

BOARD OF EDUCATION MEETING



NOVEMBER 2, 2015

BOARD OF EDUCATION MILLARD PUBLIC SCHOOLS OMAHA, NEBRASKA

BOARD MEETING 6:00 P.M.

STROH ADMINISTRATION CENTER 5606 SOUTH 147thSTREET November 2, 2015

AGENDA

A. Call to Order

The Public Meeting Act is posted on the wall and available for public inspection.

- B. Pledge of Allegiance
- C. Roll Call
- D. Public Comments on agenda items This is the proper time for public questions and comments on agenda items only. Please make sure a request form is given to the Board President before the meeting begins.

E. Routine Matters

- 1. *Approval of Board of Education Minutes, October 19, 2015
- 2. *Approval of Bills
- 3. *Receive the Treasurer's Report and Place on File

F. <u>Information Items</u>

- 1. Employees of the Month: John Becker, MEP Facilitator at RWSSC and Lenny Kazor, Custodian at Hitchcock Elementary
- 2. Superintendent's Comments
- 3. Board Comments/Announcements
- 4. Report from Student Representatives

G. Unfinished Business

- Approval of Policy 1420 Community Relations Cooperation and Participation with Other Educational Organizations
- 2. Approval of Policy 1425 Community Relations Cooperation with Non-Profit Agencies
- 3. Approval of Policy 1430 Community Relations Cooperation with Commercial Agencies
- 4. Approval of Policy 4400 Human Resources Salary Schedules

H. New Business

- 1. Approval of Rule 1420.1 Community Relations Cooperation and Participation with Other Educational Organizations
- 2. Approval of Rule 1425.1 Community Relations Cooperation with Non-Profit Agencies
- 3. Approval of Rule 1430.1 Community Relations Cooperation with Commercial Agencies
- 4. Approval of Rule 4400.1 Human Resources Salary Schedules and Payroll Dates
- 5. Approval of Rule 4400.2 Human Resources Salary Schedules Teacher and Nurse Placement
- 6. First Reading of Policy 6225 Curriculum, Instruction and Assessment Secondary Class Size
- 7. Approval of Rule 6320.1 Curriculum, Instruction, & Assessment Students: Requirements for Senior High School Graduation
- 8. Approval of Rule 6320.2 Curriculum, Instruction, & Assessment International Baccalaureate Diploma Program
- 9. Approval of PK-12 Mathematics Framework: Part I
- 10. Approval of Lobbyist Professional Service Contract
- 11. Approval of 2016 Legislative Standing Positions
- 12. Approval of Schematic Designs for the Upchurch Elementary School Open-to-Closed Project

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I. Reports

- 1. Enrollment Report
- 2. Personnel Report
- 3. International Baccalaureate Diploma Program Report

J. Future Agenda Items/Board Calendar

- Committee of the Whole Meeting on Monday, November 9, 2015 at 6:00 p.m. at the Don Stroh Administration Center
- 2. Board of Education Meeting on Monday, November 16, 2015 at 6:00 p.m. at the Don Stroh Administration Center
- 3. Thanksgiving Holiday on November 26-27, 2015 Millard Public Schools Closed
- 4. Board of Education Meeting on Monday, December 7, 2015 at 6:00 p.m. at the Don Stroh Administration Center
- 5. Winter Break begins December 21, 2015
- 6. School Resumes on January 4, 2016
- Board of Education Meeting on Monday, January 4, 2016 at 6:00 p.m. at the Don Stroh Administration Center
- 8. Committee of the Whole Meeting on Monday, January 11, 2016 at 6:00 p.m. at the Don Stroh Administration Center
- 9. MLK Jr. Day on January 18, 2016 No School for Students Teacher Staff Development Day
- 10. Board of Education Meeting on Monday, January 18, 2016 at 6:00 p.m. at the Don Stroh Administration Center
- K. <u>Public Comments</u> This is the proper time for public questions and comments on <u>any topic</u>. <u>Please make sure a request form is given to the Board President before the meeting begins.</u>

L. Adjournment:

All items indicated by an asterisk (*) will comprise the Consent Agenda and may be acted on in a single motion. Items may be deleted from the Consent Agenda by request of any board member.

BOARD OF EDUCATION MILLARD PUBLIC SCHOOLS OMAHA, NEBRASKA

BOARD MEETING 6:00 P.M.

STROH ADMINISTRATION CENTER 5606 SOUTH 147th STREET November 2, 2015

ADMINISTRATIVE MEMORANDUM

A. Call to Order

The Public Meeting Act is posted on the wall and available for public inspection

B. Pl	ledge of Allegiance
C. R	oll Call
	ublic Comments on agenda items - This is the proper time for public questions and comments on agenda items only. Please ake sure a request form is completed and given to the Board President prior to the meeting.
*E.1.	Motion by, seconded by, to approve the Board of Education Minutes, October 19, 2015 (See enclosure.)
*E.2.	Motion by, seconded by, to approve the bills. (See enclosure.)
*E.3.	Motion by, seconded by, to receive the Treasurer's Report and Place on File (See enclosure.)
F.1.	Employees of the Month: John Becker, MEP Facilitator at RWSSC and Lenny Kazor, Custodian at Hitchcock Elementary
F.2.	Superintendent's Comments
F.3.	Board Comments/Announcements
F.4.	Report from Student Representatives
G.1.	Motion by, seconded by, to approve Policy 1420 – Community Relations – Cooperation and Participation with Other Educational Organizations (See enclosure.)
G.2.	Motion by, seconded by, to approve Policy 1425 – Community Relations – Cooperation with Non-Profit Agencies (See enclosure.)
G.3.	Motion by, seconded by, to approve Policy 1430 – Community Relations – Cooperation with Commercial Agencies
G.4.	Motion by, seconded by, to approve Policy 4400 – Human Resources – Salary Schedules (See enclosure.)
H.1.	Motion by, seconded by, to approve of Rule 1420.1 – Community Relations – Cooperation and Participation with Other Educational Organizations (See enclosure.)
H.2.	Motion by, seconded by, to approve Rule 1425.1 – Community Relations – Cooperation with Non-Profit Agencies (See enclosure.)

Board Meeting Agenda November 2, 2015 Page 2

H.3.	Motion by, seconded by, to approve Rule 1430.1 – Community Relations – Cooperation with Commercial Agencies (See enclosure.)
H.4.	Motion by, seconded by, to approve Rule 4400.1 – Human Resources – Salary Schedules and Payroll Dates (See enclosure.)
H.5.	Motion by, seconded by, to approve Rule 4400.2 – Human Resources – Salary Schedules – Teacher and Nurse Placement (See enclosure.)
H.6.	First Reading of Policy 6225 – Curriculum, Instruction and Assessment – Secondary Class Size (See enclosure.)
H.7.	Motion by, seconded by, to approve Rule 6320.1 – Curriculum, Instruction, & Assessment Students: Requirements for Senior High School Graduation (See enclosure.)
H.8.	Motion by, seconded by, to approve Rule 6320.2 – Curriculum, Instruction, & Assessment – International Baccalaureate Diploma Program (See enclosure.)
H.9.	Motion by, seconded by, to approve the PK-12 Mathematics Framework: Part I (See enclosure.)
H.10.	Motion by, seconded by, to approve the Lobbyist Professional Service Contract. (See enclosure.)
H.11.	Motion by, seconded by, to approve the 2016 Legislative Standing Positions (See enclosure.)
H.12.	Motion by, seconded by, to approve the Schematic Designs for the Upchurch Elementary School Open-to-closed Project (See enclosure.)
I. Repo	<u>orts</u>
	1. Enrollment Report
	2. Personnel Report
	3. International Baccalaureate Diploma Program Report

J. Future Agenda Items/Board Calendar

- 1. Committee of the Whole Meeting on Monday, November 9, 2015 at 6:00 p.m. at the Don Stroh Administration Center
- 2. Board of Education Meeting on Monday, November 16, at 6:00 p.m. at the Don Stroh Administration Center
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- 4. Board of Education Meeting on Monday, December 7, 2015 at 6:00 p.m. at the Don Stroh Administration Center
- 5. Winter Break begins December 21, 2015
- 6. School Resumes on January 4, 2016
- 7. Board of Education Meeting on Monday, January 4, 2016 at 6:00 p.m. at the Don Stroh Administration Center
- 8. Committee of the Whole Meeting on Monday, January 11, 2016 at 6:00 p.m. at the Don Stroh Administration Center
- 9. MLK Jr. Day on January 18, 2016 No School for Students Teacher Staff Development Day
- 10. Board of Education Meeting on Monday, January 18, 2016 at 6:00 p.m. at the Don Stroh Administration Center

K. Public Comments - This is the proper time for public questions and comments on any topic. Please make sure a request form is given to the Board President before the meeting begins.

Adjournment

All items indicated by an asterisk (*) will comprise the Consent Agenda and may be acted on in a single motion. Items may be deleted from the Consent Agenda by request of any board member.

MILLARD PUBLIC SCHOOLS SCHOOL DISTRICT NO. 17

A meeting of the Board of Education of the School District No. 17, in the County of Douglas in the State of Nebraska was convened in open and public session at 6:00 p.m., Monday, October 19, 2015, at the Don Stroh Administration Center, 5606 South 147th Street.

Notice of this meeting was given in advance thereof by publication in the Daily Record on Friday, October 16, 2015; a copy of the publication is being attached to these minutes. Notice of this meeting was given to all members of the Board of Education and a copy of their Acknowledgment of Receipt of Notice and the agenda are attached to these minutes. Availability of the agenda was communicated in advance notice and in the notice of the Board of Education of this meeting. All proceedings hereafter shown were taken while the convened meeting was open to the attendance of the public.

President, Pat Ricketts, announced that the open meeting laws are posted and available for public inspection. Mr. Ricketts asked everyone to join in the Pledge of Allegiance.

Roll call was taken: Mr. Pate, Mr. Ricketts, Mrs. Poole, Mr. Kennedy and Mr. Meyer were present.

Pat Ricketts announced the proper time for public questions and comments on agenda items only. There we no requests to speak on agenda items.

Motion by Linda Poole and seconded by Mike Kennedy to excuse Dave Anderson from the Board meeting. Voting in favor of said motion was: Mrs. Poole, Mr. Kennedy, Mr. Meyer, Mr. Pate and Mr. Ricketts. Voting against were: None. Motion carried.

Motion was made by Mike Kennedy, seconded by Mr. Meyer, to approve the Board of Education Minutes from October 5, 2015, approve the bills and receive the treasurer's report and place on file. Voting in favor of said motion was: Mr. Meyer, Mr. Pate, Mr. Ricketts, Mrs. Poole and Mr. Kennedy. Voting against were: None. Motion carried.

Mike Kennedy summarized the Committee of the Whole meeting which was held on October 12, 2015.

Superintendent's Comments to the Board:

- Today we celebrated Tim Royers for achieving the honor of Nebraska Teacher of the Year. Mr. Royers is a social studies teacher at Millard West High School.
- We are hosting a luncheon for our State Senators on November 3rd at 11:30 a.m. and invite the Board members to attend. More information will be sent to the Board in the Superintendent's report.

Board Comments:

Paul Meyer:

Mr. Meyer congratulated Tim Royers on being named Nebraska Teacher of the Year

Mr. Meyer said he had requested that the Board place the employee pledge on the agenda and it is not there. He received a letter from Duncan Young stating legal council's opinion. Mr. Meyer said he had been contacted by people who requested that he bring this pledge before the Board and it is continually rejected. If the Board does not take a stand on this, Mr. Meyer said he will be contacting a number of State Senators in the coming months and ask if they are interested in backing the employee's pledge. If they are not interested, he will ask them to remove the pledge from the books.

Pat Ricketts responded to Mr. Meyer's comments. He stated that he received the same letter from legal council, and has determined it is not in the district's best interest to add the employee's pledge to the agenda. In keeping with the Board's past practices, Mr. Ricketts said he would need to receive requests from at least two or more Board members to add an item to the agenda. If those requests are received, the employee's pledge would be added to the agenda.

Board of Education Minutes October 19, 2015 Page 2

Mike Kennedy:

Mr. Kennedy responded to Mr. Meyer's comments saying he did not feel the employee's pledge needed to go on the agenda. Mr. Kennedy said he does not support loyalty oaths. The job of the Board is to make sure our directives for curriculum are carried out by the administration. If there is ever a complaint of an instructor teaching something un-American, we will hear about it and follow the correct process in dealing with it.

Linda Poole:

Mrs. Poole congratulated Tim Royers on receiving the Teacher of the Year award.

In regard to Mr. Meyer's comments, Mrs. Poole stated that she does not support placing the employee pledge on the agenda as it is against our legal council's opinion. She said she puts her faith in our legal-council, the administrators and teachers, to carry out what we ask them to carry out. If two requests are not received to place the pledge on the agenda, Mrs. Poole asks that it not be brought up again at a Board meeting.

Mike Pate:

Mr. Pate suggested to Mr. Meyer that if he does contact the State Senators regarding the employee pledge, that he do so as an individual and not representing the Board as this is not the position the Board is going to take.

Mr. Pate also congratulated Mr. Royers for receiving Teacher of the Year in the state of Nebraska. He is a tremendous individual and a great asset to our district. Mr. Pate said he was happy he was able to attend the surprise announcement in Mr. Royers' classroom.

Mr. Pate informed the Board that the Learning Community Coordinating Council did hire Dr. Keith Rohwer as the interim CEO. Dr. Rohwer is a retired Superintendent of the Nebraska City school district and currently does some consulting work. He will fill the CEO position on a four day a week contract until a permanent CEO can be found.

The Learning Community Council also approved an allocation of \$750,000 which is to be allocated amongst subcouncils 1, 3, 4 and 6. Millard is sub-council 4 and will receive a portion of this money.

Pat Ricketts:

Mr. Ricketts thanked Mr. Pate for his work on the Learning Community.

Mr. Ricketts said he was happy to be a part of Mr. Royers' award presentation and to witness the expression on his face. He was impressed that Mr. Royers wanted to "get back to teaching" after receiving the award.

Mr. Ricketts again responded to the matter of the employee pledge and stated that if another board member does not request to place the pledge on the agenda, we will move forward and we will put our focus on educating our children and working our strategic plan.

Student Reports:

Alicia Laufenberg, student representative from Millard South High School, Laura Ecklund, student representative from Millard West High School, and Olivia Obeng, student representative from Millard North High School, reported on the academic and athletic happenings at their respective schools.

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New Business:

Motion by Mike Pate and seconded by Mike Kennedy to reaffirm Policy 1415 – Community Relations – Cooperation between Schools and Welfare Agencies. Voting in favor of said motion was: Mr. Pate, Mr. Ricketts, Mrs. Poole, Mr. Kennedy and Mr. Meyer. Voting against was: None. Motion carried.

Motion by Linda Poole and seconded by Mike Pate to approve Rule 1415.1 – Community Relations – Cooperation between Schools and Welfare Agencies. Voting in favor of said motion was: Mrs. Poole, Mr. Kennedy, Mr. Meyer, Mr. Pate and Mr. Ricketts. Voting against was: None. Motion carried.

Linda Poole provided the first reading of Policy 1420 – Community Relations – Cooperation and Participation with Other Educational Organizations.

Mike Pate provided the first reading of Policy 1425 – Community Relations – Cooperation with Non-Profit Agencies.

Paul Meyer provided the first reading of Policy 1430 – Community Relations – Cooperation with Commercial Agencies.

Motion by Mike Pate and seconded by Linda Poole to reaffirm Policy 4130 – Human Resources – Examinations, reaffirm Rule 4130.1 – Human Resources – Health Examinations, and reaffirm Rule 4130.2 – Human Resources – Examinations – Bus or Small Vehicle Drivers. Voting in favor of said motion was: Mr. Kennedy, Mr. Meyer, Mr. Pate, Mr. Ricketts and Mrs. Poole. Voting against was: None. Motion carried.

Mike Kennedy provided the first reading of Policy 4400 – Human Resources – Salary Schedules.

Motion by Mike Pate and seconded by Linda Poole that the Schematic Designs for the Neihardt Elementary School Open-to-Closed construction project be approved as submitted. Mike Purdy of Purdy and Slack Architects was available to address questions and concerns from the Board. Voting in favor of said motion was: Mr. Pate, Mr. Ricketts, Mrs. Poole, Mr. Kennedy and Mr. Meyer. Voting against was: None. Motion carried.

Motion by Linda Poole and seconded by Mike Kennedy that the Schematic Designs for the Millard West High School industrial technology addition and the cafeteria expansion project be approved as submitted. Mike Purdy of Purdy and Slack Architects was available to address questions and concerns from the Board. Voting in favor of said motion was: Mr. Meyer, Mr. Pate, Mr. Ricketts, Mrs. Poole and Mr. Kennedy. Voting against were: None. Motion carried.

Motion by Mike Pate and seconded by Mike Kennedy that the Schematic Designs for the Millard West High School Parking Lot Paving project be approved as submitted. Joe Zadina of Lamp-Rynerson and Associates was available to address questions and concerns from the Board. Mr. Zadina stated there will be approximately 203 new parking stalls at MWHS when the project is complete. There was voiced concern that students are parking on the streets even when there are empty stalls as it is easier to leave at the end of the day. Dr. Sutfin requested that Dr. Tiemann have his security guard count empty parking stalls after school has started. Voting in favor of said motion was: Mr. Ricketts, Mrs. Poole, Mr. Kennedy, Mr. Meyer and Mr. Pate. Voting against was: None. Motion carried.

Motion by Linda Poole and seconded by Mr. Meyer to approve Personnel Actions: Contract Cancellation: Ashley E. Hoff. Voting in favor of said motion was: Mrs. Poole, Mr. Kennedy, Mr. Meyer, Mr. Pate and Mr. Ricketts. Voting against was: None. Motion carried.

Reports:

Construction Report - Rockwell:

Ed Rockwell stated this is his final report of approximately 23 projects totaling \$4.4 million in construction contracts. All of the security, summer, insurance and energy work is nearly complete with just punch list items remaining.

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Construction Report - Sampson:

Dave Cavlovic with Sampson Construction reported the only project under construction right now is Millard North High School. The project is on schedule and going well. The schematic design for Neihardt Elementary and Millard West should be bidding in January, given the approval of construction documents. The schematic design for the open to close Upchurch project should be seen in November. Neihardt and Upchurch are scheduled to be bid in February

Mr. Ricketts reminded the Board of future agenda items and said it was the proper time for public questions and comments. There were none.

Future Agenda Items/Board Calendar:

- 1. Board of Education Meeting on Monday, November 2, 2015 at 6:00 p.m. at the Don Stroh Administration Center
- 2. Committee of the Whole Meeting on Monday, November 9, 2015 at 6:00 p.m. at the Don Stroh Administration Center
- 3. Board of Education Meeting on Monday, November 16, at 6:00 p.m. at the Don Stroh Administration Center
- 4. Thanksgiving Holiday on November 26-27, 2015 Millard Public Schools Closed
- 5. Board of Education Meeting on Monday, December 7, 2015 at 6:00 p.m. at the Don Stroh Administration Center
- 6. Winter Break begins December 21, 2015.

Mr. Ricketts adjourned the meeting at 7:10 p.m.

- 7. School Resumes on January 4, 2015.
- 8. Board of Education Meeting on Monday, January 4, 2015 at 67:00 p.m. at the Don Stroh Administration Center
- 9. Committee of the Whole Meeting on Monday, January 11, 2015 at 6:00 p.m. at the Don Stroh Administration Center
- 10. Board of Education Meeting on Monday, January 18, 2015 at 6:00 p.m. at the Don Stroh Administration Center

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Secretary, Da	ave Anderson				

Millard Public Schools

November 2, 2015

Fund	Check Number	Check Date	Vendor Number	Vendor Name	Transaction Amount
01	427012	10/15/2015	140995	MICHELLEANN AVILLA	\$183.39
	427014	10/15/2015	134645	DAVID J BOWES	\$60.00
	427015	10/15/2015	140591	DISCOVERY BENEFITS INC	\$4,342.00
	427017	10/15/2015	102451	INTERNATIONAL BACCALAUREATE	\$739.00
	427018	10/15/2015	139936	MARRIOTT HOTEL SERVICES INC	\$3,528.88
	427019	10/15/2015	065233	MIDWEST TURF & IRRIGATION INC	\$54.80
	427020	10/15/2015	070810	OMAHA PUBLIC SCHOOLS	\$150.00
	427021	10/15/2015	138504	TODD L REESON	\$75.00
	427022	10/15/2015	081630	SAMS CLUB DIRECT	\$69.41
	427023	10/15/2015	107354	STEPHEN W. VENTEICHER	\$120.00
	427024	10/15/2015	135863	RUDOLPH A VLCEK III	\$120.00
	427025	10/15/2015	133224	JEFF WARNOCK	\$50.00
	427026	10/15/2015	138496	WRIGHT EXPRESS FINANCIAL SVCS CORP	\$15,161.56
	427027	10/22/2015	108436	COX COMMUNICATIONS INC	\$35,503.91
	427028	10/22/2015	141004	CARL DEUKER	\$510.12
	427029	10/22/2015	140591	DISCOVERY BENEFITS INC	\$4,457.50
	427030	10/22/2015	132292	NEBRASKA STATE THESPIAN SOCIETY	\$528.00
	427031	10/22/2015	107732	BRIAN L NELSON	\$236.25
	427032	10/22/2015	081630	SAMS CLUB DIRECT	\$197.22
	427033	10/22/2015	068834	UNIVERSITY OF NEBRASKA-LINCOLN	\$70.50
	427034	11/02/2015	140821	MARGARET E SCHWARTZ	\$5,824.00
	427036	11/02/2015	109853	ACCESS ELEVATOR INC.	\$355.00
	427037	11/02/2015	010003	ACT INC	\$595.00
	427038	11/02/2015	010383	ACTION BATTERIES UNLIMITED INC	\$386.80
	427039	11/02/2015	133402	KAREN ADAMS	\$66.07
	427041	11/02/2015	133620	AKSARBEN PIPE AND SEWER CLEAN LLC	\$1,245.00
	427042	11/02/2015	136365	ALEGENT CREIGHTON HEALTH SPORTS MED	\$5,750.00
	427043	11/02/2015	136659	ALL CREATURES VETERINARY CLINIC	\$104.21

Oct 28, 2015

Fund	Check Number	Check Date	Vendor Number	Vendor Name	Transaction Amount
01	427044	11/02/2015	140784	MATTHEW JOSEPH ZISKEY	\$1,600.00
	427045	11/02/2015	139802	JENNIFER ALLEN	\$115.19
	427046	11/02/2015	140391	ALLY FINANCIAL INC	\$394.00
	427047	11/02/2015	133777	ALTEC INDUSTRIES INC	\$283.74
	427048	11/02/2015	139086	AMAZING ARTHUR/BALLOON BRIGADE LLC	\$175.00
	427049	11/02/2015	107651	AMAZON.COM INC	\$68.00
	427050	11/02/2015	103126	AMERICAN MONTESSORI SOCIETY	\$225.00
	427051	11/02/2015	130704	AMERICAN PLASTICS SUPPLY & FAB CO	\$427.00
	427052	11/02/2015	012450	AMERICAN RED CROSS-HEALTH & SAFETY	\$115.00
	427054	11/02/2015	102430	AMI GROUP INC	\$4,050.00
	427055	11/02/2015	131265	JILL ANDERSON	\$168.48
	427056	11/02/2015	139224	SCANDIUM INC	\$508.14
	427057	11/02/2015	012989	APPLE COMPUTER INC	\$12,230.00
	427058	11/02/2015	106436	AQUA-CHEM INC	\$3,758.98
	427059	11/02/2015	134235	SARAH ASCHENBRENNER	\$70.84
	427060	11/02/2015	131183	ASSOCIATION FOR CAREER/TECHNICAL	\$110.00
	427061	11/02/2015	138233	FRANK ATWATER	\$7.50
	427062	11/02/2015	138291	AUTISM CENTER OF NEBRASKA INC	\$4,478.25
	427063	11/02/2015	013890	AWARDS UNLIMITED INC.	\$295.80
	427064	11/02/2015	102727	B & H PHOTO	\$304.81
	427066	11/02/2015	135991	BAKER DISTRIBUTING CO LLC	(\$350.00)
	427067	11/02/2015	135852	COLLEEN BALLARD	\$16.33
	427068	11/02/2015	099646	BARNES AND NOBLE BOOKSTORE	\$2,709.50
	427069	11/02/2015	017877	CYNTHIA BARR-MCNAIR	\$165.08
	427070	11/02/2015	107979	LORI BARTELS	\$359.18
	427071	11/02/2015	133359	TERA BASS	\$160.00
	427072	11/02/2015	099749	BAUDVILLE INC	\$38.45
	427073	11/02/2015	138054	BAXTER FORD INC	\$1,860.65

Fund	Check Number	Check Date	Vendor Number	Vendor Name	Transaction Amount
01	427074	11/02/2015	134584	MARY BAYNE	\$41.98
	427076	11/02/2015	130674	BEADLE MIDDLE SCHOOL	\$210.00
	427077	11/02/2015	135223	AARON BEARINGER	\$44.28
	427078	11/02/2015	134873	JOHN BECKER	\$81.42
	427079	11/02/2015	139783	LYNNE H BECKER	\$3,418.50
	427080	11/02/2015	107540	BRIAN BEGLEY	\$139.73
	427081	11/02/2015	139889	DARLA BELL	\$210.45
	427082	11/02/2015	139432	BENTLEY BENSON	\$11.29
	427084	11/02/2015	134945	NOLAN BEYER	\$157.55
	427085	11/02/2015	140958	BIG RED FIRE PROTECTION LLC	\$525.00
	427088	11/02/2015	019111	BISHOP BUSINESS EQUIPMENT	\$8,501.41
	427089	11/02/2015	139321	BIZCO INC	\$33.00
	427090	11/02/2015	140887	BJ'S FLEET WASH LLC	\$248.00
	427091	11/02/2015	099220	DICK BLICK CO	\$382.25
	427092	11/02/2015	132124	JASON BOATWRIGHT	\$25.64
	427093	11/02/2015	134478	TIFFANY BOCK SMITH	\$71.88
	427094	11/02/2015	139344	DOUGLAS BOGATZ	\$174.57
	427095	11/02/2015	130899	KIMBERLY BOLAN	\$198.96
	427096	11/02/2015	019530	BOULDEN PUBLISHING	\$196.57
	427097	11/02/2015	019559	BOUND TO STAY BOUND BOOKS INC	\$5,176.34
	427099	11/02/2015	139996	BOYS TOWN	\$14,745.51
	427100	11/02/2015	134129	BRAINPOP LLC	\$1,350.00
	427101	11/02/2015	139890	DOUGLAS BREITER	\$59.57
	427102	11/02/2015	130576	PAMELA BRENNAN	\$204.70
	427103	11/02/2015	130290	LINDA BREWER	\$59.80
	427104	11/02/2015	133824	NANCY BROWN	\$60.03
	427106	11/02/2015	020550	BUREAU OF EDUCATION & RESEARCH	\$108.00
	427107	11/02/2015	138774	CHRISTOPHER BURKE	\$48.88

Fund	Check Number	Check Date	Vendor Number	Vendor Name	Transaction Amount
01	427109	11/02/2015	137274	EILEEN CABRERA	\$36.63
	427110	11/02/2015	137791	JAMES R MINOR	\$200.00
	427111	11/02/2015	106806	ELIZABETH CAREY	\$26.16
	427113	11/02/2015	131158	CURTIS CASE	\$187.45
	427114	11/02/2015	137714	BETHANY CASE-MAGANA	\$184.00
	427115	11/02/2015	140956	JOHN B CASTLE	(\$32.50)
	427116	11/02/2015	133970	CCS PRESENTATION SYSTEMS	\$1,874.07
	427117	11/02/2015	133589	CDW GOVERNMENT, INC.	\$3,256.40
	427119	11/02/2015	133508	AMERICAN FUTURE SYSTEMS INC	\$0.00
	427120	11/02/2015	024260	CENTER TROPHY COMPANY	\$81.24
	427121	11/02/2015	065420	CENTRAL MIDDLE SCHOOL	\$755.00
	427122	11/02/2015	138613	CENTRAL SALES INC	\$5,353.22
	427123	11/02/2015	135648	SUSAN CHADWICK	\$72.45
	427124	11/02/2015	132271	ERIK CHAUSSEE	\$85.10
	427125	11/02/2015	024445	MARK CHAVEZ	\$40.25
	427126	11/02/2015	106851	CHILDREN'S HOME HEALTHCARE	\$35,318.00
	427131	11/02/2015	025235	DALE CLAUSEN	\$136.85
	427132	11/02/2015	131135	PATRICIA CLIFTON	\$94.71
	427133	11/02/2015	136780	LISA L CLINARD	\$98.26
	427134	11/02/2015	137013	NANCY COLE	\$186.47
	427135	11/02/2015	132126	KIP COLONY	\$47.09
	427137	11/02/2015	136791	COMPUTYPE INC	\$687.04
	427138	11/02/2015	135082	OCCUPATIONAL HEALTH CTRS OF NE PC	\$137.50
	427139	11/02/2015	139891	MARY CONNELL	\$65.15
	427140	11/02/2015	026057	CONTROL MASTERS INC	\$9,002.54
	427141	11/02/2015	136518	JANET COOK	\$168.07
	427146	11/02/2015	131506	CP RECOVERY	\$1,196.80
	427147	11/02/2015	017611	ANGELA CRAFT	\$69.58

Fund	Check Number	Check Date	Vendor Number	Vendor Name	Transaction Amount
01	427148	11/02/2015	139034	CRAIG RESOURCES INC	\$4,581.85
	427151	11/02/2015	140174	ABANTE LLC	\$1,022.65
	427152	11/02/2015	134039	CROUCH RECREATIONAL DESIGN INC	\$832.80
	427153	11/02/2015	109021	PATRICIA CRUM	\$42.67
	427154	11/02/2015	102803	GEORGIA HOLDINGS INC	\$0.00
	427155	11/02/2015	106893	WICHITA WATER CONDITIONING INC	\$55.75
	427156	11/02/2015	027345	CURRICULUM ASSOCIATES INC	\$118.97
	427157	11/02/2015	100577	CURTIS 1000 INC	\$1,464.86
	427158	11/02/2015	130731	D & D COMMUNICATIONS	\$1,021.90
	427159	11/02/2015	131483	JANET DAHLGAARD	\$35.36
	427160	11/02/2015	140999	NICHOLAS DAHLQUIST	\$1,100.00
	427161	11/02/2015	132671	JEAN DAIGLE	\$158.99
	427162	11/02/2015	134751	ANGELA DAIGLE	\$20.53
	427163	11/02/2015	131003	DAILY RECORD	\$32.20
	427164	11/02/2015	140910	LISA A DALY	\$3,604.00
	427165	11/02/2015	138477	MIDWEST HARDWOODS	\$284.73
	427166	11/02/2015	138306	STACY DARNOLD	\$119.26
	427167	11/02/2015	135099	HEATHER DAUBERT	\$1,964.79
	427168	11/02/2015	136517	WILLIAM DAUGHTRIDGE	\$275.60
	427169	11/02/2015	141005	JEREMY DAWSON	\$11.94
	427170	11/02/2015	130242	AMY DELEHANT	\$4.18
	427171	11/02/2015	099249	DELTA EDUCATION LLC	\$2,110.04
	427172	11/02/2015	032800	DEMCO INC	\$778.50
	427173	11/02/2015	136316	EVA DENTON	\$96.61
	427174	11/02/2015	137331	BASTIAN DERICHS	\$58.77
	427175	11/02/2015	140868	JULIE DESROSIERS	\$33.58
	427178	11/02/2015	033473	DIETZE MUSIC HOUSE INC	\$1,305.43
	427179	11/02/2015	135509	DIGIORGIO'S SPORTSWEAR INC	\$152.00

Fund	Check Number	Check Date	Vendor Number	Vendor Name	Transaction Amount
01	427180	11/02/2015	132669	DIGITAL DOT SYSTEMS INC	\$1,195.50
	427182	11/02/2015	134899	DISCOVERY EDUCATION	\$68.45
	427184	11/02/2015	135373	LINDA DONOHUE	\$20.70
	427186	11/02/2015	139349	TERRIN DORATHY	\$41.63
	427190	11/02/2015	130908	DOUGLAS COUNTY SCHOOL DIST.28-0001	\$329,593.71
	427191	11/02/2015	138848	ERIN DOWNS	\$123.34
	427192	11/02/2015	139825	DATA RECOGNITION CORPORATION	\$121.03
	427193	11/02/2015	135689	SUSAN DULANY	\$145.19
	427195	11/02/2015	073231	DXP ENTERPRISES INC	\$23.12
	427196	11/02/2015	137117	JEANNE DYMOND	\$70.26
	427198	11/02/2015	102791	ERIC ARMIN INC	\$45.62
	427199	11/02/2015	138426	KELLY EALY	\$65.44
	427200	11/02/2015	036520	EASTERN NEBRASKA HUMAN SVCS AGENCY	\$33,880.00
	427201	11/02/2015	138878	LACEY EDDY	\$57.39
	427203	11/02/2015	140713	BIOGENTEX LABORATORIES	\$3,070.40
	427205	11/02/2015	037525	EDUCATIONAL SERVICE UNIT #3	\$1,177.61
	427208	11/02/2015	038023	EGAN SUPPLY COMPANY	\$30.55
	427209	11/02/2015	139892	ERIN EHLY	\$10.93
	427210	11/02/2015	133823	REBECCA EHRHORN	\$306.59
	427211	11/02/2015	038100	ELECTRICAL ENGINEERING & EQPT CO	\$3,255.75
	427212	11/02/2015	038140	ELECTRONIC SOUND INC.	\$15,752.15
	427213	11/02/2015	138508	DOUGLAS COUNTY SCHOOL DISTRICT 10	\$500.00
	427214	11/02/2015	132066	ENGINEERED CONTROLS INC	\$420.00
	427215	11/02/2015	102720	EPCO LTD. INC.	\$446.00
	427216	11/02/2015	138390	SCHOOL SPECIALTY INC	\$72.16
	427217	11/02/2015	135360	PAMELA ERIXON	\$100.00
	427218	11/02/2015	109066	TED ESSER	\$252.77
	427219	11/02/2015	137950	MICHAEL ETZELMILLER	\$117.88

Fund	Check Number	Check Date	Vendor Number	Vendor Name	Transaction Amount
01	427222	11/02/2015	140838	EXECUTIVE LAWN & LANDSCAPING LLC	\$2,250.00
	427223	11/02/2015	134861	TARA FABIAN	\$117.65
	427225	11/02/2015	132699	FATHER FLANAGANS BOYS HOME	\$146.00
	427226	11/02/2015	139472	MATTHEW FEDDE	\$37.44
	427227	11/02/2015	056724	FEDEX OFFICE AND PRINT SERVICES INC	\$218.93
	427228	11/02/2015	131826	ALICIA FEIST	\$63.25
	427229	11/02/2015	040470	MARK FELDHAUSEN	\$192.52
	427230	11/02/2015	040537	FERGUSON ENTERPRISES INC	\$10,629.07
	427231	11/02/2015	137016	ANGELA FERGUSON	\$94.47
	427232	11/02/2015	132845	JODI FIDONE	\$320.58
	427233	11/02/2015	135115	TAMELA FIERSTEIN	\$36.17
	427234	11/02/2015	133919	FILTER SHOP INC	\$1,617.20
	427235	11/02/2015	133960	FIREGUARD INC	\$591.00
	427236	11/02/2015	109855	SHANNON FISCHER	\$28.35
	427239	11/02/2015	041086	FLINN SCIENTIFIC INC	\$331.38
	427240	11/02/2015	041100	FOLLETT SCHOOL SOLUTIONS INC	\$12,711.35
	427241	11/02/2015	140994	CABLE GLASS LLC	\$930.00
	427242	11/02/2015	139854	FORVESON CORP	\$192.00
	427243	11/02/2015	041146	KENNETH FOSSEN	\$49.34
	427244	11/02/2015	065300	FOUNDATIONAL BUILDINGS MATERIAL LLC	\$18.34
	427245	11/02/2015	135793	FREMONT INDUSTRIES INC	\$434.92
	427246	11/02/2015	134223	TERESA FRIDRICH	\$28.92
	427247	11/02/2015	140791	FRONTLINE PRIVATE SECURITY LLC	\$850.00
	427248	11/02/2015	140869	MAGDALENE FUNKHOUSER	\$45.61
	427249	11/02/2015	109036	GALE/CENGAGE LEARNING	\$65,051.49
	427250	11/02/2015	043760	GALLUP ORGANIZATION	\$4,000.00
	427251	11/02/2015	131710	PATRICK T GEARY	\$100.00
	427252	11/02/2015	137543	MEGAN GEERTS	\$39.45

Fund	Check Number	Check Date	Vendor Number	Vendor Name	Transaction Amount
01	427253	11/02/2015	140854	GENERAL ELECTRIC CAPITAL CORP	\$3,101.72
	427254	11/02/2015	044470	PRIME EDUCATIONAL PRODUCTS LLC	\$199.85
	427255	11/02/2015	132848	JAMES GILIN	\$25.00
	427256	11/02/2015	139894	TRICIA GILLETT	\$178.38
	427257	11/02/2015	106660	GLASSMASTERS INC	\$1,816.25
	427258	11/02/2015	044886	GOODWILL INDUSTRIES INC	\$205.00
	427259	11/02/2015	044891	GOPHER	\$2,212.29
	427261	11/02/2015	044950	GRAINGER INDUSTRIAL SUPPLY	\$1,237.23
	427262	11/02/2015	136508	ERIC GRANDGENETT	\$39.68
	427263	11/02/2015	140490	GREATER NEBRASKA SCHOOLS ASSN	\$2,000.00
	427264	11/02/2015	140210	CARI GREEN	\$62.10
	427265	11/02/2015	133885	GREENLIFE GARDENS INC	\$425.00
	427266	11/02/2015	139723	NEHER & SONS INC	\$1,100.45
	427269	11/02/2015	140939	CARRIE GROVE	\$30.00
	427270	11/02/2015	140789	GROWING LEADERS INC	\$27.00
	427271	11/02/2015	135199	LISA GUSTIN	\$94.70
	427272	11/02/2015	139653	HADDOCK CORPORATION	\$778.00
	427274	11/02/2015	101931	HANCOCK FABRICS	\$99.63
	427276	11/02/2015	047853	HAPPY CAB COMPANY INC	\$24,798.26
	427277	11/02/2015	F03042	HARRIS COMPUTER CORP	\$291.10
	427278	11/02/2015	140889	DEANNA HAYES	\$43.31
	427279	11/02/2015	132489	CHARLES HAYES	\$89.47
	427280	11/02/2015	139347	CHERYL HEADLEY	\$100.05
	427281	11/02/2015	048475	HEARTLAND FOUNDATION	\$14,364.00
	427282	11/02/2015	108273	MARGARET HEBENSTREIT PT	\$115.58
	427283	11/02/2015	132448	ROBERTA HEIDEN	\$35.76
	427285	11/02/2015	102842	HELGET GAS PRODUCTS INC	\$13.54
	427286	11/02/2015	108478	DAVID HEMPHILL	\$36.80

Fund	Check Number	Check Date	Vendor Number	Vendor Name	Transaction Amount
01	427288	11/02/2015	133186	JENNIFER HERZOG	\$80.00
	427291	11/02/2015	048845	CAMILLE HINZ	\$107.24
	427292	11/02/2015	135041	HITCHCOCK ELEMENTARY	\$114.25
	427294	11/02/2015	141000	CHELSEY HOLMQUIST	\$100.00
	427295	11/02/2015	141001	ALINA HONKEN	\$25.00
	427299	11/02/2015	137943	STACY HORSHAM	\$264.44
	427300	11/02/2015	049600	HOUCHEN BINDERY LTD	\$510.70
	427301	11/02/2015	132531	TERRY HOULTON	\$69.12
	427302	11/02/2015	101533	DIANE HOWARD	\$27.31
	427303	11/02/2015	139473	KATHLEEN HRABAN	\$21.74
	427305	11/02/2015	133689	HUTCHESON ENGINEERING PRODUCTS INC	\$4,489.26
	427306	11/02/2015	134807	MONICA HUTFLES	\$41.46
	427307	11/02/2015	140913	STEPHANI HYATT	\$1,300.00
	427309	11/02/2015	133397	HY-VEE INC	\$1,594.23
	427310	11/02/2015	133397	HY-VEE INC	\$2,298.16
	427311	11/02/2015	135004	HY-VEE INC	\$629.92
	427312	11/02/2015	049851	HY-VEE INC	\$1,586.26
	427313	11/02/2015	049850	HY-VEE INC	\$120.86
	427314	11/02/2015	051573	POPCO INC	\$124.90
	427315	11/02/2015	140112	JASON ALLEN DEWATER	\$360.00
	427316	11/02/2015	140525	IH GLOBAL INC	\$455.40
	427317	11/02/2015	136349	SCOTT INGWERSON	\$37.32
	427318	11/02/2015	139348	DANIEL INNES	\$48.70
	427319	11/02/2015	135481	INTERMEDIATE DISTRICT 287	\$800.00
	427320	11/02/2015	102451	INTERNATIONAL BACCALAUREATE	\$2,217.00
	427322	11/02/2015	100928	J W PEPPER & SON INC.	\$3,390.17
	427323	11/02/2015	139763	CALVIN JACOBS	\$31.72
	427324	11/02/2015	130259	IMAGINE THIS ENTERPRISES INC	\$126.50

Fund	Check Number	Check Date	Vendor Number	Vendor Name	Transaction Amount
01	427325	11/02/2015	131157	CHRISTINE JANOVEC-POEHLMAN	\$114.60
	427326	11/02/2015	136953	JSDO 1 LLC	\$656.31
	427327	11/02/2015	135735	GEORGE JELKIN	\$325.84
	427328	11/02/2015	133037	JENSEN TIRE COMPANY	\$481.98
	427329	11/02/2015	136282	SARAH JESSICK	\$60.00
	427330	11/02/2015	130994	JOHNSON CONTROLS INC	\$9,179.62
	427331	11/02/2015	054500	JOHNSON HARDWARE CO LLC	\$281.03
	427332	11/02/2015	054492	JIM L JOHNSON	\$140.00
	427333	11/02/2015	139350	BRANDON JOHNSTON	\$43.13
	427334	11/02/2015	059573	NANCY JOHNSTON	\$62.96
	427335	11/02/2015	054630	JOHNSTONE SUPPLY	\$458.28
	427336	11/02/2015	140074	JOURNEYED.COM INC	\$126,743.77
	427337	11/02/2015	136565	PATRICIA JUAREZ	\$15.53
	427338	11/02/2015	139736	KRISTI A ILIFF	\$48.00
	427339	11/02/2015	056182	KAGAN PUBLISHING & PRO DEVELOPMENT	\$356.70
	427340	11/02/2015	137214	DAVID KAHM	\$50.00
	427342	11/02/2015	136426	AMY KAUP	\$38.35
	427343	11/02/2015	140891	MARCIA KAUTSCH	\$120.58
	427345	11/02/2015	132265	CATHERINE KEISER	\$53.94
	427346	11/02/2015	132272	SUSAN KELLEY	\$39.22
	427347	11/02/2015	056276	KELVIN LP	\$258.94
	427348	11/02/2015	134801	JULIE KEMP	\$211.97
	427350	11/02/2015	131177	ANDREA KIDD	\$24.73
	427351	11/02/2015	140091	KENT KINGSTON	\$95.00
	427352	11/02/2015	139753	CHERIS KITE	\$100.17
	427353	11/02/2015	132965	K-LOG INC	\$717.22
	427354	11/02/2015	138846	ELIZABETH KOCIS	\$15.99
	427356	11/02/2015	134864	BRIDGET KOWAL	\$51.46

Fund	Check Number	Check Date	Vendor Number	Vendor Name	Transaction Amount
01	427357	11/02/2015	136285	MICHELLE KRAFT	\$9.20
	427358	11/02/2015	134546	ELLEN KRAMER	\$433.59
	427362	11/02/2015	133923	KUBAT PHARMACY/HEALTHCARE	\$1,515.00
	427363	11/02/2015	137385	JOSEPH KUEHL	\$143.64
	427364	11/02/2015	137010	CHRISTINA LAGRONE	\$93.44
	427365	11/02/2015	099217	LAKESHORE LEARNING MATERIALS	\$137.97
	427366	11/02/2015	135257	LANGUAGE LINE SERVICES INC	\$247.77
	427368	11/02/2015	135156	LAWSON PRODUCTS INC	\$950.17
	427370	11/02/2015	139896	MICHELLE LEENERTS	\$104.48
	427371	11/02/2015	137345	BONNIE LEVINGER	\$92.58
	427372	11/02/2015	059470	LIEN TERMITE & PEST CONTROL INC	\$716.00
	427373	11/02/2015	140456	THE LINCOLN ELECTRIC CO	\$700.00
	427375	11/02/2015	059560	MATHESON TRI-GAS INC	\$912.75
	427376	11/02/2015	133027	TRACY LOGAN	\$282.37
	427377	11/02/2015	059866	STACY LONGACRE	\$65.55
	427378	11/02/2015	139414	CHRISTOPHER LOOFE	\$539.36
	427379	11/02/2015	060111	LOVELESS MACHINE & GRINDING SVC INC	\$80.40
	427381	11/02/2015	060125	LUCKS MUSIC LIBRARY INC	\$155.43
	427382	11/02/2015	135376	CASEY LUNDGREN	\$48.53
	427384	11/02/2015	131586	LYMM CONSTRUCTION INC	\$825.00
	427385	11/02/2015	099321	MACKIN BOOK CO	\$2,053.25
	427389	11/02/2015	138473	KEITH MALY	\$9.20
	427391	11/02/2015	064110	CONNIE MASEK	\$72.45
	427392	11/02/2015	099328	MATHEMATICAL OLYMPIADS	\$109.00
	427393	11/02/2015	137783	COURTNEY MATULKA	\$46.01
	427394	11/02/2015	108052	MAX I WALKER	\$1,297.84
	427395	11/02/2015	138341	MAXIM HEALTHCARE SERVICES INC	\$17,136.13
	427396	11/02/2015	108227	MAX'S BODY SHOP INC	\$23.71

Fund	Check Number	Check Date	Vendor Number	Vendor Name	Transaction Amount
01	427397	11/02/2015	140507	ALEXA MAZUR	\$74.30
	427399	11/02/2015	130481	GERALDINE MCCLENNY	\$65.38
	427400	11/02/2015	136618	DANIEL MCCONNELL	\$84.18
	427401	11/02/2015	140110	MCGRAW-HILL EDUCATION INC	\$335.59
	427402	11/02/2015	137014	RYE MCINTOSH	\$145.88
	427403	11/02/2015	140826	SHAGHAYEGH MCVAY	\$2.76
	427404	11/02/2015	137947	MECHANICAL SALES PARTS INC	\$960.51
	427405	11/02/2015	121126	PATRICIA MEEKER	\$33.81
	427406	11/02/2015	137820	KURT MEHLIN	\$11.00
	427407	11/02/2015	064413	MENARDS INC (OMAHA)	\$26.50
	427408	11/02/2015	139979	MENARDS INC	\$140.05
	427409	11/02/2015	135331	MENTORING MINDS LP	\$101.40
	427410	11/02/2015	141003	BARBARA MERTZ	\$92.28
	427411	11/02/2015	064600	METAL DOORS & HARDWARE COMPANY INC	\$10,789.00
	427413	11/02/2015	133403	AMERICAN NATIONAL BANK	\$12,064.50
	427414	11/02/2015	139339	DOUGLAS M MEYO	\$891.25
	427415	11/02/2015	103082	MID STATES SCHOOL EQUIPMENT CO INC	\$4,173.00
	427416	11/02/2015	131309	MIDWEST INTL BACCALAUREATE SCHOOLS	\$200.00
	427418	11/02/2015	065200	MIDWEST SHOP SUPPLIES INC	\$77.50
	427419	11/02/2015	065326	MIDWEST WOODWORKERS, INC.	\$505.89
	427420	11/02/2015	065443	MILLARD WEST HIGH SCHOOL	\$500.00
	427421	11/02/2015	131716	BRAD S MILLARD	\$420.00
	427422	11/02/2015	140993	CHARLES MILLER	\$22.20
	427423	11/02/2015	132412	SANDRA MILLER	\$45.60
	427424	11/02/2015	065810	MIRACLE RECREATION EQUIPMENT CO	\$841.80
	427426	11/02/2015	066075	MONTESSORI RESEARCH/DEVELOPMENT	\$25.00
	427427	11/02/2015	140990	LAURA MORRIS	\$96.37
	427430	11/02/2015	132491	DONITA MOSEMAN	\$70.44

Fund	Check Number	Check Date	Vendor Number	Vendor Name	Transaction Amount
01	427431	11/02/2015	107539	MUELLER ROBAK LLC	\$12,500.00
	427432	11/02/2015	137052	DEVONYE MULLINS	\$72.34
	427435	11/02/2015	132854	NATIONAL SAFETY COUNCIL	\$52.00
	427436	11/02/2015	068020	NATIONAL SCIENCE TEACHERS ASSOC	\$180.00
	427437	11/02/2015	099928	NATIONAL SPEECH & DEBATE ASSN/NFL	\$149.00
	427438	11/02/2015	130548	NCS PEARSON INC	\$103.45
	427439	11/02/2015	133989	NEBRASKA DEPARTMENT OF LABOR	\$140.00
	427440	11/02/2015	134321	STATE OF NEBRASKA	\$95.50
	427441	11/02/2015	131379	MARY NEBE	\$72.45
	427442	11/02/2015	068315	NEBRASKA ACADEMY OF SCIENCES INC	\$60.00
	427443	11/02/2015	068334	NEBRASKA AIR FILTER INC	\$2,800.29
	427444	11/02/2015	136954	NEBRASKA CHILD SUPPORT PAYMENT CTR	\$32.50
	427445	11/02/2015	136457	NEBRASKA CHORAL DIRECTORS ASSN	\$200.00
	427446	11/02/2015	068414	NEBRASKA COUNCIL OF SCHOOL ATTORNEY	\$310.00
	427448	11/02/2015	068454	NEBRASKA DEPARTMENT OF REVENUE	\$117.00
	427450	11/02/2015	136532	NEBRASKA LUTHERAN OUTDR MINISTRIES	\$1,775.00
	427451	11/02/2015	130789	NEBRASKA SCHOOL PSYCHOLOGISTS ASSN	\$1,080.00
	427452	11/02/2015	131083	R NETH	\$266.00
	427453	11/02/2015	131689	NEWS-2-YOU	\$934.92
	427454	11/02/2015	109843	NEXTEL PARTNERS INC	\$3,671.39
	427456	11/02/2015	136715	CARISSA NIETFELDT	\$97.98
	427458	11/02/2015	140443	NOETIC LEARNING LLC	\$136.00
	427459	11/02/2015	107905	MELINDA NOLLER	\$58.13
	427461	11/02/2015	140537	EVE NORTON	\$30.13
	427462	11/02/2015	140989	STEFANIE NOVOTNY	\$28.87
	427463	11/02/2015	069945	NUTS & BOLTS INC	\$28.67
	427470	11/02/2015	100013	OFFICE DEPOT 84133510	\$5,101.74
	427471	11/02/2015	133717	ANNE OGG	\$28.16

Fund	Check Number	Check Date	Vendor Number	Vendor Name	Transaction Amount
01	427472	11/02/2015	070245	OHARCO DISTRIBUTORS	\$600.19
	427473	11/02/2015	132778	MELANIE OLSON	\$71.24
	427475	11/02/2015	133465	STEVE OLTMANS	\$25.00
	427476	11/02/2015	134725	OMAHA CASING CO INC	\$215.00
	427477	11/02/2015	070800	OMAHA PUBLIC POWER DISTRICT	\$442,592.11
	427478	11/02/2015	071050	OMAHA WORLD HERALD	\$389.16
	427479	11/02/2015	071053	OMAHA WORLD HERALD (EDUC)	\$197.60
	427480	11/02/2015	137824	OMBUDSMAN EDUCATIONAL SVCS LTD	\$118,170.00
	427481	11/02/2015	140402	OMNI FINANCIAL GROUP INC	\$732.50
	427482	11/02/2015	133850	ONE SOURCE	\$5,772.00
	427483	11/02/2015	071138	ORIENTAL TRADING COMPANY	\$154.68
	427486	11/02/2015	138662	KELLY OSTRAND	\$39.16
	427487	11/02/2015	107193	OTIS ELEVATOR COMPANY	\$3,035.50
	427488	11/02/2015	133368	KELLY O'TOOLE	\$81.08
	427489	11/02/2015	071178	OUTDOOR RECREATION PRODUCTS	\$74.75
	427490	11/02/2015	134428	ELIZABETH PACHTA	\$143.41
	427492	11/02/2015	137027	PANERA BREAD CO	\$154.77
	427493	11/02/2015	137015	GEORGE PARKER	\$59.28
	427494	11/02/2015	132006	ANDREA PARSONS	\$128.80
	427495	11/02/2015	135569	CYNTHIA PAVONE	\$73.31
	427497	11/02/2015	131610	PATRICIA D BUFFUM	\$40.00
	427498	11/02/2015	071947	PAULA PEAL	\$220.95
	427499	11/02/2015	109831	JANET PELSTER	\$94.30
	427500	11/02/2015	107783	HEIDI PENKE	\$41.40
	427501	11/02/2015	136724	PETCO ANIMAL SUPPLIES STORES INC	\$53.38
	427502	11/02/2015	140516	JOSEPH PETITO	\$149.39
	427503	11/02/2015	140422	AMY PETRICEK	\$159.27
	427504	11/02/2015	133390	HEATHER PHIPPS	\$151.42

Fund	Check Number	Check Date	Vendor Number	Vendor Name	Transaction Amount
01	427505	11/02/2015	072500	PIECES OF LEARNING INC	\$110.00
	427506	11/02/2015	137722	ANDREW PINKALL	\$147.20
	427507	11/02/2015	073040	PITNEY BOWES PRESORT SERVICES INC	\$20,000.00
	427509	11/02/2015	138907	PLIBRICO COMPANY LLC	\$10,530.00
	427511	11/02/2015	140930	HEATHER POHL	\$13.46
	427512	11/02/2015	139899	JENNIFER POLLOCK	\$99.19
	427513	11/02/2015	139928	DANIEL POLODNA	\$40.71
	427514	11/02/2015	079051	POSITIVE PROMOTIONS INC	\$165.40
	427515	11/02/2015	137301	POWERHOUSE DISTRIBUTING LLC	\$170.14
	427516	11/02/2015	134531	MIKE GUTHRIE	\$49.00
	427517	11/02/2015	134598	PRIME COMMUNICATIONS INC	\$225.00
	427518	11/02/2015	102199	PRIORITY FITNESS INC	\$558.66
	427519	11/02/2015	138487	PRODUCTIVITY INC	\$182.50
	427520	11/02/2015	073840	PSYCHOLOGICAL ASSESSMENT RESOURCE	\$1,540.35
	427522	11/02/2015	133583	QUALITY GLASS & MIRROR	\$327.81
	427523	11/02/2015	109143	SANDRA RALYA	\$4.03
	427524	11/02/2015	135838	RONDA S RANKIN	\$100.00
	427525	11/02/2015	140511	FAITH RASMUSSEN	\$35.71
	427526	11/02/2015	078420	RAWSON & SONS ROOFING, INC.	\$14,320.00
	427527	11/02/2015	109810	BETHANY RAY	\$133.98
	427528	11/02/2015	100389	REALITYWORKS INC	\$149.00
	427529	11/02/2015	100642	REALLY GOOD STUFF INC	\$107.76
	427530	11/02/2015	134858	JENNIFER REID	\$105.40
	427532	11/02/2015	140465	JULIE REINEKE	\$39.85
	427533	11/02/2015	133770	DIANE REINERS	\$28.41
	427535	11/02/2015	138302	TRENT RENKEN	\$50.00
	427536	11/02/2015	139151	TROY RENKEN	\$50.00
	427537	11/02/2015	079055	RESEARCH PRESS PUBLISHERS	\$57.99

Fund	Check Number	Check Date	Vendor Number	Vendor Name	Transaction Amount
01	427538	11/02/2015	109192	KIMBERLI RICE	\$51.52
	427539	11/02/2015	138690	TIMOTHY RICHT	\$48.30
	427540	11/02/2015	079179	RIEKES EQUIPMENT CO	\$4,310.00
	427542	11/02/2015	137470	AMBER RIPA	\$388.19
	427543	11/02/2015	136847	RIVERSIDE TECHNOLOGIES INC	\$1,287.00
	427544	11/02/2015	079310	ROCKBROOK CAMERA CENTER	\$5,919.00
	427545	11/02/2015	137125	LAUREN ROEDER	\$55.66
	427546	11/02/2015	134882	LINDA ROHMILLER	\$30.25
	427547	11/02/2015	136121	MELANIE E ROLL	\$635.00
	427548	11/02/2015	071023	OMAHA THEATER CO FOR YOUNG PEOPLE	\$130.25
	427549	11/02/2015	079440	ROSENBAUM ELECTRIC INC	\$10,905.49
	427550	11/02/2015	072286	JEAN RUCHTI	\$171.35
	427552	11/02/2015	041500	SAMUEL FRENCH INC	\$143.10
	427553	11/02/2015	081695	VWR INTERNATIONAL LLC	\$270.92
	427554	11/02/2015	081725	KIMBERLEY SAUM-MILLS	\$84.18
	427555	11/02/2015	131353	SCANTRON	\$12,725.00
	427556	11/02/2015	109806	BRENT SCHADE	\$167.27
	427557	11/02/2015	137012	SHELLEY SCHMITZ	\$42.15
	427558	11/02/2015	082140	SCHOLASTIC MAGAZINES	\$1,488.25
	427559	11/02/2015	138380	SCHOOL BUS SALES CO	\$1,850.50
	427560	11/02/2015	082200	SCHOOL HEALTH CORPORATION	\$6,451.82
	427561	11/02/2015	082350	SCHOOL SPECIALTY INC	\$255.57
	427562	11/02/2015	136098	SCHOOLDUDE.COM INC	\$13,906.67
	427563	11/02/2015	134567	KAYE SCHWEIGERT	\$175.83
	427564	11/02/2015	138791	MARK SCOTT	\$73.17
	427565	11/02/2015	139827	MATTHEW SCOTT	\$97.63
	427566	11/02/2015	082905	KIMBERLY SECORA	\$42.15
	427567	11/02/2015	082910	SECURITY EQUIPMENT INC	\$1,145.00

Fund	Check Number	Check Date	Vendor Number	Vendor Name	Transaction Amount
01	427568	11/02/2015	138267	NATHAN SEGGERMAN	\$94.28
	427569	11/02/2015	082941	KELLY SELTING	\$129.95
	427570	11/02/2015	134189	JODY SEMPEK	\$68.48
	427571	11/02/2015	140383	SENTRY INSURANCE, A MUTUAL COMPANY	\$83,079.00
	427572	11/02/2015	136754	CCT ENTERPRISES LLC	\$76.50
	427573	11/02/2015	109800	AMY SHATTUCK	\$188.03
	427574	11/02/2015	137697	LARIA SHEA	\$281.30
	427575	11/02/2015	083175	SHEPPARD'S BUSINESS INTERIORS	\$251.70
	427576	11/02/2015	135023	DONALD SHIRLEY	\$819.44
	427577	11/02/2015	132590	SILVERSTONE GROUP INC	\$4,877.00
	427579	11/02/2015	083452	SIMPSON SUPPLY	\$209.92
	427580	11/02/2015	136137	JULIA SINIARD	\$48.30
	427585	11/02/2015	137828	BRENT SNOW	\$100.00
	427586	11/02/2015	101476	SODEXO INC & AFFILIATES	\$101,276.99
	427587	11/02/2015	133382	SOUNDZABOUND MUSIC LIBRARY LLC	\$1,263.25
	427588	11/02/2015	133954	SOUTHSIDE PLUMBING LLC	\$139.50
	427589	11/02/2015	102524	SPALDING EDUCATION INTERNATIONAL	\$843.97
	427590	11/02/2015	132405	SPARTAN STORES DISTRIBUTION LLC	\$68.95
	427592	11/02/2015	139944	DAVID STALLING	\$18.40
	427593	11/02/2015	137481	STAPLES CONTRACT & COMMERCIAL INC	\$168.29
	427595	11/02/2015	134116	STATE STEEL OF OMAHA	\$562.25
	427596	11/02/2015	084491	TRACY STAUFFER	\$112.13
	427597	11/02/2015	140698	JENNIFER STEC	\$11.21
	427598	11/02/2015	140350	BRIDGETTE STEVENS	\$402.19
	427600	11/02/2015	139843	STUDENT TRANSPORATION NEBRASKA INC	\$157,657.37
	427601	11/02/2015	084907	SUNDERLAND BROTHERS CO	\$232.36
	427603	11/02/2015	069689	INTERLINE BRANDS INC	\$41,738.60
	427604	11/02/2015	140914	SHANNON SWANEY	\$57.44

Fund	Check Number	Check Date	Vendor Number	Vendor Name	Transaction Amount
01	427605	11/02/2015	139970	SWEAT, CYCLE & SOUL LLC	\$300.00
	427606	11/02/2015	099302	SYSCO LINCOLN INC	\$1,243.09
	427607	11/02/2015	133300	TALX UC EXPRESS	\$759.11
	427608	11/02/2015	133969	TENNANT SALES & SERVICE COMPANY	\$2,390.30
	427609	11/02/2015	140513	ANNA THOMA	\$89.00
	427610	11/02/2015	136381	ANNETTE THOMAS	\$3.80
	427611	11/02/2015	135006	STEVE THRONE	\$252.62
	427612	11/02/2015	140083	TAYLOR THRONE	\$25.00
	427613	11/02/2015	136578	PEGGI TOMLINSON	\$21.05
	427614	11/02/2015	106807	JEAN TOOHER	\$123.74
	427615	11/02/2015	131446	TOSHIBA AMERICA INFO SYS INC	\$1,395.00
	427616	11/02/2015	131446	TOSHIBA AMERICA INFO SYS INC	\$2,241.50
	427617	11/02/2015	089574	TOTAL MARKETING INC	\$410.00
	427618	11/02/2015	106364	TRANE US INC	\$415.59
	427619	11/02/2015	089740	TREETOP PUBLISHING INC	\$121.00
	427621	11/02/2015	089760	TRIARCO ARTS & CRAFTS LLC	\$65.85
	427622	11/02/2015	107719	KIMBERLY TRISLER	\$36.11
	427623	11/02/2015	106493	TRITZ PLUMBING, INC.	\$4,193.67
	427624	11/02/2015	137488	I ASSESSMENT LLC	\$34,627.40
	427627	11/02/2015	090678	UNISOURCE WORLDWIDE INC	\$624.00
	427628	11/02/2015	090270	UNITED DISTRIBUTORS, INC.	\$5,976.00
	427629	11/02/2015	090214	UNITED ELECTRIC SUPPLY CO INC	\$959.62
	427630	11/02/2015	090242	UNITED PARCEL SERVICE	\$393.42
	427631	11/02/2015	068840	UNIVERSITY OF NEBRASKA AT OMAHA	\$165,000.00
	427632	11/02/2015	068840	UNIVERSITY OF NEBRASKA AT OMAHA	\$350.00
	427636	11/02/2015	139797	US BANK NATIONAL ASSOCIATION	\$10,436.00
	427639	11/02/2015	091040	VAL LTD	\$142.81
	427640	11/02/2015	138046	AUTO LUBE INC	\$22.08

Fund	Check Number	Check Date	Vendor Number	Vendor Name	Transaction Amount
01	427641	11/02/2015	138460	KRISTIN VAN WYNGAARDN	\$156.98
	427642	11/02/2015	140084	ALLY VARNER	\$33.08
	427643	11/02/2015	083340	VERNE SIMMONDS COMPANY	\$0.00
	427644	11/02/2015	092280	VERNIER SOFTWARE & TECHNOLOGY LLC	\$1,199.54
	427645	11/02/2015	138328	VEX ROBOTICS INC	\$589.26
	427647	11/02/2015	109122	CONNIE VLCEK	\$63.96
	427648	11/02/2015	092600	VOSS ELECTRIC CO	\$9,240.00
	427650	11/02/2015	093008	BARBARA WALLER	\$133.67
	427651	11/02/2015	131112	LINDA WALTERS	\$37.72
	427653	11/02/2015	093650	VWR INTERNATIONAL LLC	\$36.65
	427655	11/02/2015	139738	WASTE MANAGEMENT OF NEBRASKA	\$13,386.64
	427656	11/02/2015	093765	WATER ENGINEERING, INC.	\$3,453.93
	427659	11/02/2015	140929	ERIC WELTE	\$115.92
	427661	11/02/2015	133061	JACKIE WHISENHUNT	\$192.63
	427662	11/02/2015	139932	WILLIAM WHISTON	\$126.27
	427663	11/02/2015	137485	WENDY WIGHT	\$153.36
	427666	11/02/2015	095376	WORLD BOOK INC	\$13,098.00
	427667	11/02/2015	095491	GLEN WRAGGE	\$217.18
	427668	11/02/2015	109852	WURTH BAER SUPPLY CO	\$2,114.97
	427669	11/02/2015	140311	WW NORTON & COMPANY INC	\$731.66
	427671	11/02/2015	137020	CHAD ZIMMERMAN	\$58.65
	427672	11/02/2015	135647	LACHELLE ZUHLKE	\$45.59
01 - T	otal				\$2,389,367.24
02	25141	10/15/2015	081630	SAMS CLUB DIRECT	\$151.08
	25142	10/15/2015	138496	WRIGHT EXPRESS FINANCIAL SVCS CORP	\$43.33
	25143	10/22/2015	138332	MCKENNA SHAYE BLACK	\$152.25
	25144	10/22/2015	140926	NICHOLAS JON GRADY	\$97.88
	25145	10/22/2015	140909	ALISON ANN GRUHN	\$108.75

Fund	Check Number	Check Date	Vendor Number	Vendor Name	Transaction Amount
02	25146	10/22/2015	140905	MICHAELA HALE	\$108.75
	25147	10/22/2015	140906	HAILEIGH M HALL	\$108.75
	25148	10/22/2015	140908	SPENCER D LEWIS	\$228.38
	25149	10/22/2015	140450	TYLER LYONS	\$228.38
	25150	10/22/2015	139861	ALYSSA C MOWERY	\$52.56
	25151	10/22/2015	140917	JENNIFER R PARKER	\$65.25
	25152	10/22/2015	139863	ELIZABETH E PFISTER	\$43.50
	25153	10/22/2015	140907	PATRICIA PHILLIPS	\$87.00
	25154	10/22/2015	140165	ANDREW WALDRON	\$74.31
	25155	10/22/2015	137672	CARLY J WHITE	\$152.25
	25156	11/02/2015	109843	NEXTEL PARTNERS INC	\$134.05
	25157	11/02/2015	100013	OFFICE DEPOT 84133510	\$3,653.60
	25158	11/02/2015	101476	SODEXO INC & AFFILIATES	\$818,684.90
	25159	11/02/2015	137481	STAPLES CONTRACT & COMMERCIAL INC	\$150.15
02 - To	otal				\$824,325.12
06	427075	11/02/2015	133480	BERINGER CIACCIO DENNELL MABREY	\$6,275.25
	427116	11/02/2015	133970	CCS PRESENTATION SYSTEMS	\$5,185.00
	427128	11/02/2015	139924	CHOICE SOLUTIONS LLC	\$208,330.00
	427136	11/02/2015	106902	COMMUNICATION SERVICES INC.	\$3,999.66
	427185	11/02/2015	136245	DONOVAN PROPERTIES LLC	\$1,782.49
	427224	11/02/2015	130045	FARRIS ENGINEERING	\$72.50
	427261	11/02/2015	044950	GRAINGER INDUSTRIAL SUPPLY	\$100.19
	427289	11/02/2015	132423	HEWLETT PACKARD CO	\$3,013.95
	427383	11/02/2015	107590	LUND-ROSS CONSTRUCTORS INC	\$26,389.31
	427425	11/02/2015	140386	MOBILE MINI INC	\$114.62
	427474	11/02/2015	136898	OLSSON ASSOCIATES INC	\$3,030.77
	427543	11/02/2015	136847	RIVERSIDE TECHNOLOGIES INC	\$6,084.00
06 - To	otal				\$264,377.74

Fund	Check Number	Check Date	Vendor Number	Vendor Name	Transaction Amount
07	427035	11/02/2015	010040	A & D TECHNICAL SUPPLY CO INC	\$262.13
	427053	11/02/2015	140305	AMERICAN TRAILER & STORAGE INC	\$285.00
	427075	11/02/2015	133480	BERINGER CIACCIO DENNELL MABREY	\$3,396.00
	427176	11/02/2015	130685	VOGEL WEST INC	\$619.20
	427197	11/02/2015	133806	E & A CONSULTING GROUP INC	\$255.20
	427344	11/02/2015	140623	KE FLEX CONTRACTING LLC	\$3,769.25
	427383	11/02/2015	107590	LUND-ROSS CONSTRUCTORS INC	\$525,580.20
	427417	11/02/2015	131899	MIDWEST STORAGE SOLUTIONS	\$1,208.90
	427474	11/02/2015	136898	OLSSON ASSOCIATES INC	\$392.20
	427517	11/02/2015	134598	PRIME COMMUNICATIONS INC	\$45,687.77
	427521	11/02/2015	139972	PURDY & SLACK ARCHITECTS PC	\$11,325.00
	427541	11/02/2015	106416	RIFE CONSTRUCTION INC	\$70,167.81
	427551	11/02/2015	140085	SAMPSON CONSTRUCTION CO INC	\$18,089.00
	427591	11/02/2015	136932	SPECIALIZED AIR/HYDRONIC BALANCING	\$8,180.00
	427602	11/02/2015	140803	SUPERIOR LIGHTING INC	\$18,217.50
	427626	11/02/2015	136492	TURF & SOIL DIAGNOSTICS	\$600.00
	427635	11/02/2015	140875	BLACKTOP REPAIR SERVICE INC	\$4,742.54
07 - To	otal				\$712,777.70
11	427013	10/15/2015	140996	JACOB BALLENTINE	\$1,500.00
	427022	10/15/2015	081630	SAMS CLUB DIRECT	\$126.78
	427068	11/02/2015	099646	BARNES AND NOBLE BOOKSTORE	\$227.85
	427083	11/02/2015	139242	ANNE BERRYMAN	\$9.99
	427098	11/02/2015	135908	KIMBERLEY BOYD	\$9.99
	427112	11/02/2015	107588	DOROTHY HARMAN	\$19.65
	427118	11/02/2015	051572	CENGAGE LEARNING	\$1,037.03
	427127	11/02/2015	140353	KAYLA CHILDRESS	\$116.29
	427130	11/02/2015	136804	KATHLEEN CINOTTO	\$9.41
	427142	11/02/2015	140998	SARA COOPER	\$9.99

Fund	Check Number	Check Date	Vendor Number	Vendor Name	Transaction Amount
11	427150	11/02/2015	135028	CREATIVE MATHEMATICS PTP	\$48.00
	427156	11/02/2015	027345	CURRICULUM ASSOCIATES INC	\$1,718.69
	427157	11/02/2015	100577	CURTIS 1000 INC	\$119.80
	427163	11/02/2015	131003	DAILY RECORD	\$9.50
	427181	11/02/2015	099552	DISCOUNT SCHOOL SUPPLY	\$37.27
	427198	11/02/2015	102791	ERIC ARMIN INC	\$57.43
	427202	11/02/2015	139782	EDMENTUM INC	\$400.00
	427204	11/02/2015	037525	EDUCATIONAL SERVICE UNIT #3	\$160.00
	427205	11/02/2015	037525	EDUCATIONAL SERVICE UNIT #3	\$519.00
	427206	11/02/2015	037934	JOAN EDWARDS	\$9.99
	427284	11/02/2015	048517	GREENWOOD PUBLISHING GROUP INC	\$2,251.40
	427287	11/02/2015	101881	OMAHA ZOOLOGICAL SOCIETY	\$300.00
	427297	11/02/2015	140300	DEBORAH HORMANN	\$11.88
	427310	11/02/2015	133397	HY-VEE INC	\$846.28
	427321	11/02/2015	138560	IXL LEARNING INC	\$1,238.00
	427349	11/02/2015	138120	SARA KENKEL	\$39.37
	427355	11/02/2015	139364	AMY KOPANIC	\$290.33
	427365	11/02/2015	099217	LAKESHORE LEARNING MATERIALS	\$149.47
	427374	11/02/2015	141002	MEGAN LINNELL	\$85.38
	427386	11/02/2015	139955	MICHAEL GABRIEL MAGRANS	\$250.00
	427401	11/02/2015	140110	MCGRAW-HILL EDUCATION INC	\$413.18
	427434	11/02/2015	107416	NATIONAL GEOGRAPHIC SOCIETY	\$100.00
	427447	11/02/2015	068440	NEBRASKA DEPARTMENT OF EDUCATION	\$20.00
	427455	11/02/2015	135632	MELISSA NIELSEN	\$9.99
	427457	11/02/2015	069675	NOBBIES INC	\$47.51
	427531	11/02/2015	141006	KIMBERLY REID	\$9.99
	427599	11/02/2015	140008	BARBARA STRATMAN	\$9.99
	427600	11/02/2015	139843	STUDENT TRANSPORATION NEBRASKA INC	\$472.83

Fund	Check Number	Check Date	Vendor Number	Vendor Name	Transaction Amount
11	427633	11/02/2015	137712	OREGON UNIVERSITY SYSTEM	\$600.00
	427634	11/02/2015	100923	UNL EXTENSION IN DOUGLAS/SARPY CO	\$285.00
	427638	11/02/2015	132117	VALA'S PUMPKIN FARM & FALL FEST INC	\$232.50
	427646	11/02/2015	138759	VIA INC	\$407.00
	427660	11/02/2015	139244	AMANDA WHARTON-HUNT	\$80.89
	427665	11/02/2015	139352	WORDMASTERS LLC	\$228.00
	427670	11/02/2015	135890	YOUTH FRONTIERS INC	\$5,265.00
	427672	11/02/2015	135647	LACHELLE ZUHLKE	\$27.91
11 - To	otal				\$19,818.56
14	427145	11/02/2015	136587	COVENTRY HEALTH & LIFE INS CO	\$153,800.95
	427578	11/02/2015	138887	SIMPLYWELL LLC	\$4,045.60
14 - To	otal				\$157,846.55
17	427035	11/02/2015	010040	A & D TECHNICAL SUPPLY CO INC	\$105.04
	427056	11/02/2015	139224	SCANDIUM INC	\$298.00
	427057	11/02/2015	012989	APPLE COMPUTER INC	\$858.00
	427116	11/02/2015	133970	CCS PRESENTATION SYSTEMS	\$671.40
	427144	11/02/2015	132170	CORMACI CONSTRUCTION INC	\$17,105.40
	427304	11/02/2015	135781	MARLENE HUNT	\$36.35
	427341	11/02/2015	139433	JEANNA KARLOFF	\$28.83
	427449	11/02/2015	068445	NEBRASKA FURNITURE MART INC	\$759.00
	427470	11/02/2015	100013	OFFICE DEPOT 84133510	\$252.97
	427496	11/02/2015	102047	PAYLESS OFFICE PRODUCTS INC	\$682.97
	427534	11/02/2015	139973	REINHARDT & ASSOCIATES ARCHITECTS P	\$2,670.00
	427561	11/02/2015	082350	SCHOOL SPECIALTY INC	\$1,824.27
	427603	11/02/2015	069689	INTERLINE BRANDS INC	\$90.46
17 - T	otal				\$25,382.69
50	427013	10/15/2015	140996	JACOB BALLENTINE	\$1,500.00
	427016	10/15/2015	139666	FELIPE GONZALEZ	\$300.00

Fund	Check Number	Check Date	Vendor Number	Vendor Name	Transaction Amount
50	427028	10/22/2015	141004	CARL DEUKER	\$2,550.60
	427040	11/02/2015	140212	HAYLEY ADDISON	\$125.00
	427056	11/02/2015	139224	SCANDIUM INC	\$99.99
	427064	11/02/2015	102727	В & Н РНОТО	\$380.18
	427065	11/02/2015	140019	ERIN BACKHAUS	\$30.00
	427066	11/02/2015	135991	BAKER DISTRIBUTING CO LLC	\$4,998.00
	427068	11/02/2015	099646	BARNES AND NOBLE BOOKSTORE	\$337.18
	427088	11/02/2015	019111	BISHOP BUSINESS EQUIPMENT	\$37.00
	427091	11/02/2015	099220	DICK BLICK CO	\$194.50
	427105	11/02/2015	140615	LAUREN BURDT	\$150.00
	427108	11/02/2015	140268	JACOB THOMAS BURROUGHS	\$90.00
	427115	11/02/2015	140956	JOHN B CASTLE	\$50.00
	427116	11/02/2015	133970	CCS PRESENTATION SYSTEMS	\$37.22
	427117	11/02/2015	133589	CDW GOVERNMENT, INC.	\$22.92
	427129	11/02/2015	140213	ALEXIS B CHRISTIANSEN	\$105.00
	427143	11/02/2015	140718	ANDREW CORDELL	\$75.00
	427149	11/02/2015	139451	NICHOLAS CRAMER	\$60.00
	427172	11/02/2015	032800	DEMCO INC	\$173.42
	427178	11/02/2015	033473	DIETZE MUSIC HOUSE INC	\$824.13
	427183	11/02/2015	138337	LYLE DITMARS	\$252.00
	427194	11/02/2015	137509	HAYLEY DUNCAN	\$42.50
	427207	11/02/2015	139918	MAX EDWARDS	\$35.00
	427220	11/02/2015	140473	CHRIS EVANS	\$90.00
	427221	11/02/2015	140719	KATIE EVANS	\$120.00
	427237	11/02/2015	101075	FITNESS FINDERS INC	\$69.95
	427238	11/02/2015	140219	BAILEE FLEMING	\$42.50
	427240	11/02/2015	041100	FOLLETT SCHOOL SOLUTIONS INC	\$1,281.40
	427267	11/02/2015	139948	NICOLAS MERLIN GREVE	\$90.00

Fund	Check Number	Check Date	Vendor Number	Vendor Name	Transaction Amount
50	427268	11/02/2015	140367	HUNTER GRIEVE	\$115.00
	427273	11/02/2015	140173	JENNIFER HAMMOND	\$84.00
	427290	11/02/2015	140952	GABRIELLA HEZEL	\$153.75
	427293	11/02/2015	139809	LOGAN HODGE	\$90.00
	427296	11/02/2015	140919	JEREMY D HOOGESTRAAT	\$239.00
	427298	11/02/2015	132592	WILLIAM SPRAGUE, JR.	\$0.00
	427308	11/02/2015	141008	ALLYSSA MAIRIN HYNES	\$87.50
	427322	11/02/2015	100928	J W PEPPER & SON INC.	\$383.71
	427359	11/02/2015	140215	SARAH KRAMER	\$90.00
	427360	11/02/2015	141010	ADAM KRELL	\$100.00
	427361	11/02/2015	138836	DANA S KRUSE	\$47.00
	427367	11/02/2015	140835	PRESTON D LAU	\$65.00
	427369	11/02/2015	139353	GRACE LAY	\$140.00
	427380	11/02/2015	135166	RONDA LOVERIDGE	\$1,728.00
	427387	11/02/2015	139655	AMANDA MALASHOCK	\$90.00
	427388	11/02/2015	139656	JESSICA MALASHOCK	\$90.00
	427390	11/02/2015	139931	KALEY J MARCINSKI	\$100.00
	427398	11/02/2015	139657	RACHEL MC CLANNAN	\$42.50
	427428	11/02/2015	140720	WILLIAM MORRIS	\$25.00
	427429	11/02/2015	139658	CAMRYN LEIGH MORTRUDE	\$47.50
	427433	11/02/2015	067000	NASCO	\$80.44
	427460	11/02/2015	140756	ALEXANDRA K NORDBERG-ELLIS	\$90.00
	427464	11/02/2015	139275	COLIN O CONNELL	\$105.00
	427465	11/02/2015	138769	HANNAH MARIE OELTJEN	\$90.00
	427470	11/02/2015	100013	OFFICE DEPOT 84133510	\$892.76
	427484	11/02/2015	140954	ANASTASIA ORTMAN	\$140.00
	427485	11/02/2015	140379	NOELLE ORTMAN	\$90.00
	427491	11/02/2015	136739	JAMES W KUPER	\$1,105.00

Fund	Check Number	Check Date	Vendor Number	Vendor Name	Transaction Amount
50	427508	11/02/2015	072760	PITSCO INC	\$157.73
	427510	11/02/2015	139399	JAMES POEHLMAN	\$37.00
	427544	11/02/2015	079310	ROCKBROOK CAMERA CENTER	\$2,377.00
	427548	11/02/2015	071023	OMAHA THEATER CO FOR YOUNG PEOPLE	\$4,417.00
	427561	11/02/2015	082350	SCHOOL SPECIALTY INC	\$19.99
	427575	11/02/2015	083175	SHEPPARD'S BUSINESS INTERIORS	\$1,296.68
	427581	11/02/2015	141009	JOHNNA SISNEROS	\$27.50
	427582	11/02/2015	139660	SYDNEY SLOSSON	\$90.00
	427583	11/02/2015	139266	GILLIAN MARIE SMITHSON	\$90.00
	427584	11/02/2015	140022	HUNTER SCOTT SMITHSON	\$90.00
	427594	11/02/2015	139589	PANCIL LLC	\$270.00
	427620	11/02/2015	139661	DIEGO TREJO	\$90.00
	427625	11/02/2015	140271	RIVER-SAGE TUCKER	\$90.00
	427637	11/02/2015	090440	BSN SPORTS INC	\$751.02
	427649	11/02/2015	140355	PAYTON WAGNER	\$75.00
	427652	11/02/2015	140216	MATT WANETKA	\$75.00
	427654	11/02/2015	141011	BRIANNA WARNER	\$25.00
	427657	11/02/2015	141007	EMMA WEDDLE	\$75.00
	427658	11/02/2015	140357	ZOE WELAND	\$100.00
	427664	11/02/2015	139968	RONALD STEVEN CONIGLIO	\$47.96
50 - To	otal				\$30,676.53
99	427013	10/15/2015	140996	JACOB BALLENTINE	(\$120.00)
	427028	10/22/2015	141004	CARL DEUKER	(\$96.00)
	427307	11/02/2015	140913	STEPHANI HYATT	(\$48.00)
	427491	11/02/2015	136739	JAMES W KUPER	(\$42.64)
99 - To	otal				(\$306.64)
Overall - Total					\$4,424,265.49

Millard Public Schools - Planned Disposition of Surplus Property

BOE Packet Due Date: 10/28/2015 BOE Meeting Date: 11/2/2015 Sale or Disposals Scheduled After: 11/2/2015

Lot	Quantity	Description
1	1	piano
2	2	crash mats
3	1	set building blocks
4	1	fire blanket
5	1	set musical bells
6	1	set concert bells
7	1	braille embosser
8	3	book shelves
9	1	hobart mixer attacjhments
10	1	chalkboard
11	5	wet vacs
12	3	buffers
13	2	carpet extractors
14	1	upright vacuums
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Agenda Item:	Revision of Policy 1420	
Meeting Date:	November 2, 2015	
Department Title and Brief Description:	Office of the Superintendent	
Action Desired:	Approval	
Background:	After reviewing Policy 1420, it has been decided that the legal reference to LB 641 can be deleted. It appears that the reference was added in 2007 when the Legislature created the Learning Community through LB 641. There's no reason to keep or change the legal reference.	
Options/Alternatives Considered:	N/A	
Recommendations:	Approve Policy 1420 with the deletion of the legal reference to LB641.	
Strategic Plan Reference:	N/A	
Implications of Adoption/Rejection:	N/A	
Timeline:	Immediately	
Responsible Persons:	Dr. Kim Saum-Mills, Executive Director of Leadership & Strategic Planning	
Superintendent's Signature: fin Juffi		

Community Relations

Cooperation and Participation with Other Educational Organizations

1420

Cooperative relationships shall be maintained with other educational organizations when it can be determined that such relationships will serve the District's mission and strategic plan and/or when mandated by law.

Legal Reference: LB 641

Related Policies & Rules: 1420.1

Policy Adopted: February 17, 1975 Millard Public Schools

Revised: May 6, 2002; July 9, 2007, November 2, 2015

Omaha NE

AGENDA ITEM:	Revision of Policy 1425		
MEETING DATE:	November 2, 2015		
DEPARTMENT:	Department of Communications		
TITLE AND BRIEF DESCRIPTION:	First Reading of Board Policy 1425 – Community Relations Cooperation with Non-Profit Agencies		
ACTION DESIRED:	Approval X Discussion Information Only		
BACKGROUND:	Policies and Rules are regularly reviewed and submitted to the Board for reaffirmation or revision.		
RECOMMENDATION:	It is recommended by our legal counsel that Policy 1425 be revised so that any special projects with a non-profit must be approved by the Superintendent or designee.		
STRATEGIC PLAN REFERENCE:	Parameter: We will always communicate effectively, both internally and externally, in order to implement our Strategic Plan, operate our schools, and maintain high levels of community support.		
IMPLICATIONS OF ADOPTION/REJECTION:	N/A		
TIMELINE:	N/A		
PERSON RESPONSIBLE:	Rebecca Kleeman		
SUPERINTENDENT APPROVAL: fin Juffs			

Community Relations

Cooperation With Non-Profit Agencies

1425

Individual schools may choose to participate in fundraising activities to benefit non-profit organizations, provided that such cooperation does not restrict or impair the educational program and is consistent with the standards, criteria, and limitations of district rules 1115.1(I), 1340.1(II), 3150.1, 6700.1(II)(A)(5)(a)-(i), and 7305.1(III-IV), which are incorporated herein. Permission to conduct such an activity must be obtained from the school principal, except for any activity that is associated with, connected to, or requires a "special project" as that term is defined in District Rule 3614.1 must be pre-approved by the Superintendent or designee.

The District does not by this policy create or establish an open or public forum and reserves the sole and absolute right to determine the acceptable non-profit activities conducted district-wide. The only authorized district-wide campaigns for solicitation of funds from employees and students of the District will be the United Way campaign and the Millard Public Schools Foundation campaign.

Related Policies and Rules: <u>1115</u>, <u>1340</u>, <u>1420</u>, <u>3150</u>, <u>4405</u>, <u>6700</u>, <u>7305</u>, <u>1115.1</u>, <u>1340.1</u>, <u>1425.1</u>, <u>3150.1</u>, <u>6700.1</u>, 7305.1

Adoption: February 17, 1975 Millard Public Schools

Revision: May 6, 2002; July 9, 2007, February 2, 2009; November 2, 2015 Omaha, NE

Reaffirm: September 20, 2010

AGENDA ITEM:	Revision of Policy 1430	
MEETING DATE:	November 2, 2015	
DEPARTMENT:	Department of Communications	
TITLE AND BRIEF DESCRIPTION:	First Reading of Board Policy 1430 – Community Relations Cooperation with Commercial Agencies	
ACTION DESIRED:	Approval X Discussion Information Only	
BACKGROUND:	Policies and Rules are regularly reviewed and submitted to the Board for reaffirmation or revision.	
RECOMMENDATION:	It is recommended by our legal counsel that Policy 1430 be revised so that any special projects with a commercial agency must be approved by the Superintendent or designee. Our legal counsel also recommended language prohibiting commercial enterprises from soliciting teachers during their work day.	
STRATEGIC PLAN REFERENCE:	Parameter: We will always communicate effectively, both internally and externally, in order to implement our Strategic Plan, operate our schools, and maintain high levels of community support.	
IMPLICATIONS OF ADOPTION/REJECTION:	N/A	
TIMELINE:	N/A	
PERSON RESPONSIBLE:	Rebecca Kleeman	
SUPERINTENDENT APPROVAL: fin Juffi		

Community Relations

Cooperation with Commercial Agencies

1430

Approved commercial agencies may conduct profit-making activities in individual schools, provided that the educational program is not impaired, the activity provides a financial benefit to the school, and is consistent with the standards, criteria, and limitations of district rules 1115.1(I), 1340.1(II), 3150.1, 3921.1(I-IV), 6700.1(II)(A)(5)(a)-(i), and 7305.1(III-IV), which are incorporated herein. Permission to conduct such an activity must be obtained from the school principal, except for any activity that is associated with, connected to, or requires a "special project" as that term is defined in District Rule 3614.1 must be pre-approved by the Superintendent or designee.

Any agent or representative of a commercial enterprise, theatrical production or play is strictly prohibited from calling upon, securing contracts or soliciting orders or business from classroom teachers between the hours of 8:00 a.m. and 5:00 p.m. on all days in which school is in session.

The District does not by this policy create or establish an open or public forum and reserves the sole and absolute right to determine the acceptable profit-making activities conducted within the District.

Legal Reference: § 79-8,100

Related Policies & Rules: 1115, 1115.1, 1340, 1340.1, 1420, 1420.1, 1430.1, 3150, 3150.1, 3921, 3921.1, 6700, 6700.1, 7305, 7305.1

Policy Adopted: February 17, 1975 Millard Public Schools

Revised: May 6, 2002; July 9, 2007, November 2, 2015 Omaha NE

Reaffirmed: February 2, 2009

Agenda Item:	Board Policy: Human Resources – Salary Schedules.			
Meeting Date:	November 2, 2015			
Department	Human Resources			
Title and Brief Description:	Approval of Board Policy 4400 – Human Resources – Salary Schedules.			
Action Desired:	Approval			
Background:	Following District guidelines to review Policies every seven years, this Policy has suggested amendments. The proposed amended Policy has been reviewed by the District's legal counsel. First Reading of this Policy was at the October 19, 2015 Board meeting.			
Options/Alternatives Considered:	Delete or revise			
Recommendations:	Approval.			
Responsible Persons:	Kevin Chick, Chad Meisgeier			
Superintendent's Signa	ture: fin Sulfri			

Human Resources

Salary Schedules 4400

The District shall develop <u>annual</u> salary <u>schedules</u>-<u>recommendations</u> for all personnel to be reviewed <u>annually</u> by the Board of Education.

Policy Adopted: October 7, 1974

Millard Public Schools Omaha, Nebraska

Revised: August 16, 1993; January 22, 2001; November 2, 2015

Reaffirmed: November 17, 2008

Agenda Item:	Revision of Rule 1420.1		
Meeting Date:	November 2, 2015		
Department Title and Brief Description:	Office of the Superintendent		
Action Desired:	Approval		
Background:	After reviewing Rule 1420.1, it has been decided that the legal reference to LB 641 can be deleted. It appears that the reference was added in 2007 when the Legislature created the Learning Community through LB 641. There's no reason to keep or change the legal reference.		
Options/Alternatives Considered:	N/A		
Recommendations:	Approve Rule 1420.1 with the deletion of the legal reference to LB641.		
Strategic Plan Reference:	N/A		
Implications of Adoption/Rejection:	N/A		
Timeline:	Immediately		
Responsible Persons:	Dr. Kim Saum-Mills, Executive Director of Leadership & Strategic Planning		
Superintendent's Signa	ture: Jin Duffi		

Community Relations

Cooperation and Participation with Other Educational Organizations

1420.1

Staff members who receive requests from other educational organizations to cooperate in educational projects shall first obtain permission to participate from the Superintendent or designee.

Legal Reference: LB 641

Related Policies & Rules: 1420

Rule Approved: February 17, 1975 Millard Public Schools

Revised: May 6, 2002; July 9, 2007, November 2, 2015 Omaha NE

AGENDA ITEM:	Revision of Rule 1425.1	
MEETING DATE:	Monday, November 2, 2015	
DEPARTMENT:	Department of Communications	
TITLE AND BRIEF DESCRIPTION:	Revision of Rule 1425.1 – Community Relations Cooperation with Non-Profit Agencies	
ACTION DESIRED:	Approval X Discussion Information Only	
BACKGROUND:	Policies and Rules are regularly reviewed and submitted to the Board for reaffirmation or revision.	
RECOMMENDATION:	It is recommended by our legal counsel that Rule 1425.1 be revised so that any special projects with a non-profit must be approved by the Superintendent or designee.	
STRATEGIC PLAN REFERENCE:	Parameter: We will always communicate effectively, both internally and externally, in order to implement our Strategic Plan, operate our schools, and maintain high levels of community support.	
IMPLICATIONS OF ADOPTION/REJECTION:	N/A	
TIMELINE:	N/A	
PERSON RESPONSIBLE:	Rebecca Kleeman	
SUPERINTENDENT APPROVAL: fin Juffi		

Community Relations

Cooperation with Non-Profit Organizations

1425.1

Non-Profit community agencies wishing to use school facilities for fundraising activities and/or after-school meetings must obtain permission from the Superintendent or designee in compliance with Policy 1340 Use of School Facilities.

The District may distribute flyers and other promotional materials for recognized non-profit community agencies in the Activities Express newspaper, if such assistance is determined by the Superintendent or designee to be consistent with the standards, criteria, and limitations of District Rules 1115.1(I), 1340.1(II), 3150.1, 6700.1(II)(A)(5)(a)-(i), and 7305.1 (III), (IV) which are incorporated herein. The District does not distribute free products to students and staff, except if such assistance is determined by the Superintendent or designee to be in the best interest of students and staff.

Schools may designate a table for literature from non-profit organizations for information that is specific to the individual school. Such information may include recruitment notices and meeting and event schedules. School staff members may announce the opportunity for students to pick up literature of interest and take it home. Schools also may designate bulletin boards for posting of meeting notices of non-profit organizations which are specific to the individual school. All such literature and postings shall be consistent with the standards, criteria, and limitations of District Rules 1115.1 (I), 1340.1 (II), 3150.1, 6700.1 (II) (A) (5) (a) – (i), and 7305.1 (III) and (IV).

Individual schools may choose to participate in fundraising activities to benefit non-profit organizations, provided that such cooperation does not restrict or impair the educational program and is consistent with the standards, criteria, and limitations of District Rules 1115.1(I), 1340.1(II), 3150.1, 6700.1(II)(A)(5)(a)-(i), and 7305.1 (III), (IV) which are incorporated herein. Permission to conduct such an activity must be obtained from the school principal, except for any activity that is associated with, connected to, or requires a "special project" as that term is defined in District Rule 3614.1 must be pre-approved by the Superintendent or designee. Promotional materials for fundraising activities taking place in individual schools may be distributed to students by school staff members only.

Students' participation in activities sponsored by non-profit community agencies must be voluntary. Students may not use school time to participate in activities sponsored by non-profit community agencies, unless the activity is within the context of the educational program.

Related Policy and Rules: <u>1115</u>, <u>1115.1</u>, <u>1340</u>, <u>1340.1</u>, <u>1420</u>, <u>1420.1</u>, <u>1425</u>, <u>3150</u>, <u>3150.1</u>, <u>4405</u>, <u>6700</u>, <u>6700.1</u>, <u>7305</u>, <u>7305.1</u>

Adoption: February 17, 1975 Millard Public Schools

Revision: May 6, 2002, July 9, 2007, February 2, 2009, September 20, 2010, Omaha, NE

November 2, 2015

AGENDA ITEM: Revision of Rule 1430.1

MEETING DATE: Monday, November 2, 2015

DEPARTMENT: Department of Communications

TITLE AND BRIEF

DESCRIPTION: Revision of Rule 1430.1 – Community Relations

Cooperation with Commercial Agencies

ACTION DESIRED: Approval \underline{X} Discussion __ Information Only __

BACKGROUND: Policies and Rules are regularly reviewed and submitted to

the Board for reaffirmation or revision.

RECOMMENDATION: It is recommended by our legal counsel that Rule 1430.1 be

revised so that any special projects with a commercial agency must be approved by the Superintendent or designee. Our legal counsel also recommended language prohibiting commercial enterprises from soliciting teachers

during their work day.

STRATEGIC PLAN

REFERENCE: Parameter: We will always communicate effectively, both

internally and externally, in order to implement our Strategic Plan, operate our schools, and maintain high

levels of community support.

IMPLICATIONS OF

ADOPTION/REJECTION: N/A

TIMELINE: N/A

PERSON RESPONSIBLE: Rebecca Kleeman

SUPERINTENDENT APPROVAL: _____ fin Juff

Community Relations

Cooperation with Commercial Agencies

1430.1

Individual schools may choose to use commercial agencies to participate in profit-making activities to benefit the school, provided that the educational program is not impaired, the activity provides a financial benefit to the school, and is consistent with the standards, criteria, and limitations of district rules 1115.1(I), 1340.1(II), 3150.1, 3921.1(I-IV), 6700.1(II)(A)(5)(a)-(i), and 7305.1(III-IV), which are incorporated herein. Permission to conduct such an activity must be obtained from the school principal, except for any activity that is associated with, connected to, or requires a "special project" as that term is defined in District Rule 3614.1 must be pre-approved by the Superintendent or designee.

Commercial agencies wishing to use school facilities to conduct profit-making activities must obtain approval from the Superintendent or designee in compliance with policy 1340 – Use of School Facilities.

The profit-making activities shall not interfere with nor disrupt the operation of the schools or the educational process. Student participation cannot be required nor classroom time devoted to promotion of profit-making activities. Promotional material for profit-making activities taking place in individual schools may be distributed to students by school staff members only.

The District may distribute flyers and other promotional materials for commercial agencies in the Activities Express newspaper, if such assistance is determined by the Superintendent or designee to be in the best interest of students. The District does not distribute free products to students and staff, except if such assistance is determined by the Superintendent or designee to be in the best interest of students and staff. Any agent or representative of a commercial enterprise, theatrical production or play is strictly prohibited from calling upon, securing contracts or soliciting orders or business from classroom teachers between the hours of 8:00 a.m. and 5:00 p.m. on all days in which school is in session.

Legal Reference: § 79-8,100

Related Policies & Rules: 1115, 1115.1, 1340, 1340.1, 1420, 1420.1, 1430.1, 3150, 3150.1, 3921, 3921.1, 6700,

6700.1, 7305, 7305.1

Rule Approved: February 17, 1975

Millard Public Schools

Revised: May 6, 2002; July 9, 2007; February 2, 2009, November 2, 2015 Omaha NE

Agenda Item:	Dates.		
Meeting Date:	November 2, 2015		
Department	Human Resources		
Title and Brief Description:	Approval of Board Rule 4400.1 – Human Resources – Salary Schedules and Payroll Dates.		
Action Desired:	Approval		
Background:	Following District guidelines to review Policies and Rules every seven years, this Rule has suggested amendments to conform to current practices. The proposed amended Policy has been reviewed by the District's legal counsel.		
Options/Alternatives Considered:	Delete or revise		
Recommendations:	Approval.		
Responsible Persons:	Kevin Chick, Chad Meisgeier		
Superintendent's Signa	ture: Jin Sulfin		

Human Resources

Salary Schedules and Payroll Dates

4400.1

Each staff member will be notified of his/her salary or wage amount with each payroll receive annually a copy of the salary schedule which pertains to his/her position.

Each employee will be placed on the appropriate salary schedule paid according to the factors related to his/her position his or her qualifications, experience, performance, and/or any applicable collective bargaining agreement.

In individual situations, the Superintendent may recommend to the Board of Education decide that no salary increase be given, or that a salary increase be granted in addition to that listed on the salary schedule, provided the salary determination is in compliance with any applicable collective bargaining agreement.

Each employee compensated by the hour shall be paid bi-weekly (every other week); each salaried employee shall be paid monthly. Payroll schedules will be developed by the Superintendent or designee—and communicated to each employee.

Related Policies & Rules: 4400P

Rule Approved: October 7, 1974

Revised: November 17, 1986; August 16, 1993; January 22, 2001; November 2, 2015

Reaffirmed: November 17, 2008

Millard Public Schools Omaha, Nebraska

Agenda Item:	Board Rule: Human Resources – Salary Schedules – Teacher and Nurse Placement.		
Meeting Date:	November 2, 2015		
Department	Human Resources		
Title and Brief Description:	Approval of Board Rule 4400.2 – Human Resources – Salary Schedules – Teacher and Nurse Placement.		
Action Desired:	Approval		
Background:	Following District guidelines to review Policies and Rules every seven years, this Rule has suggested amendments to conform to current practices. The proposed amended Policy has been reviewed by the District's legal counsel.		
Options/Alternatives Considered:	Delete or revise		
Recommendations:	Approval.		
Responsible Persons:	Kevin Chick, Chad Meisgeier		
Superintendent's Signa	ture: fin Dutfi		

Human Resources

Salary Schedules - Teacher and Nurse Placement

4400.2

The following Rules apply to certificated employees who are paid according to the Teacher's or Nurse's Schedule Negotiated Agreement:

- I. Teachers and nurses employed 90 consecutive full days or more in the same position shall be compensated on the salary schedule according to the proportion of time they are assigned, and the District shall provide fringe benefits stipulated in the collective bargaining agreement.
- II. Employment for 90 days shall not include those days during which the teacher or nurse serves as a substitute for a regular employee who is on a temporary paid or unpaid leave of absence.

Related Policies and Rules: 4400, 4205.1

Rule Approved: August 7, 1978

Revised: May 6, 1985; Aug 16, 1993; Jul 1, 1996; Aug 4, 1997; Mar 15, 1999

Mar 20, 2000, Jan 22, 2001, Feb 4, 2002; June 3, 2002; May 16, 2005; November 2, 2015

Reaffirmed: November 17, 2008

Millard Public Schools Omaha, Nebraska

Agenda Item:	Policy 6225 Secondary Class Size
Meeting Date:	November 2, 2015
Department:	Educational Services
Title and Brief Description:	Policy 6225 Secondary Class Size
Action Desired:	First Reading
Background:	Policy 6225 was the result of recommendations derived from Selective Abandonment. The changes are requested to afford the District the ability to balance the goals of selective abandonment with continued support for the District's mission and strategic goals.
	The changes will allow registration requests for the subsequent year to be taken into consideration before final decisions are made regarding those courses that may ultimately not be offered the next year. This will be especially important for many culminating courses that support the AP/IB, college and career ready culture that the District promotes.
Recommendations:	First Reading
Strategic Plan Reference:	Strategy 1 and Strategy 3
Implications of Adoption/Rejection:	If rejected the small class size report will be submitted with recommendations incorporated into the High School Curriculum Handbook at the next meeting.
Responsible Persons:	Dr. Mark Feldhausen, Associate Superintendent of Educational Services
Superintendent's Signature:	Jin Dutter -

Curriculum, Instruction, and Assessment

Secondary Class Size

6225

The District will make reasonable efforts to maintain class size in the middle and high schools it deems appropriate and fiscally responsible for the effective instruction of students.

Whenever 14 or fewer students enroll in a class (course), the class may not be offered unless so mandated by law, the Board of Education, or necessitated by District activity programs. An effort may be made to combine a class consisting of 14 or fewer students with a similar or related class or program either in the same building or in a different grade level or building.

Any course, other than those mandated, will may be deleted from the District's curriculum offerings after a history of three consecutive years where enrollment in the course has 14 or fewer students. Said enrollment figures will be those derived from official class rolls.

A report will be prepared and presented to the Board of Education on or before the first meeting in November meeting indicating 1) the courses recommended for cancellation for the following semester or year, 2) classes that are to be combined, and 3) courses with 14 or fewer students that are being recommended for retention in the curriculum for the ensuing year.

A report will be prepared and instructions provided to building administrators regarding those classes (courses) that will be subject to these parameters for the upcoming year.

Related Policies and Rules: 4005P, 4005.1, <u>10,000.1</u>

Rule Approved: May 4, 2015

Revised: November 16, 2015

Millard Public Schools

Omaha, Nebraska

AGENDA ITEM: Curriculum, Instruction, and Assessment

Rule 6320.1 – Students: Requirements for Senior High

Graduation

MEETING DATE: November 2, 2015

DEPARTMENT: Educational Services

TITLE AND BRIEF DESCRIPTION:

Approve Revisions to Rule 6320.1

ACTION DESIRED: Approval \underline{X}

BACKGROUND: Revisions to Rule 6320.1 are being recommended. Changes to the graduation requirements are mainly being proposed to:

• align with the PK-12 Mathematics Framework, which was approved July 6, 2015 with a revised PK-12

approval November 2, 2015;

 eliminate the Technology Education Graduation Requirement beginning with the Class or 2020 as part of the progression towards digital learning through one-toone technology and the addition of AP Computer Science Principles while maintaining 230 credits for graduation;

Mathematics Framework, which is recommended for

• delete all references to Class of 2016;

• adjustments related to assessment performance to align

with BOE Rule 6315.1.

RECOMMENDATIONS: It is recommended that the Board of Education approve Rule

6320.1 Curriculum, Instruction, and Assessment – Students:

Requirements for Senior High Graduation

Jin Suffer

STRATEGIC PLAN

REFERENCE:

N/A

TIMELINE: Immediate to update the 2016-2017 Millard Public Schools High

School Curriculum Handbook & Registration Guide in

preparation for registration.

RESPONSIBLE PERSON(S): Dr. Mark Feldhausen and Dr. Nancy Johnston

SUPERINTENDENT'S

APPROVAL:

Curriculum, Instruction, and Assessment

Students: Requirements for Senior High School Graduation

6320.1

Students differ widely in interests, abilities and expectations. For this reason, the following are stated as minimums to allow flexibility in the planning of individual student programs. However, on the assumption that some elements should be shared in common by educated persons, these basic uniform requirements are established for graduation from the Millard Public Schools. In addition to specified credit requirements students must successfully meet District Assessment requirements and successfully complete a Personal Learning Plan according to District requirements.

I. Credits: A minimum of **230 credits** is required for graduation. Each student's program shall include, but not be limited to, the programs and courses listed below and may be amended, revised, or deleted by the Board of Education as approved and published in the Millard Public Schools High School Curriculum Handbook and Registration Guide.

<u>PROGRAM</u>	TOTAL COURSE/SUBJECT <u>CREDITS</u>	COURSE OR SUBJECT AREAS	CREDITS
English	40	English 9	10
		English 10	10
		English 11	10
		Oral Communications	5
		Choice of Speech, Forensics, Debate I,	
		Professional Speaking (Education Academy) or	
		the combination of IB Language A ¹ , IB	
		Language B and 12 th Grade Theory of	
		Knowledge	
		Choice of an English Selected Course	5

The student will take five (5) credits from the following:

English Selected Courses

TOTAL

AP English Language & Composition
AP English Literature
Contemporary Literature
Creative Writing
Global Perspectives through Literature

IB English HL II
Literacy for Life I
Literacy for Life II
Literature and Film
Research Methods

21st Century Media Literacy

TOTAL COURSE/SUBJECT

PROGRAM	CREDITS	COURSE OR SUBJECT AREAS	CREDITS
Social Studies	30	Class es of 2016 and 2017	
		American History (Since 1914) - 9th	10
		World Geography - 10 th	10
		US Government & Economics - 11 th or 12 th	5
		Choice of a Social Studies Elective Course	5

The student will take five (5) credits from the following:

Social Studies Elective Courses

Human Diversity (Ethnic Studies)	AP Comparative Government & Politics
International Relations (World Affairs)	AP European History
Introduction to Behavioral Science	AP Human Geography
Law Studies	AP Psychology
Psychology	AP United States Government & Politics
Sociology	AP United States History

	World History World Religions	AP World History IB 20 th Century World History Topics IB History of America IB Psychology SL Class of 2018 and Beyond World Geography - 9th World History - 10th United States History - 11th or 12th United States Government & Economics	5 10 10 5
PROGRAM Mathematics	TOTAL COURSE/SUBJECT CREDITS 30	COURSE OR SUBJECT AREAS Algebra I or Algebra 1: Foundations I or appropriate course from the math sequence A course numbered 220 or higher One additional math course Computer Science courses may not be applied toward math credit.	10 10 10 10
PROGRAM Science	TOTAL COURSE/SUBJECT CREDITS 30	COURSE OR SUBJECT AREAS Curriculum Handbook describes science courses and recommended/optional course sequences. Biology - 9 th Chemistry OR Physical Science: Chemistry - 10 th or 11 th Physics OR Physical Science: Physics - 10 th or 11 th Choice of Science Electives (dependent upon choice of 5 or 10 credit Chemistry and Physics courses) Curriculum Handbook describes science courses and recommended/optional course sequences.	10 10 OR 5 10 OR 5 0-10
PROGRAM Physical Education	TOTAL COURSE/SUBJECT CREDITS 15	COURSE OR SUBJECT AREAS Choice of grade appropriate course Curriculum Handbook describes PE courses and recommends grade appropriate levels.	CREDITS 15
PROGRAM Health Education	TOTAL COURSE/SUBJECT CREDITS 5	COURSE OR SUBJECT AREAS Everyday Living taken in 10th or 11th grade	CREDITS 5

TOTAL	
COURSE/SUBJECT	

PROGRAMCREDITSCOURSE OR SUBJECT AREASCREDITSTechnology5Classes of 2017-20195EducationChoice of Technology Selected Courses

The student will take five (5) credits from the following:

Technology Selected Courses

Computer Science Principles

Computer Technology Applications (Prior to 2015-2016)

Digital Design

Information Technology Applications Introduction to Engineering Design I

Introduction to Computer Science (Prior to 2015-2016)

Introduction to Graphics Communications (Prior to 2015-2016)

Beginning with the Class of 2020, a technology course will no longer be a requirement for graduation but will be available for elective credit options.

TOTAL COURSE/SUBJECT

PROGRAMCREDITSCOURSE OR SUBJECT AREASCREDITSFine & Performing Arts5Choice of Fine & Performing Arts Selected Courses5Arts

The student will take five (5) credits from the following:

Fine & Performing Arts Selected Courses

Any art course Any music course Drama I

Theatre Appreciation

TOTAL COURSE/SUBJECT

PROGRAMCREDITSCOURSE OR SUBJECT AREASCREDITSFinancial Literacy5Choice of Financial Literacy Selected Courses5

The student will take five (5) credits from the following:

Financial Literacy Selected Courses

Personal Finance

Wealth Building & Personal Finance (Entrepreneurship Academy)

TOTAL COURSE/SUBJECT

PROGRAMCREDITSCOURSE OR SUBJECT AREASCREDITSHuman Resources5Choice of Human Resources Course5

The student will take five (5) credits from the following:

Human Resources Selected Courses

Sociology Human Diversity
Psychology International Relations

Adult Living Introduction to Behavioral Sciences

Child Development IB Psychology

IB Theory of Knowledge I

<u>PROGRAM</u>	TOTAL COURSE/SUBJECT CREDITS	COURSE OR SUBJECT AREAS	<u>CREDITS</u>
Electives	60	Classes of 2017-2019 A total of 60 additional credits	60
	65	Classes of 2020 and Beyond A total of 65 additional credits	65

- A. A grade of four (4) or better must be maintained in any course used to fulfill graduation requirements.
- B. Electives courses are offered in the subject areas previously listed and in business education, world language, family & consumer sciences, industrial technology, art, drama, debate, journalism and music.
- C. In order to provide flexibility in such situations as transfers and special needs, waivers may be submitted by staff and approved by the principal.
- A student must complete credits as described herein in order to graduate and receive a diploma from the Millard Public Schools.
- E. A student must complete a Personal Learning Plan, meeting district requirements.
- II. Assessments: In addition to 230 credits required for graduation, students must also successfully meet the College and Career Readiness metric for the high school Essential Learner Outcomes of College and Career Readiness assessments.

III. Effect of Student Performance

- A. When a student has successfully met the Essential Learner Outcomes of College and Career Readiness metric for each outcome:
 - 1. A notation shall be made in the student's cumulative record. Such information will be communicated to parent(s)/guardian(s) in writing.
 - 2. Students who meet the College and Career Readiness metric for the high school Essential Learner Outcomes of College and Career Readiness assessments have met an essential criteria for graduating from the Millard Public Schools.
 - 3. Upon successful completion of the required number of credits and Personal Learning Plan, the student shall be eligible for a graduation diploma from the Millard Public Schools.
- B. If a student has not met the College and Career Readiness metric for a given Essential Learner Outcome Assessment of College and Career Readiness, the following shall occur:
 - 1. The school/district will initiate a consistent and collaborative problem solving and intervention model called Response to Instruction and Intervention (RtI+I). Records of problem solving and intervention strategies are required.
 - 2. Utilizing RtI+I problem solving process, school representatives will offer the student supplemental learning activities that address recognized Essential Learner Outcomes of College and Career Readiness deficiencies. Supplemental learning activities may include but are not limited to the following:

- a. differentiated/complementary instruction during regular classes (i.e., peer tutoring, needs groups, individualized instruction);
- b. before- or after-school tutorials;
- c. study hall tutorials;
- d. change of interdisciplinary teams or level of instruction;
- e. repeat of specific course(s) of study;
- f. attendance at specific class(es) designed to address deficiencies;
- g. attendance at summer school and/or
- h. use of specific District identified interventions designed to support student achievement.
- 3. If the student is verified with a disability, the IEP Team may reconvene to review the problem solving and intervention strategies and to ensure that the IEP is written to assist the student in areas of weakness and that appropriate accommodations are in place.
- 4. If the student has a 504 Accommodation Plan, the 504 Team may reconvene to review the problem solving and intervention strategies and to ensure that needed accommodations are in place in areas of weakness.
- 5. If the student is identified as an English Language Learner (ELL), a school team responsible for planning the student's academic program may reconvene to review the problem solving and intervention strategies and to ensure that needed accommodations are in place in areas of weakness.

C. Procedures for high school students

- If a student has not met the College and Career Readiness metric for a given Essential Learner
 Outcome of College and Career Readiness as measured by the ACT[®] Assessment, the following
 shall occur:
 - a. The problem solving and intervention strategies will be reviewed by a qualified team and, if necessary, redesigned. Students shall be referred to Building Problem Solving Team for identification of needs if not previously referred.
 - b. The building will review the student's results of ACT® Plan or ACT® 10th Grade Aspire Assessment. If the student has successfully met the Essential Learner Outcomes of College and Career Readiness metric measured by ACT® Plan or ACT® 10th Grade Aspire Assessment for each outcome, then
 - (i) A notation shall be made in the student's cumulative record. Such information will be communicated to parent(s)/guardian(s) in writing.
 - (ii) Students who meet the College and Career Readiness metric for the high school Essential Learner Outcomes of College and Career Readiness assessments have met an essential criterion for graduating from the Millard Public Schools.
 - (iii) Upon successful completion of the required number of credits and Personal Learning Plan, the students shall be eligible for a graduation diploma from the Millard Public Schools.
 - c. Students may submit additional ACT® results for consideration in meeting the College and Career Ready metrics from testing occasions for which they have independently registered.
- 2. If after review of the student's results of ACT® Plan or ACT® 10th Grade Aspire Assessment a student has not met the college and Career Readiness metric for a given Essential Learner Outcomes of College and Career Readiness, the following shall occur:

- a. The problem solving and intervention strategies will be reviewed by a qualified team and, if necessary, redesigned. Students shall be referred to Building Problem Solving Team for identification of needs if not previously referred.
- b. The building will review the student's results of Nebraska State Accountability (NeSA) Tests. If the student has successfully met the Essential Learner Outcomes of College and Career Readiness metric measured by Nebraska State Accountability (NeSA) Tests for each outcome, then
 - (i) A notation shall be made in the student's cumulative record. Such information will be communicated to parent(s)/guardian(s) in writing.
 - (ii) Students who meet the College and Career Readiness metric for the high school Essential Learner Outcomes of College and Career Readiness assessments have met an essential criterion for graduating from the Millard Public Schools.
 - (iii) Upon successful completion of the required number of credits and Personal Learning Plan, the students shall be eligible for a graduation diploma from the Millard Public Schools.
- 3. If after review of the student's results of Nebraska State Accountability (NeSA) Tests a student has not met the College and Career Readiness metric for the Essential Learner Outcomes of College and Career Readiness, the following shall occur:
 - a. The problem solving and intervention strategies will be reviewed by a qualified team and, if necessary, redesigned. Students shall be referred to Building Problem Solving Team for identification of needs if not previously referred.
 - b. The building will review and administer locally-developed Essential Learner Outcome assessments. If the student has successfully met the Essential Learner Outcomes of College and Career Readiness metric measured by locally-developed ELO assessments for each outcome, then
 - (i) A notation shall be made in the student's cumulative record. Such information will be communicated to parent(s)/guardian(s) in writing.
 - (ii) Students who meet the College and Career Readiness metric for the high school Essential Learner Outcomes of College and Career Readiness assessments have met an essential criterion for graduating from the Millard Public Schools.
 - (iii) Upon successful completion of the required number of credits and Personal Learning Plan, the students shall be eligible for a graduation diploma from the Millard Public Schools.
 - (iv) The student shall be retested using the appropriate Essential Learner Outcomes of College and Career Readiness assessment. Students shall be given the opportunity to be retested multiple times until the requisite College and Career Readiness metric is achieved. Students shall be given notice of the opportunities for retesting.
- 4. The student will be considered ineligible for a diploma from the Millard Public Schools until such time that the requisite College and Career Readiness metrics are achieved for high school Essential Learner Outcomes of College and Career Readiness assessments.
- 5. If the student is verified with a disability or has a 504 Accommodation Plan, then the IEP or 504 Team will reconvene to review the education plan and may consider lowering the College and Career Readiness metric requirement as part of the IEP or 504 Accommodation Plan. The

student's parent(s) and/or guardian(s) shall be notified and shall also be advised of the effect of lowering the College and Career Readiness metric.

- a. Applications for approval of lowered College and Career Readiness metric requirements may be submitted by the student's IEP or 504 Team to the Associate Superintendent of Educational Services for consideration and where appropriate, approval. The Associate Superintendent of Educational Services or designee shall decide and respond to all such requests.
- b. If the lowered College and Career Readiness metric is approved, the student shall then be eligible to receive a graduation diploma with appropriate notation from the Millard Public Schools.

D. Demonstration of Proficiency

An additional opportunity is available to demonstrate student proficiency.

After review of ACT® Assessment, ACT® Plan or ACT® 10th Grade Aspire Assessment, Nebraska State Accountability (NeSA) Tests, and one or more attempts on Essential Learner Outcome of College and Career Readiness locally-developed assessments without achieving the College and Career Readiness metric, students, under building supervision, shall participate in a process, as provided in the District's Assessment Procedures, to demonstrate an appropriate level of proficiency in reading, writing, math, or science. A student who successfully meets the standards and requirements of a Demonstration of Proficiency shall have met one of the essential criteria for graduating from the Millard Public Schools.

VI. Student's Right to Appeal

- A. Students who have not achieved the necessary high school College and Career Readiness metrics as approved by the Millard Board of Education may appeal the denial of a diploma.
- B. A student may appeal the denial of a diploma only on the grounds that the student's failure to achieve the required cut score is due to:
 - 1. The failure of the District to provide a reasonable accommodation, which was previously requested by the student and denied by the District.
 - 2. The failure of the District to provide an alternate assessment or approve a demonstration of proficiency, which had been previously requested by the student and denied by the District.

V. Procedures for Appeal

- A. Within seven (7) days after the receipt of the notice that the student failed to achieve the cut score or credits required for graduation from the Millard Public Schools, a written notice of appeal shall be served upon the Superintendent of the Millard Public Schools or his/her designee. Such appeal shall set forth all of the reasons for the appeal as provided herein and shall set forth the relief sought by the student, parent(s) or guardian(s). Such notice of appeal may also include any additional information, which is relevant to the appeal.
- B. Within seven (7) days after the receipt of the written notice of appeal and any supporting information relevant to the appeal, the Superintendent or designee shall consider and render a decision on the appeal based on whether the decision of the District was unreasonable. Such decision shall then be forwarded to the student's parent(s) and/or guardian(s) advising the student's parent(s) and/or guardian(s) of the basis for the Superintendent's or designee's decision and the reasons therefore
- C. Within seven (7) days after the receipt of the written notification from the Superintendent or the Superintendent's designee, a written request may be made by the student, parent(s), or guardian(s) to the secretary of the Millard Board of Education or the Superintendent for a hearing before the Millard Board of Education or committee of the Board consisting of not less than two (2) or more than three (3)

members to be held on the issue whether the decision of the Superintendent or his designee was unreasonable.

- D. Such hearing shall be held before the Millard Board of Education or committee within thirty (30) days of the date the request for hearing was received. If a hearing request before the Millard Board of Education is not received in a timely manner, the decision of the Superintendent or the Superintendent's designee shall be final.
- E. The student, parent(s) and/or guardian(s) shall be advised at least seven (7) days prior to the date of the hearing before the Board and such notification shall set forth the date, time, and place for the hearing before the Millard Board of Education or committee.
- F. The parties may, by mutual written agreement, extend the time for hearing or final determination.
- G. The student, parent(s), and/or guardian(s) shall have the right to be represented by legal counsel and shall have the opportunity to present such evidence that is material to the issue or issues stated in the appeal.
- H. The hearing shall be conducted in closed session and in accordance with the student privacy laws unless the student, parent(s), and/or guardian(s) shall request, in writing, that the hearing be held in open session. Any formal action of the Millard Board of Education shall be taken in closed session unless such proceeding was requested by the student, parent(s), or guardian(s) to be held in open session.
- I. The decision of the Millard Board of Education or committee shall be by vote of a majority of the members of the Millard Board of Education and the Millard Board of Education shall reduce its findings and decision to writing and provide the written findings and decision to the student, parent(s), and/or guardian(s) within ten (10) days of the hearing. When conducting such proceedings, the Millard Board of Education or committee shall be exercising a judicial function and deciding a dispute of adjudicative facts.

VI. Graduation

Upon successful completion of the required credits, assessments and Personal Learning Plan, a student shall be eligible for a graduation diploma from the Millard Public Schools.

VII. Annual Review

This rule shall be reviewed annually.

Related Policies and Rules: 6301, 6301.1, 6315, 6315.1, 6320, 6320.2, 6320.3, 6320.4

Rule Approved: April 16, 2011

Millard Public Schools

Omaha, NE

Revised: Dec. 5, 1983; Dec. 17, 1990, May 17, 1999; Oct. 18, 1999, July 31, 2000; March 4, 2002; July 21, 2003; June 21, 2004; June 6, 2005; June 5, 2006; June 4, 2007; July 7, 2008; November 2, 2009; November 1, 2010; November 7, 2011; November 5, 2012; October 21, 2013; August 4, 2014; November 3, 2014, July 6, 2015, November 2, 2015

2, 2015

Reaffirmed: July 6, 2009

AGENDA SUMMARY SHEET AGENDA ITEM: Curriculum, Instruction, and Assessment Rule 6320.2 – Students: Requirements for Senior High Graduation – International Baccalaureate Diploma Program **MEETING DATE:** November 2, 2015 **DEPARTMENT: Educational Services** TITLE AND BRIEF Approve Revisions to Rule 6320.2 **DESCRIPTION: ACTION DESIRED:** Approval \underline{X} **BACKGROUND:** Revision to Rule 6320.2 is being recommended to change the course: Language A1 to Language A as noted in 6320.1 and according to International Baccalaureate course names. **RECOMMENDATIONS:** It is recommended that the Board of Education approve Rule 6320.2 Curriculum, Instruction, and Assessment – Students: Requirements for Senior High Graduation – International Baccalaureate Diploma Program STRATEGIC PLAN N/A **REFERENCE:** TIMELINE: Immediate to update the 2016-2017 Millard Public Schools High School Curriculum Handbook & Registration Guide in preparation for registration. **RESPONSIBLE PERSON(S):** Dr. Mark Feldhausen and Dr. Nancy Johnston

Jin Sulfin

SUPERINTENDENT'S

APPROVAL:

Curriculum, Instruction, and Assessment

Students: Requirements for Senior High School Graduation - International Baccalaureate Diploma Program

6320.2

- I. **Credits**: A minimum of 230 credits is required for graduation.
- II. Assessments: In addition to 230 credits required for graduation, students must also successfully meet the College and Career Readiness metric for the high school Essential Learner Outcomes of College and Career Readiness assessments.
- III. **Personal Learning Plan**: A student must complete a personal learning Plan (PLP), meeting district requirements.
- IV. Each student's International Baccalaureate Diploma Program (IB DP) shall include the courses of study as outlined in Rule 6320.1 with such adjustments (additions or substitutions) to the programs and courses as listed below. Such adjustments are made to avoid duplication in the program of study required for IB DP students.

Millard Public Schools' Graduation Requirement	International Baccalaureate Program Additions/Substitutions
English: Selected Electives (5 credits)	Substitute IB English HL II (10 credits)
English: Oral Communications (5 credits)	Substitute Imbedded Oral Assessments found in Language A4, Language B, and Theory of Knowledge I & II requirements
Social Studies: United States History (10 credits)	Substitute IB History of the Americas HL II (10 credits)
Electives: Human Resources Course Options	Add IB Theory of Knowledge I (maximum 5 credits) Add IB Psychology SL (maximum 5 credits)
Science: Biology (10 credits)	Substitute IB Biology HL I (10 credits), Add Introduction to IB Chemistry and Physics (10 credits), IB Chemistry (10 credits), and IB Physics (10 credits) to course options

Health Education: Everyday Living will be available for enrollment during grades 9-12 for IB DP students. Students waived out of Everyday Living must pick an additional Human Resources course. The Theory of Knowledge I course can only meet the Human Resource Course 5 credit requirement.

These adjustments are only applicable to students enrolled in the full International Baccalaureate Diploma program with intentions to test for and secure the IB Diploma.

Related Rule and Policy: 6320, 6320.1

Approved: April 16, 2001

Revised: August 4, 2003; June 5, 2006; June 4, 2007; July 7, 2008; November 2, 2009; November 1, 2010; November 7, 2011; November 5, 2012; December 17, 2012; October 21, 2013; November 3, 2014; November 2, 2015

Millard Public Schools Reaffirmed: July 6, 2009 Omaha, NE

AGENDA ITEM: Approve PK-12 Mathematics Framework: Part I

MEETING DATE: November 2, 2015

DEPARTMENT: Educational Services

TITLE: PK-12 Mathematics Framework: Part I

BRIEF DESCRIPTION: The PK-12 Mathematics Framework: Part I was approved on July 6, 2015. Work done

> on the PK-12 Mathematics Framework was based on the draft of the Nebraska State Standards in order to continue with the timeline to begin Phase II including the elementary field study. As we shared in July, we are now bringing the PK-12 Mathematics Framework back as the Nebraska State Board of Education approved the adoption of the K-12 Nebraska College and Career Ready Standards for Mathematics

on September 4, 2015.

While the majority of the MPS PK-12 Mathematics Framework remains the same as the Board of Education approved document in July of 2015, there were revisions made during the review process, thus the need to approve a revised PK-12 Mathematics Framework. Changes are noted within PK-12 Mathematics Framework and mainly reflect the adjusted:

- timeline to include the review and alignment of the MPS Framework to the approved K-12 Nebraska College and Career Ready Standards for Mathematics (page 7);
- nomenclature from Analytic Geometry to Coordinate Geometry (pages 32 & 54);
- nomenclature from real-life reference to real-world (pages 29 & 50);
- standards and indicators throughout the matrix mainly to provide clarification and/or examples (for example, page 29: MA S 2.3.1.a);
- clarification between Calculus II & Advanced Topics and Calculus III/ Differential Equations (page 77);
- course descriptions for the three Middle School Integrated Mathematics courses to better reflect more rigorous content focused on the integration of the four comprehensive standards of Number, Algebra, Geometry, and Data (page 79).

ACTION DESIRED: X Approval

BACKGROUND: The revised PK-12 Mathematics Framework: Part I is being presented for approval due

to the final approval of the K-12 Nebraska College and Career Ready Standards for

Mathematics and will return in February for approval with Part II:

Textbook/Instructional Materials Selection.

Recommend approval of the revised PK-12 Mathematics Framework: Part I **RECOMMENDATIONS:**

STRATEGIC PLAN REFERENCE: N/A

TIMELINE: Implementation November 2015

RESPONSIBLE Dr. Mark Feldhausen, Dr. Nancy Johnston, Andy DeFreece, Matt Scott, PERSON(S):

Jin Dutter

and Tami Fierstein

SUPERINTENDENT'S APPROVAL:

PK – 12 Mathematics Framework

Part I: PK-12

July 6, 2015

November 2, 2015 Revised



Millard Public Schools

Millard Board of Education

Dave Anderson

Mike Kennedy

Paul Meyer

Mike Pate

Linda Poole

Pat Ricketts

Jim Sutfin, Ed.D., Superintendent

Notice of Non-Discrimination

The Millard School District does not discriminate on the basis of race, color, religion, national origin, gender, marital status, disability, or age, in admission or access to or treatment of employment, or in its programs and activities. The following person has been designated to handle inquiries regarding the non-discrimination policies: Superintendent of Schools, 5606 South 147th Street, Omaha, NE 68137 (402) 715-8200. The Superintendent may delegate this responsibility as needed. Complaints and grievances by school personnel or job applicants regarding discrimination or sexual harassment shall follow the procedures of District Rule 4001.2. Complaints and grievances by students or parents regarding discrimination or sexual harassment shall follow the procedures of District Rule 5010.2.

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Millard Public Schools Mission and Beliefs

Millard Public Schools Mission

The mission of the Millard Public Schools is to guarantee that each student develops the character traits and masters the knowledge and skills necessary for personal excellence and responsible citizenship by developing a world-class educational system with diverse programs and effective practices designed to engage and challenge all students.

Millard Public Schools Beliefs

We believe:

- Each individual has worth.
- Individuals are responsible for their actions.
- Our greatest resource is people.
- Diversity enriches life.
- All people can learn.
- High expectations promote higher achievement.
- Achievement builds self-esteem; self-esteem promotes achievement.
- All people are entitled to a safe, caring, and respectful environment.
- Responsible risk-taking is essential for growth.
- Excellence is worth the investment.
- Educated and engaged citizens are necessary to sustain our democratic society.
- Public education benefits the entire community and is the shared responsibility of all.
- All schools are accountable to the community.
- Shaping and developing character is the shared responsibility of the individual, family, school and community.

6110.1

The Essential Learner Outcomes of the Millard Public Schools are the following:

MILLARD ESSENTIAL LEARNER OUTCOMES

• LANGUAGE ARTS • MATHEMATICS • SCIENCE • SOCIAL STUDIES •

FINANCIAL WELL-BEING · HUMAN RELATIONS · TECHNOLOGY · FINE AND PERFORMING ARTS · PERSONAL DEVELOPMENT AND WELL-BEING · CRITICAL THINKING AND PROBLEM-SOLVING SKILLS · CREATIVITY AND INNOVATION · COLLABORATION AND TEAMWORK · CITIZENSHIP AND PERSONAL RESPONSIBILITY

ACADEMIC SKILLS AND APPLICATIONS

Students will demonstrate proficiency by meeting established standards through course requirements and for assessments identified by the District for specific purposes. This proficiency, along with the successful completion of 230 credits and a Personal Learning Plan (PLP) is used for diploma granting or denial.

LANGUAGE ARTS

- Students will learn and apply reading skills and strategies to comprehend text.
- · Students will learn and apply writing skills and strategies to communicate.
- Students will develop and apply appropriate speaking, and listening skills and strategies to communicate for a variety of purposes.
- Students will apply information fluency and practice digital citizenship.

MATHEMATICS

- Students will communicate number sense concepts using multiple representations to reason, solve problems, and make connections within mathematics and across disciplines.
- Students will communicate geometric concepts and measurement concepts using multiple representations to reason, solve problems, and make connections within mathematics and across disciplines.
- Students will communicate algebraic concepts using multiple representations to reason, solve
 problems, and make connections within mathematics and across disciplines.
- Students will communicate data analysis/probability concepts using multiple representations
 to reason, solve problems, and make connections within mathematics and across disciplines.

SCIENCE

- Students will combine scientific processes and knowledge with scientific reasoning and critical thinking to ask questions about phenomena and propose explanations based on gathered evidence.
- Students will integrate and communicate the information, concepts, principles, processes, theories, and models of the Physical Sciences to make connections with the natural and engineered world.
- Students will integrate and communicate the information, concepts, principles, processes, theories, and models of the Life Sciences to make connections with the natural and engineered world
- Students will integrate and communicate the information, concepts, principles, processes, theories, and models of the Earth and Space Sciences to make connections with the natural and engineered world.

SOCIAL STUDIES

- Students will develop and apply the skills of civic responsibility to make informed decisions based upon knowledge of government at local, state, national and international levels.
- Students will utilize economic reasoning skills to make informed judgments and become
 effective participants in the economy at the local, state, national and international levels.
- Students will develop and apply spatial perspective and geographic skills to make informed
 decisions regarding issues and current events at local, state, national and international levels.
- Students will develop and apply historical knowledge and skills to research, analyze, and
 understand key concepts of past, current, and potential issues and events at the local, state,
 national, and international levels.

FINANCIAL WELL-BEING

- Demonstrate skills to manage financial resources for short and long term priorities.
- Analyze and make sound financial choices by using appropriate resources.

HUMAN RELATIONS

- Interact positively with all people.
- Understand ethnic and cultural differences.
- Apply awareness of current local, national and global news and world cultures and languages to communicate effectively.

TECHNOLOGY

- Obtain, organize, and communicate information electronically.
- Use a variety of technological resources to solve problems.
- Understands the ethical uses of information and technology related to privacy, intellectual
 property and cyber security issues.

FINE AND PERFORMING ARTS

- Experience and evaluate a variety of music, art, or drama.
- Recognize the value of a wide range of knowledge and experiences from the arts, culture and humanities.

PERSONAL DEVELOPMENT AND WELL-BEING

- · Understand human growth and development.
- Identify the values of good nutrition and physical activity.
- · Evaluate the impact of addictive substances and behaviors.
- Build positive social relationships with supportive friends and family in the community.
- Use resources to develop a personal education and career plan to meet goals and objectives.
- Communicate experiences, knowledge and skills identified in a résumé or portfolio and present a professional image when interviewing.

COLLEGE AND CAREER READINESS SKILLS

The following standards and indicators are not measured by district-wide assessments for diploma-granting or denial. Within the school setting, students in the Millard Public Schools will:

CRITICAL THINKING AND PROBLEM-SOLVING SKILLS

- Demonstrate the ability to reason critically, systematically, and logically to evaluate situations from multiple perspectives.
- Conduct research, gather input and analyze information necessary for decisionmaking.
- Develop and prioritize possible solutions with supporting rationale using valid research, historical context and balanced judgment.
- · Demonstrate a willingness to learn new knowledge and skills.
- Exhibit the ability to focus, prioritize, organize and handle ambiguity.
- · Recognize factors, constraints, goals and relationships in a problem situation.
- · Evaluate solutions and determine the potential value toward solving the problem.

CREATIVITY AND INNOVATION

- Search for new ways to improve the efficiency of existing processes.
- Appreciate new and creative ideas of others.
- Use information, knowledge and experience to generate original ideas and challenge assumptions.
- Know when to curb the creative process and begin implementation.
- Determine the feasibility of improvements for ideas and concepts.
- · Accept and incorporate constructive criticism into proposals for innovation.

COLLABORATION AND TEAMWORK

- Contribute to team-oriented projects, problem-solving activities and assignments.
- Engage team members, build consensus and utilize individual talents and skills.
- Anticipate potential sources of conflict to facilitate solutions.
- Demonstrate the ability to disagree with a team member without causing personal
 offense.
- Take responsibility for individual and shared group tasks.

CITIZENSHIP AND PERSONAL RESPONSIBILITY

- Respect the rights of others.
- Treat others in a considerate and non-demeaning manner.
- · Respect diversity.
- Demonstrate the ability to manage time.
- Demonstrate the ability to follow directions.
- Develop the attributes of integrity, self-discipline, and positive attitude.
- Take personal responsibility for actions.
- Establish and execute plans to completion and persevere when faced with setbacks.
- Model behaviors that demonstrate reliability, dependability and commitment.
- Arrive on time to school, work, appointments or meetings adequately prepared and appropriately dressed.
- · Comply with policies and regulations.
- Participate in school and/or community organizations.
- Engage in local government through attendance, participation and service.
- · Demonstrate a respect for laws and regulations and those who enforce them.
- Consider the ethical implications and long-term consequences of decisions and actions on personal reputation and credibility.

Revised: Strategic Planning, December 5, 1996

T-Chart Approved: Millard Board of Education, January 13, 1997

Related Policy: 6110 Rule Adopted: May 3, 1999

Revised: June 18, 2001; July 21, 2003; December 4, 2006,

March 2, 2009; March 1, 2010; April 18, 2011; August 19, 2013; November 3, 2014

Millard Public Schools Omaha, Nebraska

PK-12 Mathematics Teaching & Learning Philosophy

The MPS PK-12 Mathematics Department, a group of persistent, professional educators, believes students must be collaborative, life-long learners in the field of mathematics. Students will engage and persevere in productive struggle, justify ideas, and proficiently use math tools to critically think about, make sense of, and provide solutions to problems in a global society.

We believe:

- Change is a necessity.
- Students cultivate productive mathematics dispositions and growth mindsets through positive adult and peer models, opportunities to constructively struggle, and appropriate supports.
- Students must be able to use mathematical tools (e.g. technology, models) as an aid to demonstrate proficiency.
- Students must be able to communicate and justify mathematical ideas with precise vocabulary and representations.
- High expectations and rigorous instruction will be established and maintained in order to support individual student growth.
- Engaging and involving all stakeholders expands students' understanding of mathematics and makes learning mathematics relevant.
- Effective mathematics teaching and learning involves developing conceptual understanding and procedural fluency in a student-centered learning environment.
- Equipping teaching professionals with the instructional tools and learning experiences to foster rigorous, effective mathematics learning is worth the investment.

The PK-12 Mathematics Philosophy and beliefs are supported by research from various entities, including the National Council of Teachers of Mathematics (NCTM). Instructional best practices are central to reifying our district mission and the rigorous standards and coursework set forth in this framework; therefore, practitioners will implement the following instructional practices (NCTM, 2014):

- Establish mathematics goals to focus learning
- Implement tasks that promote reasoning and problem solving
- Use and connect mathematical representations
- Facilitate meaningful mathematical discourse
- Pose purposeful questions
- Build procedural fluency from conceptual understanding
- Support productive struggle in learning mathematics
- Elicit and use evidence of student thinking

Name	Grade Level/Course/Position	Building
Lori Bartels	Elementary Special Education Coordinator	Don Stroh Administration Center
Jennifer Carson	Assistant Principal	Russell Middle School
Missy Croom	First Grade	Norris Elementary School
Pam D'Amour	English Language Learner	Sandoz Elementary School
Nichol Dolezal	Second Grade	Abbott Elementary School
Bill Eich	Geo/Alg II: Foundations 3 & Geometry	Horizon High School
Alicia Feist	Principal	Montclair Elementary School
Kristie Fuhr	Preschool	Norris Elementary School
Jane Fulton	Seventh Grade	Andersen Middle School
Katie Garth	Preschool	Montclair Elementary School
Larry (JR) Goodenough	Eighth Grade	Russell Middle School
Skip Hanlon	Principal	Ackerman Elementary School
Aaron Harding	PreCalculus & IB	North High School
Susan Keogh	Fourth Grade	Willowdale Elementary School
Cheris Kite	Kindergarten	Neihardt Elementary School
Karen Kneifl	Algebra II Honors & AP Calculus	West High School
Christine Koehn *	Third Grade	Norris Elementary School
Candy List	Building Interventionist	Andersen Middle School
Tassie Little	Eighth Grade	Beadle Middle School
Susan Marlatt	Assistant Principal	North High School
Becky Mertins	Third Grade	Neihardt Elementary School
Jean Noel	First Grade	Sandoz Elementary School
Jenn Nicholson	Fifth Grade	Holling Heights Elementary School
Jennifer Parker	Sixth Grade	North Middle School
Amanda Scott	Algebra & Geometry	North High School
Michelle Slaughter	Second Grade	Ezra Elementary School
Megan Smith	College Prep Math, PreCalculus	West High School
Phill Smith	Seventh Grade	Kiewit Middle School
Kent Stetson	Special Education Resource	Central Middle School
Courtney Stevens	Fifth Grade	Abbott Elementary School
Sarah Sturgeon	Algebra I & Algebra II	West High School
Joe Vonderhaar	Fifth Grade	Disney Elementary School
Cami Warneke	AP Statistics	South High School
Tait Whorlow	Algebra II	South High School
Kerri White	Kindergarten	Wheeler Elementary School

Under the facilitation of Janet Cook, Ed.D., Secondary Curriculum and Instruction MEP Facilitator and Matt Scott, Elementary Curriculum and Instruction MEP Facilitator. In consultation with Angela Peterson, Secondary District Interventionist, Julia Siniard, Elementary District Interventionist, Andy DeFreece, Director of Elementary and Early Childhood Education, and Nancy Johnston, Ed.D., Director of Secondary Education.

PK-12 Mathematics Community Focus Group

Andy DeFreece Parent

Mindy Stetson Health Care Representative

Amy Streckfuss Parent

Jim Vyhlidal Community Partner: Tri-V Tool & Manufacturing Company

Under the facilitation of Janet Cook, Ed.D., Secondary Curriculum and Instruction MEP Facilitator and Matt Scott, Elementary Curriculum and Instruction MEP Facilitator.

^{*} Christine Koehn served on the Nebraska Department of Education Mathematics Framework Committee.

Ron Witt Support Services Center

Staff Member	Grade Level/Course/Position	Building
Danae Albers	Kindergarten	Montclair Elementary
Lori Bartels	Elementary Special Education Coordinator	Don Stroh Administration Center
Eric Benzel	Eighth Grade	Central Middle School
Sara Bivens	First Grade	Reagan Elementary
Sara Bonn	Algebra II	South High School
Pam Brennan	Special Education Program Facilitator	Ron Witt Support Services Center
Heather Bruntz	Sixth Grade	Kiewit Middle School
Karen Coates	Special Education	North Middle School
Amy Delehant	Algebra II	West High School
Bert Deremer	Principal	Ezra Elementary School
Jean Determan	Advanced Placement & Honors Courses	South High School
Pat Edwards	Seventh Grade	Andersen Middle School
Annie Essink	Sixth Grade	Andersen Middle School
Katie Etzelmiller	Algebra II	North High School
Tara Fabian	Principal	Reagan Elementary
Tami Fierstein	Eighth Grade	Kiewit Middle School
Melissa Frans	Seventh Grade	Kiewit Middle School
Tiffany Frazier	Special Education Resource	Cody Elementary
Tammy Gebhart	Building Interventionist	Cody Elementary School
Cassie Grant	Fourth Grade	Cody Elementary
Juli Gray	Seventh Grade	Central Middle School
Lisa Green	Special Education Resource	Beadle Middle School
Kim Hagedorn	Geometry	West High School
Daniel Hall	Advanced Placement & Honors Courses	West High School
Brooke Hartnett	Algebra II & Foundations	West High School
Scott Haug	Sixth Grade	Russell Middle School
Cheryl Heimes	Assistant Principal	Andersen Middle School
Lisa Henggeler	Sixth Grade	Central Middle School
Mary-Helen Hoppes	Second Grade	Willowdale Elementary
Judy Hughes	Fourth Grade	Rohwer Elementary
Liz Hullinger	Seventh Grade	North Middle School
Alicia Jones	Algebra I	North High School
Brett Keim	Algebra I	South High School
Julie Kemp	Assistant Principal	Horizon High School
Susan Keogh	Fourth Grade	Willowdale Elementary
Jessi King	Seventh Grade	Central Middle School
Maureen Kuch	Third Grade	Harvey Oaks Elementary
Bob Lamberty	Assistant Principal	West High School
Amanda Leuck	Eighth Grade	Beadle Middle School
Casey Lundgren	Assistant Principal	North High School
Shelly Madsen	Special Education Resource	Ezra Elementary
Jenn Malone	Second Grade	Ezra Elementary
Pat Meeker	Assistant Principal	Kiewit Middle School
Austin Meter	Geometry	South High School
Daniel Meyer	Eighth Grade	Andersen Middle School
Angie Peterson	District Level Interventionist	Ron Witt Support Services Center
Rachel Price	First Grade	Cody Elementary
Sara Rogers	Fifth Grade	Bryan Elementary
Cindy Scharff	Administrative Intern	Montclair Elementary
Shelley Schmitz	District Level Interventionist	Ron Witt Support Services Center
Cathy Schneiders	Algebra I	West High School
Charlene Schuchardt	Third Grade	Rohwer Elementary
Kaye Schweigert	Special Education Program Facilitator	Ron Witt Support Services Center
Stan Sagal	Instructional Technology MED Escilitator	Don Witt Cupport Corvines Contar

Instructional Technology MEP Facilitator

Stan Segal

Staff Member	Grade Level/Course/Position	77 Building
Megan Septak	Assistant Principal	Central Middle School
Julia Siniard	District Level Interventionist	Ron Witt Support Services Center
Lance Smith	Geometry	West High School
Sandy Sokerka	First Grade	Montclair Elementary
Courtney Stevens	Fifth Grade	Abbott Elementary
Brad Sullivan	Principal	Bryan Elementary School
Bridgette Stevens	Assistant Principal	Beadle Middle School
Molly Tessin	Second Grade	Hitchcock
Allen Thamer	Sixth Grade	North Middle School
Anna Thoma	Assistant Principal	North Middle School
Heidi Thomsen	Kindergarten	Bryan Elementary
Andrew Tomei	Foundations Courses	Horizon High School
Cindy Wallace	English Language Learner Teacher	Willowdale Elementary
Cami Warneke	Advanced Placement & Honors Courses	South High School
Heidi Weaver	Principal	South High School
Trevor Wenger	Seventh Grade	Russell Middle School
Weylon White	Advanced Placement & Honors Courses	North High School
Wendy Wight	Special Education Program Facilitator	Ron Witt Support Services Center
Sharon Williamson	Special Education Resource	Russell Middle School
Katie Wright	Fifth Grade	Ezra Elementary

Under the facilitation of Janet Cook, Ed.D and Tami Fierstein, Secondary Curriculum and Instruction MEP Facilitators and Matthew Scott, Elementary Curriculum and Instruction MEP Facilitator. In consultation with Angela Peterson, Secondary District Interventionist, Julia Siniard, Elementary District Interventionist, Andy DeFreece, Director of Elementary and Early Childhood Education, and Nancy Johnston, Ed.D, Director of Secondary Education.

Timeline for Millard Education Program: PK-12 Mathematics

December 2014	Curriculum Planning Committee: provided Phase I overview and orientation
January 2015	Curriculum Planning Committee: met to determine research areas based on current data, education
	trends, and member expertise
January-March 2015	Research groups: Conducted research in the following areas:
	• Assessment
	• Intervention
	Standards
	Instructional Best Practices
February 2015	Community Focus Group: provided input on issues in PK-12 Mathematics education and trends in
·	employment
March 2015	Curriculum Planning Committee: shared research findings with Curriculum Planning Committee
	members
March 2015	PK-12 Instructional Materials Evaluation Committee: provided Phase I overview and orientation to
	instructional materials evaluation process
April 2015	Vendor Fair with PK-12 Instructional Materials Evaluation Committee: investigated instructional
•	resources, including digital learning and open-source tools, from various entities; completed
	materials evaluation forms
April 2015	Curriculum Planning Committee: met to research and synthesize comprehensive standards from
r	released draft of Nebraska K-12 Mathematics Standards, began work to specify indicators for the
	PK-12 Mathematics matrix, and finalized the PK-12 Mathematics philosophy statement and beliefs
April 2015	PK-12 Instructional Materials Evaluation Committee: reviewed materials, collaborated in vertical
11p111 2015	analysis teams, and examined data from vendor fair survey data to determine need for field study in
	Fall 2015
May-June 2015	Curriculum Planning Committee: researched and drafted course descriptions, courses flow chart,
Way-June 2013	and standards matrix
June 2015	Dr. Janet Cook, Matt Scott, and Tami Fierstein met with Dr. Nancy Johnston to discuss PK-12
June 2013	Mathematics Framework proposal and course of study proposals; finalized the standards matrix
	proposal to share with Dr. Feldhausen and Ed Services Executive Cabinet
July 6, 2015	PK-12 Mathematics Framework to the Board of Education
Fall 2015	Field Study at grades PK-5 and continued preview of resources PK-12 of:
ran 2013	 Digital Learning Open-Education Resources (www.ck12.org)
	Math Expressions & Big Ideas Math
N. 1 2015	• Go Math!
November 2015	PK-12 Mathematics Framework to the Board of Education
	• Reviewed and aligned Framework to the approved (September, 2015) K-12 Nebraska College
	and Career Ready Standards for Mathematics
Fall 2015	Curriculum Planning Committee & PK-12 Instructional Materials Evaluation Committee Convene:
	develops Instructional Materials Proposal
Fall 2015	Community Materials Review Meetings: two opportunities to be held for the community to review
	primary instructional resources
Winter 2015	Curriculum Planning Committee & PK-12 Instructional Materials Evaluation Committee: proposal
	submitted to Educational Services Executive Cabinet and the recommendation to the Board of
	Education for approval
Spring 2016	Course guide and course assessment committees meet to develop district course guides and
	assessments for each course
Summer 2016	Professional Development for impending fall implementation of new PK-8 course offerings,
	including instructional materials training, instructional best practices, and other department needs
Fall 2016	Implement new curriculum, acquire instructional resources to ensure the written curriculum is the
	taught and assessed curriculum - Grades PK-8, including Algebra I, Geometry, and Algebra II
Summer 2017	Professional Development for impending fall implementation of new high school elective course
	offerings, including instructional materials training, instructional best practices, and other
Fall 2017	department needs Implement new curriculum, acquire instructional resources to ensure the written curriculum is the

Introduction to PK-12 Mathematics Matrix

Introduction

The matrix displays the Millard Mathematics Standards and Indicators written by the PK-12 Mathematics Curriculum Planning Committee. This standards document is based on the Nebraska K-12 Mathematics Standards (2015), ACT College and Career Readiness Standards for Mathematics, the MPS College and Career Readiness Standards, and the College Board. Critical analysis of existing standards in consortia school districts as well as other states and countries informed the development of this matrix. Additional information is provided, where appropriate, to show progression in concepts and skills.

The Mathematics Standards within the framework are listed by levels of progression by grade level through fifth grade and follow a typical sequence of courses in the 6-11th grade portion. The Nebraska State Standards are organized by grade level from kindergarten through eighth grade and includes a range for 9th through 11th grades. Therefore, those standards and indicators have been divided among the Algebra I, Geometry, and Algebra II courses within the MPS PK-12 Mathematics Matrix while the Advanced Topics portion reflects standards taught in 12th grade and/or those met in advanced mathematics courses.

Nomenclature

The PK-12 Mathematics Standards and Indicators are sequenced in the following matrix. The nomenclature for the standards and indicators is as follows:

MA Mathematics

CCR College and Career Readiness

S State StandardM Millard Standard

1-5 Comprehensive Standards

1-Number

2-Algebra

3-Geometry

4-Data

5-Advanced Topics Specialized Concepts and Skills

Comprehensive Standard and Concepts

Number 1-Numeric Relationships

2-Operations

Algebra 1-Algebraic Relationships

2-Algebraic Processes

3-Applications

Geometry 1-Characteristics

2-Analytic Coordinate Geometry

3-Measurement

Data 1-Representations

2-Analysis & Applications

3-Probability

Advanced Topics Specialized Concepts and Skills

1-Calculus

2-Advanced Statistics

Examples

MA S 3.2.2.b MA = Mathematics

S = State Standard 3 = Third Grade

2 = Comprehensive Standard 2 (Algebra)
 2 = Concept 2 (Algebraic Processes)

b = Indicator b

MA M 11.4.2.b MA = Mathematics

M = Millard Standard11 = Eleventh Grade

4 = Comprehensive Standard 4 (Data) 2 = Concept 2 (Analysis & Applications)

b = Indicator b

MA S 12.1.1.c (AT) MA = Mathematics

S = State Standard 12 = Twelfth Grade

1 = Comprehensive Standard 1 (Number) 1 = Concept 1 (Numeric Relationships) c = Indicator c (Advanced Topics)

MA M 12.5.1.a (AT) MA = Mathematics

M = Millard Standard12 = Twelfth Grade

5 = Comprehensive Standard 5 (Advanced Topics)

1 = Concept 1 (Calculus)

a = Indicator a (Advanced Topics)

PK-5 Mathematics Matrix

K-12 Comprehensive Standard: Number

Students will communicate number sense concepts using multiple representations to reason, solve problem, and

	make connections within mathematics and across disciplines.										
Concept	PK	Kindergarten	First Grade	Second Grade	Third Grade	Fourth Grade	Fifth Grade	Integrated Math I Sixth Grade			
Numeric Relationships	MA M PK.1.1 Numeric Relationships: Students will demonstrate, represent, and show relationships among whole numbers within the base-ten number system.	MA S 0.1.1 Numeric Relationships: Students will demonstrate, represent, and show relationships among whole numbers within the base-ten number system.	MA S 1.1.1 Numeric Relationships: Students will demonstrate, represent, and show relationships among whole numbers within the base-ten number system.	MA S 2.1.1 Numeric Relationships: Students will demonstrate, represent, and show relationships among whole numbers within the base-ten number system.	MA S 3.1.1 Numeric Relationships: Students will demonstrate, represent, and show relationships among whole numbers and simple fractions within the base- ten number system.	MA S 4.1.1 Numeric Relationships: Students will demonstrate, represent, and show relationships among fractions and decimals within the base- ten number system.	MA S 5.1.1 Numeric Relationships: Students will demonstrate, represent, and show relationships among fractions and decimals and within the base- ten number system.	MA S 6.1.1 Numeric Relationships: Students will demonstrate, represent, and show relationships among fractions, decimals, percents, and integers within the base-ten number system.			
Curricular Indicators	MA M PK.1.1.a Perform the counting sequence by counting forward from any given number to 20, by ones	MA S 0.1.1.a Perform the counting sequence by counting forward from any given number to 100, by ones. Count by tens to 100 starting at any decade number	MA S 1.1.1.a Count to 120 by ones and tens, starting at any given number MA M 1.1.1.a Count to 200 by ones and tens starting from any given number and count to 100 by fives at any decade number	MA S 2.1.1.a Count within 1000, including skip-counting by 5s, 10s, and 100s starting at a variety of multiples of 5, 10 or 100							
	MA M PK.1.1.b Demonstrate cardinality (i.e., the last number name said indicates the number of objects counted) 1-10	MAS 0.1.1.b Demonstrate cardinality (i.e., the last number name said indicates the number of objects counted), regardless of the arrangement or order in which the objects were counted									

Curricular Indicators		MA M 0.1.1.b Read numerals within the range of 0 – 20	MA S 1.1.1.b Read and write numerals within the range of 0 – 120 MA M 1.1.1.b Read and write numerals within the range of 0 – 200	MA S 2.1.1.b Read and write numbers within the range of 0 – 1,000 using standard, word, and expanded forms	MA S 3.1.1.a Read, write and demonstrate multiple equivalent representations for numbers up to 100,000 using objects, visual representations, including standard form, word form, expanded form, and expanded notation	MA S 4.1.1.a Read, write, and demonstrate multiple equivalent representations for whole numbers up to one million and decimals to the hundredths, using objects, visual representations, standard form, word form, and expanded notation	MA S 5.1.1.a Determine multiple equivalent representations for whole numbers and decimals through the thousandths place using standard form, word form, and expanded notation	MA M 6.1.1.j Convert a fraction to a decimal using long division
	MA M PK.1.1.f Represent a number 0 to 10 using objects	MA S 0.1.1.f Write numbers 0 to 20 and represent a number of objects with a written numeral 0 to 20	MA S 1.1.1.c Write numerals to match a representation of a given set of objects for numbers up to 120					
	MA M PK.1.1.c Use one-to-one correspondence (pairing each object with one and only one spoken number name, and each spoken number name with one and only one object) when counting objects to show the relationship between numbers and quantities of 0 to 10	MAS 0.1.1.c Use one-to-one correspondence (pairing each object with one and only one spoken number name, and each spoken number name with one and only one object) when counting objects to show the relationship between numbers and quantities of 0 to 20						

Curricular Indicators		MA M 0.1.1.d Demonstrate the relationship between numbers, knowing each sequential number name refers to a quantity that is one larger (e.g. before and after, one more and one less)	MA M 1.1.1.e Demonstrate that decade numbers represent a number of tens and 0 ones (e.g. ten more and ten less) MA S 1.1.e Demonstrate that decade numbers represent a number of tens and ones (e.g., 50 = 5 tens and 0 ones)	MA M 2.1.1.d Demonstrate that 100 represents a group of ten tens (e.g. 100 more and 100 less)	MA S 3.1.1.c Round a	MA S 4.1.1.g Round a multi-	MA S 5.1.1.c Round whole	
	MA M PK.1.1.e Count up to 10 objects arranged	MA S 0.1.1.e Count up to 20 objects arranged			whole given number to the tens and or hundreds place, using place value understanding and or visual representation	digit whole number to any given place	numbers and decimals to any given place	
	in a line. Count out the number of objects, given a number from 1 to 10. Begin to count scattered array of 10 objects	in a line, a rectangular array, or a circle. Count up to 10 objects in a scattered configuration. Count out the number of objects, given a number from 1 to 20						

						MA S 4.1.1.c Classify a number up to 100 as prime or composite		MAS 6.1.1.a Determine common factors and common multiples using prime factorization of numbers with and without exponents
Curricular Indicators						MA S 4.1.1.d Determine whether a given number up to 100 is multiple of a given one-digit number		
						MA S 4.1.1.e Determine factors of any whole number up to 100		
	MA M PK.1.1.h Compare the number of objects in two groups by identifying the comparison as more, less, or same (equal) to by using strategies of matching and counting	MA S 0.1.1.h Compare the number of objects in two groups by identifying the comparison as greater than, less than, or equal to by using strategies of matching and counting						
		MA S 0.1.1.i Compare the value of two written numerals between 1 and 10	MAS 1.1.1.f Compare two two-digit numbers by using symbols <, =, and > and justify the comparison based on the number of tens and ones	MA S 2.1.1.e Compare two three-digit numbers by using symbols <, =, and > and justify the comparison based on the meanings of the hundreds, tens, and ones	MA S 3.1.1.b Compare whole numbers through the hundred thousands and represent the comparisons using the symbols >, < or =	MA S 4.1.1.f Compare whole numbers up to one million and decimals through the hundredths place using >, <, and = symbols, and visual representations	MA S 5.1.1.b Compare whole numbers, fractions, mixed numbers, and decimals through the thousandths place and represent comparisons using symbols <, >, or =	MA S 6.1.1.c Compare and order rational numbers both on the number line and not on the number line

1			1	T-				
Curricular Indicators	MA M PK.1.1.g Begin to compose numbers from 11 to 19 using a 10 frame	MA S 0.1.1.g Compose and decompose numbers from 11 to 19 into ten ones and some more ones by a drawing, model, or equation (e.g., 14 = 10 + 4) to record each composition and decomposition	MA S 1.1.1.d Demonstrate that each digit of a two-digit number represents amounts of tens and ones, knowing 10 can be considered as one unit made of ten ones which is called a "ten" and any two-digit number can be composed of some tens and some ones (e.g., 19 is one ten and nine ones) and can be recorded as an equation (e.g., 19=10+9)	MA S 2.1.1.c Demonstrate that each digit of a three-digit number represents amounts of hundreds, tens and ones, (e.g., 387 is 3 hundreds, 8 tens, 7 ones)				
			19-10+9)			MA S 4.1.1.b Recognize the value of each place value position as 10 times the position to the right and as one tenth of the value of the place to its left MA S 4.1.1.b Recognize a digit in one place represents ten times what it represents in the place to its right and 1/10 what it represents in the place to its left	MA S 5.1.1.e Write powers of 10 with exponents	MA S 6.1.1.b Represent numbers using exponential notation
					MA S 3.1.1.d Represent and understand a fraction as a number on a number line			

	1	1	T	T	1	T
Curricular			MA S 3.1.1.e			
Indicators			Express whole			
Tituleulors			numbers as			
			fractions, and			
			recognize			
			fractions that are			
			equivalent to			
			whole numbers			
			MA S 3.1.1.f	MA S 4.1.1.i		
			Show and identify	Generate and		
			equivalent	explain equivalent		
			fractions using	fractions by		
			visual	multiplying by an		
			representations	equivalent		
			including pictures,	fraction of 1		
				naction of 1		
			manipulatives,			
			and number lines			
			MA S 3.1.1.g			
			Find parts of a			
			whole and parts of			
			a set using visual			
			representations			
			MA S 3.1.1.h			
			Explain and			
			demonstrate how			
			fractions 1/4, 1/2, 3/4			
			and a whole relate			
			to time,			
			measurement, and			
			money, and			
			demonstrate using			
			visual			
			representation	354 0 4 1 1 1		35.00.00
			MA S 3.1.1.i	MA S 4.1.1.k		MA S 6.1.1.h
			Compare and	Compare and order		Compare and
			order fractions	fractions having		order integers and
			having the same	unlike numerators		absolute value
			numerators or	and unlike		both on the
			denominators	denominators using		number line and
			using visual	visual		not on the number
				representations		
			representations,	(number line),		line
			comparison	comparison		
			symbols, and	symbols and verbal		
			verbal reasoning	reasoning, e.g.,		
				using benchmarks		
				or common		
				numerators or		
				common		
				denominators		

Curricular Indicators Curricular Indicators			MA S 4.1.1.j Explain how to change a mixed number to a fraction and how to change a fraction to a mixed number		
			MAS 4.1.1.1 Decompose a fraction into a sum of fractions with the same denominator in more than one way and record each decomposition with an equation and a visual representation		
			MA S 4.1.1.h Use decimals notation for fractions with denominators of 10 or 100		
				MAS 5.1.1.d Recognize and generate equivalent forms of commonly used fractions, decimals, and percents (e.g., halves, thirds, fourths, fifths, and tenths)	MAS 6.1.1.d Convert among fractions, decimals, and percents using multiple representations
					MAS 6.1.1.e Determine ratios from drawings, words, and manipulatives with the use of symbols

Curricular Indicators								MA S 6.1.1.f Convert unit rates
								MA S 6.1.1.g Model integers using drawings, words, manipulatives, number lines, and symbols MA S 6.1.1.i Determine absolute value of
Operations	MA S PK.1.2 Operations: Students will demonstrate the meaning of addition and subtraction with whole numbers and compute accurately.	MAS 0.1.2 Operations: Students will demonstrate the meaning of addition and subtraction with whole numbers and compute accurately.	MA S 1.1.2 Operations: Students will demonstrate the meaning of addition and subtraction with whole numbers and compute accurately.	MA S 2.1.2 Operations: Students will demonstrate the meaning of addition and subtraction with whole numbers and compute accurately.	MAS 3.1.2 Operations: Students will demonstrate the meaning of multiplication and division with whole numbers and compute accurately.	MA S 4.1.2 Operations: Students will demonstrate the meaning of addition and subtraction of whole numbers and fractions and compute accurately.	MA S 5.1.2 Operations: Stude nts will demonstrate the meaning of the operations with decimals and compute whole numbers by a fraction accurately. Students will demonstrate the meaning of operations and compute accurately with whole numbers, fractions, and decimals	rational numbers MA S 6.1.2 Operations: Students will compute with fractions and decimals accurately.
Curricular Indicators		MA S 0.1.2.a Fluently (i.e. automatic recall based on understanding) add and subtract within 5	MA S 1.1.2.a Fluently (i.e., automatic recall based on understanding) add and subtract within 10	MA S 2.1.2.a Fluently (i.e., automatics recall based on understanding) add and subtract within 20				

Curricular Indicators		MA S 1.1.2.b Add and subtract within 20, using a variety of strategies, (e.g., count on to make a ten). MA S 1.1.2.e Add within 100, which may include adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of ten using concrete models, drawings, and strategies which reflect understanding of place value	MA S 2.1.2.b Add and subtract within 100 using strategies based on place value, including the standard algorithm, properties of operations, and/or the relationship between addition and subtraction MA S 2.1.2.e Add and subtract within 1000, using concrete models, drawings, and strategies, which reflect understanding of place value and properties of operations.	MA S 3.1.2.a Add and subtract within 1,000 with or without regrouping	MA S 4.1.2.a Add and subtract multi-digit numbers using the standard algorithm	MA S 5.1.2.g Add, subtract, multiply, and divide decimals to the hundredths using concrete models or drawings and strategies based on place value, properties of operations (i.e. Commutative, Associative, Distributive, Identity, Zero), and/or relationships between	
		MA S 1.1.2.c Find the difference between two numbers that are multiples of 10, ranging from 10 – 90 using concrete models, drawings or strategies, and write the corresponding equation, (e.g., 90 – 70 = 20)		MA S 3.1.2.b Select and apply the appropriate methods of computation when solving one and two step addition and subtraction problems with four-digit whole numbers through the thousands (e.g., visual representations, mental computation, paper-pencil)		operations	

Curricular Indicators		MA S 1.1.2.d Mentally find 10 more or 10 less than a two-digit number without having to count and explain the reasoning used, (e.g., 33 is 10 less than 43)	MA S 2.1.2.c Mentally add or subtract 10 or 100 to/from a given number 100-900			
			MA S 2.1.2.d Add up to three two-digit numbers using strategies based on place value and understanding of properties			
			MA S 2.1.2.f Use addition to find the total number of objects arranged in an array no larger than five rows and five columns and write an equation to express the total (e.g., 3 + 3 + 3 = 9)	MA S 3.1.2.c Use drawings, words, arrays, symbols, repeated addition, equal groups, and number lines to explain the meaning of multiplication		
				MA S 3.1.2.d Use words and symbols to explain the meaning of the Zero Property and Identity Property of multiplication		
				MA S 3.1.2.e Multiply one digit whole numbers by multiples of 10 in the range of 10 to 90		

Curricular Indicators			MAS 3.1.2.f Use objects, drawings, arrays, words and symbols to explain the relationship between multiplication and division (e.g., if 3x4 = 12 then 12÷3 = 4)			
				MA S 4.1.2.b Multiply a four- digit whole number by a one- digit whole number		
				MA S 4.1.2.c Multiply a two- digit whole number by a two- digit whole number using the standard algorithm	MA S 5.1.2.a Multiply multi- digit whole numbers using the standard algorithm	
			MAS 3.1.2.g Fluently (i.e. automatic recall based on understanding) multiply and divide within 100	MAS 4.1.2.d Divide up to a four-digit whole number by a one- digit divisor with and without a remainders	MA S 5.1.2.b Divide four-digit whole numbers by a two-digit divisor with or without remainders using the standard algorithm	MA S 6.1.2.e Add, subtract, multiply, and divide decimals using the standard algorithm
				MAS 4.1.2.e Use drawings, words, and symbols to explain the meaning of addition and subtraction of fractions with like denominators		

Curricular				MA S 4.1.2.f	MA S 5.1.2.h	
Indicators				Add and subtract	Add and subtract	
maicaiors				fractions and	fractions and	
				mixed numbers	mixed numbers	
				with like	with unlike	
				denominators	denominators	
				MA S 4.1.2.g	MA S 5.1.2.c	MA S 6.1.2.a
				Multiply a	Multiply a whole	Multiply and
				fraction by a	number by a	divide fractions
				whole number	fraction or a	and mixed
					fraction by a	numbers
					fraction using	
					models and visual	
					representations	
					MA S 5.1.2.d	MA S 6.1.2.d
					Divide a unit	Divide multi-digit
					fraction by a	numbers using the
					whole number and	standard
					a whole number	algorithm
					by a unit fraction	
					MA S 5.1.2.e	
					Explain division	
					of a whole	
					number by a	
					fraction using	
					models and visual	
					representations	
					MA S 5.1.2.f	MA S 6.1.2.c
					Interpret a	Evaluate
					fraction as	expressions with
					division of the	positive exponents
					numerator by the	
					denominator	
			MS S 3.1.2.h	MS S 4.1.2.h	MA S 5.1.2.i	
			Determine the	Determine the	Determine the	
			reasonableness of	reasonableness of	reasonableness of	
			whole number	computations	computations	
			sums and	involving whole	involving whole	
				number products	numbers,	
			differences in real- life -world	and quotients in	fractions, and	
			problems using	real- life world	decimals	
			estimation,	problems using	uccilliais	
			compatible	estimation,		
			numbers, mental	compatible		
				numbers, mental		
			computations, or other strategies	computations, or		
			oniei suategies			
		J		other strategies	1	

Curricular Indicators				MA S 5.1.2.j Multiply and divide by powers of 10	
					MA S 6.1.2.b Convert between metric and standard units of measurement
					MAS 6.1.2.f Estimate and check reasonableness of answers using appropriate strategies and tools

K-12 Comprehensive Standard: Algebra

Students will communicate algebraic concepts using multiple representations to reason, solve problems, and make connections within mathematics and across disciplines.

make connections within mathematics and across disciplines.										
Concept	PK	Kindergarten	First Grade	Second Grade	Third Grade	Fourth Grade	Fifth Grade	Integrated Math I Sixth Grade		
Algebraic Relationships	MA M PK.2.1 Algebraic Relationships: Students will demonstrate, represent, and show relationships with expressions and equations.	MA S 0.2.1 Algebraic Relationships: Students will demonstrate, represent, and show relationships with expressions and equations.	MA S 1.2.1 Algebraic Relationships: Students will demonstrate, represent, and show relationships with expressions and equations.	MA S 2.2.1 Algebraic Relationships: Students will demonstrate, represent, and show relationships with expressions and equations.	MA S 3.2.1 Algebraic Relationships: Students will demonstrate, represent, and show relationships with expressions and equations.	MA S 4.2.1 Algebraic Relationships: Students will demonstrate, represent, and show relationships with expressions and equations.	MA S 5.2.1 Algebraic Relationships: Students will demonstrate, represent, and show relationships with expressions and equations.	MA S 6.2.1 Algebraic Relationships: Students will demonstrate, represent, and show relationships with expressions, equations, and inequalities.		
Curricular Indicators	MA M PK.2.1.a Begin to decompose numbers less than or equal to 10 in more than one way, showing decomposition with a drawing, or manipulatives	MA S 0.2.1.a Decompose numbers less than or equal to 10 into pairs in more than one way, showing each decomposition with a model, drawing, or equation (e.g., 7 = 4 + 3 and 7 = 1 + 6)	MA S 1.2.1.a Use the meaning of the equal sign to determine if equations are true and give examples of equations that are true (e.g., $4 = 4$, 6 = 7 - 1, $6 + 3 = 3+ 6$, and $7 + 2 = 5 +4)$			MA S 4.2.1.a Create a simple algebraic expression or equation using a variable for an unknown number to represent a math process (e.g., 3 + n = 15, 81 ÷ n = 9)	MA S 5.2.1.a Form ordered pairs from a rule such as y=2x, and graph the ordered pairs on a coordinate plane	MA S 6.2.1.c Analyze the relationship between dependent and independent variables using graphs, tables and equations		
				MA S 2.2.1.a Identify a group of objects from 0-20 as even or odd by counting by 2's or by showing even numbers as a sum of two equal parts	MAS 3.2.1.a Identify arithmetic patterns (including patterns in the addition or multiplication tables) using properties of operations					

Curricular Indicators	MA S 0.2.1.b For any number from 1 to 9, find the number that makes 10 when added to the given number, showing the answer with a model, drawing, or equation	MA S 1.2.1.b Use the relationship of addition and subtraction to solve subtraction problems (e.g., find $12-9=$, using the addition fact $9+3=12$)	MA S 3.2.1.b Interpret a multiplication equation as equal groups (e.g., interpret 4 × 6 as the total number of objects in four groups of six objects each). Represent verbal statements of equal groups as multiplication equations		MA S 6.2.1.a Create algebraic expressions (e.g., one operation, one variable as well as multiple operations, one variable) from word phrases
		MA S 1.2.1.c Find numerical patterns to make connections between counting and addition and subtraction (e.g., adding two is the same as counting on two)			
		MA S 1.2.1.d Determine the unknown whole number in an addition or subtraction equation, (e.g. 7 + ? = 13)		MA S 4.2.1.b Generate and analyze a number or shape pattern to follow a given rule; such as y = 3x + 5 is a rule to describe a relationship between two variables and can be used to find a second number when a first number is given	MA S 6.2.1.b Recognize and generate equivalent algebraic expressions involving distributive property and combining like terms

Algebraic Processes	MA M PK.2.2 Algebraic Processes: Students will apply the operational properties when adding and subtracting.	MAS 0.2.2 Algebraic Processes: Students will apply the operational properties when adding and subtracting.	MA S 1.2.2 Algebraic Processes: Students will apply the operational properties when adding and subtracting.	MA S 2.2.2 Algebraic Processes: Students will apply the operational properties when adding and subtracting.	MA S 3.2.2 Algebraic Processes: Student will apply the operational properties when multiplying and dividing.	MA S 4.2.2 Algebraic Processes: Students will apply the operational properties when evaluating expressions and solving equations.	MA S 5.2.2 Algebraic Processes: Students will apply the operational properties when evaluating expressions and solving equations.	MA S 6.2.2 Algebraic Processes: Students will apply the operational properties when evaluating expressions and solving expressions,
Curricular Indicators		No additional indicator(s) at this level	MA S 1.2.2.a Decompose numbers and use the commutative and associative properties of addition to develop addition and subtraction strategies including (Making 10's and counting on from the larger number) to add and subtract basic facts within 20 (e.g., decomposing to make $10, 7 + 5 = 7 + 3 + 2 = 10 + 2 = 12$; using the commutative property to count on $2 + 6 = 6 + 2$; and using the associative property to make $10, 5 + 3 + 7 = 5 + (3 + 7) = 5 + 10$	No additional indicator(s) at this level. Mastery is expected at previous grade levels	MA S 3.2.2.a Apply the commutative, associative, and distributive properties as strategies to multiply and divide	MAS 4.2.2.a Solve one- and two-step equations which use any or all of the four basic operations and include the use of a letter to represent the unknown quantity	MA S 5.2.2.a Interpret and evaluate numerical or algebraic expressions using order of operations (excluding exponents)	equations, and inequalities. MA S 6.2.2.a Simplify expressions using the distributive property and combining like terms
					MA S 3.2.2.b Solve one-step whole number equations using the four operations, which include the use of a letter to represent the unknown quantity.			MA S 6.2.2.b Use substitution to determine if a given value for a variable makes an equation or inequality true

Curricular Indicators				MA S 6.2.2.c Evaluate numerical
				expressions, including absolute value and exponents, with
				respect to order of operations MA S 6.2.2.d
				Given the value of the variable, evaluate algebraic expressions (which many include absolute
				value) with respect to order of operations (non- negative rational numbers)
				MAS 6.2.2.e Solve one-step equations with non-negative rational numbers using addition, subtraction, multiplication and division
				MAS 6.2.2.f Make tables of equivalent ratios relating quantities with whole- numbers and find missing values in the tables, and plot the pairs of values on the coordinate plane
				MA S 6.2.2.g Represent inequalities on a number line, e.g., graph x > 3

Applications	MA M PK.2.3 Applications: Students will solve real-life world problems involving addition and subtraction.	MA S 0.2.3 Applications: Students will solve real-life world problems involving addition and subtraction.	MA S 1.2.3 Applications: Students will solve real-life world problems involving addition and subtraction.	MA S 2.2.3 Applications: Students will solve real-life world problems involving addition and subtraction.	MA S 3.2.3 Applications: Students will solve real-life world problems involving equations with whole numbers.	MA S 4.2.3 Applications: Students will solve real-life world problems involving equations with fractions.	MA S 5.2.3 Applications: Students will solve real-life world problems involving equations with fractions and mixed numbers.	MA S 6.2.3 Applications: Students will solve real-life world problems involving ratios, unit rates, and percents.
Curricular Indicators	MA M PK.2.3.a Solve reallife world problems that involve addition and subtraction within 10 (e.g., by using objects or drawings to represent the problem)	MA S 0.2.3.a Solve real life world problems that involve addition and subtraction within 10 (e.g., by using objects or drawings to represent the problem)	MAS 1.2.3.a Solve real-life world problems involving addition and subtraction within 20 in situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem (e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem)	MAS 2.2.3.a Solve real-life world problems involving addition and subtraction within 100 in situations of addition and subtraction, including adding to, subtracting from, joining and separating, and comparing situations with unknowns in all positions using objects, models, drawings, verbal explanations, expressions and equations	MAS 3.2.3.a Solve real—life world problems involving two-step equations (involving two operations) involving whole numbers using addition and subtraction compri sed of whole numbers using the four operations	MA S 4.2.3.a Solve real-life world problems involving multi- step equations comprised of whole numbers using the four operations, including interpreting remainders	MA S 5.2.3.a Solve real—life world problems using equations involving fractions and mixed numbers using addition and subtraction	MA S 6.2.3.a Write equations (e.g., one operation, one variable) to represent real-life problems comprised of non- negative rational numbers
			MA S 1.2.3.b Solve real-life-world problems that include addition of three whole numbers whose sum is less than or equal to 20 by using objects, drawings, and equations with a symbol to represent the unknown number in the problem	MA S 2.2.3.b Create real-life-world problems to represent one-and two-step addition and subtraction within 100, with unknowns in all positions	MA S 3.2.3.b Write an equation (e.g., one operation, one variable) to represent real-life world problems compris ed involving of whole numbers	MA S 4.2.3.b Solve real-life-world problems involving addition and subtraction of fractions and mixed numbers with like denominators	MA S 5.2.3.a Solve real- life-world problems involving addition and subtraction of fractions and mixed numbers with like and unlike denominators	MA S 6.2.3.b Solve real- life-world problems comprised of non- negative rational numbers

Curricular Indicators		MAS 1.2.3.c Create a real-life_world problem to represent a given equation involving addition and subtraction within 20			MA S 6.2.3.c Solve real-life problems involving percents of numbers
					MA S 6.2.3.d Solve real-life problems using ratios and unit rates

K-12 Comprehensive Standard: Geometry

Students will communicate geometric concepts and measurement concepts using multiple representations to reason, solve problems,

	and make connections within mathematics and across disciplines.									
Concept	PK	Kindergarten	First Grade	Second Grade	Third Grade	Fourth Grade	Fifth Grade	Integrated		
								Math I Sixth Grade		
Characteristics	MA M PK 3.1 Characteristics: Students will identify and describe geometric characteristics and create two- and three-dimensional shapes.	MA S 0.3.1 Characteristics: Students will identify and describe geometric characteristics and create two- and three-dimensional shapes.	MA S 1.3.1 Characteristics: Students will identify and describe geometric characteristics and create two- and three-dimensional shapes.	MA S 2.3.1 Characteristics: Students will identify and describe geometric characteristics and create two- and three-dimensional shapes.	MA S 3.3.1 Characteristics: Students will identify and describe geometric characteristics and create two- and three-dimensional shapes.	MA S 4.3.1 Characteristics: Students will identify and describe geometric characteristics and create two- and three-dimensional shapes.	MA S 5.3.1 Characteristics: Students will identify and describe geometric characteristics and create two- and three-dimensional shapes.	MA S 6.3.1 Characteristics: Students will identify and describe geometric characteristics and create two- and three-dimensional shapes.		
Curricular Indicators	MA M PK.3.1.a Begin to describe reallife world objects using names of shapes, regardless of their orientation or size (squares, circle, triangles, rectangles, hexagons, cubes, cones, spheres, and cylinders)	MA S 0.3.1.a Describe real-life world objects using names of shapes, regardless of their orientation or size (e.g., squares, circles, triangles, rectangles, hexagons, cubes, cones, spheres, and cylinders)	MA S 1.3.1.a Determine defining and non- defining attributes of two- dimensional shapes; build and draw shapes that match the given definition	MA S 2.3.1.a Recognize and draw shapes having a specific number of angles, faces, or other attributes, including triangles, quadrilaterals, pentagons, and hexagons	MA S 3.3.1.a Identify the number of sides, angles, and vertices of two- dimensional shapes	MA S 4.3.1.a Recognize angles as geometric shapes that are formed where two rays share a common endpoint	MA S 5.3.1.a Identify three- dimensional figures including cubes, cones, pyramids, prisms, spheres, and cylinders	MA S 6.3.1.a Identify and create nets to represent two-dimensional drawings of rectangular prisms and triangular prisms		
	MA M PK.3.1.b Begin to identify shapes as two- dimensional ("flat") or three- dimensional ("solid")	MA S 0.3.1.b Identify shapes as two-dimensional ("flat") or three- dimensional ("solid")	MA S 1.3.1.c Use two- dimensional shapes (e.g., rectangles, squares, trapezoids, triangles, half- circles, and quarter-circles) and three- dimensional shapes (e.g., cubes, rectangular prisms, cones, and cylinders) to compose and describe new shapes	MAS 2.3.1.b Identify triangles, quadrilaterals, pentagons, hexagons, and cubes	MA S 3.3.1.b Sort quadrilaterals into categories (e.g., rhombuses, squares, and rectangles, and other)	MA S 4.3.1.d Classify two- dimensional shapes based on the presence or absence of parallel and perpendicular lines, or the presence or absence of specific angles	MA S 5.3.1.c Justify the classification of two-dimensional figures based on their properties			

		1	1	1	1	1		
Curricular Indicators				MA S 2.3.1.e b-Partition a rectangle into rows and columns of equal sized squares. Count to find the total.				
			MA S 1.3.1.b Decompose circles and rectangles into two and four equal parts, using the terms "halves", "fourths" and "quarters", and use the phrases "half of", "fourth of", and "quarter of"	MAS 2.3.1.4 c Divide circles and rectangles into two, three, or four equal parts. Describe the parts using the language of halves, thirds, fourths, half of, third of, fourth of	MA S 3.3.1.c Draw lines to separate two- dimensional figures into equal areas, and express the area of each part as a unit fraction of the whole			
						MA S 4.3.1.b Classify an angle as acute, obtuse, or right		
	MA M PK.3.1.c Compare two- and three-dimensional shapes, with different sizes and orientations, to describe their similarities, and differences	MAS 0.3.1.c Compare and analyze two- and three-dimensional shapes, with different sizes and orientations, to describe their similarities, differences, parts (e.g., number of "corner"/vertices), and other attributes (e.g., sides of equal length)					MA S 5.3.1.b Identify faces, edges, and vertices of rectangular prisms	
						MA S 4.3.1.c Identify and draw points, lines, line segments, rays, angles, parallel lines, perpendicular lines, intersecting lines, and recognize them in two- dimensional figures		

MA M PK 3.1.d Model shapes found in real-life by building shapes from materials (e.g., clay and pipe cleaners) and drawing shapes	MA S 0.3.1.d Model shapes found in real-life world by building shapes from materials (e.g., clay and pipe cleaners) and drawing shapes						
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Match models to combine simple shapes to compose larger shapes (e.g., pattern blocks)	MA S 0.3.1.e Combine simple shapes to compose larger shapes (e.g., use triangle pattern blocks to build a hexagon)						
			MA S 2.3.1.e d Recognize the equal shares of identical wholes need not have the same shape				
					MA S 4.3.1.e Identify right triangles		
					MA S 4.3.1.f Measure angles in whole number degrees using a protractor		
					MA S 4.3.1.g Sketch angles of a specified measure		
					MA S 4.3.1.h Recognize and draw lines of symmetry in two- dimensional shapes		
	combine simple shapes to compose larger shapes (e.g.,	Match models to combine simple shapes to compose larger shapes (e.g., pattern blocks) Combine simple shapes to compose larger shapes (e.g., use triangle pattern blocks to	Match models to combine simple shapes to compose larger shapes (e.g., pattern blocks) Combine simple shapes to compose larger shapes (e.g., use triangle pattern blocks to	Match models to combine simple shapes to compose larger shapes (e.g., pattern blocks) Match models to combine simple shapes to compose larger shapes (e.g., use triangle pattern blocks to build a hexagon) MAS 2.3.1.ed Recognize the equal shares of identical wholes need not have the	Match models to combine simple shapes to compose larger shapes (e.g., pattern blocks) Match models to combine simple shapes to compose larger shapes (e.g., use triangle pattern blocks to build a hexagon) MAS 2.3.1.ed Recognize the equal shares of identical wholes need not have the	Match models to combine simple shapes to compose larger shapes (e.g., pattern blocks) MAS 2.3.1.ed Recognize the equal shares of identical wholes need not have the same shape MAS 4.3.1.e Identify right triangles MAS 4.3.1.f Measure angles in whole number degrees using a protractor MAS 4.3.1.l. g Sketch angles of a specified measure MAS 4.3.1.h Recognize and draw lines of symmetry in two-dimensional	Mach models to combine simple shapes to compose larger shapes (e.g., use triangle pattern blocks) MAS 2.3.1.ed Recognize the equal shares of identical wholes need not have the same shape MAS 4.3.1.e Identify right triangles MAS 4.3.1.f Measure angles in whole number degrees using a protractor MAS 4.3.1.g Sketch angles of a specified measure MAS 4.3.1.l Recognize and draw lines of symmetry in two-dimensional

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Analytic Coordinate Geometry	MA M PK.3.2 Analytic Coordinate Geometry: Students will determine location, orientation, and relationships on the coordinate	MA S 0.3.2 Analytic Coordinate Geometry: Students will determine location, orientation, and relationships on the coordinate	MA S 1.3.2 Analytic Coordinate Geometry: Students will determine location, orientation, and relationships on the coordinate	MA S 2.3.2 Analytic Coo rdinate Geometry: Students will determine location, orientation, and relationships on the coordinate plane.	MA S 3.3.2 Analytic Coordinate Geometry: Students will determine location, orientation, and relationships on the coordinate	MA S 4.3.2 Analytic Coo rdinate Geometry: Students will determine location, orientation, and relationships on the coordinate plane.	MA S 5.3.2 Analytic Coo rdinate Geometry: Students will determine location, orientation, and relationships on the coordinate plane.	MA S 6.3.2 Analytic Coordinate Geometry: Students will determine location, orientation, and relationships on the coordinate
Curricular Indicators	plane. MA M PK .3.2.a Describe the	plane. MA S 0.3.2.a Describe the	plane. No additional indicator(s) at this	No additional indicator(s) at this	plane. No additional indicator(s) at this	No additional indicator(s) at this level. Mastery is	MA S 5.3.2.a Identify the origin,	plane. MA S 6.3.2.a Identify the
	relative positions of objects (e.g., above, below, beside, in front of, behind, next to, between)	relative positions of objects (e.g., above, below, beside, in front of, behind, next to, between)	level. Mastery is expected at previous grade levels	level. Mastery is expected at previous grade levels	level. Mastery is expected at previous grade levels	expected at previous grade levels	x axis, and y axis of the coordinate plane	ordered pair of a given point in the coordinate plane
							MA S 5.3.2.b Graph and name points in the first quadrant of the coordinate plane using ordered pairs of whole numbers	MA S 6.3.2.b Plot the location of an ordered pair in the coordinate plane
								MA S 6.3.2.e Calculate vertical and horizontal distances in the coordinate plane to find perimeter and area
								MA S 6.3.2.d Draw polygons in the coordinate plane given coordinates for the vertices
								MA S 6.3.2.c Identify the quadrant of a given point in the coordinate plane

Measurement	MA M PK.3.3	MA S 0.3.3	MA S 1.3.3	MA S 2.3.3	MA S 3.3.3	MA S 4.3.3	MA S 5.3.3	MA S 6.3.3
	Measurement: Students will	Measurement: Students will	Measurement: Students will	Measurement: Students will	Measurement: Students will	Measurement: Students will	Measurement: Students will	Measurement: Students will
	perform and	perform and	perform and	perform and	perform and	perform and	perform and	perform and
	compare	compare	compare	compare	compare	compare	compare	compare
	measurements and	measurements and	measurements and	measurements and	measurements and	measurements and	measurements and	measurements and
	apply formulas.	apply formulas.	apply formulas.	apply formulas.	apply formulas.	apply formulas.	apply formulas.	apply formulas.
Curricular			MA S 1.3.3.a	MA S 2.3.3.a				
Indicators			Identify, name, and understand the	Solve real- life -world				
			value of dimes and	problems				
			pennies (e.g., a	involving dollar				
			dime is equal to	bills, quarters,				
			ten pennies)	dimes, nickels,				
			relating to tens and	and pennies, using				
			ones, and solve	\$ and ¢ symbols				
			real- life <u>world</u> problems	appropriately				
			involving dimes					
			and pennies, using					
			¢ symbol					
			appropriately (e.g.,					
			If you have four					
			dimes and two					
			pennies, how many cents do you					
			have?)					
			nave.)					
					MA S 3.3.3.a	MA S 4.3.3.a		
					Find the perimeter	Apply perimeter		
					of polygons given	and area formulas		
					the side lengths,	for rectangles		
					and find an			
					unknown side			
					length			
			MAS 1.3.3.b	MAS 2.3.3.b	MAS 3.3.3.b			
			Tell and write time to the half hour	Identify and write time to five-	Tell and write time to the minute			
			and hour using	minute intervals	using both analog			
			analog and digital	using analog and	and digital clocks			
			clocks	digital clocks and				
				both a.m. and p.m.				

Curricular Indicators	MA M PK.3.3.a Describe measurable attributes of real- life objects, e.g., length or weight	MAS 0.3.3.a Describe measurable attributes of real- life world objects, e.g., length or weight	MA S 1.3.3.c Measure objects by using a shorter object end-to-end and know that the length of the object is the amount of same- size objects that span it lined up end-to-end	MA S 2.3.3.c Identify and use appropriate tools for measuring length (e.g., ruler, yardstick, meter stick, and measuring tape)	MA S 3.3.3.c Solve real-life world problems involving addition and subtraction of time intervals in minutes and elapsed time MA S 3.3.3.d Identify and use the appropriate tools and units of measurement, both customary and metric, to solve real-life world problems involving length, weight, mass, liquid volume, and capacity (within the same system	MA S 4.3.3.b Identify and use the appropriate tools, operations, and units of measurement, both customary and metric, to solve real-life world problems involving time, length, weight, mass, capacity, and volume	MA S 5.3.3.a Recognize that solid figures have volume that is measured in cubic units	MAS 6.3.3.a Determine the area of quadrilaterals, including parallelograms and triangles by composition and decomposition of polygons as well as application of formula
	MA M PK 3.3.b Compare length and weight of two objects (e.g., longer/shorter, heavier/lighter)	MAS 0.3.3.b Compare length and weight of two objects (e.g., longer/shorter, heavier/lighter)	MA S 1.3.3.d Order three objects by directly comparing their lengths, or indirectly by using a third object	MA S 2.3.3.d Measure the length of an object using two different length units and describe how the measurements relate to the size of the specific unit	and unit) MA S 3.3.3.f Use concrete and pictorial models to measure areas in square units by counting square units		MA S 5.3.3.b Use concrete and pictorial models to measure the volume of rectangular prisms in cubic units by counting cubic units	MA S 6.3.3.b Determine the surface area of rectangular prisms and triangular prisms using nets
							MA S 5.3.3.e Apply volume formulas for right rectangular prisms	MA S 6.3.3.c Use concrete and pictorial models to measure the volume of right rectangular prisms
				MA S 2.3.3.e Measure and estimate lengths using, inches, feet, centimeters, and meters	MA S 3.3.3.e Estimate and measure length to the nearest half inch, quarter inch, and centimeter	MA S 4.3.3.c Generate simple conversions from a larger unit to a smaller unit within a system of measurement the customary and metric systems of measurement	MAS 5.3.3.d c Generate conversions within a system of measurement including smaller to larger units the customary and metric systems of measurement	

Curricular		MA S 2.3.3.f			
Indicators		Compare the			
Indicators		difference in			
		length of objects			
		using, inches and			
		feet or			
		centimeters or and			
		meters.			
		MA S 2.3.3.g			
		Represent whole			
		numbers as			
		lengths from 0 on			
		a number line			
		diagram with			
		equally spaced			
		points			
		corresponding to			
		the numbers 0, 1,			
		2, etc., and			
		represent whole			
		number sums and			
		differences within			
		100 on a number			
		line			
		MA S 2.3.3.h			
		Use measurement			
		lengths and			
		addition and			
		subtraction within			
		100 to solve			
		real- life- world			
		problems			
			MA S 3.3.3.g		MA S 6.3.3.3.g
			Find the area of a		Apply volume,
			rectangle with		formulas for right
			whole-number		rectangular prisms
			side lengths by		
			modeling with unit		
			squares, and show		
			that the area is the		
			same as would be		
			found by		
			multiplying the		
			side lengths		
	1		side lenguis		1

Curricular Indicators			MAS 3.3.3.h Identify and draw rectangles with the same perimeter and different areas or with the same area and different perimeters		
			perimeters		

K-12 Comprehensive Standard: Data
Students will communicate data analysis/probability concepts using multiple representations to reason, solve problems, and make connections within mathematics and across disciplines.

Concept	PK	Kindergarten	First Grade	Second Grade	Third Grade	Fourth Grade	Fifth Grade	Integrated
Сопсері		J	That Grade	Second Grade				Math I Sixth Grade
Representations	MA M PK.4.1	MA S 0.4.1	MA S 1.4.1	MA S 2.4.1	MA S 3.4.1	MA S 4.4.1	MA S 5.4.1	MA S 6.4.1
•	Representations:	Representations:	Representations:	Representations:	Representations:	Representations:	Representations:	Representations:
	Students will create	Students will create	Students will create	Students will create	Students will create	Students will create	Students will create	Students will create
	displays that	displays that	displays that	displays that	displays that	displays that	displays that	displays that
	represent the data.	represent the data.	represent the data.	represent the data.	represent the data.	represent the data.	represent the data.	represent the data.
Curricular	MA M PK.4.1.a	MA M 0.4.1.a	MA S 1.4.1.a	MA S 2.4.1.a	MA S 3.4.1.a			
Indicators	Begin to represent data to organize	Organize and represent a data set	Organize and	Create and represent a data set	Create scaled pictographs and			
	and represent a	with up to three	represent a data set with up to three	using pictographs	scaled bar graphs to			
	data set with up to	categories	categories <u>using a</u>	and bar graphs to	represent a data			
	three categories	categories	picture graph	represent a data set	set—including data			
	unce categories		pictare graph	with up to four	collected through			
			MA M 1.4.1.a	categories	observations,			
			Organize,		surveys, and			
			represent, and		experiments—with			
			explain data set		several categories			
			with up to three					
			categories		MA M 3.4.1.a			
					Create graphs			
					(pictographs, bar			
					graphs, and line			
					graphs) to represent			
					a data set—			
					including data collected through			
					observations,			
					surveys, and			
					experiments—with			
					several categories			
				MA S 2.4.1.b	MA S 3.4.1.b	MA S 4.4.1.a	No additional	MA S 6.4.1.a
				Create and	Represent data	Represent data	indicator(s) at this	Represent data
				represent a data set	using line plots	using line plots	level. Mastery is	using line plots (dot
				by making a line	where the	where the	expected at	plots), box plots,
				plot	horizontal scale is	horizontal scale is	previous grade	and histograms
					marked off in	marked off in	<u>levels</u>	
					appropriate units-	appropriate units		
					whole numbers,	(e.g., whole		
					halves, or quarters	numbers, halves,		
						quarters, or		
						eighths)		

A 1 0	MA M PK.4.2	MA S 0.4.2	MA S 1.4.2	MA S 2.4.2	MA S 3.4.2	MA S 4.4.2	MA S 5.4.2	MA S 6.4.2
Analysis &	Analysis &	Analysis &	Analysis &	Analysis &	Analysis &	Analysis &	Analysis &	Analysis &
Application	Applications:	Applications:	Applications:	Applications:	Applications:	Applications:	Applications:	Applications:
	Students will	Students will	Students will	Students will	Students will	Students will	Students will	Students will
	analyze data to	analyze data to	analyze data to	analyze data to	analyze data to	analyze data to	analyze data to	analyze data to
	address the	address the	address the	address the	address the	address the	address the	address the
	situation.	situation.	situation.	situation.	situation.	situation.	situation.	situation.
C	Situation.	Situation.	MA S 1.4.2.a	MA S 2.4.2.a	Situation.	MA S 4.4.2.a	MAS 5.4.2.a	MA S 6.4.2.a
Curricular			Ask and answer	Interpret data using		Solve problems	Formulate	Use operations
Indicators			questions about the	bar graphs with up		involving addition	questions that can	with fractions to
			total number of	to four categories.		or subtraction of	be addressed with	solve problems
			data points, how	Solve simple		fractions using	data and make	using information
			many in each	comparison		information	predictions about	presented in line
			category, and	problems using		presented in line	the data. Use	plots
			compare categories	information from		plots	observations,	piots
			by identifying how	the graphs		piots	surveys, and	
			many more or less	the graphs			experiments to	
			are in a particular				collect, represent,	
			category <u>using a</u>				and interpret the	
			picture graph				data using tables	
			picture graph				and bar graphs	
							MA S 5.4.2.b	
							Formulate	
							questions that can	
							be addressed with	
							data and make	
							predictions about	
							the data	
	MA M PK.4.2.a	MA S 0.4.2.a					the data	
	Identify, sort, and	Identify, sort, and						
	classify objects by	classify objects by						
	size, shape, color,	size, shape, color,						
	and other	and other attributes.						
	attributes. Identify	Identify objects						
	objects that do not	that do not belong						
	belong to a	to a particular						
	particular group	group and explain						
	and explain the	the reasoning used						
	reasoning used	the reasoning used						
	- Justing about				MA S 3.4.2.a			
					Solve problems and			
					make simple			
					statements about			
					quantity differences			
					(e.g., how many			
					more and how many			
					less) using			
					information in			
					pictographs and bar			
					graphs			

Curricular Indicators							MA S 5.4.2.a Use observations, surveys, and experiments to collect, represent, and interpret the data using tables	MAS 6.4.2.b Compare and interpret data sets based upon their graphical representations (center, spread and
							(e.g., frequency charts) and bar graphs	shape)
							Etablis	MA S 6.4.2.c Find and interpret the mean, median, mode, and range for a set of data
								MA S 6.4.2.d Compare the mean, median, mode, and range from two sets of data
Probability	MA M PK .4.3 Probability: Students will interpret and apply concepts of probability.	MA S 0.4.3 Probability: Students will interpret and apply concepts of probability.	MA S 1.4.3 Probability: Students will interpret and apply concepts of probability.	MA S 2.4.3 Probability: Students will interpret and apply concepts of probability.	MA S 3.4.3 Probability: Students will interpret and apply concepts of probability.	MA S 4.4.3 Probability: Students will interpret and apply concepts of probability.	MA S 5.4.3 Probability: Students will interpret and apply concepts of probability.	MA S 6.4.3 Probability: Students will interpret and apply concepts of probability.
Curricular Indicators	No additional indicator(s) at this level	No additional indicator(s) at this level	No additional indicator(s) at this level	No additional indicator(s) at this level	No additional indicator(s) at this level	No additional indicator(s) at this level	No additional indicator(s) at this level	No additional indicator(s) at this level

6-11 Mathematics Matrix

K-12 Comprehensive Standard: Number

Students will communicate number <u>sense</u> concepts using multiple representations to reason, solve problems, and make connections within mathematics and across disciplines.

	make connections within mathematics and across disciplines.										
Concept	Fifth Grade	Integrated Math I	Integrated Math II	Integrated Math III	Algebra I	Geometry	Algebra II				
Numeric Relationships	MA S 5.1.1 Numeric Relationships: Students will demonstrate, represent, and show relationships among fractions and decimals and within the base-ten number system.	MA S 6.1.1 Numeric Relationships: Students will demonstrate, represent, and show relationships among fractions, decimals, percents, and integers within the base-ten number system.	MAS 7.1.1 Numeric Relationships: Students will demonstrate, represent, and show relationships among rational numbers within the base-ten number system.	MA S 8.1.1 Numeric Relationships: Students will demonstrate, represent, and show relationships among real numbers within the base-ten number system.	MA M 9.1.1 Numeric Relationships: Students will demonstrate, represent, and show relationships among real numbers within the base-ten number system.	MA M 10.1.1 Numeric Relationships: Students will demonstrate, represent, and show relationships among real numbers within the base-ten number system.	MA S 11.1.1 Numeric Relationships: Students will demonstrate, represent, and show relationships among the subsets of real numbers and the complex number system.				
Curricular Indicators	MA S 5.1.1.a Determine multiple equivalent representations for whole numbers and decimals through the thousandths place using standard form, word form, and expanded notation	MA M 6.1.1.j Convert a fraction to a decimal using long division	MA S 7.1.1.a Convert a rational number to a decimal using long division No additional indicator(s) at this level. Mastery is expected at previous grade levels	MA S 8.1.1.a Determine subsets of numbers as natural, whole, integer, rational, irrational, or real, based on the definitions of these sets of numbers	MA M 9.1.1.a Compare and contrast subsets of the complex number system, including rational, irrational, integers, whole, and natural numbers		MA S 11.1.1.a Compare and contrast subsets of the complex number system, including imaginary, rational, irrational, integers, whole, and natural numbers				
		MA S 6.1.1.a Determine common factors and common multiples using prime factorization of numbers with and without exponents									
	MA S 5.1.1.e Write powers of 10 with exponents	MA S 6.1.1.b Represent non- negative whole numbers using exponential notation	MA M 7.1.1.b a Compare and represent numbers in scientific and standard notation	MA S 8.1.1.b Represent numbers using positive and negative exponents including and in scientific notation							

Curricular Indicators	MA S 5.1.1.b Compare whole numbers, fractions, mixed numbers, and decimals through the thousandths place and represent comparisons using symbols <, >, or =	MA S 6.1.1.c Compare and order rational numbers both on the number line and not on the number line	MA M 7.1.1.e b Compare and order real numbers on the number line and not on a number line	MA S 8.1.1.c Demonstrate Describe the difference between a rational and irrational number		
	MA S 5.1.1.d Recognize and generate equivalent forms of commonly used fractions, decimals, and percents (e.g., halves, thirds, fourths, fifths, and tenths)	MA S 6.1.1.d Convert among fractions, decimals, and percents using multiple representations		MA S 8.1.1.d Approximate, compare, and order real numbers (both rational and irrational) and order real numbers both on the number line and off the number line, including irrational number		
	MAS 5.1.1.c Round whole numbers and decimals to any given place			approximations	MA S 11.1.b Use drawings, words, and symbols to explain the effects of operations such as multiplication and division on the magnitude of quantities in the real number system, including powers and roots, e.g. if you take the square root of a number, will the result always be smaller than the original number?	
		MA S 6.1.1.e Determine ratios from drawings, words, and manipulatives with the use of symbols				
		MA S 6.1.1.f Convert Explain and determine unit rates				

Curricular Indicators		MA S 6.1.1.g Model integers using drawings, words, manipulatives, number lines, and symbols MA S 6.1.1.h Compare and order integers and absolute value both on the number line and not					
		on the number line MA S 6.1.1.i Determine absolute value of rational numbers					MA S 11.1.1.b
							Recognize that closure properties apply to the subsets of the complex number system, under the standard operations
Operations	MA S 5.1.2 Operations: Students will demonstrate the meaning of the operations with decimals and compute whole numbers by a fraction accurately.	MA S 6.1.2 Operations: Students will compute with fractions and decimals accurately.	MA S 7.1.2 Operations: Students will compute with rational numbers accurately.	MA S 8.1.2 Operations: Students will compute with exponents and roots.	MA S 11.1.2 Operations: Students will compute with real and complex numbers.	MA S 11.1.2 Operations: Students will compute with real and complex numbers.	MA S 11.1.2 Operations: Students will compute with real and complex numbers.
Curricular Indicators	MA S 5.1.2.a Multiply multi-digit whole numbers using the standard algorithm						

	MA S 5.1.2.c Multiply a whole number by a fraction or a fraction by a fraction using models and visual representations	MA S 6.1.2.a Multiply and divide non-negative fractions and mixed numbers	MA S 7.1.2.b Add, subtract, multiply, and divide rational numbers (e.g., positive and negative fractions, decimals, and integers).	MA M 8.1.2.e f Compute rational, integers, whole and natural numbers	MA M 9.1.2.a Compute rational, irrational, integers, whole and natural numbers	MA S 11.1.2.a Compute with subsets of the complex number system, including imaginary, rational, irrational, integers, whole, and natural numbers
Curricular Indicators			MA S 7.1.2.a Solve problems using proportions and ratios (e.g., cross products, percents, tables, equations, and graphs)	MA M 8.1.2.a Evaluate the square roots of small perfect squares and cube roots of small perfect cubes (e.g. small perfect squares: 1 20; cube roots of small perfect cubes 1-5) MA S 8.1.2.a Evaluate the square roots of perfect squares less than or equal to 400 and cube roots of perfect cubes less than or equal to 125		numous
	MA S 5.1.2.b Divide four-digit whole numbers by a two-digit divisor with or without remainders using the standard algorithm	MA S 6.1.2.e d Add, subtract, multiply, and divide decimals using the standard algorithm	MA S 7.1.2.d Use multiple representations and strategies to add, subtract, multiply, and divide integers			
		MA S 6.1.2.b Convert between metric and standard units of measurement				
	MA S 5.1.2.f Interpret a fraction as division of the numerator by the denominator	MA S 6.1.2.e b Evaluate expressions with positive exponents	MA S 7.1.2.c Apply properties of operations as strategies for problem solving with rational numbers	MA S 8.1.2.b Simplify numerical expressions involving exponents and roots, e.g., 4^-2 is the same as 1/16	MA S 11.1.2.b Simplify expressions with rational exponents	MA S 11.1.2.b Simplify expressions with rational exponents
	MA S 5.1.2.d	MA S 6.1.2. d <u>c</u>				

	Divide a unit fraction by a whole number and a whole number by a unit fraction MA S 5.1.2.e Explain division of a whole number by a fraction using models and visual representations	Divide multi-digit numbers using the standard algorithm					
Curricular Indicators		MA S 6.1.2.fe Estimate and check reasonableness of answers using appropriate strategies and tools.	MA S 7.1.2.e Estimate and check reasonableness of answers using appropriate strategies and tools	MA S 8.1.2.d e Estimate and check reasonableness of answers using appropriate strategies and tools	MA S 11.1.2.d Use estimation methods to check the reasonableness of real number computations and decide if the problem calls for an approximation (including appropriate rounding) or an exact number	MA S 11.1.2.d Use estimation methods to check the reasonableness of real number computations and decide if the problem calls for an approximation (including appropriate rounding) or an exact number	MA S 11.1.2.d Use estimation methods to check the reasonableness of real number computations and decide if the problem calls for an approximation (including appropriate rounding) or an exact number
	MA S 5.1.2.g Add, subtract, multiply, and divide decimals to the hundredths using concrete models or drawings and strategies based on place value, properties of operations, and/or relationships between operations						
	MA S 5.1.2.h Add and subtract fractions and mixed numbers with unlike denominators MA S 5.1.2.i Determine the reasonableness of computations involving whole numbers, fractions,						

	MA S 5.1.2.j Multiply and divide by powers of 10		MAS 8.1.2.e d Multiply and divide numbers using scientific notation		MA S 11.1.2.c Select, apply, and explain the method of computation when problem solving using real numbers (e.g., models, mental computation, paper- pencil, or technology)
Curricular Indicators			MA S 8.1.2.c Simplify numerical expressions involving absolute value		

K-12 Comprehensive Standard: Algebra

Students will communicate algebraic concepts using multiple representations to reason, solve problems, and make connections within mathematics and across disciplines.

	make connections within mathematics and across disciplines.									
Concept	Fifth Grade	Integrated	Integrated	Integrated	Algebra I	Geometry	Algebra II			
		Math I	Math II	Math III						
Algebraic Relationships	MA S 5.2.1 Algebraic Relationships: Students will demonstrate, represent, and show relationships with expressions and equations.	MA S 6.2.1 Algebraic Relationships: Students will demonstrate, represent, and show relationships with expressions, equations, and inequalities.	MA S 7.2.1 Algebraic Relationships: Students will demonstrate, represent, and show relationships with expressions, equations, and inequalities.	MA S 8.2.1 Algebraic Relationships: Students will demonstrate, represent, and show relationships with expressions, equations, and inequalities.	MA S 11.2.1 Algebraic Relationships: Students will demonstrate, represent, and show relationships with functions.		MA S 11.2.1 Algebraic Relationships: Students will demonstrate, represent, and show relationships with functions.			
Curricular Indicators		MA S 6.2.1.a Create algebraic expressions (e.g., one operation, one variable as well as multiple operations, one variable) from word phrases MA S 6.2.1.b Recognize and generate equivalent algebraic expressions involving distributive property and combining like terms	MA S 7.2.1.a Describe and create an inequality from words and pictures (e.g., one-step, one-variable)	MA S 8.2.1.a Create algebraic expressions, equations, and inequalities (e.g., two- step, one variable) from word phrases, tables, and pictures MA S 8.2.1.c Describe equations and linear graphs as having one solution, no solution, or infinitely many solutions	MA S 11.2.1.a Define a function and use function notation MA S 11.2.1.a b Analyze a relation to determine if it is a function given graphs, tables, or algebraic notation		MA S 11.2.1.a b Analyze a relation to determine if it is a function given graphs, tables, or algebraic notation			
	MAS 5.2.1.a Form ordered pairs from a rule such as y=2x, and graph the ordered pairs on a coordinate plane	MAS 6.2.1.c Represent and analyze the relationship between dependent and independent two variables using graphs, tables and one-step equations		MA S 8.2.1.b Determine and describe the rate of change for given situations through the use of tables and graphs	MA S 11.2.1.b c Classify a function given graphs, tables, or algebraic notation, as linear, quadratic, or neither MA S 11.2.1.e d Identify domain and range of functions represented in either algebraic or graphical form		MA S 11.2.1.b c Classify a function given graphs, tables, or algebraic notation, as linear, quadratic, or neither MA S 11.2.1.e d Identify domain and range of functions represented in either algebraic or graphical form			

				I	1	
Curricular			MA S 7.2.1.b	MA S 8.2.1.d	MA S 11.2.1. d <u>e</u>	MA S 11.2.1. d <u>e</u>
Indicators			Represent proportiona	Graph proportional	Analyze and graph	Analyze and graph
Trial carors			1 relationships by	relationships and	linear functions and	linear functions and
			equations. Real-world	interpret , interpreting	inequalities (point-	inequalities (point-
			situations with	the unit rate as the	slope form, slope-	slope form, slope-
			proportions	slope	intercept form,	intercept form,
				_	standard form,	standard form,
					intercepts, rate of	intercepts, rate of
					change, parallel and	change, parallel and
					perpendicular lines,	perpendicular lines,
					vertical and horizontal	vertical and
					lines, and inequalities)	horizontal lines, and
					inies, and inequalities)	inequalities)
					MA M 9.2.1. e - <u>f</u>	MA S 11.2.1. <u>e f</u>
					Analyze and graph	Analyze and graph
					absolute value	absolute value
					functions (using a	functions (finding the
					table of values)	vertex, symmetry,
						transformations,
						determine intercepts,
						and minimums or
						maximums <u>using</u>
						piecewise definition)
					MA S 11.2.1. f g	MA S 11.2.1. f g
					Analyze and graph	Analyze and graph
					quadratic functions	quadratic functions
					(standard form, vertex	(standard form,
					form, finding zeros,	vertex form, finding
					symmetry,	zeros, symmetry,
					transformations,	transformations,
					determine intercepts,	determine intercepts,
					and minimums or	and minimums or
					maximums)	maximums)
					maximums)	MA S 11.2.1. <u>g h</u>
						Represent, interpret,
						and analyze inverses
						of functions
						algebraically and
47 7	MA 0 5 0 0	MAGGGG	MA 0.7.2.0	MA C 0 2 2	MA C 11 2 2	graphically
Algebraic	MA S 5.2.2	MA S 6.2.2	MA S 7.2.2	MA S 8.2.2	MA S 11.2.2	MA S 11.2.2
Processes	Algebraic Processes:	Algebraic Processes:	Algebraic Processes:	Algebraic Processes:	Algebraic Processes:	Algebraic Processes:
	Students will apply	Students will apply	Students will apply	Students will apply	Students will apply	Students will apply
	the operational	the operational	the operational	the operational	the operational	the operational
	properties when	properties when	properties when	properties when	properties when	properties when
	evaluating expressions	evaluating expressions	evaluating expressions	evaluating expressions	evaluating rational	evaluating rational
	and solving equations.	and solving	and solving equations,	and solving	expressions, and	expressions, and
		expressions,	and inequalities.	expressions,	solving linear and	solving linear and
		equations, and		equations, and	quadratic equations,	quadratic equations,
		inequalities.		inequalities.	and inequalities.	and inequalities.

Curricular Indicators	MA S 5.2.2.a Interpret and evaluate numerical or algebraic expressions using order of operations (excluding exponents)	MA S 6.2.2.a Simplify expressions using the distributive property and combining like terms	MA S 7.2.2.a Solve equations using the distributive property and combining like terms	MA S 8.2.2.a Solve multi-step equations involving rational numbers with the same variable used appearing on both sides of the equal sign	MA S 11.2.2.a b Identify and explain the properties used in solving equations and inequalities	MA S 11.2.2.a b Identify and explain the properties used in solving equations and inequalities
		MA S 6.2.2.b Use substitution to determine if a given value for a variable makes an equation or inequality true	MA S 7.2.2.b Use factoring and properties of operations to create equivalent algebraic expressions. [e.g., 2x + 6 = 2(x + 3)]		MA S 11.2.2-b c Simplify algebraic expressions involving integer and rational exponents	MA S 11.2.2.b c Simplify algebraic expressions involving integer and rational exponents
					MA M 9.2.2.e d Perform operations on rational expressions with a monomial denominators and numerators (add, subtract, multiply, divide, and simplify)	MA S 11.2.2.e-d Perform operations on rational expressions (add, subtract, multiply, divide, and simplify)
		MA S 6.2.2.c Evaluate numerical expressions, including absolute value and exponents, with respect to order of operations	MA S 7.2.2.c Given the value of the variable(s), evaluate algebraic expressions (including absolute value) with respect to order of operations (rational numbers)			
		MA S 6.2.2.d Given the value of the variable, evaluate algebraic expressions (which many include absolute value) with respect to order of operations (nonnegative rational numbers)			MA S 11.2.2.d e Evaluate expressions at specified values of their variables (polynomial, rational, radical, and absolute value)	
		MA S 6.2.2.e Solve one-step equations with non- negative rational numbers using addition, subtraction, multiplication and division	MA S 7.2.2.d Solve two-step equations involving integers and rational numbers rational numbers which include the integers		MA S 11.2.2.e f Solve an equation involving several variables for one variable in terms of the others	

			•		
Curricular Indicators		MA S 7.2.2.e Solve one- step and two step inequalities involving integers and rational numbers (including whole numbers, fractions and decimals) and represent solutions on a number line	MA S 8.2.2.b Solve two-step inequalities involving rational numbers and represent solutions on a number line	MA S 11.2.2-f g Solve linear equations and inequalities including absolute value Solve linear and absolute value equations and inequalities	
	MAS 6.2.2.f Make tables of Use equivalent ratios relating quantities with whole-numbers and find missing values in the tables; and plot the pairs of values on the coordinate plane				
	MA S 6.2.2.g Represent inequalities on a number line, e.g., graph x > 3			MA S 11.2.2.g h Analyze and solve systems of two linear equations and inequalities in two variables algebraically and graphically	MA S 11.2.2.g h Analyze and solve systems of two linear equations and inequalities in two variables algebraically and graphically
				MA S 11.2.2.h i Perform operations (addition, subtraction, multiplication, and division) on polynomials (add, subtract, multiply, divide)	MA S 11.2.2.h i Perform operations (addition, subtraction, multiplication, and division) on polynomials (add, subtract, multiply, divide)
				MA S 11.2.2.i j Factor polynomials to include factoring out monomial terms and factoring quadratic expressions	MA S 11.2.2.i j Factor polynomials to include factoring out monomial terms and factoring quadratic expressions

Curricular					MA S 11.2.2.k	
					Recognize polynomial	
Indicators					multiplication patterns	
					and their related	
					factoring patterns	
					$(e.g., (a + b)^2 = a^2 +$	
					$2ab + b^2$, $a^2 - b^2 = (a + b^2)$	
					<u>b)(a – b))</u>	
					MA S 11.2.2.1	
					Make the connection between the factors of	
					a polynomial and the	
					zeros of a polynomial	
					zoros or a porynomiai	MA S 11.2.2. j <u>m</u>
						Combine functions
						by composition and
						perform operations
						on functions
						(addition,
						subtraction, multiplication,
						division)
						division)
					MA M 9.2.2.k	MA S 11.2.2.k n
					Solve quadratic	Solve quadratic
					equations involving	equations involving
					real numbers	real coefficients and
						real or
						imaginary values roots
					MA S 11.2.2.a	100ts
					Convert equivalent	
					rates (e.g., miles per	
					hour to feet per	
					second)	
Applications	MA S 5.2.3	MA S 6.2.3	MA S 7.2.3	MA S 8.2.3	MA S 11.2.3	MA S 11.2.3
	Applications: Students	Applications: Students	Applications: Students	Applications: Students	Applications: Students will solve real-life	Applications:
	will solve real-life problems involving	will solve real- life world problems	will solve real- life world problems	will solve real- life world problems	will solve real-life world problems	Students will solve real-life world
	equations with	involving ratios, unit	involving expressions,	involving multi-step	involving linear	problems involving
	fractions and mixed	rates, and percents.	equations, and	equations and multi-	equations and	linear equations and
	numbers.	, and percents.	inequalities.	step inequalities.	inequalities, systems	inequalities, systems
			1	1	of linear equations,	of linear equations,
					quadratic, exponential,	quadratic,
					square root, and	exponential, square
					absolute value	root, and absolute
					functions.	value functions.

Curricular Indicators	MA S 5.2.3.a Solve real-life problems using equations involving fractions and mixed numbers using addition and subtraction	MA S 6.2.3.a Write equations (e.g., one operation, one variable) to represent real-life problems comprised of non- negative rational numbers	MA S 7.2.3.a Describe and write linear equations from words and tables	MA S 8.2.3.a Describe and write equations from words, patterns, and tables	MA S 11.2.3.a Analyze, model, and solve real-life problems using various representations (graphs, tables, linear equations and inequalities, systems of linear equations, quadratic, exponential, square root, and absolute value functions)	MA S 11.2.3.a Analyze, model, and solve real-life problems using various representations (graphs, tables, linear equations and inequalities, systems of linear equations, quadratic, exponential, square root, and absolute value functions)
	MA S 5.2.3.b Solve real-life problems involving addition and subtraction of fractions and mixed numbers with unlike denominators	MA S 6.2.3.b Solve real-life problems comprised of involving non- negative rational numbers	MA S 7.2.3.b Write an a two-step equation to represent real-life world problems eomprised of involving rational numbers in any form (e.g., positive and negative fractions, decimals and integers)	MA S 8.2.3.b Write an equation to represent real-life problems comprised of rational numbers in any form (whole numbers, fractions, and decimals)		
		MA S 6.2.3.c Solve real-life problems involving percents of numbers	MA S 7.2.3.c Solve real-life world problems comprised of with equations that involve rational numbers in any form (e.g., positive and negative fractions, decimals and integers)	MA S 8.2.3.c Solve real-life multi- step problems comprised of rational numbers in any form (whole numbers, fractions, and decimals)		
		MA S 6.2.3.d Solve real-life problems using ratios and unit rates	MA S 7.2.3.d Solve real-life world problems comprised of inequalities MA S 7.2.3.e Use proportional			
			relationships to solve real-life problems, including percent problems, (e.g., % increase, % decrease, mark-up, tip)			

K-12 Comprehensive Standard: Geometry

Students will communicate geometric concepts and measurement concepts using multiple representations to reason, solve problems, and make connections within mathematics and across disciplines.

and make connections within mathematics and across disciplines.									
Concept	Fifth Grade	Integrated Math I	Integrated Math II	Integrated Math III	Algebra I	Geometry	Algebra II		
Characteristics	MA S 5.3.1 Characteristics: Students will identify and describe geometric characteristics and create two- and three- dimensional shapes.	MAS 6.3.1 Characteristics: Students will identify and describe geometric characteristics and create two- and three- dimensional shapes.	MA S 7.3.1 Characteristics: Students will identify and describe geometric characteristics and create two- and three-dimensional shapes.	MAS 8.3.1 Characteristics: Students will identify and describe geometric characteristics and create two- and three-dimensional shapes.	MAS 11.3.1 Characteristics: Students will identify and describe geometric characteristics and create two- and three- dimensional shapes.	MA S 11.3.1 Characteristics: Students will identify and describe geometric characteristics and create two- and three- dimensional shapes.	MA S 11.3.1 Characteristics: Students will identify and describe geometric characteristics and create two- and three- dimensional shapes.		
Curricular Indicators	MA S 5.3.1.a Identify three- dimensional figures MA S 5.3.1.b	MAS 6.3.1.a Identify and create nets to represent two- dimensional drawings of rectangular prisms and triangular prisms-prisms, pyramids, cylinders and cones		MA S 8.3.1.b	MA M 9.3.1.a Know and use precise definitions based on the undefined terms of perpendicular lines and parallel lines	MA M 10.3.1.a Know and use precise definitions based on the undefined terms of point, line, and plane, including of ray, line segment, angle, and congruence based on the defined terms of geometry: point, line and plane MA S 11.3.1.b			
	Justify the classification of two-dimensional figures based on their properties			Identify and apply geometric properties of parallel lines cut by a transversal and the resulting corresponding, alternate interior, and alternate exterior angles to find missing measures		Prove geometric theorems about angles, triangles, congruent triangles, similar triangles, parallel lines with transversals, and quadrilaterals using deductive reasoning			
						MA S 11.3.1.c Apply geometric properties to solve problems involving similar triangles, congruent triangles, quadrilaterals, and other polygons			

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Curricular Indicators	MA S 5.3.1.c Identify faces, edges, and vertices of rectangular prisms	MA S 7.3.1.a	MA S 8.3.1.a		
		Apply and use properties of adjacent complementary, supplementary, and vertical angles to find missing <u>angle</u> measure	interior angles of a triangle to find solve for missing measures		
				MA S 11.3.1.d Identify and apply rig triangle relationships including sine, cosine tangent, special right triangles, and the converse of the Pythagorean Theorem	,
				MA S 11.3.1.e Create geometric models to visualize, describe, and solve problems using simil- triangles, right triangles, and trigonometry	ır
				MAS 11.3.1.f Know and use precise definitions and terminology of circle including central ang inscribed angle, arc, intercepted arc, chord secant, and tangent	e,
				MA S 11.3.1.g Apply the properties central angles, inscribed angles, ang formed by intersectin chords, and angles formed by secants and/or tangents to fin the measures of angle related to the circle	es 3

Curricular Indicators			MA M 7.3.1.b Draw triangles (freehand, with ruler and protractor, and using technology) with given conditions from three measures of angles or sides. MA S 7.3.1.b Draw triangles (freehand using a ruler and a protractor, and using technology) with given conditions of three measures of angles or sides, and notice when the conditions determine a unique triangle, more than one triangle, or no triangle MA M 7.3.1.c Notice when the conditions determine a unique triangle, more than one triangle, or no triangle			MA S 11.3.1.h Sketch, draw, and construct appropriate representations of geometric objects using a variety of tools and methods which may include ruler/straight edge, protractor, compass, reflective devices, paper folding, or dynamic geometric software	
						MA M 10.3.1.b (AT) Prove and apply properties of lengths of chords, secant segments, and tangent segments	
Analytic Coordinate Geometry	MA S 5.3.2 Analytic Coordinate Geometry: Students will determine location, orientation, and relationships on the coordinate plane.	MA S 6.3.2 Analytic Coordinate Geometry: Students will determine location, orientation, and relationships on the coordinate plane.	MA S 7.3.2 Analytic Coordinate Geometry: Students will determine location, orientation, and relationships on the coordinate plane.	MA S 8.3.2 Analytic Coordinate Geometry: Students will determine location, orientation, and relationships on the coordinate plane.	MA S 11.3.2 Analytic Coordinate Geometry: Students will determine location, orientation, and relationships on the coordinate plane.	MA S 11.3.2 Analytic Coordinate Geometry: Students will determine location, orientation, and relationships on the coordinate plane.	MA S 11.3.2 Analytic Coordinate Geometry: Students will determine location, orientation, and relationships on the coordinate plane.
Curricular Indicators	MA S 5.3.2.a Identify the origin, x axis, and y axis of the coordinate plane	MA S 6.3.2.a Identify the ordered pair of a given point in the coordinate plane	No additional indicator(s) at this level. Mastery is expected at previous grade levels			MA S 11.3.2.a Derive and apply the midpoint formula	

						-
Curricular Indicators	MA S 5.3.2.b Graph and name points in the first quadrant of the coordinate plane using ordered pairs of whole numbers	MA S 6.3.2.b Plot the location of an ordered pair in the coordinate plane		MA S 11.3.2.b Use coordinate geometry to analyze linear relationships to determine if lines are parallel or perpendicular and to write the equations of parallel or perpendicular lines		
				MAS 11.3.2.c Given a line, write the equation of a line that is parallel or perpendicular to it		
		MA S 6.3.2.e Calculate vertical and horizontal distances in the coordinate plane to find perimeter and area			MA S 11.3.2.e d Derive and apply the distance formula	
		MA S 6.3.2.d Draw polygons in the coordinate plane given coordinates for the vertices			MA S 11.3.2.d e Use coordinate geometry to prove triangles are right, acute, obtuse, isosceles, equilateral, or scalene	
					MAS 11.3.2.e f Use coordinate geometry to prove quadrilaterals are trapezoids, isosceles trapezoids, parallelograms, rectangles, rhombi, kites, or squares	
		MA S 6.3.2.c Identify the quadrant of a given point in the coordinate plane	MAS 8.3.2.a Perform and describe positions and orientation of shapes under single transformations including rotations (in multiples of 90 degrees about the origin), translations, reflections, and dilations on and off the coordinate plane		MAS 11.3.2.fg Perform and describe positions and orientation of shapes under a single translation using algebraic notation on a coordinate plane	

Curricular Indicators				MAS 8.3.2.b Find congruent two- dimensional figures and define congruence in terms of a series of transformations		MA S 11.3.2.g h Perform and describe positions and orientation of shapes under a rotation about the origin in multiples of 90 degrees using algebraic notation on a coordinate plane MA S 11.3.2.h i Perform and describe positions and orientation of shapes under a reflection across a line using algebraic notation on a	
			MAS7.3.2.a Solve real-life problems involving scale drawings using a proportional relationship	MA S 8.3.2.c Find similar two- dimensional figures and define similarity in terms of a series of transformations		MA S 11.3.2.ij Perform and describe positions and orientation of shapes under a single dilation on a coordinate plane	
						MA S 11.3.2.j k Derive the equation of a circle given the radius and the center	
Measurement	MA S 5.3.3 Measurement: Students will perform and compare measurements and apply formulas.	will perform and	MA S 7.3.3 Measurement: Students will perform and compare measurements and apply formulas.	will perform and	MA S 8.3.3 Measurement: Students will perform and compare measurements and apply formulas.	MA S 11.3.3 Measurement: Students will perform and compare measurements and apply formulas.	MA S § 11.3.3 Measurement: Students will perform and compare measurements and apply formulas.
Curricular Indicators	MA S 5.3.3.a Recognize that solid figures have volume that is measured in cubic units	MAS 6.3.3.a Determine the area of quadrilaterals, including parallelograms and trapezoids, and triangles by composition and decomposition of polygons as well as application of formulas	MAS 7.3.3.a Solve real-life world problems involving perimeter and area of composite shapes made from triangles, quadrilaterals and polygons				

Curricular Indicators	MA S 5.3.3.d Generate conversions within a system of measurement including smaller to larger units				MA S 11.3.3.a Convert between various units of <u>length</u> , area and volume <u>(e.g.,</u> such as square feet to square yards)	
						MA S 11.3.3.b Convert between metric and standard units of measurement
				MAS 8.3.3.a Show a justification Explain a model of the Pythagorean Theorem		
	MAS 5.3.3.b Use concrete and pictorial models to measure the volume of rectangular prisms in cubic units by counting cubic units	MAS 6.3.3.b Determine the surface area of rectangular prisms and triangular prisms using nets	MAS 7.3.3.b Solve real-life world problems involving surface area and volume of composite shapes made from rectangular and triangular prisms	MAS 8.3.3.b Apply the Pythagorean Theorem to find missing side lengths and to solve real world problems	MAS 11.3.3.bc Apply the effect of a scale factor to determine the length, area, and volume of similar two- and three-dimensional shapes and solids	
				MAS 8.3.3.c Find the distance between any two points on the coordinate plane using the Pythagorean Theorem		
	MA S 5.3.3.c Apply volume formulas for right rectangular prisms	MAS 6.3.3.c Use concrete and pictorial models to measure the volume of right rectangular prisms	MA S 7.3.3.c Determine the area and circumference of circles both on and off the coordinate plane		MA S 11.3.3.e d Find arc length and area of sectors of a circle	
		MAS 6.3.3.d c Apply volume formulas for right rectangular prisms		MAS 8.3.3.d Determine the volume of cones, cylinders, and spheres, and solve real- world problems <u>using</u> <u>volumes</u>	MAS 11.3.3.d © Determine surface area and volume of spheres, cones, pyramids, and prisms using formulas and appropriate units	

K-12 Comprehensive Standard: Data

Students will communicate data analysis/probability concepts using multiple representations to reason, solve problems, and make connections within mathematics and across disciplines.

	and make connections within mathematics and across disciplines.									
Concept	Fifth Grade	Integrated Math I	Integrated Math II	Integrated Math III	Algebra I	Geometry	Algebra II			
Representations	MA S 5.4.1 Representations: Students will create displays that represent the data.	MA S 6.4.1 Representations: Students will create displays that represent the data.	MA S 7.4.1 Representations: Students will create displays that represent the data.	MA S 8.4.1 Representations: Students will create displays that represent the data.	MA S 11.4.1 Representations: Students will create displays that represent the data.	MA S 11.4.1 Representations: Students will create displays that represent the data.	MA S 11.4.1 Representations: Students will create displays that represent the data.			
Curricular Indicators		MA S 6.4.1.a Represent data using line plots (dot plots), box plots, and histograms	MAS 7.4.1.a Represent data using circle graphs	MA S 8.4.1.a Represent bivariate data (i.e., ordered pairs) using scatter plots MA S 8.4.1.b Find the slope and y intercept of the line of best fit using approximation	No additional indicator(s) at this level. Mastery is expected at previous grade levels	representation and demanded	represent the data.			
Analysis & Applications	MA S 5.4.2 Analysis & Applications: Students will analyze data to address the situation.	MA S 6.4.2 Analysis & Applications: Students will analyze data to address the situation.	MA S 7.4.2 Analysis & Applications: Students will analyze data to address the situation.	MA S 8.4.2 Analysis & Applications: Students will analyze data to address the situation.	MA S 11.4.2 Analysis & Applications: Students will analyze data to address the situation.	MA S 11.4.2 Analysis & Applications: Students will analyze data to address the situation.	MA S 11.4.2 Analysis & Applications: Students will analyze data to address the situation.			
Curricular Indicators	MA S 5.4.2.a Formulate questions that can be addressed with data and make predictions about the data. Use observations, surveys, and experiments to collect, represent, and interpret the data using tables and bar graphs	MAS 6.4.2.a Use operations with fractions to Solve problems using information presented in line plots, dot plots, box plots, and histograms	MA S 7.4.2.a Solve problems using information presented in circle graphs	MA S 8.4.2.a Solve problems and make predictions using an approximate line of best fit		MA S 11.4.2.e Develop linear equations for linear models to predict unobserved outcomes using the regression line and correlation coefficient with technology				
		MA S 6.4.2.b Compare and interpret data sets based upon their graphical representations (center, spread and shape)				MA S 11.4.2.f Describe the shape, identify any outliers, and determine the spread of a data set				

Curricular	MA S 6.4.2.c		 	MA S 11.4.2.b	
Indicators	Find and interpret the			Explain how	
Indicators	mean, median, mode,			transformations of	
	and range for a set of			data, including	
	data			outliers, affect	
	data			measures of central	
				tendency	
	MA S 6.4.2.d			MA S 11.4.2.a	
	Compare the mean,			Identify and compute	
	median, mode, and			measures of central	
	range from two sets			tendency (mean,	
	of data			median, mode) when	
				provided data both	
				with and without	
				technology	
				MS S 11.4.2.c	
				Compare data sets	
				and formulate	
				conclusions	
		MA S 7.4.2. a <u>b</u>		MA S 11.4.2.d	
		Explain the difference		Support conclusions	
		between a population		with valid arguments	
		and a sample		with valid arguments	
		MA S 7.4.2. b <u>c</u>		MA S 11.4.2.g	
		Generate conclusions		Explain the impact of	
		about a population		sampling methods,	
		about a population		bias, and the phrasing	
		based upon a random			
		sample		of questions asked	
				during data	
				collection, and the	
				conclusions that can	
				rightfully be made	
		MA S 7.4.2. <u>e</u> <u>d</u>		MA S 11.4.2.h	
		Determine and		Explain the	
		critique biases in		differences between a	
		different data		randomized	
		representations		experiment and	
		_		observational studies	
				MA S 11.4.2.i	
				Using scatter plots,	
				analyze patterns and	
				describe relationships	
				in paired data	
				MA S 11.4.2.j	
				Recognize when	
				Accognize when	
				arguments based on	
				data confuse	
				correlation with	
				causation	

Curricular Indicators						MA S 11.4.2.k Interpret data represented by the normal distribution, formulate conclusions, and recognize that some data sets are not normally distributed	
Probability	MA S 5.4.3 Probability: Students will interpret and apply concepts of probability.	MA S 6.4.3 Probability: Students will interpret and apply concepts of probability.	MA S 7.4.3 Probability: Students will interpret and apply concepts of probability.	MA S 8.4.3 Probability: Students will interpret and apply concepts of probability.	MA S 11.4.3 Probability: Students will interpret and apply concepts of probability.	MA S 11.4.3 Probability: Students will interpret and apply concepts of probability.	MA S 11.4.3 Probability: Students will interpret and apply concepts of probability.
Curricular Indicators		No additional indicator(s) at this level	MA S 7.4.3.a Generate a list of possible outcomes for a simple event	No additional indicator(s) at this level. Mastery is expected at previous grade levels.	MA S 11.4.3.a Construct sample spaces and probability distributions		
			MA S 7.4.3.b Describe the theoretical probability of an event using a fraction, percentage, decimal, or ratio	and overs.	distributions		
			MA S 7.4.3.c Find theoretical probabilities for independent events				
			MA S 7.4.3.d Perform simple experiments and express the degree of likelihood (possible, impossible, certain, more likely, equally likely, or less likely);				
			write as fractions and percentages MA S 7.4.3.e Find experimental probability for independent events		MA M 9.4.3.d Identify dependent and independent events and calculate their probabilities		

Curricular Indicators	MA S 7.4.3.f Compare and contrast theoretical and experimental probabilities.		
	MA S 7.4.3.g Find the probability of dependent compound events	MA S 11.4.3.b Use the appropriate counting techniques to determine the probability of an event	
	MA S 7.4.3.h Identify complementary events and calculate their probabilities	MA S 11.4.3.c Determine if events are mutually exclusive and calculate their probabilities in either case	

ADVANCED MATHEMATICS TOPICS MATRIX

K-12 Comprehensive Standard: Number

Students will communicate number concepts using multiple representations to reason, solve problems, and

make connections within Mathematics and across disciplines.				
Concept	College Algebra	Honors/ Precalculus	AP Calculus	AP Statistics
Numeric Relationships	MA S 12.1 Number: Students will communicate number sense concepts using multiple representations to reason, solve problems, and Make connections within Mathematics and across disciplines.	MA S 12.1 Number: Students will communicate number sense concepts using multiple representations to reason, solve problems, and Make connections within Mathematics and across disciplines.	MA S 12.1 Number: Students will communicate number sense concepts using multiple representations to reason, solve problems, and Make connections within Mathematics and across disciplines.	MA S 12.1 Number: Students will communicate number sense concepts using multiple representations to reason, solve problems, and Make connections within Mathematics and across disciplines.
Curricular Indicators	MA S.12.1.1 Numeric Relationships: Students will demonstrate, represent, and show relationships among the complex numbers MA S 12.1.1.c (AT) Use Matrices to represent and manipulate data MA S 12.1.1.d (AT) Recognize the role that additive and multiplicative identities play in matrix operations MA S 12.1.1.e (AT) Recognize that, unlike multiplication of numbers, matrix multiplication for square Matrices is not a commutative operation, but still satisfies the associative and distributive properties	MA S.12.1.1 Numeric Relationships: Students will demonstrate, represent, and show relationships among the complex numbers MA S 12.1.1.a (AT) Graph complex numbers on the complex plane MA S 12.1.1.b (AT) Determine the magnitude of complex numbers MA S 12.1.1.c (AT) Use Matrices to represent and manipulate data MA S 12.1.1.d (AT) Recognize the role that additive and multiplicative identities play in matrix operations MA S 12.1.1.e (AT) Recognize that, unlike multiplication of numbers, matrix multiplication for square Matrices is not a commutative operation, but still satisfies the associative and distributive properties		

		MAS 12.2.2.a 12.1.1.f (AT) Derive and use the formulas for the general term and summation of finite arithmetic and geometric series	MA M 12.2.2.a 12.1.1.a (AT) Derive and use the formulas for the general term and summation of geometric series	
Numeric Relationships	MA S 12.1.2 Operations: Students will compute with Matrices.	MA S 12.1.2 Operations: Students will compute with Matrices.		
Curricular Indicators	MA S 12.1.2.a (AT) Multiply Matrices by scalars to produce new Matrices. MA S 12.1.2.b (AT) Add, subtract, and multiply Matrices of appropriate dimensions.	MA S 12.1.2.a (AT) Multiply Matrices by scalars to produce new Matrices. MA S 12.1.2.b (AT) Add, subtract, and multiply Matrices of appropriate dimensions.		

K-12 Comprehensive Standard: Algebra

Students will communicate algebraic concepts using multiple representations to reason, solve problems, and

	Students will communicate algebraic concepts using multiple representations to reason, solve problems, and make connections within Mathematics and across disciplines.				
Concept	College Algebra	Honors/Precalculus	AP Calculus	AP Statistics	
Algebraic Relationships	MA S 12.2 Algebra: Students will communicate algebraic concepts using multiple representations to reason, solve problems, and Make connections within Mathematics and across disciplines.	MA S 12.2 Algebra: Students will communicate algebraic concepts using multiple representations to reason, solve problems, and Make connections within Mathematics and across disciplines.	MA S 12.2 Algebra: Students will communicate algebraic concepts using multiple representations to reason, solve problems, and Make connections within Mathematics and across disciplines.	MA S 12.2 Algebra: Students will communicate algebraic concepts using multiple representations to reason, solve problems, and Make connections within Mathematics and across disciplines.	
Curricular Indicators	MA M 12.2.1 Algebraic Relationships: Students will demonstrate, represent, and show relationships with non-linear functions MA M 12.2.1.a (AT) Analyze and graph non-linear functions, e.g., quadratic, square root, logarithmic, rational, higherorder polynomials, absolute value, and piecewise	MAS 12.2.1 Algebraic Relationships: Students will demonstrate, represent, and show relationships with non-linear and trigonometric functions MAS 12.2.1.a (AT) Analyze and graph non-linear functions (e.g., quadratic, trigonometric, square root, logarithmic, rational, higher-order polynomials, exponential, absolute value, piecewise, and sinusoidal) MAS 12.2.1.c (AT) Evaluate sine, cosine, and tangent functions at positive and negative multiples of 30 and 45 degrees MAS 12.2.1.d (AT) Create new functions out of existing	MA S 12.2.1 Algebraic Relationships: Students will demonstrate, represent, and show relationships with non-linear and trigonometric functions MA S 12.2.1.a (AT) Analyze and graph non-linear functions (e.g., quadratic, trigonometric, square root, logarithmic, rational, higher-order polynomials, exponential, absolute value, piecewise, and sinusoidal)		
		functions using addition, subtraction, multiplication, division, translation, dilation, and composition MA S 12.2.1.b (AT) Use the unit circle to define the trigonometric functions on all real numbers MA S 12.2.1.e e (AT) Use limits to describe the behavior of a function near its asymptotes and	MA S 12.2.1.e e (AT) Use limits to describe the behavior of a function near its asymptotes and		
		removable discontinuities	removable discontinuities		

Curricular Indicators	T T	MA S 12.2.1. d <u>f</u> (AT)		
Curricular Indicators		Understand that the radian measure		
		of an angle is the length of the arc		
		on the unit circle subtended by that		
		angle		
		MA S 12.2.1.g (AT)		
		Convert between radian and degree		
		measures of an angle		
		MA M 12.2.1.e h Use arc length and		
		angular velocity formulas		
Algebraic Processes		MA S 12.2.2	MA S 12.2.2	
ingenture i i deesses		Algebraic Processes: Students will	Algebraic Processes: Students will	
		apply the identities when evaluating	apply the identities when evaluating	
		and solving trigonometric equations.	and solving trigonometric equations.	
Curricular Indicators		MA S 12.2.2. b <u>a</u> (AT)	MA S 12.2.2. b <u>a</u> (AT)	
		Use trigonometric identities to solve	Use trigonometric identities to solve	
		trigonometric equations	trigonometric equations	
		MA M 12.2.2.b		
		Prove trigonometric identities		
		MA S 12.2.2.e <u>b</u> (AT)		
		Explain symmetry (odd and even)		
		and periodicity of trigonometric functions		
		MA S 12.2.2.c (AT)		
		<u>Create an invertible function from a</u> non-invertible function by restricting		
		the domain (e.g., arcsin, arcos, and		
		arctan)		
		MA S 12.2.2.d (AT)		
		Find the period, amplitude, and		
		midline of a trigonometric function		
		of the form $y = A + B\sin(Cx)$, where A, B, and C are parameters,		
		and identify these properties on a		
		graph of the function		

Algebraic Applications	MA S 12.2.3 Applications: Students will solve real-life problems involving trigonometric functions.	MA S 12.2.3 Applications: Students will solve real-life problems involving trigonometric functions.	
Curricular Indicators	MA S 12.2.3.a (AT) Model periodic events with specified amplitude, frequency, and shifts	MA S 12.2.3.a (AT) Model periodic events with specified amplitude, frequency, and shifts	
	MA S 12.2.3.b (AT) Solve real-life world problems using trigonometric and inverse trigonometric functions		

K-12 Comprehensive Standard: Geometry

Students will communicate geometric concepts and measurement concepts using multiple representations to reason, solve problems, and make connections within Mathematics and across disciplines.

make connections within Mathematics and across disciplines.				
Concept	College Algebra	Honors/ Precalculus	AP Calculus	AP Statistics
Characteristics		MA S 12.3 Geometry: Students will communicate geometric concepts and measurement concepts using multiple representations to reason, solve problems, and Make connections within Mathematics and across disciplines.	MA S 12.3 Geometry: Students will communicate geometric concepts and measurement concepts using multiple representations to reason, solve problems, and Make connections within Mathematics and across disciplines.	
Curricular Indicators		MA S 12.3.1 Characteristics: Students will identify and describe geometric characteristics and create two- and three-dimensional shapes MA S 12.3.1.a (AT) Apply the Law of Sines and the Law of Cosines to find unknown measures in triangles	MA S 12.3.1 Characteristics: Students will identify and describe geometric characteristics and create two- and three-dimensional shapes	
		MA M 12.3.1.b Apply the six trigonometric ratios to solve right triangles		
Analytic Coordinate Geometry	MA S 12.3.2 Analytic Coordinate Geometry: Students will determine location, orientation, and relationships on the coordinate plane.	MA S 12.3.2 Analytic Coordinate Geometry: Students will determine location, orientation, and relationships on the coordinate plane.	MA S 12.3.2 Analytic Coordinate Geometry: Students will determine location, orientation, and relationships on the coordinate plane.	
Curricular Indicators		MA S 12.3.2.a (AT) Identify features of a function (e.g., local and global maxima and minima, concavity, approximate locations of points of inflection and vertical and horizontal asymptotes) from its graph MA S 12.3.2.b (AT) Identify symmetry properties of a function (e.g., axis of symmetry of a parabola) and know the connection		
		between its symmetry properties and specific transformations MA S 12.3.2.a c (AT) Recognize that vector quantities have both Magnitude and direction and can be represented by directed line segments		

		3.5.1. G .1.2.2.2.1. 1.(1.170)		
Curricular Indicators		MA S 12.3.2. b <u>d</u> (AT)		
		Add and subtract vectors graphically		
		and algebraically		
		MA S 12.3.2. <u>e e (</u> AT)		
		Perform scalar multiplication of a		
		vector and show it graphically		
		MA M 12.3.2.e (AT)		
		Find the dot product of two vectors		
	MA S 12.3.2.d <u>f</u> (AT)	MA S 12.3.2. <u>d f</u> (AT)		
	Derive the equations of parabolas,	Derive the equations of parabolas,		
	ellipses, and hyperbolas from a	ellipses, and hyperbolas from a		
	graph or given parameters	graph or given parameters		
			MA S 12.3.2.e g (AT)	
			Determine the three-dimensional	
			object created by rotating or	
			revolving a two-dimensional object	
			about an axis	
			MA S 12.3.2. f h (AT)	
			Determine the shape of a two-	
			dimensional cross-section of a three-	
			dimensional object	
		MA M 12.3.2. <u>g i</u>	amenatana seject	
		Use trigonometric form to perform		
		operations on complex numbers		
		MA M 12.3.2.h j		
		Convert coordinates and equations		
		between rectangular and polar form		
M		between rectangular and polar form	MA S 12.3.3	
Measurement			Measurement: Students will perform	
			and compare measurements and	
			apply formulas. MA S 12.3.3.a (AT)	
Curricular Indicators				
			Use Cavalieri's Principle to	
			determine the volume of a sphere	
			and other solid figures	
			MA S 12.3.3.b (AT)	
			Determine the tolerance interval and	
			percent of error in measurement	

K-12 Comprehensive Standard: Data

Students will communicate data analysis/probability concepts using multiple representations to reason, solve problems, and make connections within Mathematics and across disciplines.

Concept	College Algebra	Honors/ Precalculus	AP Calculus	AP Statistics
Characteristics				MA S 12.4 Data: Students will communicate
				data analysis/probability concepts using multiple representations to reason, solve problems, and Make connections within Mathematics and
				across disciplines. MA S 12.4.1
Representations				Representations: Students will create displays that represent the data.
Curricular Indicators				No additional indicator(s) at this level. Mastery is expected at previous grade levels.
Analysis & Applications				MA S 12.4.2 Analysis & Applications: Students will analyze data to address the situation
Curricular Indicators				MAS 12.4.2.a (AT) Make inferences and justify conclusions from sample surveys, experiments, and observational
Probability				MA S 12.4.3 Probability: Students will interpret and apply concepts of probability.
Curricular Indicators				MA S 12.4.3.a (AT) Calculate the expected value of a random variable and interpret it as the mean of a probability distribution
				MA S 12.4.3.b (AT) Determine possible outcomes of a decision by assigning probabilities to outcome values and finding expected values
				MA S 12.4.3.c (AT) Evaluate and compare strategies on the basis of expected values
				MA S 12.4.3.d (AT) Analyze decisions and strategies using probability concepts, e.g., medical testing and product testing

	Advanced Topics Specialized Concepts and Skills Students will investigate specialized concepts and skills derived from Calculus and Statistics.				
Specialized	AP Calculus	AP Statistics			
Concepts and	MA M 12.5	MA M 12.5			
Skills	Students will investigate specialized concepts and skills derived from Calculus and Statistics.	Students will investigate specialized concepts and skills derived from Calculus and Statistics.			
	MA M 12.5.1 Communicate calculus concepts using a multi-representational approach with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally.	MA M 12.5.2 Apply major statistical concepts and tools to collect, analyze, and draw conclusions from data			
Curricular Indicators	MA M 12.5.1.a (AT) Analyze an assortment of functions by describing their asymptotic behavior, continuity, and limits at various functional values	MA M 12.5.2.a (AT) Demonstrate understanding of graphical and numerical techniques to study patterns and departures from patterns, with emphasis on interpreting graphical and numerical displays and summaries			
	MA M 12.5.1.b (AT) Demonstrate relationships between functions and their derivatives	MA M 12.5.2.b (AT) Collect data according to a well-developed plan, deciding upon a method of data collections and analysis			
	MA M 12.5.1.c (AT) Calculate, interpret and apply Riemann sums to the definite integral	MA M 12.5.2.c (AT) Utilize probability as a tool for anticipating what the distribution of data should look like under a given model			
	MA M 12.5.1.d (AT) Interpret the convergence and divergence of series (BC only)	MA M 12.5.2.d (AT) Apply statistical inference for selecting models and drawing conclusions for the data			

APPENDIX

NEBRASKA MATHEMATICS PROCESSES

The Nebraska Mathematical Processes reflect overarching processes that students should master as they work towards college and career readiness. The Nebraska Mathematical Processes reflect the interaction of skills necessary for success in math coursework as well as the ability to apply math knowledge and processes within real-world contexts. The processes highlight the applied nature of math within the workforce and clarify the expectations held for the use of mathematics in and outside of the classroom.

The Nebraska Mathematical Processes reflect overarching processes that students should master as they work towards college and career readiness. The Nebraska Mathematical Processes reflect the interaction of skills necessary for success in math coursework as well as the ability to apply math knowledge and processes within real-world contexts. The processes highlight the applied nature of math within the workforce and clarify the expectations held for the use of mathematics in and outside of the classroom.

1. Solves mathematical problems.

Through the use of appropriate academic and technical tools, students will make sense of mathematical problems and persevere in solving them. Students will draw upon their prior knowledge in order to employ critical thinking skills, reasoning skills, creativity, and innovative ability. Additionally, students will compute accurately and determine the reasonableness of solutions.

2. Models and represents mathematical problems.

Students will analyze relationships in order to create mathematical models given a real-world situation or scenario. Conversely, students will describe situations or scenarios given a mathematical model.

3. Communicates mathematical ideas effectively.

Students will communicate mathematical ideas effectively and appropriately critique the reasoning of others as well as provide mathematical justifications. Students will utilize appropriate communication approaches individually and collectively and through multiple methods, including writing, speaking, and listening.

4. Makes mathematical connections.

Students will connect mathematical knowledge, ideas, and skills beyond the math classroom. This includes the connection of mathematical ideas to other topics within mathematics and to other content areas. Additionally, students will be able to describe the connection of mathematical knowledge and skills to their career interest as well as within authentic/real-world contexts.

Adapted from: Nebraska Department of Education (2015). K-12 Mathematics Standards DRAFT. Retrieved June 24, 2015: http://nde.ne.gov/math/Math_Standards/DraftNebraskaMathematicsStandardsVerticalPosted432015.pdf

PK-12 MATHEMATICS INSTRUCTIONAL BEST PRACTICES

Best Practice	Teacher Evidence	Student Evidence
Establishing Math goals	 Teacher is communicating goals with students Goals or objectives are posted Teacher has planned based on the needs of the students Intentional standards based on planning instruction Teachers have an understanding of the standard 	 Students regulate their own learning Students can identify the goals they are working on
Implement tasks that promote reasoning and problem solving	 Teachers have planned purposeful questioning Model think alouds Teachers provide opportunities for groupwork Quality versus quantity when it comes to practice Higher DOK practice 	 Students can justify their reasoning Reason abstractly and quantitatively Look for and express regularity in repeated reasoning. Look for different ways to solve problems Student should have a range of strategies and approaches for problem solving Students will persevere through problem solving Students will produce reasonable solutions Students are actively engaged
Use and connect mathematical representations	 Teachers provide numerous relevant examples Examples occur in multiple formats and technologies Provide appropriate tools/manipulatives 	 Model with mathematics. Use appropriate tools strategically. Establishing connections and seeing similarities between operations, math concepts and problem solving strategies Discussing mathematical relationships Applying mathematical prior knowledge to current curriculum
Pose purposeful questions	 Open-ended Questions are high depth-of-knowledge Authentic questions 	 Construct viable arguments and critique the reasoning of others. Agreeing / Disagreeing and why? Revoicing Students are encouraged to ask meaningful questions
Support productive struggle in learning mathematics	 Facilitator of learning Demonstrate acceptance of a variety of solutions Plan for misconceptions 	 Students to defend, justify, and explain their method/answer Students will solve challenging problems Students will persevere in solving problems Celebrate mistakes and learn from them Students will agree and disagree respectfully

Elicit and use evidence of student thinking	 Teachers use Common Formative Assessments Use student evidence to adjust instruction accordingly 	 Attend to precision Students check for reasonableness 				
Build a foundation for conceptual understanding of number sense	 Teachers build on students' prior knowledge Number sense establishes a comfort with numbers, including estimation, mental math, numerical equivalents, a sense of order and magnitude, and a well-developed understanding of place value. Number sense is taught and reinforced in every math problem. Teachers will use that conceptual knowledge to build procedural fluency 	 Look for and make sense of structure Students make flexible and reasonable estimates makes mental math easier quick recall of numbers 				
Language Rich Mathematics Classrooms	 Ongoing emphasis on use and meaning of mathematical terms Precise use of mathematical terms, vocabulary, and notation Number Talks Talk Moves Turn and talk Think, Pair, Share Collaboration Group Work 	 Precise use of mathematical terms Talk Moves Communicate thinking effectively Appropriately critique the reasoning of others and provide reasoning of mathematical justification Communicate through writing, speaking and listening 				
Models and represents mathematical problems	 Connect to real world situations Demonstrate proper use of models Provide manipulatives to enhance models 	 Analyze relationships to create models in order to solve real-world problems Describe situations given a model 				
Making math relative in real world contexts	 Connect to real world situations Provide opportunities beyond the classroom Create cross-curricular connections Connect concepts throughout the year/grade level Facilitate meaningful mathematical discourse 	 Students create problems using mathematical concepts relative to their lives Make mathematical connections to career interests 				

Millard Public Schools PK-12 Enduring Understandings and Essential Questions

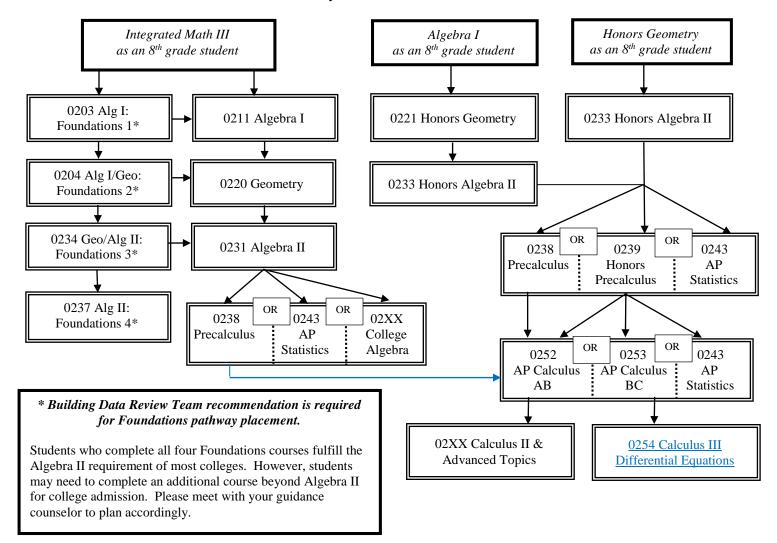
Each mathematics unit within PK-12 Course Guides will include at least one Essential Question across all four Content Strands (Number, Algebra, Geometry, and Data).

Enduring Understandings	Example Essential Questions
Numbers are necessary in our daily lives.	Why are numbers necessary?
Estimating, approximating, and judging the	Why is it important to understand place value of numbers?
reasonableness of answers are useful tools in everyday life.	How are estimates made?
Operations with numbers are used to solve	When are estimations and approximations appropriate to use?
problems at all levels of mathematics.	What are some ways quantities can be made?
Mathematical properties of our number system aid in computation.	How does knowing basic facts make problem solving easier?
Basic concepts of geometry and spatial relationships are used to construct, draw,	How can symbols be used to represent quantities, operations, or relationships?
describe, and compare geometric models and their transformations to solve problems.	What happens to a quantity when a number is composed in a different way?
Customary, metric, and non-standard units	Where are shapes found in the world?
are used to approximate and compute	How can shapes be described?
measurements and communicate.	How are plane shapes different from solids?
Algebra skills and concepts enable us to describe real world phenomena	Why are objects measured?
symbolically and graphically, and to model quantitative change.	How can objects be measured?
Patterns enable us to discover, analyze,	How are measuring units selected?
describe, extend, and formulate concrete understandings of mathematical in the real	What symbols do we use in mathematical equations?
world.	What strategies can be used to find a missing number in an equation?
The type of data determines how data sets can be collected, organized, displayed, and	Where are patterns found?
analyzed.	How does finding patterns help in counting?
Mathematical problems can be solved in more than one way.	What strategies can be used to continue a numerical number sequence?
more than one way.	What kinds of questions generate data?
	What are some ways to gather and record information?
	What are some ways data can be displayed to communicate information?
	What strategy is used to solve which math problem?
	How do you know which strategy to use to solve math problems?

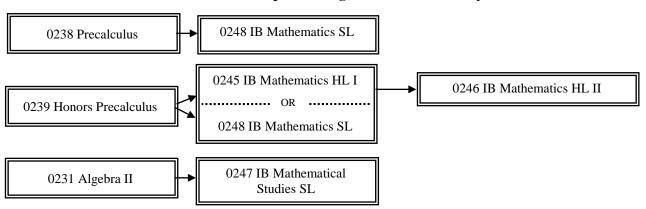
High School Mathematics Course Offerings Flowchart

A student's 8th grade math course determines where a student enters this flowchart in 9th grade.

Advanced Placement (AP) Statistics can be taken any time after successful completion of Algebra II, and concurrently with another mathematics course.



Millard North High School IB Diploma Programme Students Only



Course Descriptions for Renamed Courses

Previous Course	Proposed Course	Rationale/Impact
Math 6	Integrated Math I	 More consistency and vertical articulation from fifth to sixth grades Balanced emphasis across content strands of mathematics (Number, Algebra, Geometry, and Data) Greater depth and study of whole numbers, fractions, and decimals; coordinate-plane graphing; mean, median, mode, range; data representations; geometric measurement in two- and three- dimensional figures; percents; ratios; proportions; integers; one-step equations and inequalities
Challenge Math 6/Math 7	Integrated Math II	 Increased opportunities for students to complete advanced mathematics courses regardless of age/grade Balanced emphasis across content strands of mathematics (Number, Algebra, Geometry, and Data) Greater depth and study of fractions, decimals, and integers; two-step equations and inequalities, and theoretical/experimental probability; application of percents, ratios, proportions; two- and three- dimensional geometry
Pre-Algebra	Integrated Math III	 Increased opportunities for students to complete advanced mathematics courses Balanced emphasis across content strands of mathematics (Number, Algebra, Geometry, and Data) Greater depth and study of multi-step and linear equations and inequalities using rational number operations; number theory; geometric concepts and relationships; application of real number operations, data representation, and proportions
College Prep Math	College Algebra	 Alignment with Metropolitan Community College Early College offering at Millard South High School Opportunity for students to complete AP Statistics Option for students who do not want to take Precalculus Concepts align to understandings needed for required examinations (e.g. ACT)
	Calculus II & Advanced Topics	 Option for students who take AP Calculus AB to continue within their mathematics sequence Preparation for AP Calculus BC Exam Potential for Dual Enrollment credit (Calculus II)
Calculus III Differential Equations		 Approved course in 2007, but has yet to be offered due to low enrollment Pending teacher availability due to the high level of advanced topics May need to arrange student schedule pending instructor's high school Course beyond AP level would hold weighted grade credit

Course Descriptions

Elementary

PRESCHOOL (PK)

<u>Description</u>: Students will develop a deep understanding of number sense by demonstrating, representing, and showing relationships among whole numbers 0-10 within the base-ten number system. Students will count sequences to 20 and demonstrate concepts of cardinality and one-to-one correspondence. Students will solve real life addition and subtraction problems using objects and representations. Students will describe, identify and compare two and three dimensional shapes. Students will sort and classify objects by multiple attributes and will develop understanding of concepts of position, measurement and quantity.

KINDERGARTEN

<u>Description</u>: Students will develop a deep understanding of number sense by counting, reading, writing, using one-to-one correspondence and showing relationships among whole numbers 0-20 within the base-ten system. Students will also fluently add and subtract numbers to 5 and will solve real life problems involving addition and subtraction. Students will compose and decompose numbers using a model, drawing, or equation. Students will describe, identify and compare two and three dimensional shapes. Students will identify, sort and classify objects by size, shape, color, weight, length and other attributes.

FIRST GRADE

<u>Description</u>: Students will develop a deep understanding of number sense concepts using a variety of representations to show relationships among whole numbers. Students will also be able to understand the connections between addition and subtraction within 10 and apply this knowledge to determine missing parts in an equation. Students will identify two-dimensional shapes and demonstrate an understanding by dividing shapes into equal parts and composing new shapes. Students will identify and know the value of dimes and pennies in addition to using them to solve real-life problems. Students will tell time to the hour and half hour as well as compare the measurement of objects. Students will also communicate data analysis/probability concepts using various strategies to solve problems.

SECOND GRADE

<u>Description</u>: Students will apply their knowledge of addition and subtraction strategies to demonstrate, represent, problem solve, and show relationships among whole numbers within the base-ten number system and extend this knowledge to compute fluently and accurately. Students will use their conceptual knowledge of the base-ten number system to show relationships with expressions and equations. Students will communicate geometric concepts and measurement concepts using multiple representations. Students will analyze and communicate about data and probability concepts.

THIRD GRADE

<u>Description</u>: Students will communicate, demonstrate, represent and show relationships between whole numbers, simple fractions and the base ten number system. Students will explore and master the meaning and computation of multiplication and division with whole numbers. Students will identify and describe geometric characteristics and create two and three-dimensional shapes. Students will perform and compare measurements and apply formulas. Students will create, represent and analyze data through the use of problem solving.

FOURTH GRADE

<u>Description</u>: Students will demonstrate, represent, and show relationships among whole numbers, fractions and decimals while solving real-life problems involving equations. Along with numbers and operations, students will be able to describe geometric characteristics, determine location, orientation and relationships on the coordinate planes. Students will perform and compare measurements, and create displays to represent, interpret and analyze data.

FIFTH GRADE

<u>Description</u>: Students will study addition, subtraction, multiplication, and division of whole numbers, decimals, and fractions. Along with numbers and operations, students will also explore and evaluate algebraic expressions and equations, ordered pairs, coordinate planes, and order of operations. Students will identify characteristics of two-dimensional and three-dimensional figures and will calculate volume within three-dimensional figures. They will formulate questions, make predictions, collect, interpret, and analyze data.

Middle School

XXXX INTEGRATED MATH I

<u>Description</u>: Students will continue the study of <u>addition</u>, <u>subtraction</u>, multiplication and division of whole numbers <u>and addition</u>, <u>subtraction</u>, <u>multiplication</u>, <u>and division of decimals and fractions through the study of algebraic equations and expressions</u>. They will also study measurement; coordinate-plane graphing; mean, median, mode, and range; data representations; geometric measurement in two- and three-dimensional figures; percents; ratios; proportions; integers; one-step equations and inequalities.

Prerequisite: Qualifying test scores on math placement exams

XXXX INTEGRATED MATH II

<u>Description</u>: Students will study operations of fractions, decimals and integers <u>through the study of algebraic equations and expressions</u>. In addition, students will study two-step equations and inequalities and theoretical/experimental probability. Application of percents, ratios, proportions, and two- and three-dimensional geometry will also be studied while comparing measurements, applying mathematical formulas, and analyzing data.

Prerequisite: Qualifying test scores on math placement exams or Integrated Math I

XXXX INTEGRATED MATH III

<u>Description</u>: Students will learn to solve multi-step and linear equations and inequalities using rational number operations (<u>pre-algebra applications</u>). They will also study number theory, <u>exponents</u>, <u>square roots</u>, geometric concepts and relationships. Application of real number operations, data representation, and proportions will be extended from Integrated Math II. Justification and application of the Pythagorean Theorem will also be <u>studied</u> <u>learned</u>.

Prerequisite: Qualifying test scores on math placement exams or Integrated Math II.

0211 ALGEBRA I

<u>Description</u>: Students will explore linear, quadratic, and exponential equations in depth. They will also study probability concepts as an extension of Integrated <u>Math II and</u> Math III. Algebra I is designed for students who have <u>mastered</u> <u>strong understanding of</u> the basics of arithmetic, <u>and</u> demonstrated algebraic readiness, and who understand mathematics in a more abstract form.

Prerequisite: Integrated Math III

0221 HONORS GEOMETRY

<u>Description</u>: Students will apply algebraic skills to geometric concepts and build upon previously learned mathematical concepts. This <u>rigorous</u>, <u>conceptually complex</u> course <u>also</u> includes proof of geometric theorems and descriptive statistics topics such as measures of central tendency, dispersion, and sampling methods.

Prerequisite: Algebra I

High School

0203 ALG I: FOUNDATIONS 1

10 Credits

<u>Description</u>: Students who would benefit from reinforcement in basic <u>algebraic</u> skills in order to successfully master algebra concepts <u>are may be</u> recommended for this course. Students will also solve linear equations and inequalities and analyze solutions. Successful completion of both Alg I: Foundations 1 and Alg I/Geo: Foundations 2 will satisfy the Algebra graduation requirement. Upon completion, students should enroll in either Alg/Geo: Foundations 2 or Algebra I.

Prerequisite: Placement recommendation from RtI+I Math Building Data Team

0204 ALG I/GEO: FOUNDATIONS 2

10 Credits

<u>Description</u>: Students will investigate and solve problems involving systems of equations, polynomials, exponential equations, and quadratics. They will also study basic two- and three-dimensional geometric concepts including trigonometry and proof. Successful completion of both Alg I: Foundations 1 and Alg I/Geo: Foundations 2 will satisfy the Algebra graduation requirement. Upon completion, students should enroll in either Geo/Alg II: Foundations 3 or Geometry.

<u>Prerequisite</u>: Alg I: Foundations 1 and/or placement recommendation from RtI+I <u>Math Building</u> Data Team

0211 ALGEBRA I 10 Credits

<u>Description</u>: Students will explore linear, quadratic, and exponential equations in depth. They will also study probability concepts as an extension of <u>the middle school courses</u>: Integrated Math II and III. Algebra I is designed for students who have <u>mastered</u> <u>strong understanding of</u> the basics of arithmetic, demonstrated algebraic readiness, and who understand mathematics in a more abstract form.

Prerequisite: Integrated Math III or Alg I: Foundations 1 None

0220 GEOMETRY 10 Credits

<u>Description</u>: Students will apply algebraic skills to geometric concepts and build upon previously learned mathematical concepts. This course also includes proof of geometric theorems and descriptive statistics topics such as measures of central tendency, dispersion, and sampling methods.

Prerequisite: Algebra I or Alg I/Geo: Foundations 2

0221 HONORS GEOMETRY

10 Credits

<u>Description</u>: Students will apply algebraic skills to geometric concepts and build upon previously learned mathematical concepts. This course <u>also</u> includes proof of geometric theorems and descriptive statistics topics such as measures of central tendency, dispersion, and sampling methods. This course will go into greater depth than Geometry and is recommended for students who plan to pursue Advanced Placement[®] or International Baccalaureate[®] mathematics classes.

Prerequisite: Algebra I

0231 ALGEBRA II 10 Credits

<u>Description</u>: Students will explore a variety of advanced, integrated algebraic topics such as systems of equations and inequalities, higher-ordered polynomials, and advanced functions. Algebra II completes the three-year mathematics sequence required by many colleges as well as the Millard graduation requirement. **Prerequisite:** Geometry or Geo/Alg II: Foundations 3

0233 HONORS ALGEBRA II

10 Credits

Description: Students will further develop understanding of a variety of advanced algebraic topics such as systems of equations and inequalities, higher-ordered polynomials, advanced functions and discrete math topics. This course will go into greater depth than Algebra II and is recommended for students who plan to pursue Advanced Placement® or International Baccalaureate® mathematics classes.

Prerequisite: Honors Geometry

0234 GEO/ALG II: FOUNDATIONS 3

10 Credits

<u>Description</u>: Students will investigate geometric concepts including both two- and three-dimensional figures, apply geometric properties to solve problems, prove geometric theorems, and use coordinate geometry. Additionally, students will expand their understanding of algebraic concepts. <u>Upon completion, students should enroll in Alg II: Foundations 4 or Algebra II for completion of Algebra II content.</u>
<u>Prerequisite</u>: Alg I/Geo: Foundations 2 and/or placement recommendation from RtI+I <u>Math Building</u> Data Team

0237 ALG II: FOUNDATIONS 4

10 Credits

<u>Description</u>: Students will investigate a variety of advanced algebraic topics such as systems of equations and inequalities, higher-ordered polynomials, advanced functions, and discrete math topics.

Prerequisite: Geo/Alg II: Foundations and/or placement recommendation from RtI+I Math Building Data

Team

XXXX COLLEGE ALGEBRA

10 Credits

<u>Description</u>: Students will investigate functions, matrices and conic sections through an algebraic, analytical, numerical, and graphical approach, including mathematical modeling for real-world application. This course will assist students in preparation for introductory college mathematics courses. Students planning to take Calculus or Trigonometry should enroll in Precalculus or Honors Precalculus.

Prerequisite: Algebra II

0238 PRECALCULUS 10 Credits

<u>Description</u>: Students will investigate functions, conic sections, and trigonometry through an algebraic, analytical, numerical, and graphical approach, including mathematical modeling for real-world application. Students enrolled in Precalculus as part of the Early College Program will be required to complete additional topics per articulation agreements with Metropolitan Community College (MCC). Prerequisite: Algebra II

0239 HONORS PRECALCULUS

10 Credits

<u>Description</u>: Students will investigate functions, conic sections, and trigonometry through an algebraic, analytical, numerical, and graphical approach, including mathematical modeling for real-world application. This course will go into greater depth than Precalculus and is recommended for students who plan to pursue Advanced Placement® or International Baccalaureate® math classes. <u>Students enrolled in Honors Precalculus as part of the Early College Program will be required to complete additional topics per articulation agreements with Metropolitan Community College (MCC).</u>

Prerequisites: Honors Algebra II

0252 ADVANCED PLACEMENT CALCULUS AB

10 Credits

<u>Description</u>: Advanced Placement[®] Calculus AB is a course in single variable calculus that includes techniques and applications of the derivative, techniques and applications of the definite integral, and the Fundamental Theorem of Calculus. Algebraic, numerical, and graphical representations are emphasized throughout the course. It is equivalent to at least a semester of calculus at most colleges and universities. Completion of this course will prepare students to take the Advanced Placement[®] Calculus AB exam. **Prerequisite:** Precalculus or Honors Precalculus

0253 ADVANCED PLACEMENT CALCULUS BC

10 Credits

<u>Description</u>: Advanced Placement[®] Calculus BC is a course in single variable calculus that includes all the topics of Advanced Placement[®] Calculus AB plus additional topics in differential and integral calculus (including parametric, polar, and vector functions) and series. Algebraic, numerical, and graphical representations are emphasized throughout the course. It is equivalent to at least a year of calculus at most colleges and universities. Completion of this course will prepare students to take the Advanced Placement[®] Calculus BC exam.

Prerequisite: Honors Precalculus

0243 ADVANCED PLACEMENT STATISTICS

10 Credits

<u>Description</u>: Students will learn a variety of statistical concepts including exploring data, sampling and experimentation, anticipating patterns, and statistical inference. Completion of this course will prepare students to take the Advanced Placement[®] Statistics exam. Students who successfully complete the Advanced Placement[®] examination may receive credit and/or advanced placement for a one-semester introductory college statistics course at many colleges and universities.

Prerequisite: Algebra II

XXXX CALCULUS II & ADVANCED TOPICS

10 Credits

<u>Description</u>: Students will review <u>Advanced Placement</u> Calculus AB topics and study the additional AP Calculus BC topics in greater depth. Advanced topics will also include various concepts from Calculus III, Discrete Mathematics, and Linear Algebra. Completion of this course will prepare students to take the Advanced Placement[®] Calculus BC exam.

Prerequisite: Advanced Placement Calculus AB

0254 CALCULUS III/DIFFERENTIAL EQUATIONS

10 Credits

Description: Calculus III /Differential Equations is a course investigating calculus topics including (but not limited to) vector analysis, partial differentiation, multiple integration, and functions of several variables. The differential equations portion of the course will focus primarily on (but not limited to) ordinary differential equations, solutions by series, Laplace transformations, and applications. This course is not available for dual enrollment; however, provides a weighted grade as it exceeds Advanced Placement® Calculus level courses. Course offering is dependent upon instructor availability; students may need to arrange schedule to attend available instructor's assigned high school for this course.

Prerequisite: Advanced Placement® Calculus BC

0245 IB MATHEMATICS HL I

11 North Only

10 Credits

<u>Description</u>: <u>Juniors</u> <u>Students</u> with excellent math abilities will study matrices, vectors, probability, statistics, complex numbers and calculus. This is the first course in a two-year sequence culminating with the IB HL Math test during the spring of a student's senior year.

Prerequisite: Honors Precalculus

0246 IB MATHEMATICS HL II

12 North Only

10 Credits

Description: Seniors Students who have successfully completed Math HL I will engage further with proofs, vectors, probability, statistics, and calculus. This is the second course in a two-year sequence culminating with the IB HL Math test.

Prerequisite: IB Mathematics HL I

0247 IB MATHEMATICAL STUDIES SL

11-12 North Only

10 Credits

<u>Description</u>: Students pursuing non-math intensive fields will concentrate on advanced math topics such as numbers and algebra, sets and logic, geometry and trigonometry, functions, financial math, calculus, statistics and probability. IB Mathematical Studies SL is designed for <u>juniors or seniors</u> students who intend to test standard level math in the IB program.

Prerequisite: Algebra II or Honors Algebra II

0248 IB MATHEMATICS SL

11-12 North Only

10 Credits

<u>Description</u>: Students will engage in a rigorous study of matrices, vectors, probability, statistics, complex numbers and calculus. Mathematics SL is intended for juniors or seniors with strong math abilities.

Prerequisite: Precalculus or Honors Precalculus

AGENDA SUMMARY SHEET

Agenda Item:	Professional Services Contract for Mueller Robak LLC
Meeting Date:	November 2, 2015
Department	Office of Superintendent
Title and Brief Description:	Professional Services Contract for Mueller Robak LLC
Action Desired:	Approval
Background	The attached contract is for profession services from the lobbying firm of Mueller Robak LLC. The terms of this contract are the same as past contracts and the dollar amount has not changed since 2009.
Options/Alternatives Considered:	None
Recommendations:	Approve the professional services contract with Mueller Robak LLC.
Responsible Persons:	Nolan Beyer, Activities, Athletics & External Affairs
Superintendent's Signa	ature: fin Suffir

PROFESSIONAL SERVICES CONTRACT

THIS CONTRACT is made by and between Millard Public Schools, hereinafter referred to as "Principal" and the lobbying firm of Mueller Robak LLC, 530 South 13th Street, Suite 110, Lincoln, Nebraska 68508 hereinafter referred to as "Lobbyist."

WITNESSETH, that Principal and Lobbyist for the consideration hereinafter named agree as follows:

ARTICLE I

Lobbyist shall undertake the professional representation of the legislative interests of Principal before the Nebraska State Legislature during the period January 1, 2016 through December 31, 2016. Any special session convened during the term of this Contract is expressly excluded from this Contract. Lobbyist shall use its best efforts in the performance of this Contract, and shall devote such time, personnel, and resources in the performance of such Contract as in Lobbyist's reasonable judgment will provide the highest probability of success. It is mutually understood and agreed that Lobbyist cannot and does not either expressly or impliedly guarantee or warrant the result of its efforts. It is understood and agreed that Principal is retaining Lobbyist to provide lobbying services and not legal services and no attorney-client relationship is created hereunder between the Parties.

ARTICLE II

It is agreed that representation under this Contract involves monitoring and actively lobbying legislative bills and resolutions introduced in the Nebraska Legislature of interest to Principal. Lobbyist will read all legislative bills and resolutions. Lobbyist will monitor the activities of the Legislature and be generally aware of legislative issues of interest to Principal. Lobbyist will provide copies of bills to Principal which Lobbyist has identified as being of possible interest to Principal and Lobbyist will inform Principal as to their status in the legislative process. Lobbyist will be available to report to Principal by telephone, in writing or in person upon reasonable request. Lobbyist will be available for advice and consultation to Principal on relevant legislative issues pending before the Nebraska Legislature.

If extraordinary lobbying time and effort is required during the legislative session or in the interim, the parties shall negotiate a supplemental fee for the additional time and effort involved.

ARTICLE III

Principal shall pay to Lobbyist the fixed fee of \$50,000.00 for providing services under this Contract, payable in four (4) equal installments of \$12,500.00 each payable on January 5, April 5, July 5, and October 5, 2016. Incidental expenses, including lobbyist registration fees and reasonable entertainment expenses, shall also be payable by Principal and will be billed separately to Principal. The payments authorized under this agreement will be applied to the payment of the Principal's account and are earned upon receipt. In the event this contract is terminated during the legislative session, Lobbyist shall be entitled to a pro rata portion of the fixed fee based on the number of legislative days of the session which have transpired prior to the date of termination. If the Contract is terminated after the legislative session concludes, Lobbyist shall be entitled to the entire fixed fee provided in this contract.

ARTICLE IV

It is understood that Lobbyist shall not be deemed an employee, agent, partner or joint venturer of Principal, but is acting solely as an independent contractor for all purposes and at all times. Principal acknowledges that Lobbyist has now and may hereafter acquire other clients for whom Lobbyist provides lobbying services and that the services of Lobbyist are not exclusive to Principal.

ARTICLE V

Principal recognizes that Lobbyist is engaged in the business of lobbying for a number of clients. From time to time an issue of legislative concern may affect more than one of Lobbyist's clients. Principal and Lobbyist further recognize that the legislative interests of Principal and other clients of Lobbyist may not always be compatible. Any conflict of interest which arises with respect to any legislative issue will be brought to the attention of all affected clients by Lobbyist and will be resolved in the following manner: (1) An attempt will be made to resolve or compromise the conflict between clients. Such a compromise must be agreed to by all affected clients; (2) If a client elects to withdraw the conflicting issue from its legislative program, the conflict of interest will be considered resolved; (3) If a conflict is not resolved by a client's withdrawal of the issue or mutual compromise of the conflicting points of view, Lobbyist shall continue to represent, on the conflicting issue, only the legislative interests of the client which has had Mueller Robak LLC or one or more of its current or past lobbyists as a registered lobbyist for the longest continuous period of time. In this circumstance, Principal agrees that it will not object in any manner to this continued representation. For purposes of this article, client includes any

parent, subsidiary or affiliated entity of such client.

ARTICLE VI

Principal and Lobbyist shall comply, at their expense, with all applicable federal and state laws, regulations and executive orders relating to lobbyists. Lobbyists will be available to discuss accountability procedures in order that Principal complies with all accountability laws, regulations and executive orders. However, the responsibility to comply with the laws of the State of Nebraska relating to Principal remains with Principal.

ARTICLE VII

This Contract constitutes the entire agreement between Principal and Lobbyist with respect to the subject matter hereof and shall not be amended or modified without specific written provision to that effect, signed by all parties. No oral agreement of any person whomsoever shall, in any manner or degree, modify or otherwise affect the terms and provisions of this Agreement.

MILLARD PUBLIC SCHOOLS PRINCIPAL	MUELLER ROBAK LLC LOBBYIST
	- (1)01 & A,000
By:	By:
Title:	Title: Jenjan Parther
Date:	Date: $10-13-15$

AGENDA SUMMARY SHEET

Agenda Item:	Legislative Standing Positions 2016						
Meeting Date:	November 2, 2015						
Department	Office of the Superintendent						
Title and Brief Description:	Legislative Standing Positions 2016						
	Each year the Board adopts Legislative Positions which guide the lobbying efforts on all bills and amendments to bills. These resolutions can be amended at any time in the year or session in order to respond to legislative issues.						
Action Desired:	Approval						
Background:	The Legislative Standing Position supporting accountability for funding has been added.						
Options/Alternatives Considered:	NA						
Recommendations:	Approval.						
Responsible Persons:	Nolan Beyer, Director of Activities, Athletics & External Affairs						
Superintendent's Signat	eure: Jin Suffri						

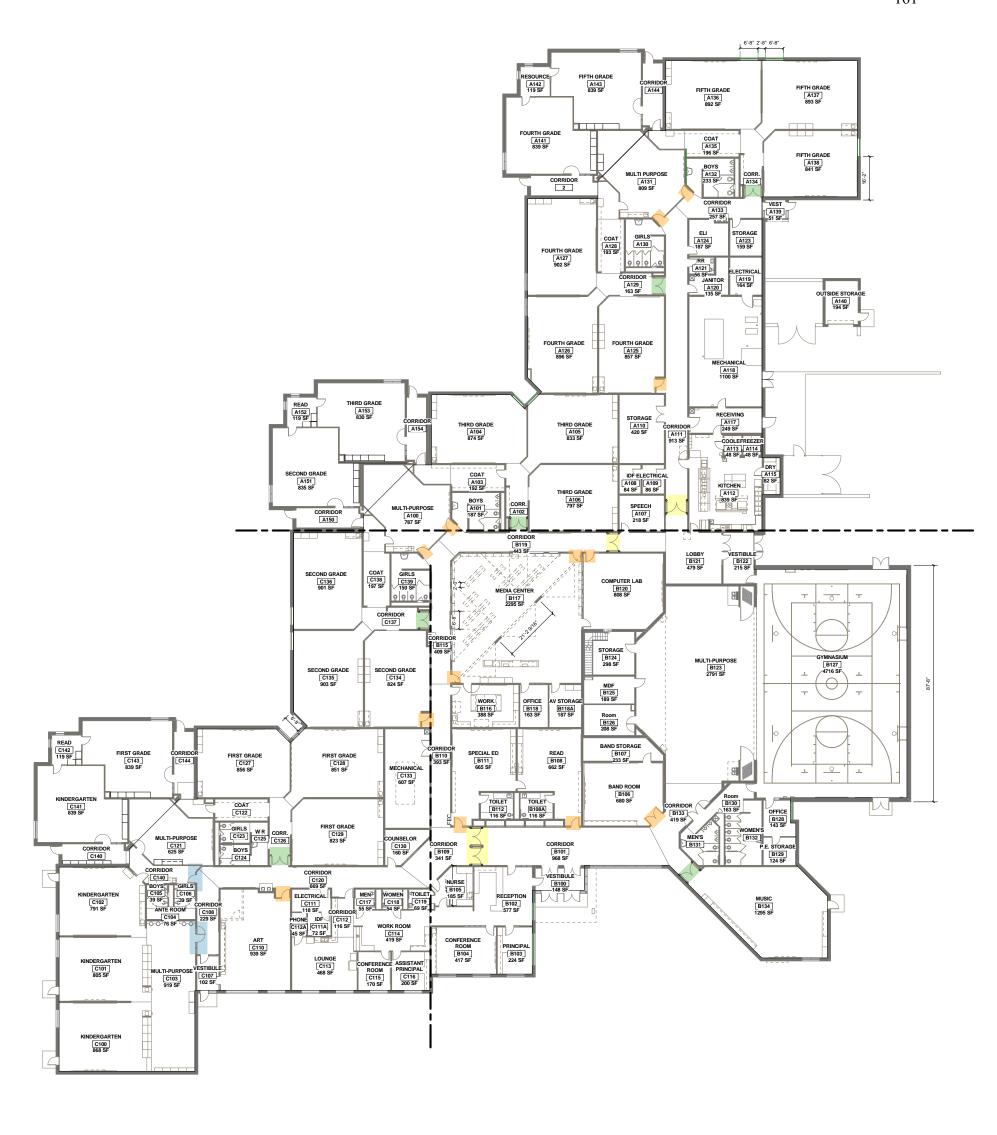
Millard Public Schools 2016 Standing Positions

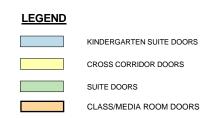
- 1. The Millard Public Schools supports legislation that holds Districts accountable for their results (2016).
- 2. The Millard Public Schools supports legislation that creates an incentive for districts to adopt programs which increase educational rigor and relevancy, including, but not limited programs of excellence (e.g. AP, IB, etc), dual-enrollment courses, and career academies (2016).
- 3. The Millard Public Schools opposes legislation that establishes tuition tax credits, vouchers, and private charter schools. Rationale: The District has opposed all attempts to channel public money to private schools and circumvent the control of the local Board of Education (2015).
- 4. The Millard Public Schools supports legislation that would repeal the Learning Community Law. Rationale: The Learning Community is not necessary and is not benefitting students in the Metropolitan area or accomplishing the goals that were listed when it was established in 2008 (2012).
- 5. The Millard Public Schools supports the independence of established Class III school districts (2009).
- 6. The authority to levy for the general fund should remain with locally elected school boards. Rationale: Locally elected boards are in the best position to make decisions on levies and taxes (2009).
- 7. Locally elected school boards should have the ultimate authority to approve diversity and poverty plans. Rationale: Locally elected boards are more responsive to local needs (2009).
- 8. State aid decisions should not be reconsidered after the February 1st certification date. Rationale: School districts need time in order to make proper plans for funding school systems. The rules for state aid should not change after districts have established their budgets and levies (2009).
- 9. State funding should be sufficient to keep teacher's salaries regionally competitive (2003).
- 10. State and local taxpayers share the responsibility for the Pre-K through 12th grade educational program. The funding should reflect an equitable distribution of state revenue (2001).
- 11. School districts should be encouraged to support ongoing maintenance of school buildings; therefore spending and levy restrictions should be removed from the building fund (2001).
- 12. Federal and state governments should never impose un-funded mandates (2001).
- 13. Local boards of education are accountable to their community for making decisions regarding the educational program and are in the best position to make decisions on curriculum, management and funding (2001).

AGENDA SUMMARY SHEET

AGENDA ITEM:	Approval of Schematic Designs for the Upchurch Elementary School Open-to-Closed Project							
MEETING DATE:	November 2, 2015							
DEPARTMENT:	General Administration							
TITLE & BRIEF	Approval of Schematic Designs for Upchurch Elementary Open-to-Closed Project – the Upchurch project funded by the 2013 Bond Issue.							
DESCRIPTION: ACTION DESIRED:	Approval <u>x</u> Discussion <u>Information Only</u> .							
BACKGROUND:	The progressive steps for construction projects are as follows:							
	 Schematic Design (SD) * "30 thousand feet view" – initial design and cost estimates Design Development (DD) "10 thousand feet view" – refined design and cost estimates Construction Documents (CD) * "Pattern altitude view" – final design and cost estimates plus all of the information necessary for contractors to bid the project. Bidding/Awarding of Contract (BA) * The receipt and opening of bids and the presentation to the board for the award of the construction contract. Contract Administration (CA) Supervision and documentation of the construction project. Attached are the Schematic Designs for the Upchurch Open-to-Closed construction project. Jeff Hemji (Morrissey Engineering, Inc.) will be present to address the board. 							
OPTIONS AND ALTERNATIVES:	n/a							
RECOMMENDATION:	It is recommended that the schematic designs for the Upchurch Elementary School Open-to-Closed construction project be approved as submitted.							
STRATEGIC PLAN REFERENCE:	n/a							
IMPLICATIONS OF ADOPTION/REJECTION:	n/a							
TIMELINE:	Immediate							
RESPONSIBLE PERSON:	Morrissey Engineering, Inc. (Design Engineer), Sampson Construction (CMa), and Ken Fossen							

SUPERINTENDENT'S APPROVAL:









AGENDA SUMMARY SHEET

AGENDA ITEM:	Enrollment Report
MEETING DATE:	November 2, 2015
DEPARTMENT:	Educational Services: Assessment, Research, & Evaluation
TITLE:	Enrollment Report
BRIEF DESCRIPTION:	Report states the district and building enrollment reflective of data pulled on October 20, 2015.
ACTION DESIRED:	Approval _X Information/Discussion
BACKGROUND:	Enrollment data pulled on/near the 20 th of each month in session is reported to the Millard Board of Education for public record. Enrollment data is stored in our student information system, Infinite Campus.
RECOMMENDATIONS:	None
STRATEGIC PLAN REFERENCE:	None
IMPLICATIONS OF ADOPTION OR REJECTION:	None
TIMELINE:	None
RESPONSIBLE PERSON(S):	Dr. Mark Feldhausen, Dr. Darin Kelberlau, and Sharon Freeman
SUPERINTENDENT'S APPROVAL:	Jin Dutti

October 20, 2015 Millard Public Schools **Total Enrollment**

Elementary K 1 2 3 4 5 Prgm Total Change Change Abbott (3 unit) 65 68 81 66 64 68 412 -2 -1 Ackerman (4 unit) 75 80 72 71 86 72 456 1 0 Aldrich (3 unit) 70 73 73 93 71 81 461 -1 -1 -1 Black Elk (4 unit) 73 86 88 57 80 79 463 -1 0 Bryan (3 unit) 56 65 62 54 75 57 369 3 3 Cather (3 unit) 72 74 71 60 71 75 423 2 1 Cody (2 unit) 45 42 38 29 45 39 19 257 2 2 <th>Official 15/16 Enrollment 413 456 462 463 366 422 255 314 296 450</th>	Official 15/16 Enrollment 413 456 462 463 366 422 255 314 296 450
Abbott (3 unit) 65 68 81 66 64 68 412 -2 -1 Ackerman (4 unit) 75 80 72 71 86 72 456 1 0 Aldrich (3 unit) 70 73 73 93 71 81 461 -1 -1 Black Elk (4 unit) 73 86 88 57 80 79 463 -1 0 Bryan (3 unit) 56 65 62 54 75 57 369 3 3 Cather (3 unit) 72 74 71 60 71 75 423 2 1 Cody (2 unit) 45 42 38 29 45 39 19 257 2 2	413 456 462 463 366 422 255 314 296
Ackerman (4 unit) 75 80 72 71 86 72 456 1 0 Aldrich (3 unit) 70 73 73 93 71 81 461 -1 -1 Black Elk (4 unit) 73 86 88 57 80 79 463 -1 0 Bryan (3 unit) 56 65 62 54 75 57 369 3 3 Cather (3 unit) 72 74 71 60 71 75 423 2 1 Cody (2 unit) 45 42 38 29 45 39 19 257 2 2	456 462 463 366 422 255 314 296
Aldrich (3 unit) 70 73 73 93 71 81 461 -1 -1 Black Elk (4 unit) 73 86 88 57 80 79 463 -1 0 Bryan (3 unit) 56 65 62 54 75 57 369 3 3 Cather (3 unit) 72 74 71 60 71 75 423 2 1 Cody (2 unit) 45 42 38 29 45 39 19 257 2 2	462 463 366 422 255 314 296
Black Elk (4 unit) 73 86 88 57 80 79 463 -1 0 Bryan (3 unit) 56 65 62 54 75 57 369 3 3 Cather (3 unit) 72 74 71 60 71 75 423 2 1 Cody (2 unit) 45 42 38 29 45 39 19 257 2 2	463 366 422 255 314 296
Bryan (3 unit) 56 65 62 54 75 57 369 3 3 Cather (3 unit) 72 74 71 60 71 75 423 2 1 Cody (2 unit) 45 42 38 29 45 39 19 257 2 2	366 422 255 314 296
Cather (3 unit) 72 74 71 60 71 75 423 2 1 Cody (2 unit) 45 42 38 29 45 39 19 257 2 2	422 255 314 296
Cody (2 unit) 45 42 38 29 45 39 19 257 2 2	255 314 296
	314 296
	296
Cottonwood (3 unit) 45 48 44 49 51 70 7 314 0 0	
Disney (3 unit) 54 50 44 46 47 43 16 300 4 4	450
Ezra Millard (3 unit) 91 74 78 69 71 65 0 448 -2 -2	
Harvey Oaks (2 unit) 42 44 36 44 52 43 261 0 0	261
Hitchcock (2 unit) 40 47 46 36 46 38 13 266 0 1	265
Holling Heights (3 unit) 57 60 70 62 56 56 11 372 8 8	364
Montclair (4 unit) 98 92 93 97 79 97 556 0 1	555
Morton (3 unit) 48 45 61 38 43 57 292 1 -2	294
Neihardt (4 unit) 108 111 100 96 88 90 593 -3 -3	596
Norris (3 unit) 61 64 56 59 57 62 359 -1 -1	360
Reagan (4 unit) 85 111 87 83 91 72 529 -2 -2	531
Reeder (4 unit) 125 104 100 102 94 102 627 -3 -3	630
Rockwell (3 unit) 36 49 42 46 46 51 18 288 -2 -2	290
Rohwer (3 unit) 61 93 94 94 98 107 17 564 1 0	564
Sandoz (3 unit) 55 63 53 49 53 49 322 2 1	321
Upchurch (3 unit) 88 98 106 93 96 98 579 0 0	579
Wheeler (4 unit) 78 78 75 88 97 79 21 516 1 0	516
Willowdale (3 unit) 64 61 76 72 75 66 414 -1 1	413
Totals 1692 1780 1746 1653 1732 1716 122 10,441 7 5	10,436
SpEd Current Current YTD	Official 15/16

				SpEd	Current	Current	YID	Official 15/16
Middle	6	7	8	Prgm*	Total	Change	Change	Enrollment
Andersen MS	309	293	292	0	894	-8	-6	900
Beadle MS	345	356	389	28	1090	-3	-1	1091
Central MS	334	278	260	23	872	-3	-2	875
Kiewit MS	335	314	306	0	955	3	2	953
North MS	265	253	280	19	798	-3	-4	802
Russell MS	289	288	284	0	861	-3	-3	864
Totals	1877	1782	1811	70	5470	-17	-14	5485

							SpEd	Current	Current	YTD	Official 15/16
High	Grads YTD	9	10	11	12		Prgm*	Total	Change	Change	Enrollment
North HS	2	614	616	606	602		26	2438	-8	-8	2446
South HS		558	523	500	520		38	2101	-22	-15	2116
West HS	6	676	626	611	561		25	2474	-5	-7	2481
Horizon HS	16	0	19	35	77		0	131	-6	-4	135
Totals	24	1848	1784	1752	1760		89	7144	-41	-34	7178
*SpEd Program Included in MS/HS Grade Level totals					Contracted SpEd		46	-1	1	45	

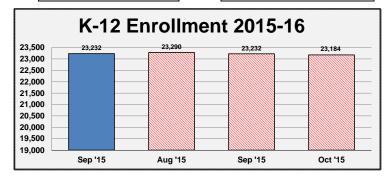
**Itinerant & Contracted	d Pre-K includ	ded in Official 15/16	Enrollment	53						
**Itinerant & Contracted Pre-K included in Current Enrollment: 5										
Preschool	SpEd	Not SpEd	Total	Official 15/16						
Bryan	11	19	30	31						
Cody	38	33	71	63						
Disney	10	17	27	26						
Harvey Oaks	28	21	49	47						
Hitchcock	27	15	42	42						
Holling Heights	3	12	15	15						
Montclair Montessori	3	84	87	91						
Neihardt	15	37	52	52						
Norris	4	12	16	16						
Norris Montessori	1	28	29	30						
Rockwell	11	25	36	35						
Sandoz	22	33	55	53						
Wheeler	25	23	48	46						
Homebased Infants	95	0	95	90						
TOTAL			652	637						

Career Academies	NHS	SHS	WHS	HHS	TOTAL
Culinary	1	2	3		6
Education	4	16	27		47
Entrepreneurship	10	8	18		36
Health Sciences	6	21	45		72
Dist/Log Mgmt	6	9	16		31
Ombudsman	(Primary and	d Secondary	y Assigni	ment)	36

	89	7144	-41	-34	7178
Contracted SpEd		46	-1	1	45
Rule 18 Interim		18	4	4	14
Young Adult Program		40	-3	-2	42
Ombudsman (Primary)		25	3	4	21
Total District K-12		23,184	-48	-36	23,221
Total District PreK-12**		23,893	-21	-18	23,911

10/20/2015	
Elementary	10,441
Middle School	5,470
High School	7,144
Contracted & Rule 18	64
Young Adult	40
Ombudsman (Primary)	25
TOTAL	23,184

09/21/2015	
Elementary	10,434
Middle School	5,487
High School	7,185
Contracted & Rule 18	61
Young Adult	43
Ombudsman (Primary)	22
TOTAL	23,232



8.0

Classroom Avg

18.00

16.67 22.00

23.00

23.50 21.50

													166	Ta:
	K	1	2	3	4	5			SpEd Cluster	Current Total	Current Change	YTD Change	Official 15/16 Enrollment	Class Size w/out SpEd
Ezra Millard	24 24 21	24 25 25	19 20 20	23 23 23	24 24 23	22 22 21			Oldoto!	. 0 0.0	onango	Change	2111011110111	opeu
Total Students	22 91	74	19 78	69	71	65				448	-2	-2	450	448
Total Teachers	4	3	4	3	3	3				20	-	-	400	20
Classroom Avg	22.8	24.7	19.5	23.0	23.7	21.7				22				22
	K	1	2	3	4	5			1	Current Total	Current Change	YTD Change	Official 15/16 Enrollment	-
Harvey Oaks	21 21	21 23	18 18	22 22	26 26	21 22								
Total Students Total Teachers	42 2	44 2	36 2	44	52 2	43 2				261	0	0	261	261
Classroom Avg	21.0	22.0	18.0	22.0	26.0	21.5				12 22				12 22
									SpEd	Current	Current	YTD	Official 15/16	
r	K	1	2	3	4	5			Cluster	Total	Change	Change	Enrollment	7
Hitchcock	19 21	24 23	22 24	18 18	24 22	19 19			6 7					
Total Students	40	47	46	36	46	38			13	266	0	1	265	253
Total Teachers Classroom Avg	2 20.0	2 23.5	2 23.0	2 18.0	2 23.0	2 19.0			2 6.5	14 19				12 21
									 SpEd	Current	Current	YTD	Official 15/16	
Holling Heights	19	21	24	3 21	18	5 19			Cluster 3	Total	Change	Change	Enrollment]
	19 19	20 19	23 23	21 20	18 20	18 19			8					
Total Students Total Teachers	57 3	60 3	70 3	62 3	56 3	56 3			11 2	372 20	8	8	364	361 18
Classroom Avg	19.0	20.0	23.3	20.7	18.7	18.7			5.5	19				20
	K	1	2	3	4	5		3 M4-5		Current Total	Current Change	YTD Change	Official 15/16 Enrollment	-
Montclair	24 26	22 22	22 23	23 26	21 22	27 27	16	24 20 24 18 24 21						
							:	24 20 24						
Total Students	50	44	45	49	43	54	48 1	24 14 79		556	0	1	555	556
Total Teachers Classroom Avg	2 25.0	2 22.0	2 22.5	2 24.5	2 21.5	2 27.0	3 16.0 24	6 4 .0 19.8		25 22				25 22
	14		0	0		-			SpEd	Current	Current	YTD	Official 15/16	
Morton	15	23	21	3 20	22	5 19			Cluster	Total	Change	Change	Enrollment	
	16 17	22	21 19	18	21	19 19								
Total Students	48	45	61	38	43	57				292	1	-2	294	292
Total Teachers Classroom Avg	3 16.0	2 22.5	3 20.3	2 19.0	2 21.5	3 19.0				15 19				15 19
	14		0			-				Current	Current	YTD	Official 15/16	
Neihardt	22	22	25	3 24	21	5 23				Total	Change	Change	Enrollment	
	23 21	21 23	24 26	24 24	23 22	23 22								
	23 19	23 22	25	24	22	22								
Total Students Total Teachers	108 5	111 5	100 4	96 4	88 4	90 4				593 26	-3	-3	596	593 26
Classroom Avg	21.6	22.2	25.0	24.0	22.0	22.5				23				23
	K	1	2	3	4	5	M-K M1-	3 M4-5		Current Total	Current Change	YTD Change	Official 15/16 Enrollment	
Norris	19 18	21 19	16 16	21 21	21 19	21 21	12	20 19 22 18			J.			
								23						
Total Students Total Teachers	37 2	40 2	32 2	42 2	40 2	42 2	24 2	35 37 3 2		359 19	-1	-1	360	359 19
Classroom Avg	18.5	20.0	16.0	21.0	20.0	21.0	12.0 21			19 Current	Current	YTD	Official 15/16	19
Reagan	K 22	1 23	2 22	3 21	4 23	5 23			Т	Total	Change	Change	Enrollment	1
ouguii	21	22	22	20	22	25								
	20 22	21 23	22 21	20 22	23 23	24								
Total Students	85	111	87	83	91	72				529	-2	-2	531	529
Total Teachers	4	5	4	4	4	3				24	-2	-2	JJ 1	24
Classroom Avg	21.3	22.2	21.8	20.8	22.8	24.0				22				22

																	Class
	K	1	2	3	4	5						SpEd Cluster	Current Total	Current Change	YTD Change	Official 15/16 Enrollment 7	Size w/out SpEd
Reeder	22 22	19 21	21 17	19 23	26 22	23 26										,	
	22 20	23 22	20 23	20 19	24 22	26 27											
	17 22	19	19	21													
Total Students Total Teachers	125 6	104 5	100 5	102 5	94 4	102 4							627 29	-3	-3	630	627 29
Classroom Avg	20.8	20.8	20.0	20.4	23.5	25.5						SpEd	22 Current	Current	YTD	Official 15/16	22
Rockwell	K 19	1 17	21	3 15	4 24	5 25						Cluster 9	Total	Change	Change	Enrollment	7
	17	16 16	21	15 16	22	26						9					
Total Students Total Teachers	36 2	49 3	42 2	46 3	46 2	51 2						18 2	288 16	-2	-2	290	270 14
Classroom Avg	18.0	16.3	21.0	15.3	23.0	25.5						9.0 SpEd	18 Current	Current	YTD	Official 15/16	19
Rohwer	K 20	1 24	2 19	3 23	4 25	5 20						Cluster 9	Total	Change	Change	Enrollment	7
	20 21	23 24	18 19	23 24	25 23	23 22						8					
		22	19 19	24	25	21 21											
Total Students Total Teachers	61 3	93 4	94	94 4	98 4	107						17 2	564 27	1	0	564	547 25
Classroom Avg	20.3	23.3	18.8	23.5	24.5	21.4						8.5	21 Current	Current	YTD	Official 15/16	22
Sandoz	K 18	1 21	2	3 25	4 17	5 24						1	Total	Change	Change	Enrollment	٦
	19 18	21 21	17 18	24	18 18	25											
Total Students Total Teachers	55 3	63 3	53	49 2	53 3	49 2							322 16	2	1	321	322 16
Classroom Avg	18.3	21.0	17.7	24.5	17.7	24.5							20 Current	Current	YTD	Official 15/16	20
Upchurch	K 22	1 20	2	3 18	4 20	5 21						1	Total	Change	Change	Enrollment	7
Орспитст	22 22 22	20 20 19	22 22	20 19	20 20 18	20 21											
	22	19	22	17	19	16											
Total Students	88	98	106	93	96	98 5							579	0	0	579	579
Total Teachers Classroom Avg	4 22.0	5 19.6	5 21.2	5 18.6	5 19.2	5 19.6							29 20	0 1	VII	000 : 145/40	29 20
Wheeler	K 17	1	2	3	4 24	5 25						SpEd Cluster	Current Total	Current Change	YTD Change	Official 15/16 Enrollment	7
Wileelei	21	18 21	19 19	22 23	22	27						6 7					
	20 20	18 21	18 19	20 23	25 26	27						8					
Tatal Otrodanta	70	70	75	00	07	70						04	540			540	405
Total Students Total Teachers	78 4	78 4	75 4	88	97 4	79 3						21	516 26	1	0	516	495 23
Classroom Avg	19.5	19.5 1	18.8	22.0	24.3	26.3 5						7.0	Current	Current	YTD Change	Official 15/16 Enrollment	22
Willowdale	20	20	25	25	25	23							Total	Change	Criange	Enrollment	1
	22 22	20 21	26 25	23 24	25 25	22 21											
Total Students Total Teachers	64	61	76	72	75 3	66							414	-1	1	413	414
Classroom Avg	3 21.3	3 20.3	3 25.3	3 24.0	25.0	3 22.0							18 23				18 23
Flomenton, Totala												0-54	Current	Current	YTD	Official 15/16	
Elementary Totals Grade	K	1	2	3	4	5	M-1			M-4 M-5		SpEd Cluster	Current Total	Change	Change	Enrollment	10040
Students Teachers	1692 83	1780 80	1746 79	1653 75	1732 74	1716 74	72 9		65	53 6 6	63	115 17	10441 497	7	5	10436	480
Classroom Avg	20.4	22.3	22.1	22.0	23.4	23.2						6.8 Sp.Ed	21.01	C1:====+	VTD	Official 45/42	21.50
Andorosa MC	6	7	8									SpEd Cluster	Current Total	Current Change	YTD Change	Official 15/16 Enrollment	7
Andersen MS Beadle MS	309 345	293 356	292 389									0 28	894 1090	-8 -3	-6 -1	900 1091	
Central MS Kiewit MS	334 335	278 314	260 306									23	955	-3 3	-2 2	874 953	
North MS Russell MS	265 289	253 288	280 284									19 0	798 861	-3 -3	-4 -3	802 864	
Totals	1877	1782	1811	9	10	11	12					70	5470	-17	-14	5484	1
North HS South HS				614 558	616 523	606 500	602 520	1				26 38	2438 2101	-8 -22	-8 -15	2446 2116	
West HS Horizon HS				676 0	626 19	611 35	561 77	•				25	2474 131	-5 -6	-7 -4	2481 135	_
Totals				1848	1784	1752	1760	Contracte		t		89	7144 46	-41 -1	-34 1	7178 45	-
								Rule 18 In Young Ad	ult Proo				18 40	4 -3	4 -2	14 42	
								Ombudsm Total Dist		imary Enrol nrollment	iment)		25 23184	3 -48	-36	21 23220	_

AGENDA SUMMARY SHEET

Agenda Item: Personnel Report 2015-2016

Meeting Date: November 2, 2015

Department: Human Resources

Title and Brief

Description: Human Resource Personnel Report 2015-2016

Action Desired: Report Only

Background: The annual Personnel Report contains information regarding the District's staffing levels, classroom enrollment averages, teacher preparation, experience, and student teacher internships. Report highlights include:

- 69% of our certificated staff hold an advanced degree.
- Certificated staff members have worked for Millard for an average of 11.7 years and an average of 15 total years in education.
- We hosted 86 student teachers in Millard during the 2014-2015 school year.
- A historical look at personnel distribution and ratios between staff positions is provided along with graphs to illustrate trends since 1981.
- Across all job classes, we show a decrease of 4.41 FTE's from the previous school year. Since 2010, we show a reduction of 37.78 FTE's for certificated teachers and 44.72 FTE's for all staff. Over this same time period student enrollment has increased by approximately 1,006 students.
- Information regarding our health insurance fund is included which shows an average enrollment of 2,453 employees taking insurance.
- The information provided is a "snapshot" of information that can change from day-to-day and year-to-year. As a result, staff changes reflect the difference in the "snapshot" from October 2014 to October 2015.

Recommendations: Report Only

Responsible

Persons: Kevin Chick, Mitch Mollring, Chad Meisgeier,

Jeanine Beaudin

Superintendent's Signature:	Sin Juttin	

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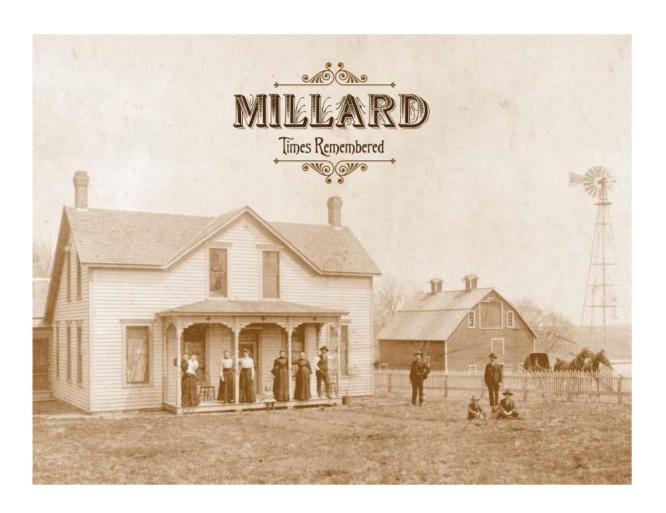
Personnel Report

2015-2016

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Recruiting Report



Millard Public Schools Recruiting Report

2014-15

Our Human Resources staff attended numerous recruiting events throughout the year. Many of our teaching positions were filled by candidates we met at these events.

August 2014	UNO Student Teacher Symposium
October 2014	Millard Public Schools Student Teacher Interview Day
October 2014	UNL Fall Interview Day for Educators
October 2014	Nebraska Wesleyan Education Interview Day
November 2014	University of Kansas Teacher Recruiting Fair
December 2014	Wayne State College Education Interview Day
January 2015	UNO Student Teacher Symposium
February 2015	Millard Public Schools Student Teacher Interview Day
February 2015	Doane College Interview Day
February 2015	Creighton Interview Day
March 2015	UNO Education Fair
March 2015	Nebraska Wesleyan Education Interview Day
March 2015	University of Northern Iowa Interview Fair
March 2015	UNK Employment Fair
March 2015	UNL Interview Day for Educators
April 2015	Wayne State College Education Interview Day

Student Teacher Placements 2014-15

Total Student Teacher Applications 94
Total Student Teachers Placed 86

MIDDLE SCHOOL

Teaching Area	<u>AMS</u>	<u>CMS</u>	<u>KMS</u>	<u>NMS</u>	<u>RMS</u>	<u>BMS</u>	TOTAL
Grade 6	1				1		2
Art							0
Business							0
Counseling							0
Language Arts	1	2	1	1			5
World Language							0
ELL		1					1
Health							0
Family Con Science							0
Industrial Arts							0
Math							0
Media							0
Music	1		1			1	3
Nurse							0
Physical Education							0
Science		1		3	1	1	6
Social Studies				1			1
SPED	1		1				2
TOTAL	4	4	3	5	2	2	20

HIGH SCHOOL

<u>Teaching Area</u> Art	<u>SOUTH</u>	<u>NORTH</u>	WEST	HORIZON	TOTAL 1
Business		1	2		3
Counseling			_		0
Language Arts	2	1			3
ELL					0
World Language		1	2		3
Health					0
Family Con Science			2		2
Industrial Tech					0
Math		1			1
Media					0
Music		1			1
Nurse					0
Physical Education	2		1		3
Science	1	1	2		4
Social Studies SPED	1	1	2		1
TOTAL	7	7	12	0	26
I O I ME	•	•	12	U	20

Student Teacher Placements 2014-15 (continued)

ELEMENTARY	<u>Pre-K</u>	<u>K</u>	<u>1-3</u>	<u>4,5</u>	Spec.	<u>Total</u>
Abbott						0
Aldrich			3			3
Ackerman						0
Black Elk				1	1	2
Bryan			1	1	1	3
Cather				1		1
Cody		1	1			2
Cottonwood			1			1
Disney		1	2		1	4
Harvey Oaks			1	2		3
Hitchcock			2	1	2	5
Holling Heights			1		1	2
Ezra Millard		2	1	2	1	6
Montclair			1			1
Morton						0
Neihardt			3	1	1	5
Norris			3		1	4
Reagan			2		3	5
Reeder				2		2
Rockwell						0
Rohwer			1		2	3
Sandoz			1			1
Upchurch						0
Wheeler			1			1
Willowdale			2	1		3
TOTAL	0	4	27	12	14	57
TEACHING AREA	<u>UNO</u>	<u>UNL</u>	<u>UNK</u>	WAYNE	<u>OTHER</u>	<u>TOTAL</u>
Elementary	15	12	2	3	15	47
Secondary	11	4	0	1	14	30
SPED	3	0	1	1	3	8
Specialist	2	1	1	1	3	8
TOTAL	31	17	4	6	35	93

Candidate Applications from 7/31/2014 to 7/31/2015

Applications by Job-Category	
Administrative	30
Coaching	182
Counselor	144
Custodial	1373
District Level Leader	112
Elementary K-5 Teaching Positions	3609
ELL Teacher	42
Food Service	1095
Grounds	39
High School Teacher	693
Maintenance	290
Middle Level Teacher	764
Paraprofessionals	1532
Professional Technical Hourly	1893
Professional Technical Salaried	159
Special Education Teacher	336
Speech Pathologist	44
Substitute	346
Summer School	572
Summer Temp Jobs	46
Support	89
Transportation	18

Totals: 13408

Health/Benefits Report



Health Insurance Rates – Traditional Plan

Benefit	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Millard Deductibles	\$300/\$600	\$350/\$700	\$350/\$700	\$500/\$1,000	\$600/\$1,200	\$600/\$1,200	\$750/\$1,500	\$750/\$1,500
EHA - Closest Equivalent EHA Plan Deductibles	\$300/\$600	\$350/\$700	\$350/\$700	\$600/\$1,200	\$600/\$1,200	\$750/\$1,500	\$750/\$1,500	\$750/\$1,500
Millard - Single Premium	\$325.28	\$349.68	\$379.40	\$394.58	\$405.00	\$445.00	\$499.34	\$506.46*
EHA - Single Premium	\$448.22	\$479.57	\$496.16	\$431.25	\$484.52	\$514.80	\$500.31	\$509.82
Millard - Employee + Children Premium	\$890.78	\$957.60	\$1,039.00	\$1,080.56	\$1,110.00	\$1,220.00	\$923.87	\$936.62*
EHA - Employee + Children Premium	\$829.21	\$887.22	\$917.92	\$797.83	\$896.38	\$952.40	\$925.59	\$943.18
Millard Employee + Spouse Premium	\$890.78	\$957.60	\$1,039.00	\$1,080.56	\$1,110.00	\$1,220.00	\$1,048.15	\$1,062.90*
EHA Employee + Spouse Premium	\$941.26	\$1,007.11	\$1,041.96	\$905.63	\$1,017.50	\$1,081.09	\$1,050.66	\$1,070.62
Millard Family								
Premium	\$890.78	\$957.60	\$1,039.00	\$1,080.56	\$1,110.00	\$1,220.00	\$1,408.15	\$1,427.38*
EHA Family Premium	\$1,208.63	\$1,323.63	\$1,399.08	\$1,216.03	\$1,366.24	\$1,451.63	\$1,410.77	\$1,437.58
Millard Family Premium *	\$890.78	\$957.60	\$1,039.00	\$1,080.56	\$1,110.00	\$1,220.00	n/a	n/a
EHA Equivalent Family Premium	\$1,124.77	\$1,224.77	\$1,288.32	\$1,119.76	\$1,258.08	\$1,336.70	n/a	n/a
	·			· I			· I	
Estimated Percentage Savings	22%	23%	20%	4%	13%	10%	0%	1%
Estimated \$ Savings	\$5.3 Mil.	\$6.3 Mil.	\$6.1 Mil.	\$1.1 Mil.	\$3.7 Mil.	\$3.0 Mil.	\$0.0 Mil.	\$0.1 Mil.

Health Insurance Rates – High Deductible Health Plan

Benefit	2014-15	2015-16
Millard Deductibles	\$3,100/\$6,200	\$3,100/\$6,200
EHA - Closest Equivalent EHA Plan Deductibles	\$3,100/\$6,200	\$3,100/\$6,200
Millard - Single Premium	\$374.54	\$380.18*
EHA - Single Premium	\$422.12	\$430.14
Millard - Employee + Children Premium	\$692.90	\$702.30*
EHA - Employee + Children Premium	\$780.95	\$795.79
Millard Employee + Spouse Premium	\$786.53	\$797.51*
EHA Employee + Spouse Premium	\$886.47	\$903.32
•		
Millard Family Premium	\$1,056.11	\$1,070.70*
EHA Family Premium	\$1,190.29	\$1,212.92
	•	
Estimated Percentage Savings	11%	13%
Estimated \$ Savings	\$1.3 Mil.	\$1.4 Mil.

- (a) Until January 1, 2015, Millard allowed only a family premium option while, since 2008-09, the EHA permits a three tier option beyond single coverage (Employee + Spouse, Employee + Children, and Family). The "Equivalent Family Premium" is a blend of these rates to better compare like situations. To arrive at this, we assumed that 22% would be employee + spouse, 7% employee + children, and 71% family. Effective January 1, 2015, Millard adopted a four tier rate structure.
- (b) EHA has had several different tiers of deductibles that can be elected for family coverage. For purposes of comparison, deductibles have not always lined up perfectly, so we have matched the closest EHA plan for purposes of comparing rates.
- (c) Until January 1, 2016, plan terms such as deductibles generally changed on January 1 of each year while rates are generally changed on September 1 of each year. This is still true of EHA. However, Millard moved to changing rates on January 1 to align with open enrollment effective on January 1, 2016. Therefore, the rates in the 2015-16 year on the charts reflect four months of "old" rates and 8 months of "new" rates. Monthly rates effective January 1, 2016 for the traditional plan are \$510 for Single; \$1,070 for Employee & Spouse; \$943 for Employee & Children; and \$1,437 for Full Family Coverage. Monthly rates effective January 1, 2016 for the high deductible plan are \$383 for Single; \$803 for Employee & Spouse; \$707 for Employee and Children; and \$1,078 for Full Family Coverage.
- (d) EHA historical rates are posted on the EHA website. See http://www.ehaplan.org/content/coverage-rates. In December of 2011, EHA offered a one month premium holiday on the condition that the local teachers' bargaining unit agreed to the distribution of the savings between the employee and the employer. While it is our understanding that most districts did not receive 100% of this premium holiday, we have nonetheless reduced the EHA premiums by one-twelfth in 2011-12 for purposes of this chart.
- (f) Effective January 1, 2015, Millard adopted a High Deductible Plan option. Approximately 64% of employees elected the High Deductible Plan option in its first year.

Millard Public Schools Self-Funded Summary through August 2015

Contract Year	Total Average Enrollment	Medical Claims Paid	Rx Claims Paid	Gross Medical/Rx Claims	Reinsurance Reimbursment After Deductibles	Net Paid Medical/Rx
2005-06	1,978	\$8,915,744	\$2,808,235	\$11,723,979	(\$128,952)	\$11,595,027
2006-07	2,040	\$11,074,333	\$3,497,158	\$14,571,491	(\$630,973)	\$13,940,518
2007-08	2,178	\$12,940,507	\$3,649,886	\$16,590,393	(\$236,293)	\$16,354,100
2008-09	2,279	\$16,357,773	\$3,500,826	\$19,858,599	(\$754,855)	\$19,103,744
2009-10	2,374	\$16,389,942	\$3,995,880	\$20,385,822	(\$744,039)	\$19,641,783
2010-11	2,462	\$19,905,919	\$4,507,756	\$24,413,675	(\$1,121,951)	\$23,291,724
2011-12	2,448	\$21,645,590	\$4,849,169	\$26,494,759	(\$197,990)	\$26,296,769
2012-13	2,469	\$20,941,879	\$4,619,095	\$25,560,974	\$0	\$25,560,974
2013-14	2,505	\$21,575,942	\$4,983,171	\$26,559,113	(\$368,955)	\$26,190,158
2014-15	2,453	\$20,480,661	\$5,079,579	\$25.560.240	\$0	\$25,560,240

Section 2(a)): Plan Income - Tra	ditional PPO PI	lan							
Contract Year	Average Number of Employees with Single Coverage	Single Monthly Premium	Average Number of Employees with Employee + Spouse Coverage	Employee + Spouse Monthly Premium	Average Number of Employees with Employee + Child(ren) Coverage	Employee + Child(ren) Monthly Premium	Average Number of Employees with Family Coverage	Family Monthly Premium	Percentage Increase in Premiums	Plan Income (Annual Enrollment x Premium)
2005-06	734	\$325.28					1,244	\$890.78	Not Applicable	\$16,168,710
2006-07	717	\$325.28					1,323	\$890.78	0.0%	\$16,946,425
2007-08	768	\$325.28					1,410	\$890.78	0.0%	\$18,064,999
2008-09	787	\$325.28					1,492	\$890.78	0.0%	\$19,020,710
2009-10	804	\$349.68					1,570	\$957.60	7.5%	\$21,410,109
2010-11	820	\$379.40					1,642	\$1,039.00	8.5%	\$24,204,334
2011-12	802	\$394.58					1,646	\$1,080.56	4.0%	\$25,139,372
2012-13	827	\$405.00					1,642	\$1,110.00	2.6%	\$25,893,585
2013-14	843	\$445.00					1,662	\$1,220.00	9.9%	\$28,829,970
2014-15	543	\$499.37	79	\$1,048.71	30	\$923.87	760	\$1,408.15	12.2%	\$17,408,477

Section 2(b	Section 2(b): Plan Income - High Deductible Health Plan										
			Average Number of Employees with	Employee +	Average Number of Employees					Plan Income	
	Average Number of		Employee +	Spouse	with Employee +	Employee +	Average Number of			(Annual	
Contract	Employees with	Single Monthly	Spouse	Monthly	Child(ren)	Child(ren) Monthly	Employees with	Family Monthly	Percentage Increase	Enrollment x	
Year	Single Coverage	Premium	Coverage	Premium	Coverage	Premium	Family Coverage	Premium	in Premiums	Premium)	
2014-15	248	\$374.54	155	\$786.53	67	\$692.90	572	\$1,056.11	Not Applicable	\$10,385,080	

Millard Public Schools Self-Funded Summary through August 2015

Section 3:	Income Versus Expe	enses			Employer		Other Adjustments			
		Annual	Annual	Net Paid	Contributions to		(e.g. ERRP, flu			
Contract		Administrative	Reinsurance	Medical/Rx	Health Savings	Total Annual	shots, and			Ending Employee
Year	Total Annual Income	Cost	Cost	Claims	Accounts	Expenses	wellness)	Taxes	Deficit or Surplus	Benefits Fund
2005-06	\$16,168,710	\$1,098,253	\$1,232,655	\$11,595,027	n/a	\$13,925,935	(\$26,075)	\$0	\$2,216,700	\$8,561,274
2006-07	\$16,946,425	\$688,631	\$567,655	\$13,940,518	n/a	\$15,196,804	(\$35,675)	\$0	\$1,713,946	\$10,275,220
2007-08	\$18,064,999	\$786,252	\$561,020	\$16,354,100	n/a	\$17,701,372	(\$36,810)	\$0	\$326,817	\$10,602,037
2008-09	\$19,020,710	\$774,741	\$606,985	\$19,103,744	n/a	\$20,485,470	(\$44,975)	\$0	(\$1,509,735)	\$9,092,302
2009-10	\$21,410,109	\$839,109	\$780,921	\$19,641,783	n/a	\$21,261,813	\$15,232	\$0	\$163,528	\$9,255,830
2010-11	\$24,204,334	\$860,854	\$956,951	\$23,291,724	n/a	\$25,109,529	\$43,448	\$0	(\$861,747)	\$8,394,083
2011-12	\$25,139,372	\$854,990	\$708,385	\$26,296,769	n/a	\$27,860,144	(\$173,522)	\$0	(\$2,894,294)	\$5,499,789
2012-13	\$25,893,585	\$782,232	\$844,055	\$25,560,974	n/a	\$27,187,261	(\$172,533)	\$0	(\$1,466,209)	\$4,033,580
2013-14	\$28,829,970	\$817,223	\$911,634	\$26,190,158	n/a	\$27,919,015	(\$172,634)	\$0	\$738,321	\$4,771,901
2014-15	\$27,793,557	\$824,362	\$978,022	\$25,560,240	\$2,838,567**	\$27,362,624	(\$185,932)	\$299,628	(\$54,627)	\$4,717,274

YEAR	Number of Individual Claims Above \$75,000	Total Paid for Individuals over \$75,000	Number of Individual Claims Above \$150,000	Total Paid for Individuals over \$150.000	Number of Individual Claims Above \$500,000	Total Paid for Individuals over \$500.000
2005-06	11	\$1,249,125	2	\$373,660	0	\$0
2006-07	6	\$1,380,972	3	\$984,753	0	\$0
2007-08	17	\$2,076,826	2	\$536,295	0	\$0
2009-10	25	\$3,829,297	8	\$2,044,039	0	\$0
2010-11	35	\$5,174,620	7	\$2,271,951	1	\$744,819
2011-12	23	\$4,101,687	11	\$2,623,934	0	\$0
2012-13	24	\$3,669,347	13	\$2,385,028	0	\$0
2013-14	23	\$4,027,254	9	\$2,379,392	1	\$905,404
2014-15	53	\$6,433,530	10	\$2,163,419	0	\$0

Section 5:	Health Insurance Ad	Health Insurance Administrator / Reinsurance Terms Reinsurance							
Contract Year	Provider	Reinsurance Specific Deductible	Aggregating Specific Deductible						
2005-06	UnitedHealthcare	\$125,000	Not Applicable						
2006-07	Mutual Of Omaha	\$125,000	Not Applicable						
2007-08	Coventry Healthcare	\$150,000	Not Applicable						
2008-09	Coventry Healthcare	\$150,000	\$100,000						
2009-10	Coventry Healthcare	\$150,000	\$100,000						
2010-11	Coventry Healthcare	\$150,000	\$100,000						
2011-12	Coventry Healthcare	\$200,000	\$350,000						
2012-13	Coventry Healthcare	\$200,000	\$350,000						
2013-14	Coventry Healthcare	\$200,000	\$350,000						
2014-15	Coventry Healthcare	\$200,000	\$350,000						

Footnotes:

The Employee Benefits Fund balance will vary from the business office numbers based primarily of timing and accounting of plan expenses / income. These variances have been reviewed by Silverstone, Human Resources, and the Business Office and variances are within normal parameters. Unlike the Business Office numbers, the numbers above do not include the \$1.5 million originally loaned to the health fund from the general fund and paid back to the general fund in 2008-09. At the conclusion of the 2014-15 year, the buisiness office showed a health fund balance of \$4,622,330 (a difference of \$94,944 from Silverstone's accounting).

^{** -} The Health Savings Account contributions made by the District are made out of the general fund and not the health insurance fund. They are included on this sheet for information purposes only and are not included in the total expenses or in the income/loss calculation to the health insurance fund.

^{*** -} For the 2014-15 year, the average number of persons in each plan is misleading because the high deductible plan did not exist until January of 2015. Therefore, 2014-15 averages include four months where employees only had the choice of single or family coverage (two tiers only) under the traditional PPO plan. In August 2015, 868 (36%) persons chose the traditional plan and 1,561 (64%) chose the high deductible health plan.

Ancillary Benefits Rates

District Single Dental Rates - Monthly

2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
\$21.50	\$25.16	\$25.16	\$23.90	\$23.90	\$25.10	\$25.10	\$22.89	\$22.89

District LTD Rates

2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
\$0.21	\$0.21	\$0.21	\$0.175	\$0.175	\$0.175	\$0.175	\$0.175	\$0.175

District Life Insurance Rates - Monthly

2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
\$4.00	\$4.00	\$4.00	\$3.50	\$3.50	\$3.50	\$3.50	\$3.50	\$3.50

District NPERS Rates

2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
7.3528%	7.3528%	7.3528%	8.3628%	8.9688%	9.8788%	9.8788%	9.8788%	9.8788%

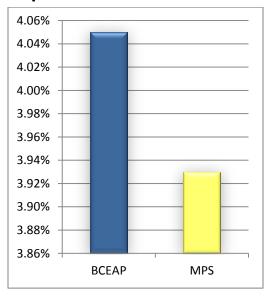
District Employee Assistance Program Rates

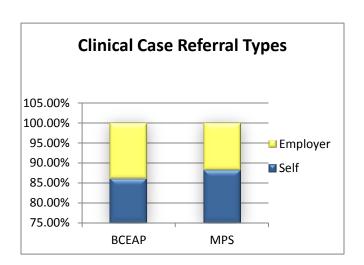
2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
\$16.00	\$16.25	\$16.25	\$16.25	\$16.25	\$16.25	\$16.25	\$15.50	\$15.50

Impact Analysis

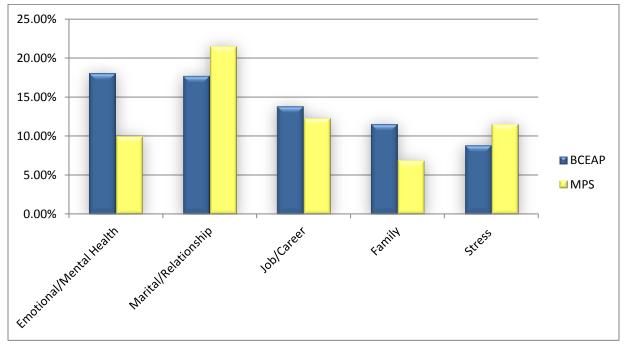


Impact Rate:





Assessed Problem Types Comparison:



This report outlines how your organization's statistics compare to Best Care EAP's full book of business for 2014.

Days Absent by Reason by Employee Group 2014-15

Reason	Admin	Teachers	Nurses	ProfTechS	ProfTechH	EdPara	CustMaint	Food Serv
Personal Illness	131.0	5,359.1	35.5	210.3	721.9	1,272.4	1,491.2	485.1
Family Illness	72.0	3,497.2	29.0	119.0	286.2	519.0	190.2	184.8
Business/Emergency	18.5	1,338.5	15.5	50.0	177.9	347.7	212.7	187.5
Personal	-	634.9	2.0	-	-	_	-	-
Bereavement	16.0	448.1	4.0	8.5	76.4	111.0	80.3	48.0
Family Medical Lv	61.0	4,758.4	-	73.0	69.5	162.7	233.5	237.7
Total Days	299	16,036	86	461	1,332	2,413	2,208	1,143
Mean Avg Days/Employee	3.39	9.35	6.14	7.82	7.78	7.77	11.46	8.04
% of Scheduled Work	1.5%	4.8%	3.2%	3.5%	3.5%	4.2%	4.9%	4.4%
2013-14	1.6%	4.7%	3.5%	3.2%	3.4%	4.3%	5.0%	4.0%
2012-13	2.5%	4.7%	3.9%	4.9%	3.7%	4.2%	5.3%	4.8%
2011-12	2.3%	4.6%	3.4%	4.2%	3.2%	3.9%	4.8%	4.6%
2010-11	2.3%	4.7%	2.1%	3.7%	3.6%	3.8%	4.1%	4.0%
2009-10	2.3%	4.4%	4.0%	3.2%	3.4%	4.2%	4.3%	3.9%
2008-09	1.9%	4.2%	3.5%	4.3%	3.3%	3.6%	3.5%	4.3%
2007-08	1.7%	4.2%	3.0%	3.6%	3.4%	3.7%	3.8%	4.4%
2006-07	1.3%	4.2%	3.0%	4.7%	3.7%	3.9%	3.7%	3.6%
2005-06	1.9%	4.0%	2.1%	3.8%	3.1%	3.7%	3.7%	3.6%
2004-05	2.0%	4.3%	3.4%	4.6%	3.4%	4.5%	4.0%	4.4%
2003-04	1.8%	4.3%	2.7%	3.7%	3.5%	3.8%	3.9%	4.0%
Scheduled Absences								
Vacation	747.5	-	-	308.5	1,024.5	-	2,474.5	14.0
Military	-	15.0	-	-	-	-	-	-
Union	-	25.5	-	-	-	-	-	-
Jury/Election	1.5	53.0	-	1.0	2.6	4.3	6.0	5.2
Professional	260.0	7,045.2	18.5	54.0	1.9	2.9	-	-
Retirement Seminar	1.0	30.5	-	-	4.1	8.8	2.6	1.9
Misc/Administrative	-	280.5	9.5	5.0	-	-	-	-
Total Scheduled Days	1,010.0	7,449.7	28.0	368.5	1,033.1	16.0	2,483.1	21.1

Teacher Professional Le	eave Days	Avg
2014-15	7,045	4.1
2013-14	6,814	4.0
2012-13	6,283	3.7
2011-12	6,188	3.6
2010-11	6,165	3.6
2009-10	6,681	3.9
2008-09	5,967	3.6
2007-08	6,009	3.7
2006-07	5,701	3.6
2005-06	5,034	3.3
2004-05	5,012	3.4

Current Staffing Levels



Personnel Distribution

Full-time Equivalency

F.T.E. Change 14-15

to

Employee Class	15-16	Staff F.T.E. 15-	Staff F.T.E. 14-	Staff F.T.E. 13-	Staff F.T.E. 12-
Administrators	0.00	88.00	88.00	87.00	86.00
Teachers	-13.07	1701.23	1714.30	1706.46	1697.87
School Nurses	0.00	14.00	14.00	15.00	15.00
Professional Technical Salaried	6.00	64.95	58.95	58.05	55.35
Professional Technical Hourly	2.72	173.98	171.26	169.28	168.08
Educational Paraprofessionals	1.71	312.10	310.39	313.15	310.77
Custodial/Maintenance	1.75	194.44	192.69	190.69	187.63
Food Service	-3.52	138.71	142.23	139.39	139.51
Totals	-4.41	2687.41	2691.82	2679.02	2660.21

Employee Count

Count Change 14-15

to

Employee Class	15-16	Staff Count 15-16	Staff Count 14-15	Staff Count 13-14	Staff Count 12-13
Administrators	0	88	88	87	86
Teachers	-13	1733	1746	1741	1733
School Nurses	0	14	14	15	15
Professional Technical Salaried	6	67	61	61	59
Professional Technical Hourly	0	184	184	181	181
Educational Paraprofessionals	0	420	420	420	425
Custodial/Maintenance	1	196	195	194	189
Food Service	-2	174	176	173	172
Totals	-8	2876	2884	2872	2860

Staffing Admin Positions

Class	Current Job Class Title	FTE
A010	SUPERINTENDENT	1.00
A020	ASSOC SUPT GENERAL ADMIN	1.00
A030	ASSOC SUPT EDUC SERV	1.00
A120	EXEC DIR TECHNOLOGY	1.00
A130	EXEC DIR HUMAN RESOURCES	1.00
A140	EXEC DIR LDRSHP STRATPLAN	1.00
A200	DIR EMPLOYEE RELATIONS	1.00
A205	DIR ASSMENT,RESEARCH,EVAL	1.00
A210	DIR PERSONNEL	1.00
A230	DIR COMMUNICATIONS	1.00
A240	DIR STUDENT SERVICES	1.00
A250	DIR STAFF DEVELOPMENT	1.00
A260	DIR ELEM & EARLY CHILD ED	1.00
A270	DIR SECONDARY ED	1.00
A280	DIR SPED	1.00
A300	DIRECTOR OF ACTIVITIES	1.00
A305	DIR OF DIGITAL LEARNING	1.00
A310	COORD OF CAREER & TECH ED	1.00
A330	COORD SPECIAL PROJECTS	1.00
A340	COORD K-5 SPED PROG	1.00
A350	COORD 6-12 SPED PROG	1.00
A354	COORD SPED RELSRV&YNGADLT	1.00
A360	COORD PRE-SCHOOL SPED	1.00
A365	COOR ELL-POV-FED/STATE PR	1.00
A401	ELEM PRINCIPAL	25.00
A402	MDL SCH PRINCIPAL	6.00
A403	HS PRINCIPAL	3.00
A421	ELEM ASST PRINCIPAL	1.00
A422	MDL SCH ASST PRINCIPAL	12.00
A423	HS ASST PRINCIPAL	12.00
A443	HS ACTIVITY DIRECTOR	3.00
A463	HORIZON HS PRINCIPAL	1.00
A473	HORIZON ASST PRINCIPAL	1.00
Overa	II - Total	88.00

Staffing Teacher Positions

Class	Correct lab Class Title	CTC
Class	Current Job Class Title	FTE
C011	MONTESSORI PRESCHOOL TCHR	3.00
C081	MONTESSORI PRE/KDG TCHR	3.00
C091	KINDERGARTEN TEACHER	76.00
C101	MONTESSORI 1-3 TEACHER	9.00
C111	GRADE 1 TEACHER	77.00
C121	GRADE 2 TEACHER	76.00
C131	GRADE 3 TEACHER	74.00
C141	GRADE 4 TEACHER	72.00
C151	GRADE 5 TEACHER	72.00
C162	GRADE 6 TEACHER	74.00
C223	CERTIFIED NURSING ASST	0.50
C301	CORE TEACHER	15.00
C311	MONTESSORI 4/5 TEACHER	6.00
C312	MONTESSORI TEACHER	3.00
C321	ART TEACHER	1.50
C322	ART TEACHER	9.00
C323	ART TEACHER	13.50
C333	BUSINESS TEACHER	25.16
C352	LANGUAGE ARTS TEACHER	32.50
C353	LANGUAGE ARTS TEACHER	67.00
C362	READING TEACHER	12.00
C363	READING TEACHER	2.00
C381	WORLD LANGUAGE TEACHER	1.00
C382	WORLD LANGUAGE TEACHER	28.25
C383	WORLD LANGUAGE TEACHER	38.17
C412	FAMILY CONSUMER SCI TCHR	9.50
C413	FAMILY CONSUMER SCI TCHR	17.50
C432	INDUSTRIAL TECH TEACHER	6.00
C433	INDUSTRIAL TECH TEACHER	17.00
C452	COMPUTER TEACHER	7.00
C461	MATH INTERVENTIONIST	3.00
C462	MATH TEACHER	31.00
C463	MATH TEACHER	61.00
C472	SCIENCE TEACHER	30.50
C473	SCIENCE TEACHER	56.00
C492	SOCIAL STUDIES TEACHER	29.50
C493	SOCIAL STUDIES TEACHER	54.38
C503	ACADEMY LEAD TEACHER	1.00
C531	VOCAL MUSIC TEACHER	25.50

Staffing Teacher Positions

Class	Current Job Class Title	FTE
C532	VOCAL MUSIC TEACHER	7.60
C533	VOCAL MUSIC TEACHER	4.00
C54I	INSTR MUSIC TEACHER	13.75
C55I	ORCHESTRA TEACHER	10.00
C572	HEALTH TEACHER	4.75
C591	PHYSICAL ED TEACHER	27.40
C592	PHYSICAL ED TEACHER	13.75
C593	PHYSICAL ED TEACHER	20.12
C611	ELEM COUNSELOR	13.20
C612	MDL SCH COUNSELOR	16.00
C613	HIGH SCH COUNSELOR	21.00
C620	MEDIA SPECIALIST	1.00
C621	MEDIA SPECIALIST	24.60
C622	MEDIA SPECIALIST	6.00
C623	MEDIA SPECIALIST	4.00
C631	READ TEACHER	28.05
C641	EARLY LIT INT (ELI) TCHR	3.50
C652	LEARNING CTR TEACHER	4.00
C66I	ELL TEACHER	14.00
C670	TITLE 1 PRESCHOOL TCHR	10.00
C671	TITLE 1 TEACHER	7.00
C682	HIGH ABILITY LRNER TCH	3.50
C710	MEP TECH FACILITATOR	4.00
C711	TECHNOLOGY LEADER	0.50
C721	INSTR FACILITATOR	6.55
C733	INSTRUCTIONAL DEPT HEAD	1.00
C741	MEP FACILITATOR	5.50
C743	MEP FACILITATOR	7.00
C751	LEADERSHIP/LEARNING FACIL	4.00
C770	MEA PRESIDENT	1.00
C771	ADMINISTRATIVE INTERN	11.50
C79I	INTERVENTIONIST	2.50
C811	SPED PROGRAM FACILITATOR	5.00
C823	SPED ADAPTIVE PE TEACHER	1.00
C831	SPED RESOURCE TEACHER	45.50
C832	SPED RESOURCE TEACHER	31.00
C833	SPED RESOURCE TEACHER	32.00
C851	SPED MH TEACHER	13.00
C852	SPED MH TEACHER	7.00

Staffing Teacher Positions

Class	Current Job Class Title	FTE
C853	SPED MH TEACHER	15.00
C861	SPED BD TEACHER	4.00
C862	SPED BD TEACHER	3.00
C873	SPED VOC SPEC NEEDS TCHR	1.00
C883	SPED MLC TEACHER	2.00
C891	AUDIOLOGIST	1.00
C90I	SPEECH PATHOLOGIST	60.00
C913	SPED VISION IMPAIRED TCHR	3.00
C931	SPED INFANT TEACHER	3.00
C941	SPED PRESCHOOL TEACHER	13.50
C952	SPED HOMEBOUND TCHR MS	1.00
C961	EARLY CHLDHD LITERACY TCH	2.00
C97I	SCHOOL PSYCHOLOGIST	18.00
Overal	II - Total	1701.23

Staffing Nurse Positions

Class	Current Job Class Title	FTE
E100	NURSE DEPT. HEAD	0.40
E20I	SCHOOL NURSE	13.60
Overa	II - Total	14.00

Staffing Professional Technical Salary Positions

Class	Current Job Class Title	FTE
G100	HOME VISITOR	2.00
G105	FAMILY FACILITATOR	2.00
G110	HUMAN RESOURCE RECRUITER	1.00
G210	RESEARCH ASSOCIATE	3.00
G315	GRANT,COM SERVICE, MENTOR	1.00
G333	COMMUNITY COUNSELOR	6.55
G341	SCHOOL SOCIAL WORKER	2.00
G342	SCHOOL SOCIAL WORKER	4.00
G343	SCHOOL SOCIAL WORKER	1.00
G351	OCCUPATIONAL THERAPIST	7.00
G361	PHYSICAL THERAPIST	3.40
G401	SYSTEMS ANALYST	1.00
G421	NETWORK SUPPORT SPEC	4.00
G431	TECHNOLOGY FACILITATOR 1A	7.00
G441	TECHNOLOGY FACILITATOR 2A	2.00
G450	TELECOMMUNICATIONS SPEC	1.00
G460	CADD/GIS ANALYST	1.00
G473	TECHNOLOGY SPECIALIST	3.00
G474	TECHNOLOGY SPECIALIST II	2.00
G500	ACCOUNTING MANAGER	1.00
G520	DISTRICT ACCOUNTANT	2.00
G525	DATABASE PROGRAMMER	1.00
G550	DATABASE WAREHOUSE SPEC	1.00
G600	GENERAL MANAGER SSC	1.00
G610	WAREHOUSE MANAGER	1.00
G620	PURCHASING AGENT	1.00
G630	TRANSPORTATION MANAGER	1.00
G640	PROJECT MANAGER	1.00
G810	FOOD SERVICE SUPERVISOR	1.00
Overa	II - Total	64.95

Staffing Professional Technical Hourly Positions

Class	Current Job Class Title	FTE
J010	EX SEC TO SUPERINTENDENT	1.00
J020	ADMIN AFFAIRS SECRETARY	0.50
J030	COMMUNICATIONS SPECIALIST	1.00
J040	ACTIVITIES/AD-HR SECRETRY	1.00
J110	HR SPECIALIST CERT STAFF	1.00
J120	HR SPEC CLASSIFIED STAFF	2.00
J130	EMPLOYEE RELATIONS SPEC	1.00
J140	HR RECORDS SPECIALIST	1.00
J150	RECEPTIONIST	1.13
J160	HR SPEC SUB TEACHERS	1.00
J180	ASSESS/RESEARCH/EVAL SEC	1.00
J240	SECRETARY DIR PUPIL SERV	1.00
J250	SCHOOL PSYC SECRETARY	1.00
J260	PUPIL SERVICES SECRETARY	3.00
J270	STAFF DEV PROG SECRETARY	0.50
J300	EXEC SEC ASSOC SUPT EDSRV	2.00
J310	SECRETARY TO DIR STAFFDEV	1.00
J320	SECRETARY TO DIR ELED	1.00
J330	TITLE I/ECE SECRETARY	1.00
J340	ED SERV SECONDARY EDU SEC	1.00
J34B	BILINGUAL FAM-SCH LIAISON	2.00
J350	SECRETARY TO DIR SECED	1.00
J360	SECRETARY TO DIR SPED	1.00
J370	SPED SECRETARY I	1.50
J380	SPED PRE-SCH SECRETARY I	1.00
J400	SCTRY-ASST SUPT TECHNOLGY	1.00
J410	TECH HELP DESK SPECIALIST	1.00
J500	EXEC SEC ASSOC SUPT GENAD	1.00
J510	ACCOUNTING SPECIALIST	1.00
J520	PAYROLL SPECIALIST	2.00
J540	ACCTS PAYABLE ASSISTANT	1.00
J560	DUPLICATION CLERK	0.50
J600	SUPPORT SERV SECRETARY II	1.00
J601	CNA/CMA	3.00
J610	MAINTENANCE SECRETARY	3.50
J620	WAREHOUSE/MEDIA SECRETARY	3.00
J630	CATALOGER 12MO	1.00
J713	HS SECURITY GUARD	13.06
J723	HS OUTSIDE SECURITY GUARD	2.75

Staffing Professional Technical Hourly Positions

Class	Current Job Class Title	FTE
J800	FOOD SERV BOOKKEEPER/SEC	2.00
J830	SPED VAN DRIVER	7.25
J840	SPED PRESCHOOL VAN DRIVER	14.56
J850	TRANSPORTATION SECRETARY	1.00
J860	SPED VAN DRIVER/JOB COACH	4.00
J902	SECRETARY 12MO MDL SCH	6.00
J903	SECRETARY 12 MO HIGH SCH	7.00
J913	HS ACCOUNTING CLERK	3.00
J921	ELEM SECRETARY 10 MO	25.00
J922	MDL SCH SECRETARY 10 MO	13.00
J923	HS SECRETARY 10 MO	23.00
J933	HS SWIM SUPERVISOR	0.14
J943	HS ACCOMPANIST	2.10
J982	TAP INTERN	1.50
Overa	II - Total	173.98

Staffing Para Ed

Class	Current Job Class Title	FTE
K111	PRESCH MONTESSORI ED PARA	7.88
K201	INSTRUCTIONAL PARA	23.88
K202	INSTRUCTIONAL PARA	7.67
K203	INSTRUCTIONAL PARA	2.16
K211	ELI ED PARA	3.59
K221	MONTESSORI ED PARA	0.50
K241	RETEACHING PARA	5.41
K242	RETEACHING PARA	1.75
K243	RETEACHING PARA HS	0.88
K261	MEDIA PARA	17.84
K262	MEDIA PARA	5.32
K263	MEDIA PARA	4.00
K301	PRESCHOOL SPED PARA	19.74
K311	RESOURCE SPED PARA-E	28.70
K312	RESOURCE SPED PARA-M	25.22
K313	RESOURCE SPED PARA-H	12.99
K31S	RESOURCE WITH STIPEND	0.80
K341	BD SPED PARA	5.78
K342	BD SPED PARA	7.36
K343	BD SPED PARA	1.62
K351	ACP SPED ELEM PARA	23.68
K352	ACP SPED MS PARA	11.46
K353	ACP SPED HS PARA	15.37
K361	VI SPED ED PARA	0.91
K373	YOUNG ADULT PARA	8.06
K400	TITLE 1 PRESCHOOL PARA	15.96
K411	ELL PARA	0.79
K601	HEALTH ROOM PARA	15.70
K602	HEALTH ROOM PARA	3.11
K603	HEALTH ROOM PARA	1.81
K621	OFFICE PARA	1.18
K622	OFFICE PARA	3.73
K623	OFFICE PARA	2.29
K641	WORKROOM PARA	10.79
K642	WORKROOM PARA	2.19
K643	WORKROOM PARA	0.41
K661	FOOD SERVICE PARA	11.59
Overa	II - Total	312.10

Staffing Custodial / Maintenance Positions

Class	Current Job Class Title	FTE
M010	CUSTODIAN SPEC PROJECTS	1.00
M023	CUSTODIAN I DEPT HEAD HS	2.00
M031	DAY CUSTODIAN II	28.00
M040	CUSTODIAN I	1.00
M042	DAY CUSTODIAN I MS	7.00
M043	DAY CUSTODIAN I HS	9.00
M050	NIGHT CUSTODIAN I	2.00
M051	NIGHT CUSTODIAN I ELEM	31.00
M052	NIGHT CUSTODIAN I MS	20.00
M053	NIGHT CUSTODIAN I HS	33.00
M071	CUSTODIAN 10-MONTH ELEM	1.31
M080	PT CUSTODIAN 12-MO	0.50
M090	PT DELIVERY DRIVER	0.62
M110	DELIVERY DRIVER	3.00
M120	WAREHOUSE ASSISTANT	1.00
M130	GENERAL LABORER	4.00
M310	DISTRICT GROUNDS LEADER	7.00
M320	DIST GROUNDS ASSISTANT	9.00
M420	SMALL ENGINE REPAIR TECH	1.00
M520	MECHANICAL TECHNICIAN	7.00
M530	ELECTRICIAN	1.00
M543	SR HI DAY ENGINEER	3.00
M553	SR HI NIGHT ENGINEER	4.00
M560	PREV MAINTENANCE ENGINEER	2.00
M572	MS DAY ENGINEER/CUST III	5.00
M582	CMS DAY ENGINEER/CUST IV	1.00
M592	CUSTODIAN ENGINEER	1.00
M600	CARPENTER	7.00
M700	PAINTER 1	1.00
M701	PAINTER 2	1.00
Overa	II - Total	194.44

Staffing Food Service Positions

Class	Current Job Class Title	FTE
P090	FS FOUNDATION LEAD	1.00
P101	FS ELM PRODUCTION MANAGER	22.88
P102	FS MS PRODUCTION MANAGER	6.00
P103	FS HS PRODUCTION MANAGER	4.00
P201	FS ELM HELPER	29.19
P202	FS MS HELPER	28.78
P203	FS HS HELPER	36.01
P302	FS MS PRODUCTION LEAD	4.53
P303	FS HS PRODUCTION LEAD I	3.31
P313	FS C-STORE MANAGER	3.00
Overa	II - Total	138.71

Staffing Substitute Dept

Department	Department Title	Employee Number
SUB CUST	SUB CUSTODIAN	48
SUB HRLY	SUBSTITUTES HOURLY	171
SUB TCH	SUBSTITUTE TEACHER	411
Overall - Tot	tal	630

Elementary Regular Classroom Average

School	Sections	Students	15-16	14-15	13-14	12-13	11-12	10-11	09-10	08-09
Abbott	19	414	21.8	21.7	21.8	22.3	21.7	21.6	21.4	21.8
Ackerman	21	455	21.7	21.0	22.0	22.0	22.1	20.1	20.6	22.1
Aldrich	19	462	24.3	24.5	23.4	22.4	23.2	22.3	21.8	21.3
Black Elk	21	464	22.1	20.7	21.1	23.0	22.5	21.9	22.5	22.6
Bryan	18	366	20.3	21.1	20.8	20.4	20.2	20.2	19.9	19.9
Cather	18	421	23.4	22.9	22.8	21.7	20.4	19.9	20.7	23.1
Cody	14	255	18.2	17.3	16.2	14.1	14.9	15.1	15.5	17.3
Cottonwood	15	314	20.9	21.7	20.5	20.4	21.8	19.1	19.6	20.1
Disney	16	296	18.5	18.6	17.5	19.0	19.2	17.3	16.6	19.2
Ezra Millard	20	450	22.5	19.6	19.2	20.2	18.9	19.4	19.2	20.4
Harvey Oaks	12	261	21.8	21.5	22.2	22.4	21.2	20.2	19.6	21.5
Hitchcock	14	266	19.0	18.6	17.1	15.9	17.1	14.8	15.1	15.9
Holling Heights	18	364	20.2	19.6	19.6	19.9	18.1	18.9	20.4	21.2
Montclair	25	556	22.2	21.0	21.0	20.3	20.7	20.9	20.8	21.2
Morton	15	291	19.4	19.4	18.5	18.5		18.1	17.9	19.5
Neihardt	26	596	22.9	22.7	21.8	21.8	22.9	21.6	20.6	21.0
Norris	19	360	18.9	19.5	19.2	18.8	18.3	19.3	18.7	19.0
Reagan	24	531	22.1	22.3	22.4	23.4	21.7	20.6	20.9	20.5
Reeder	29	630	21.7	22.1	20.4	21.2	20.4	20.4	21.0	17.9
Rockwell	16	290	18.1	19.3	17.9	16.5	18.4	18.7	18.6	18.4
Rohwer	27	563	20.9	21.7	20.7	20.8	21.1	19.3		21.4
Sandoz	16	320	20.0	19.9	18.5	19.8	18.1	19.1	19.3	18.2
Upchurch	29	579	20.0	21.3	22.6	22.8	21.6	21.5	20.5	-
Wheeler	26	515	19.8	19.5	20.1	21.5	20.0	19.3	19.8	20.8
Willowdale	18	415	23.1	22.7	21.4	21.1	21.1	21.4	21.9	22.1
Average	495	10434	21.0	20.9	20.6	20.7	20.3	19.9	20.5	21.1

*Based upon MPS Enrollment Counts 10/7/15

Secondary Classroom Averages by Subject Area 2014-2015

2014 2010	<u>North</u>	<u>South</u>	<u>West</u>	<u>AMS</u>	<u>BMS</u>	<u>CMS</u>	<u>KMS</u>	<u>NMS</u>	<u>RMS</u>
Grade 6				24.3	23.9	24.6	26.3	24.7	24.0
Art	19.4	21.8	23.8	27.0	19.7	23.6	25.5	17.4	20.7
Family Consumer Science Industrial Technology	25.4 18.3	22.8 18.1	23.2 21.8	25.0 27.1	22.1 33.2	23.6 23.6	22.4 26.9	19.9 21.5	20.7 29.0
P.E.	26.6	22.9	28.2	43.7	31.9	23.6	39.0	21.5	24.2
Health/KnowYrslf		22.7		24.9	31.2	23.6	26.0	21.5	24.2
Business	23.4	22.3	21.5					20.0	
Vocal Music	49.0	49.8	58.1	27.0	30.7	21.6	29.8	23.8	29.0
Instr. Music	45.4 14.4	55.9 12.2	39.6	31.5 26.2	35.7 18.1	39.8 23.6	21.8 25.8	32.5 23.3	34.0 24.2
Computers Reading	14.4	12.2	20.0	24.1	25.0	23.0	25.6 25.6	23.5 23.5	24.2
Math	23.8	21.6	22.8	23.0	25.4	22.3	24.0	23.6	22.3
English	24.1	21.8	22.3	23.0	25.4	22.3	26.0	23.8	22.3
Science	23.7	20.7	21.9	24.3	25.4	22.3	24.0	23.8	22.3
Social Studies	23.8	22.4	24.7	24.3	25.4	22.3	25.3	23.8	22.3
World Language Montessori Mini Magnet	22.3	22.7	20.7	20.5	26.4	22.3 25.0	18.3	19.7	30.0
Middle Level Average Class Size:		25.1	Middle	Level Ro	dg,Math,	Eng,Sci,	SS Clas	s Averaç	23.7
High School Average Class Size:		26.1	-		_	Sci, SS (_	22.8
Total Secondary Average Class S 2015-2016	ize:	25.4	Total S	ec Rdg,l	Math, Er	ng,Sci,SS	, Class <i>i</i>	Average	23.5
2015-2010	<u>North</u>	<u>South</u>	<u>West</u>	<u>AMS</u>	BMS	<u>CMS</u>	<u>KMS</u>	<u>NMS</u>	<u>RMS</u>
Grade 6	<u>North</u>	South	West	AMS 24.3	BMS 23.1	CMS 27.5	KMS 25.7	NMS 25.6	RMS 24.4
	North 17.6	South 23.4	<u>West</u> 25.4	-	<u> </u>		· <u></u>	' <u></u>	
Grade 6 Art Family Consumer Science	17.6 23.2	23.4 22.3	25.4 24.0	24.3 27.0 25.0	23.1 19.5 21.1	27.5 27.0 26.0	25.7 24.5 22.1	25.6 15.4 22.3	24.4 20.8 20.8
Grade 6 Art Family Consumer Science Industrial Technology	17.6 23.2 18.5	23.4 22.3 18.5	25.4 24.0 22.6	24.3 27.0 25.0 27.1	23.1 19.5 21.1 30.5	27.5 27.0 26.0 25.7	25.7 24.5 22.1 27.4	25.6 15.4 22.3 21.6	24.4 20.8 20.8 24.3
Grade 6 Art Family Consumer Science Industrial Technology P.E.	17.6 23.2	23.4 22.3 18.5 25.7	25.4 24.0	24.3 27.0 25.0 27.1 43.7	23.1 19.5 21.1 30.5 30.4	27.5 27.0 26.0 25.7 38.4	25.7 24.5 22.1 27.4 39.8	25.6 15.4 22.3 21.6 28.6	24.4 20.8 20.8 24.3 24.3
Grade 6 Art Family Consumer Science Industrial Technology P.E. Health/KnowYrsIf	17.6 23.2 18.5 25.2	23.4 22.3 18.5 25.7 23.5	25.4 24.0 22.6 29.5	24.3 27.0 25.0 27.1	23.1 19.5 21.1 30.5	27.5 27.0 26.0 25.7	25.7 24.5 22.1 27.4	25.6 15.4 22.3 21.6 28.6 22.1	24.4 20.8 20.8 24.3
Grade 6 Art Family Consumer Science Industrial Technology P.E. Health/KnowYrsIf Business	17.6 23.2 18.5 25.2 23.0	23.4 22.3 18.5 25.7 23.5 20.6	25.4 24.0 22.6 29.5 24.5	24.3 27.0 25.0 27.1 43.7 24.9	23.1 19.5 21.1 30.5 30.4 30.4	27.5 27.0 26.0 25.7 38.4 25.6	25.7 24.5 22.1 27.4 39.8 26.5	25.6 15.4 22.3 21.6 28.6 22.1 23.7	24.4 20.8 20.8 24.3 24.3 24.3
Grade 6 Art Family Consumer Science Industrial Technology P.E. Health/KnowYrsIf	17.6 23.2 18.5 25.2	23.4 22.3 18.5 25.7 23.5	25.4 24.0 22.6 29.5	24.3 27.0 25.0 27.1 43.7	23.1 19.5 21.1 30.5 30.4	27.5 27.0 26.0 25.7 38.4	25.7 24.5 22.1 27.4 39.8	25.6 15.4 22.3 21.6 28.6 22.1	24.4 20.8 20.8 24.3 24.3
Grade 6 Art Family Consumer Science Industrial Technology P.E. Health/KnowYrslf Business Vocal Music	17.6 23.2 18.5 25.2 23.0 45.7	23.4 22.3 18.5 25.7 23.5 20.6 47.0	25.4 24.0 22.6 29.5 24.5 59.7	24.3 27.0 25.0 27.1 43.7 24.9 27.0 31.5 26.2	23.1 19.5 21.1 30.5 30.4 30.4 35.1 32.8 17.7	27.5 27.0 26.0 25.7 38.4 25.6 31.0 44.2 26.1	25.7 24.5 22.1 27.4 39.8 26.5 32.9 27.6 25.7	25.6 15.4 22.3 21.6 28.6 22.1 23.7 36.0 33.7 22.2	24.4 20.8 20.8 24.3 24.3 24.3 30.2 34.8 24.3
Grade 6 Art Family Consumer Science Industrial Technology P.E. Health/KnowYrsIf Business Vocal Music Instr. Music Computers Reading	17.6 23.2 18.5 25.2 23.0 45.7 68.0 20.1	23.4 22.3 18.5 25.7 23.5 20.6 47.0 48.8 20.6	25.4 24.0 22.6 29.5 24.5 59.7 39.0	24.3 27.0 25.0 27.1 43.7 24.9 27.0 31.5 26.2 24.1	23.1 19.5 21.1 30.5 30.4 35.1 32.8 17.7 23.9	27.5 27.0 26.0 25.7 38.4 25.6 31.0 44.2 26.1 26.6	25.7 24.5 22.1 27.4 39.8 26.5 32.9 27.6 25.7 24.8	25.6 15.4 22.3 21.6 28.6 22.1 23.7 36.0 33.7 22.2 25.3	24.4 20.8 20.8 24.3 24.3 24.3 30.2 34.8 24.3 24.5
Grade 6 Art Family Consumer Science Industrial Technology P.E. Health/KnowYrsIf Business Vocal Music Instr. Music Computers Reading Math	17.6 23.2 18.5 25.2 23.0 45.7 68.0 20.1	23.4 22.3 18.5 25.7 23.5 20.6 47.0 48.8 20.6	25.4 24.0 22.6 29.5 24.5 59.7 39.0	24.3 27.0 25.0 27.1 43.7 24.9 27.0 31.5 26.2 24.1 23.0	23.1 19.5 21.1 30.5 30.4 30.4 35.1 32.8 17.7 23.9 25.0	27.5 27.0 26.0 25.7 38.4 25.6 31.0 44.2 26.1 26.6 26.2	25.7 24.5 22.1 27.4 39.8 26.5 32.9 27.6 25.7 24.8 24.5	25.6 15.4 22.3 21.6 28.6 22.1 23.7 36.0 33.7 22.2 25.3 24.4	24.4 20.8 20.8 24.3 24.3 24.3 30.2 34.8 24.3 24.5 22.4
Grade 6 Art Family Consumer Science Industrial Technology P.E. Health/KnowYrsIf Business Vocal Music Instr. Music Computers Reading Math English	17.6 23.2 18.5 25.2 23.0 45.7 68.0 20.1 22.1 24.3	23.4 22.3 18.5 25.7 23.5 20.6 47.0 48.8 20.6 21.2 23.5	25.4 24.0 22.6 29.5 24.5 59.7 39.0 23.3 22.7	24.3 27.0 25.0 27.1 43.7 24.9 27.0 31.5 26.2 24.1 23.0 23.0	23.1 19.5 21.1 30.5 30.4 30.4 35.1 32.8 17.7 23.9 25.0 25.0	27.5 27.0 26.0 25.7 38.4 25.6 31.0 44.2 26.1 26.6 26.2 26.2	25.7 24.5 22.1 27.4 39.8 26.5 32.9 27.6 25.7 24.8 24.5 25.8	25.6 15.4 22.3 21.6 28.6 22.1 23.7 36.0 33.7 22.2 25.3 24.4 24.5	24.4 20.8 20.8 24.3 24.3 24.3 30.2 34.8 24.3 24.5 22.4
Grade 6 Art Family Consumer Science Industrial Technology P.E. Health/KnowYrsIf Business Vocal Music Instr. Music Computers Reading Math English Science	17.6 23.2 18.5 25.2 23.0 45.7 68.0 20.1 22.1 24.3 22.2	23.4 22.3 18.5 25.7 23.5 20.6 47.0 48.8 20.6 21.2 23.5 20.2	25.4 24.0 22.6 29.5 24.5 59.7 39.0 23.3 22.7 23.0	24.3 27.0 25.0 27.1 43.7 24.9 27.0 31.5 26.2 24.1 23.0 23.0 24.3	23.1 19.5 21.1 30.5 30.4 30.4 35.1 32.8 17.7 23.9 25.0 25.0 25.0	27.5 27.0 26.0 25.7 38.4 25.6 31.0 44.2 26.1 26.6 26.2 26.2 26.2	25.7 24.5 22.1 27.4 39.8 26.5 32.9 27.6 25.7 24.8 24.5 25.8 24.5	25.6 15.4 22.3 21.6 28.6 22.1 23.7 36.0 33.7 22.2 25.3 24.4 24.5 24.4	24.4 20.8 20.8 24.3 24.3 24.3 30.2 34.8 24.3 24.5 22.4 22.4
Grade 6 Art Family Consumer Science Industrial Technology P.E. Health/KnowYrslf Business Vocal Music Instr. Music Computers Reading Math English Science Social Studies	17.6 23.2 18.5 25.2 23.0 45.7 68.0 20.1 22.1 24.3 22.2 24.5	23.4 22.3 18.5 25.7 23.5 20.6 47.0 48.8 20.6 21.2 23.5 20.2 23.0	25.4 24.0 22.6 29.5 24.5 59.7 39.0 23.3 22.7 23.0 24.8	24.3 27.0 25.0 27.1 43.7 24.9 27.0 31.5 26.2 24.1 23.0 23.0 24.3 24.3	23.1 19.5 21.1 30.5 30.4 30.4 35.1 32.8 17.7 23.9 25.0 25.0 25.0 25.0	27.5 27.0 26.0 25.7 38.4 25.6 31.0 44.2 26.1 26.6 26.2 26.2 26.2 26.2	25.7 24.5 22.1 27.4 39.8 26.5 32.9 27.6 25.7 24.8 24.5 25.8 24.5 25.8	25.6 15.4 22.3 21.6 28.6 22.1 23.7 36.0 33.7 22.2 25.3 24.4 24.5 24.4 24.5	24.4 20.8 20.8 24.3 24.3 24.3 30.2 34.8 24.3 24.5 22.4 22.4 22.4
Grade 6 Art Family Consumer Science Industrial Technology P.E. Health/KnowYrslf Business Vocal Music Instr. Music Computers Reading Math English Science Social Studies World Language Montessori Mini Magnet	17.6 23.2 18.5 25.2 23.0 45.7 68.0 20.1 22.1 24.3 22.2	23.4 22.3 18.5 25.7 23.5 20.6 47.0 48.8 20.6 21.2 23.5 20.2 23.0 23.0	25.4 24.0 22.6 29.5 24.5 59.7 39.0 23.3 22.7 23.0 24.8 21.4	24.3 27.0 25.0 27.1 43.7 24.9 27.0 31.5 26.2 24.1 23.0 24.3 24.3 20.5	23.1 19.5 21.1 30.5 30.4 35.1 32.8 17.7 23.9 25.0 25.0 25.0 34.4	27.5 27.0 26.0 25.7 38.4 25.6 31.0 44.2 26.1 26.6 26.2 26.2 26.2 27.6 22.7	25.7 24.5 22.1 27.4 39.8 26.5 32.9 27.6 25.7 24.8 24.5 25.8 24.5 25.8 21.6	25.6 15.4 22.3 21.6 28.6 22.1 23.7 36.0 33.7 22.2 25.3 24.4 24.5 24.5 16.9	24.4 20.8 20.8 24.3 24.3 24.3 30.2 34.8 24.5 22.4 22.4 22.4 14.6
Grade 6 Art Family Consumer Science Industrial Technology P.E. Health/KnowYrslf Business Vocal Music Instr. Music Computers Reading Math English Science Social Studies World Language Montessori Mini Magnet Middle Level Average Class Size:	17.6 23.2 18.5 25.2 23.0 45.7 68.0 20.1 22.1 24.3 22.2 24.5 21.6	23.4 22.3 18.5 25.7 23.5 20.6 47.0 48.8 20.6 21.2 23.5 20.2 23.0 23.0	25.4 24.0 22.6 29.5 24.5 59.7 39.0 23.3 22.7 23.0 24.8 21.4	24.3 27.0 25.0 27.1 43.7 24.9 27.0 31.5 26.2 24.1 23.0 23.0 24.3 24.3 20.5	23.1 19.5 21.1 30.5 30.4 35.1 32.8 17.7 23.9 25.0 25.0 25.0 25.0 34.4 Eng,Sci,	27.5 27.0 26.0 25.7 38.4 25.6 31.0 44.2 26.1 26.6 26.2 26.2 26.2 27.6 22.7	25.7 24.5 22.1 27.4 39.8 26.5 32.9 27.6 25.7 24.8 24.5 25.8 24.5 25.8 21.6	25.6 15.4 22.3 21.6 28.6 22.1 23.7 36.0 33.7 22.2 25.3 24.4 24.5 24.5 16.9	24.4 20.8 20.8 24.3 24.3 24.3 30.2 34.8 24.5 22.4 22.4 22.4 22.4 22.4 24.6
Grade 6 Art Family Consumer Science Industrial Technology P.E. Health/KnowYrslf Business Vocal Music Instr. Music Computers Reading Math English Science Social Studies World Language Montessori Mini Magnet	17.6 23.2 18.5 25.2 23.0 45.7 68.0 20.1 22.1 24.3 22.2 24.5 21.6	23.4 22.3 18.5 25.7 23.5 20.6 47.0 48.8 20.6 21.2 23.5 20.2 23.0 23.0 Middle High So	25.4 24.0 22.6 29.5 24.5 59.7 39.0 23.3 22.7 23.0 24.8 21.4 Level Rochool Ma	24.3 27.0 25.0 27.1 43.7 24.9 27.0 31.5 26.2 24.1 23.0 23.0 24.3 20.5	23.1 19.5 21.1 30.5 30.4 35.1 32.8 17.7 23.9 25.0 25.0 25.0 25.0 34.4 Eng,Sci,	27.5 27.0 26.0 25.7 38.4 25.6 31.0 44.2 26.1 26.6 26.2 26.2 26.2 27.6 22.7	25.7 24.5 22.1 27.4 39.8 26.5 32.9 27.6 25.7 24.8 24.5 25.8 24.5 25.8 21.6 s Average	25.6 15.4 22.3 21.6 28.6 22.1 23.7 36.0 33.7 22.2 25.3 24.4 24.5 24.5 16.9	24.4 20.8 20.8 24.3 24.3 24.3 30.2 34.8 24.5 22.4 22.4 22.4 14.6

Current Staff Demographics



<u>Certificated Staff Educ Work Experience by School</u>

Base Location Building Name	Years in Total	Years in District
ABBOTT ELEMENTARY	19.1	16.1
ACKERMAN ELEMENTARY	18.4	15.0
ALDRICH ELEMENTARY	15.2	11.2
ANDERSEN MIDDLE SCHOOL	15.2	11.9
BEADLE MIDDLE SCHOOL	13.5	9.8
BLACK ELK ELEMENTARY	16.5	12.9
BRYAN ELEMENTARY	14.8	12.0
CATHER ELEMENTARY	13.9	10.2
CENTRAL MIDDLE SCHOOL	13.1	10.3
CODY ELEMENTARY	15.2	12.4
COTTONWOOD ELEMENTARY	14.7	10.5
DISNEY ELEMENTARY	12.4	9.3
DON STROH ADMIN CTR	22.7	17.1
EZRA MILLARD ELEMENTARY	14.1	11.6
HARVEY OAKS ELEMENTARY	14.9	10.2
HITCHCOCK ELEMENTARY	7.9	5.5
HOLLINGHEIGHTS ELEMENTARY	12.2	9.7
HORIZON HIGH SCHOOL	14.1	8.7
KIEWIT MIDDLE SCHOOL	15.7	12.1
MISC LOCATION	17.0	17.0
MONTCLAIR ELEMENTARY	14.0	10.7
MORTON ELEMENTARY	14.6	12.7
NEIHARDT ELEMENTARY	10.1	8.0
NORRIS ELEMENTARY	14.9	9.5
NORTH HIGH SCHOOL	14.5	11.1
NORTH MIDDLE SCHOOL	13.2	9.5
REAGAN ELEMENTARY	9.9	8.5
REEDER ELEMENTARY	12.1	9.0
ROCKWELL ELEMENTARY	15.7	11.9
ROHWER ELEMENTARY	15.8	13.5
RON WITT SSC	17.5	13.0
RUSSELL MIDDLE SCHOOL	13.1	10.2
SANDOZ ELEMENTARY	15.2	11.9
SOUTH HIGH SCHOOL	14.1	10.8
SUPPORT SERVICES CTR	30.6	25.6
UPCHURCH ELEMENTARY	11.3	7.8
WEST HIGH SCHOOL	14.9	11.1
WHEELER ELEMENTARY	16.6	13.4
WILLOWDALE ELEMENTARY	17.7	14.1

Certificated Staff Highest Degree by building

Base Location Building Name	RN	BSN	ВА	MA	DR	EDS	Total
ABBOTT ELEMENTARY	0	0	10	17	1	0	28
ACKERMAN ELEMENTARY	1	0	11	20	0	0	32
ALDRICH ELEMENTARY	0	0	8	19	1	0	28
ANDERSEN MIDDLE SCHOOL	0	1	21	46	1	1	70
BEADLE MIDDLE SCHOOL	0	0	25	56	1	0	82
BLACK ELK ELEMENTARY	0	0	6	25	0	0	31
BRYAN ELEMENTARY	0	1	8	22	1	0	32
CATHER ELEMENTARY	0	0	11	17	1	0	29
CENTRAL MIDDLE SCHOOL	0	1	23	44	1	0	69
CODY ELEMENTARY	0	0	15	17	0	0	32
COTTONWOOD ELEMENTARY	0	0	10	13	0	0	23
DISNEY ELEMENTARY	0	0	14	17	0	0	31
DON STROH ADMIN CTR	0	0	1	10	10	2	23
EZRA MILLARD ELEMENTARY	0	0	6	22	0	1	29
HARVEY OAKS ELEMENTARY	0	0	4	24	1	0	29
HITCHCOCK ELEMENTARY	0	0	11	14	1	0	26
HOLLINGHEIGHTS ELEMENTARY	0	0	14	20	0	0	34
HORIZON HIGH SCHOOL	0	0	8	16	0	0	25
KIEWIT MIDDLE SCHOOL	0	0	18	48	1	0	68
MISC LOCATION	0	0	0	1	0	0	1
MONTCLAIR ELEMENTARY	1	0	15	25	0	0	41
MORTON ELEMENTARY	0	0	12	12	0	1	25
NEIHARDT ELEMENTARY	0	0	14	27	0	1	43
NORRIS ELEMENTARY	0	0	10	22	0	0	32
NORTH HIGH SCHOOL	1	0	60	101	2	0	164
NORTH MIDDLE SCHOOL	0	1	16	45	2	0	64
REAGAN ELEMENTARY	0	0	13	23	0	0	36
REEDER ELEMENTARY	0	0	17	23	0	0	40
ROCKWELL ELEMENTARY	0	0	8	32	0	0	40
ROHWER ELEMENTARY	1	0	10	29	0	0	40
RON WITT SSC	0	0	1	24	3	20	48
RUSSELL MIDDLE SCHOOL	1	1	19	45	0	0	66
SANDOZ ELEMENTARY	0	0	12	25	1	0	38
SOUTH HIGH SCHOOL	1	0	32	111	3	2	149
SUPPORT SERVICES CTR	0	0	0	1	0	0	1
UPCHURCH ELEMENTARY	0	0	10	29	1	0	40
WEST HIGH SCHOOL	0	0	36	123	3	0	162
WHEELER ELEMENTARY	0	0	13	29	0	0	42
WILLOWDALE ELEMENTARY	0	0	6	25	0	1	32
YOUNG ADULT PRG-CMS ANNEX	1	0	1	6	0	0	8
Overall - Total	7	5	529	1225	35	29	1833

Certificated Staff Gender by school

Certificated Staff Gene	uci by	3011	<u> </u>
Base Location Building Name	Total	F	M
ABBOTT ELEMENTARY	28	23	5
ACKERMAN ELEMENTARY	32	25	7
ALDRICH ELEMENTARY	28	25	3
ANDERSEN MIDDLE SCHOOL	70	48	22
BEADLE MIDDLE SCHOOL	82	68	14
BLACK ELK ELEMENTARY	31	29	2
BRYAN ELEMENTARY	32	28	4
CATHER ELEMENTARY	29	26	3
CENTRAL MIDDLE SCHOOL	69	51	18
CODY ELEMENTARY	32	30	2
COTTONWOOD ELEMENTARY	23	22	1
DISNEY ELEMENTARY	31	28	3
DON STROH ADMIN CTR	23	10	13
EZRA MILLARD ELEMENTARY	29	27	2
HARVEY OAKS ELEMENTARY	29	28	1
HITCHCOCK ELEMENTARY	26	23	3
HOLLINGHEIGHTS ELEMENTARY	34	30	4
HORIZON HIGH SCHOOL	25	15	10
KIEWIT MIDDLE SCHOOL	68	44	24
MISC LOCATION	1	0	1
MONTCLAIR ELEMENTARY	41	40	1
MORTON ELEMENTARY	25	25	0
NEIHARDT ELEMENTARY	43	35	8
NORRIS ELEMENTARY	32	29	3
NORTH HIGH SCHOOL	164	85	79
NORTH MIDDLE SCHOOL	64	44	20
REAGAN ELEMENTARY	36	29	7
REEDER ELEMENTARY	40	35	5
ROCKWELL ELEMENTARY	40	39	1
ROHWER ELEMENTARY	40	36	4
RON WITT SSC	48	40	8
RUSSELL MIDDLE SCHOOL	66	50	16
SANDOZ ELEMENTARY	38	36	2
SOUTH HIGH SCHOOL	149	90	59
SUPPORT SERVICES CTR	1	1	0
UPCHURCH ELEMENTARY	40	36	4
WEST HIGH SCHOOL	162	100	62
WHEELER ELEMENTARY	42	39	3
WILLOWDALE ELEMENTARY	32	31	1
YOUNG ADULT PRG-CMS ANNEX	8	6	2

YOUNG ADULT PRG-CMS ANNEX 8 6 2 **Overall - Total** 1833 1406 427

All Staff Gender by school

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Base Location Building Name	Total	F	М
ABBOTT ELEMENTARY	39	33	6
ACKERMAN ELEMENTARY	44	33	11
ALDRICH ELEMENTARY	40	36	4
ANDERSEN MIDDLE SCHOOL	102	75	27
BEADLE MIDDLE SCHOOL	115	97	18
BLACK ELK ELEMENTARY	45	40	5
BRYAN ELEMENTARY	48	42	6
CATHER ELEMENTARY	40	34	6
CENTRAL MIDDLE SCHOOL	105	81	24
CODY ELEMENTARY	63	59	4
COTTONWOOD ELEMENTARY	37	33	4
DISNEY ELEMENTARY	46	41	5
DON STROH ADMIN CTR	68	48	20
EZRA MILLARD ELEMENTARY	40	36	4
HARVEY OAKS ELEMENTARY	45	42	3
HITCHCOCK ELEMENTARY	48	43	5
HOLLINGHEIGHTS ELEMENTARY	53	45	8
HORIZON HIGH SCHOOL	37	22	15
KIEWIT MIDDLE SCHOOL	100	68	32
MISC LOCATION	2	1	1
MONTCLAIR ELEMENTARY	68	65	3
MORTON ELEMENTARY	37	36	1
NEIHARDT ELEMENTARY	63	53	10
NORRIS ELEMENTARY	47	41	6
NORTH HIGH SCHOOL	234	135	99
NORTH MIDDLE SCHOOL	97	70	27
REAGAN ELEMENTARY	53	44	9
REEDER ELEMENTARY	56	49	7
ROCKWELL ELEMENTARY	77	73	4
ROHWER ELEMENTARY	60	54	6
RON WITT SSC	78	55	23
RUSSELL MIDDLE SCHOOL	95	73	22
SANDOZ ELEMENTARY	59	55	4
SOUTH HIGH SCHOOL	221	142	79
SUPPORT SERVICES CTR	59	15	44
TRANSPORTATION CMS-A	30	11	19
UPCHURCH ELEMENTARY	55	48	7
WEST HIGH SCHOOL	234	152	82
WHEELER ELEMENTARY	69	64	5
WILLOWDALE ELEMENTARY	44	40	4
YOUNG ADULT PRG-CMS ANNEX	21	17	4
Overall - Total	2875	2202	673

Certificated Staff Ethnicity by school

Gertificated Staff		<u>, ~</u>			1001	
Base Location Building Name	Total	Α	В	Н	W	I
ABBOTT ELEMENTARY	28	0	0	0	28	0
ACKERMAN ELEMENTARY	32	0	0	0	32	0
ALDRICH ELEMENTARY	28	1	0	0	27	0
ANDERSEN MIDDLE SCHOOL	70	1	0	0	68	1
BEADLE MIDDLE SCHOOL	82	0	1	1	80	0
BLACK ELK ELEMENTARY	31	0	0	1	30	0
BRYAN ELEMENTARY	32	0	0	0	32	0
CATHER ELEMENTARY	29	0	0	0	29	0
CENTRAL MIDDLE SCHOOL	69	1	1	1	66	0
CODY ELEMENTARY	32	0	0	0	32	0
COTTONWOOD ELEMENTARY	23	0	0	0	23	0
DISNEY ELEMENTARY	31	0	0	0	31	0
DON STROH ADMIN CTR	23	0	0	0	23	0
EZRA MILLARD ELEMENTARY	29	0	0	0	29	0
HARVEY OAKS ELEMENTARY	29	0	0	0	29	0
HITCHCOCK ELEMENTARY	26	0	0	0	26	0
HOLLINGHEIGHTS ELEMENTARY	34	0	0	0	34	0
HORIZON HIGH SCHOOL	25	0	0	1	24	0
KIEWIT MIDDLE SCHOOL	68	2	0	1	65	0
MISC LOCATION	1	0	0	0	1	0
MONTCLAIR ELEMENTARY	41	0	0	0	41	0
MORTON ELEMENTARY	25	0	0	1	24	0
NEIHARDT ELEMENTARY	43	1	0	0	42	0
NORRIS ELEMENTARY	32	0	0	0	32	0
NORTH HIGH SCHOOL	164	0	0	1	162	0
NORTH MIDDLE SCHOOL	64	1	0	1	62	0
REAGAN ELEMENTARY	36	0	0	1	35	0
REEDER ELEMENTARY	40	0	0	1	39	0
ROCKWELL ELEMENTARY	40	0	1	1	38	0
ROHWER ELEMENTARY	40	0	1	1	38	0
RON WITT SSC	48	0	0	1	47	0
RUSSELL MIDDLE SCHOOL	66	0	0	0	66	0
SANDOZ ELEMENTARY	38	0	0	1	37	0
SOUTH HIGH SCHOOL	149	0	0	3	146	0
SUPPORT SERVICES CTR	1	0	0	0	1	0
UPCHURCH ELEMENTARY	40	0	0	0	40	0
WEST HIGH SCHOOL	162	0	1	3	158	0
WHEELER ELEMENTARY	42	0	0	0	42	0
WILLOWDALE ELEMENTARY	32	0	0	0	32	0
YOUNG ADULT PRG-CMS ANNEX	8	0	0	0	8	0
Overall - Total	1833	7	5	20	1799	1

Staff Ethnicity by School All Employees

Stair Ethinicity by Sch	<u> </u>	<u> </u>			yees	_
Base Location Building Name	Total	Α	В	Н	W	1
ABBOTT ELEMENTARY	39	0	0	0	39	0
ACKERMAN ELEMENTARY	44	0	0	0	44	0
ALDRICH ELEMENTARY	40	1	0	1	38	0
ANDERSEN MIDDLE SCHOOL	102	1	0	2	97	1
BEADLE MIDDLE SCHOOL	115	1	1	1	112	0
BLACK ELK ELEMENTARY	45	0	0	2	43	0
BRYAN ELEMENTARY	48	0	0	0	48	0
CATHER ELEMENTARY	40	0	1	0	39	0
CENTRAL MIDDLE SCHOOL	105	1	1	3	100	0
CODY ELEMENTARY	63	0	0	3	60	0
COTTONWOOD ELEMENTARY	37	0	0	0	37	0
DISNEY ELEMENTARY	46	0	0	0	46	0
DON STROH ADMIN CTR	68	0	1	0	67	0
EZRA MILLARD ELEMENTARY	40	0	0	0	40	0
HARVEY OAKS ELEMENTARY	45	0	0	0	45	0
HITCHCOCK ELEMENTARY	48	0	0	1	47	0
HOLLINGHEIGHTS ELEMENTARY	53	0	0	1	52	0
HORIZON HIGH SCHOOL	37	0	1	3	33	0
KIEWIT MIDDLE SCHOOL	100	2	1	1	96	0
MISC LOCATION	2	0	0	0	2	0
MONTCLAIR ELEMENTARY	68	4	0	1	63	0
MORTON ELEMENTARY	37	0	0	1	36	0
NEIHARDT ELEMENTARY	63	1	0	0	62	0
NORRIS ELEMENTARY	47	0	0	1	46	0
NORTH HIGH SCHOOL	234	1	3	3	225	1
NORTH MIDDLE SCHOOL	97	1	0	2	94	0
REAGAN ELEMENTARY	53	0	1	1	51	0
REEDER ELEMENTARY	56	1	0	1	54	0
ROCKWELL ELEMENTARY	77	1	2	1	73	0
ROHWER ELEMENTARY	60	0	2	1	57	0
RON WITT SSC	78	1	1	1	75	0
RUSSELL MIDDLE SCHOOL	95	0	0	2	93	0
SANDOZ ELEMENTARY	59	0	0	2	57	0
SOUTH HIGH SCHOOL	221	1	2	9	209	0
SUPPORT SERVICES CTR	59	0	1	0	58	0
TRANSPORTATION CMS-A	30	0	0	0	30	0
UPCHURCH ELEMENTARY	55	0	0	0	55	0
WEST HIGH SCHOOL	234	4	3	10	217	0
WHEELER ELEMENTARY	69	0	0	2	67	0
WILLOWDALE ELEMENTARY	44	0	0	0	44	0
YOUNG ADULT PRG-CMS ANNEX	21	0	1	0	20	0
Overall - Total	2875	21	22	56	2772	2

Certificated Staff Age by school

Base Location Building Name	Age
ABBOTT ELEMENTARY	48
ACKERMAN ELEMENTARY	44
ALDRICH ELEMENTARY	40
ANDERSEN MIDDLE SCHOOL	41
BEADLE MIDDLE SCHOOL	40
BLACK ELK ELEMENTARY	40
BRYAN ELEMENTARY	41
CATHER ELEMENTARY	45
CENTRAL MIDDLE SCHOOL	40
CODY ELEMENTARY	44
COTTONWOOD ELEMENTARY	41
DISNEY ELEMENTARY	38
DON STROH ADMIN CTR	50
EZRA MILLARD ELEMENTARY	38
HARVEY OAKS ELEMENTARY	41
HITCHCOCK ELEMENTARY	32
HOLLINGHEIGHTS ELEMENTARY	39
HORIZON HIGH SCHOOL	46
KIEWIT MIDDLE SCHOOL	43
MISC LOCATION	41
MONTCLAIR ELEMENTARY	42
MORTON ELEMENTARY	39
NEIHARDT ELEMENTARY	37
NORRIS ELEMENTARY	42
NORTH HIGH SCHOOL	41
NORTH MIDDLE SCHOOL	39
REAGAN ELEMENTARY	35
REEDER ELEMENTARY	38
ROCKWELL ELEMENTARY	43
ROHWER ELEMENTARY	42
RON WITT SSC	43
RUSSELL MIDDLE SCHOOL	40
SANDOZ ELEMENTARY	42
SOUTH HIGH SCHOOL	41
SUPPORT SERVICES CTR	62
UPCHURCH ELEMENTARY	37
WEST HIGH SCHOOL	42
WHEELER ELEMENTARY	41
WILLOWDALE ELEMENTARY	43
YOUNG ADULT PRG-CMS ANNEX	39

42

Overall - Average

Staff Turnover

Staff Terminations September 1, 2014 through August 31, 2015

Reason	Admin	Tchr	Nurse	PTS	PTH	Para	Cust	Fd Srv
Continuing Education		1			1	4	1	
Contract Expired		1						
Deceased		2						2
Employment Outside Education		6		1	4	20	2	4
Personal / Family Reasons		6			1	5		
Personal Health		1			1	6	1	2
Job Dissatisfaction						2		1
Long-term Disability		3						
Miscellaneous Resignation		2		1	3	9		2
Other Education Job		1 38		1	2	7		
Performance							3	
Relocation		17			1	7	1	3
Resigned		2						
Retired		44		1	8	12	9	4
Sabbatical Leave								
Unpaid Leave of Absence								
Reduction in Force						1		
Total		1 123		4	21	73	17	18
Total as a % of 14-15 Staff	1.00%	7.00%	0%	6%	4.9%	17%	8.60%	10.00%
History								
2014-2015	1.00%	7.00%	0%	6%	4.9%	17%	8.26%	10.00%
2013-2014	5.70%	6.0%	0%	10.2%	4.9%	15.1%	11.9%	13.3%
2012-2013	8%	8.8%	6.7%	2.0%	11.0%	18.3%	7.3%	25.9%
2011-2012	13.8%	7.6%	0.0%	4.1%	9.3%	12.3%	8.8%	9.6%
2010-2011	8.0%	6.8%	6.7%	6.1%	7.7%	9.1%	8.8%	6.6%
2009-2010	3.4%	6.7%	6.7%	4.1%	7.7%	11.9%	5.7%	7.8%
2008-09	6.9%	7.3%	6.7%	10.2%	3.8%	10.9%	9.3%	5.4%
2007-08	4.6%	8.4%	6.7%	8.2%	14.8%	19.0%	9.8%	12.0%
2006-07	10.6%	9.7%	6.8%	17.8%	12.0%	27.7%	10.6%	18.1%

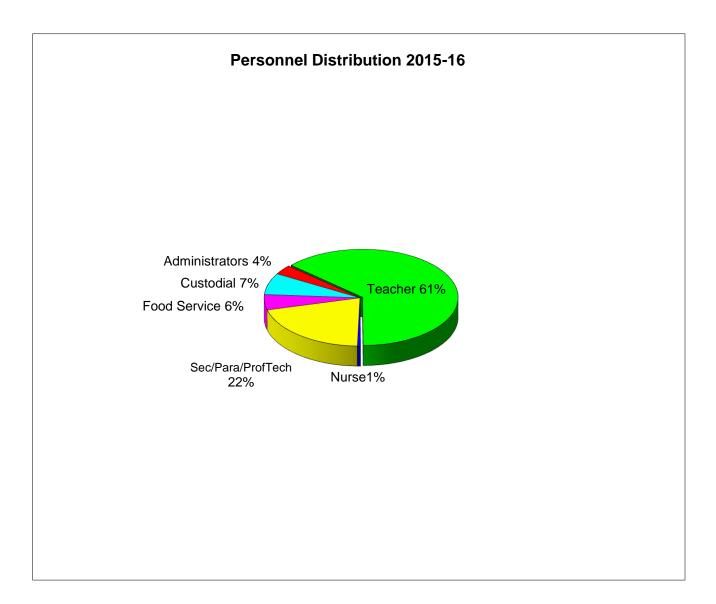
PERSONNEL REPORT

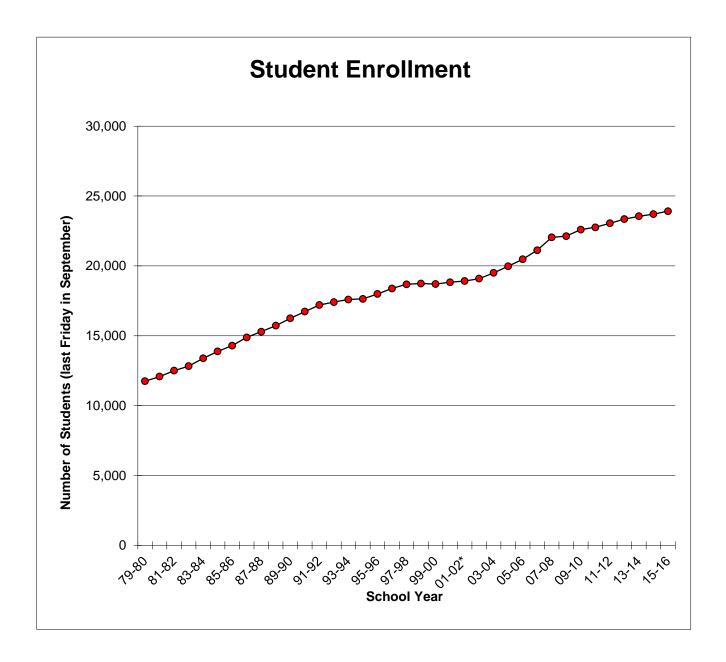
Personnel Distribution History

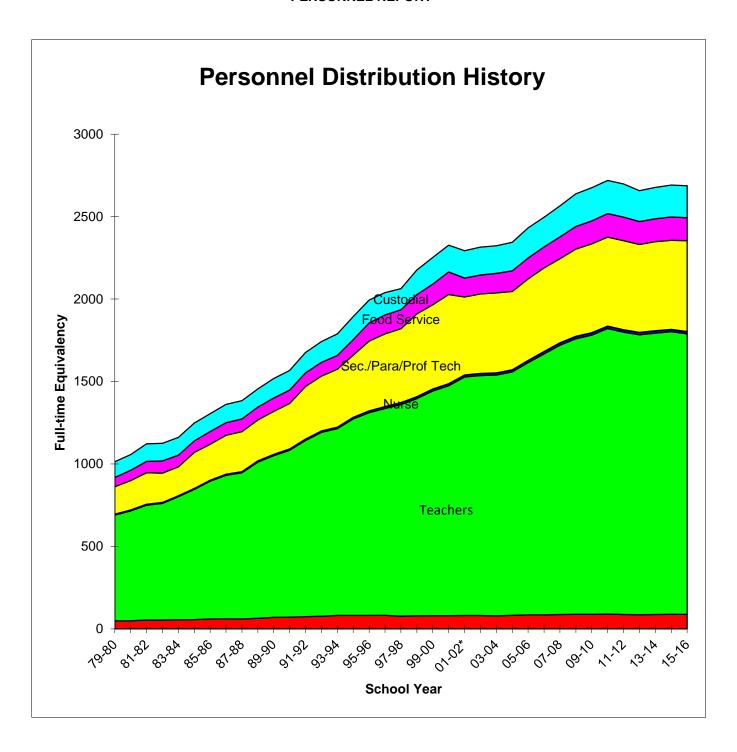
									Ratios			
School				F.T.E.			Total	Total	Stu/	Stu/	Staff/	Tch/
<u>Year</u>	<u>Adm</u>	<u>Tch</u>	Nur	PT/EP	<u>FS</u>	CM	<u>Staff</u>	Students	<u>Staff</u>	<u>Tea</u>	<u>Adm</u>	<u>Adm</u>
79-80	49	641	6	167	56		1,014	11,748	11.6	18.3	19.9	13.2
80-81	49	666	6	178	63		1,057	12,077	11.4	18.1	20.6	13.6
81-82	54	696	6	191	69		1,122	12,500	11.1	18.0	20.0	13.0
82-83	54	707	6	178	74	107	1,125	12,821	11.4	18.1	20.0	13.2
83-84	55	746	6	175	71	108	1,161	13,385	11.5	17.9	20.1	13.6
84-85	56	789	6	218	70	108	1,248	13,877	11.1	17.6	21.3	14.1
85-86	60	835	6	218	77		1,305	14,292	11.0	17.1	20.7	13.9
86-87	61	870	7	236	76		1,361	14,879	10.9	17.1	21.4	14.3
87-88	60	886	7	243	77		1,384	15,289	11.0	17.3	22.1	14.8
88-89	64	947	8	248	78		1,455	15,722	10.8	16.6	21.7	14.8
89-90	70	980	8	261	81		1,518	16,248	10.7	16.6	20.7	14.0
90-91	71	1012	8	276	81	119	1,567	16,728	10.7	16.5	21.1	14.3
91-92	74	1068	9	319	83	123	1,676	17,198	10.3	16.1	21.6	14.4
92-93	77	1115	9	333	83		1,742	17,411	10.0	15.6	21.8	14.6
93-94	82	1133	9	351	84		1,789	17,594	9.8	15.5	20.9	13.9
94-95	82	1191	10	377	94		1,894	17,637	9.3	14.8	22.2	14.6
95-96	82	1229	11	423	110		1,994	17,988	9.0	14.6	23.5	15.1
96-97	82	1254	12	441	115		2,038	18,380	9.0	14.7	23.9	15.3
97-98	77	1283	12	448	115		2,062	18,678	9.1	14.6	25.8	16.7
98-99	79	1317	12	502	117		2,176	18,736	8.6	14.2	26.5	16.7
99-00	80	1362	13	511	125		2,252	18,698	8.3	13.7	27.2	17.0
00-01	80	1394	13	541	137		2,327	18,828	8.1	13.5	28.1	17.4
01-02*	81	1446	13	473	115		2,293	18,917	8.2	13.1	27.3	17.9
02-03	81	1455	13	482	115		2,315	19,084	8.2	13.1	27.6	18.0
03-04	79	1460	13	485	119		2,323	19,497	8.4	13.4	28.4	18.5
04-05	82	1476	13	475	125		2,344	19,972	8.5	13.5	27.6	18.0
05-06	85	1529	14	494	127		2,432	20,469	8.4	13.4	27.6	18.0
06-07	85	1582	15	507	127		2,495	21,120	8.5	13.4	28.4	18.6
07-08	87	1633	15	510	132		2,581	22,041	8.6	13.5	28.5	18.8
08-09	88	1671	15	529	137		2,638	22,129	8.4	13.2	29.0	19.0
09-10	88	1693	15	539	139		2,675	22,593	8.4	13.3	29.4	19.2
10-11	90	1731	15	540	143		2,719	22,755	8.4	13.1	29.2	19.2
11-12	87	1712	15	540	143		2,719	23,050	8.5	13.5	30.0	19.7
12-13	86	1697	15	533	139		2,660	23,348	8.8	13.8	29.9	19.7
13-14	87	1706	15	540	139		2,677	23,550	8.8	13.8	29.8	19.6
14-15	88	1714	14	540	142		2,691	23,700	8.8	13.8	29.6	19.5
15-16	88	1701	14	551	139	194	2,687	23,914	8.9	14.1	29.5	19.3

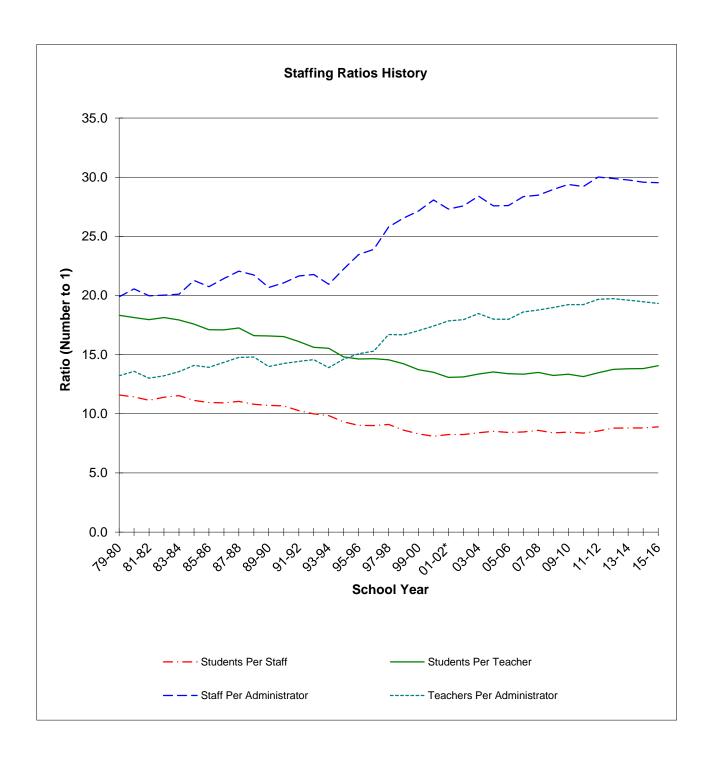
^{*} FTE for paras changed from 5.5 to 8 hours per day = 1 FTE
* FTE for food service changed from 6.5 to 8 hours per day = 1 FTE

PERSONNEL REPORT









AGENDA SUMMARY SHEET

AGENDA ITEM: International Baccalaureate Diploma Program Report

MEETING DATE: November 2, 2015

DEPARTMENT: Educational Services

TITLE AND BRIEF DESCRIPTION:

IB Diploma Program at Millard North High School

ACTION DESIRED: Information Only

BACKGROUND: In 2015 there were 39 IB Diploma candidates. Thirty-four of the

2015 candidates, or 87%, earned the IB Diploma. The worldwide rate of passage in May 2014, the most recently

published international data, was 79.3%.

Millard North students scored passing or higher on 94% of the tests taken in 2015, Extended Essay and Theory of Knowledge included. 93 junior and senior Diploma students completed 256 subject tests, 39 Extended Essay and 39 Theory of Knowledge

exams in 2015.

The average exam score of Millard North students in 2015 was 5.17. Exams scored from 7 (excellent) to 1 (very poor), with 4 being the minimum passing. The international mean exam score

in May 2014 was 4.7.

Candidates must accumulate at least 24 points to be awarded the IB Diploma. The average number of Diploma points earned by Millard North IB Diploma students was 32 out of 45 possible.

The international mean in May 2014 was 30.1.

The Millard Public Schools Foundation again assisted families financially during the 2014-2015 school year by paying for the costs of IB exams (currently \$110 per exam) while parents paid for IB registration fees (currently \$160). In 2014-2015 this was a financial commitment from the Millard Public Schools Foundation

of \$28,490.00.

RECOMMENDATIONS: Continue the program

STRATEGIC PLAN REFERENCE:

The 2004 and 2009 Strategic Plans called to support

promoting personal excellence, increasing student achievement,

and engaging students.

RESPONSIBLE

PERSONS: Dr. Mark Feldhausen, Dr. Nancy Johnston & Dr. Kara Hutton

SUPERINTENDENT'S SIGNATURE:

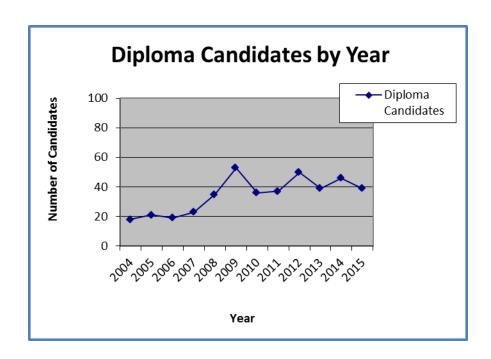
Jin Dulfi

Diploma Program Participation at Millard North High School

The International Baccalaureate Programs in Millard Public Schools culminate with the Diploma Program for 11th and 12th grade students at Millard North High School. This is a two-year diploma program that allows students to self-select into and out of the program. The diploma program focuses on students completing all requirements to receive the IB diploma.

Requirements include 6 subject exams, a Theory of Knowledge course, a research-based Extended Essay, and a Creativity, Action, and Service (CAS) component. CAS includes activities such as arts, sports, and service projects. This is in contrast to IB Diploma + certificate programs, in which students may take individual IB Diploma courses and exams with the aim of receiving a certificate for the successful completion of each exam much like Advanced Placement[®] (AP) courses and exams.

In 2014-2015, the twelfth year of IB Diploma exams at Millard North, there were 40 participating seniors as of September 16th. One student withdrew in December of 2014 and did not complete the exams. Therefore, 39 students completed the requirements and were "diploma candidates" in the Millard North IB Diploma program. In addition, one 2014 graduate returned to retake exams, but was unsuccessful in achieving the IB Diploma. There are 50 "diploma candidates" at the beginning of school year 2015-16.



IB Diploma Enrollment by School Year

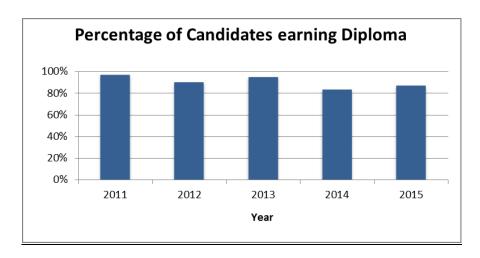
The number of ninth and tenth grade students intending to participate in the IB Diploma Program fluctuates; however, some attrition is normal and expected between the Middle Years Program and the Diploma Program. The majority of students who originally plan to pursue the IB Diploma, but who later change plans do so after 9th or 10th grade before actually beginning IB Diploma classes.

	IB Diploma Program Enrollment by School Year													
Year	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15			
Grade	Grade Students Within Middle Years Program Intending to Enroll in the Diploma Program													
9	63	89	72	67	94	103	96	71	100	116	100			
10	46	58	69	45	49	68	55	62	77	84	82			
			St	udents O	fficially I	Participati	ng in the	Diploma I	Program					
11	25	30	41	54	36	41	58	47	60	53	57			
12	21	19	23	33	53	36	37	50	40	48	40*			
Retention Rate 11 th to 12 th Grade		76%	77%	80%	98%	100%	90%	86%	85%	80%	75%			

^{*}Enrollment counts taken as of the third Monday in September. One senior withdrew from the program in December of 2014. Final Diploma Candidate count was then 39.

IB Diploma Results

In 2014-2015, Millard North had 39 IB Diploma candidates. Thirty-four students or 87% successfully earned or were "awarded" the IB Diploma.



Test Results

As part of the requirements to receive the IB diploma, each candidate must complete the coursework and exams in 6 subjects during their junior and senior years. The exams for each subject are taken on two successive days and may be in two or three separate tests, each one typically two hours in length. The subject exams fall into 2 levels, Standard Level (SL) and Higher Level (HL). Standard Level exams are taken after 1 year of coursework with the exception of World Languages which tests at the end of 5 years for French, German, and Spanish and at the end of 4 years for Latin. Higher Level exams follow 2 years of coursework.

Millard North had 93 students complete 253 subject tests in May 2015. Millard North students scored passing or higher on 232 of the 253 subject tests taken (92%). Results by subject are shown in the following table.

Millard North DP Subject Tests: May 2015 Results										
			Student Score Distribution							
Subject	Level	Students in Course	7	6	5	4	3	2	1	N
English										
English	HL	39	0	10	17	12	0	0	0	0
Foreign Language										
French B	SL	7	0	3	3	1	0	0	0	0
French B	HL	2	0	1	0	1	0	0	0	0
German B	SL	2	0	0	1	1	0	0	0	0
Latin	SL	2	0	0	0	1	1	0	0	0
Spanish	SL	26	3	11	10	2	0	0	0	0
Individuals and Society										
History	SL	9	0	2	4	3	0	0	0	0
History of Americas	HL	15	0	4	4	5	2	0	0	0
Psychology	SL	25	0	3	13	7	2	0	0	0
Experimental Sciences										
Biology	HL	24	2	7	11	3	1	0	0	0
Chemistry	HL	16	1	3	3	3	5	1	0	0
Physics	SL	1	0	0	0	0	1	0	0	0
Physics	HL	11	0	4	3	2	2	0	0	0
Mathematics										
Mathematics Studies	SL	7	0	2	3	2	0	0	0	0
Mathematics	SL	25	2	4	9	8	1	0	0	1
Mathematics	HL	10	1	0	5	3	1	0	0	0
Fine Arts/Electives										
Film	SL	5	0	2	1	2	0	0	0	0
Film	HL	3	0	0	1	2	0	0	0	1
Music SL Group Performance	SL	25	0	0	1	19	4	0	0	1
Visual Arts Option A	HL	2	2	0	0	0	0	0	0	0
		e Scale:								
7-Excellent 6-Very Good 3-Mediocre 2-Poor	5-Good 1-Very Poor			4-Satisfactory (Minimum Pass) N-Failure to Test						

Exams are scored from 7 (excellent) to 1 (very poor), with 4 being the minimum passing score.

In the May 2015 subject tests, Millard North IB Diploma students' average scores were higher than the international averages in 13 of the 20, or 65%, of the subject areas examined. The distribution of the Millard North students' IB Diploma subject exam scores is shown in the following table. The average exam score for Millard North students was 5.17, as compared to the May 2014 international mean of 4.7.

International Baccalaureate Subject Tests										
		May	2015 Resu	lts	May 2014 Results			May	2013 Resu	ılts
Subject	Level	Number of Students	MNHS Mean	Int'l Mean*	Number of Students	MNHS Mean	Int'l Mean*	Number of Students	MNHS Mean	Int'l Mean*
English										
English	HL	39	4.95	4.75	47	5.11	4.78	40	4.6	4.77
Foreign Language										
French B	SL	7	5.29	4.89	9	5.00	4.92	11	5.82	4.90
French B	HL	2	5.00	5.23						
German B	SL	2	4.50	5.16	7	4.57	5.21	2	5.5	5.29
Latin	SL	2	3.50	4.40	8	4.75	4.64	6	5.17	4.61
Spanish B	SL	26	5.58	5.03	23	5.48	5.05	25	5.64	5.01
Individuals and Society										
History of the Americas	HL	15	4.67	4.21	24	4.48	4.10	17	5.29	4.11
History	SL	9	4.89	4.65	10	4.50	4.56	11	4.4	4.63
Psychology	SL	25	4.68	4.37	29	5.14	4.4	32	5.34	4.44
Experimental Sciences										
Biology	HL	24	5.25	4.35	31	4.93	4.31	26	5.23	4.34
Biology	SL	-	-	-	1	5.00	4.26	4	4.25	4.29
Chemistry	HL	16	4.31	4.50	16	4.44	4.52	21	4.33	4.55
Physics	SL	1	3.00	4.19	3	4.67	4.16	2	5.0	4.18
Physics	HL	11	4.82	4.69	11	4.45	4.64	10	5.6	4.67
Mathematics										
Mathematical Studies	SL	7	5.00	4.48	18	4.89	4.51	16	5.38	4.65
Mathematics	HL	10	4.70	4.43	11	4.91	4.41	14	4.93	4.41
Mathematics	SL	25	4.92	4.44	21	5.55	4.48	15	5.67	4.46
Fine Arts/Electives										
Film	SL	5	4.40	4.12	3	4.33	4.21	-	-	-
Film	HL	3	4.50	4.63	1	5.0	4.66	5	4.0	4.73
Music Group Performance	SL	25	3.88	4.31	18	5.18	4.26	26	4.58	4.26
Visual Arts	HL	2	7.00	4.84	5	4.60	4.87	1	5.00	4.84
Percentage above Int'l	Mean		65%				75%			74%

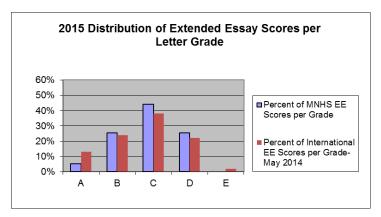
The "International Mean" is the mean of all IB Diploma students worldwide that tested in May, 2015 which is the IB testing month for students in the northern hemisphere.

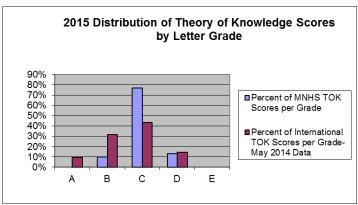
Extended Essay and Theory of Knowledge

Additional requirements for the IB diploma include completion of an original research project called the Extended Essay (EE) and a 2-year Theory of Knowledge (TOK) course, culminating in an Essay on a topic chosen from ten prescribed prompts. These are in addition to the subject tests, and are graded from A (excellent) to E (elementary). A grade of D or better must be obtained on both the Extended Essay and the Theory of Knowledge Essay for a student to be eligible to receive the IB Diploma. In other words, D is the minimum passing grade.

Grade distribution percentages are shown below for the 39 students that completed the IB Diploma Program in May 2015, with Millard North data from previous years included for comparison. In 2015 seventy-five percent of Millard North students earned a grade of a C or better on the Extended Essay (EE), as compared to nearly 83% in 2014. Eighty-seven percent of Millard North Students taking the Theory of Knowledge Essay scored a C or better, compared to 72% in 2014. Passing scores of a D or better were received by 100% of Millard North Students on both essays in 2015.

Millard North IB May 2014 - 2015 EE and TOK Results							
	Student Score Distribution Percentages						
Extended Essay	A	В	С	D	E		
May 2015	5%	25.5%	44%	25.5%	0%		
May 2014	13%	17%	53%	17%	0%		
May 2013	46.2%	10.3%	33.3%	10.3%	0%		
May 2012	10%	34%	32%	22%	2%		
May 2011	21%	30%	30%	19%	0%		
Theory Of Knowledge	A	В	C	D	E		
May 2015	0%	10%	77%	13%	0%		
May 2014	9%	24%	39%	28%	0%		
May 2013	10%	36%	46%	8%	0%		
May 2012	10%	34%	42%	12%	2%		
May 2011	13%	30%	49%	8%	0%		

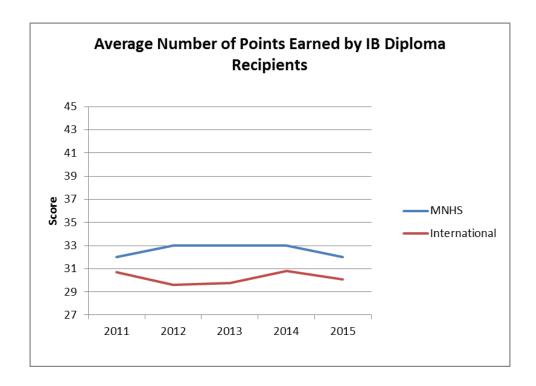




IB Diploma Points

IB Diploma candidates must earn at least 24 points to be awarded the IB Diploma. These points come primarily from the subject tests, with up to 3 possible extra points based on the student's grades on the Extended Essay and Theory of Knowledge Essay. The maximum possible point total is 45.

The average of IB Diploma points for all 34 students who received the IB Diploma during the 2014-2015 school year was 32 points. The international average in May 2014 was 30.1 points. The highest number of Diploma points earned by a Millard North Student in 2015 was 42.



MPS Foundation IB Exam Support

The financial support provided by the Millard Public Schools Foundation again assisted families during the 2014-2015 school year. The cost of taking an IB exam in 2015 was \$103.00.

Beginning with the 2013-2014 school year, the Foundation paid for IB exams (currently \$110 per exam) while parents paid for registration (currently \$160). In 2014-2015 this was a financial commitment of \$28,490.00.

	Amount Funded	Number of Exams	Number of Students
2014-2015	\$ 28,490.00	256	93
2013-2014	\$ 31,968.00	296	100