Math Program and Essential Standards Grades K-2

Program Standard #1: PROBLEM SOLVING

Essential Standard #1: Explore ways to solve problems

Program Standard #2: COMMUNICATION

Essential Standard #2: Recognize and use mathematical symbols and words

Program Standard #3: REASONING

Essential Standard #3: Explain and show work to justify answers

Program Standard #4: CONNECTIONS

Essential Standard #4: Recognize mathematical ideas in everyday experiences

Program Standard #5: REPRESENTATIONS

Essential Standard #5: Model mathematical concepts using materials

Directions for Use of Content Checklist

The grade level Content Checklist is designed to accompany the Essential Standards. Faculty discussion will need to take place to ensure consistency in teaching. The administrator should reproduce the Content Checklist and distribute it to all teachers.

The format for the Content Section is as follows:

1. Blank box to record date of instruction of content or to use as a check-off to indicate that instruction of content occurred
2. Numeric system that identifies the specific content statement
3. Content Statement
4. Nebraska Math Standard Reference **(NE)**
5. Program Standard Reference **(PS)**
6. Level of Teacher Instruction:
   Introduce (**I**), Develop **(D**), Master (**M)**

Introduce **(I)**: To provide with a beginning knowledge or first experience of something. No assessment.

Develop **(D**): To progress from simple to more complex through practice. Check for understanding as needed.

Master **(M)**: To gain control over content; to understand and be able to retrieve the specified material for use as needed to maintain proficiency. Must be assessed.

Teachers will use this curriculum as the basis for planning their lessons for the year. Use of the curriculum will assist students in attaining the Standards for which all are accountable. Teachers are required to spend 80% of their time teaching strictly from the curriculum guide with the remaining 20% of their time teaching concepts that enhance the curriculum.

Archdiocese of Omaha Math Content Checklist
Primary Grades K-2

			Grade	Grade	Grade
		Primary Grades	**K**	**1**	**2**
	1	**NUMERATION/NUMBER SENSE**			
	1.1	Counts and sequences whole numbers 0-100 (NE 1.1.1; PS #5)	**I, D**	**M**	
	1.2	Compares relationships among whole numbers 0-100 -bigger, smaller, more, greater, less, fewer, equal, higher, lower, before, after, between (NE 1.1.1; PS #5)	**I**	**D,M**	
	1.3	Demonstrates the value of whole numbers using a variety of models and representations (NE 1.1.1; PS #5)	**I**	**D,M**	
	1.4	Demonstrates one-to-one correspondence to 20 (NE 1.1.1; PS #5)	**I,D,M**		
	1.5	Identifies and writes whole numbers 0-999 (NE 2.1.1; PS #5)	**I**	**D**	**M**
	1.6	Compares relationships among whole numbers 100-999 (NE 2.1.1; PS #5)		**I**	**D,M**
	1.7	Identifies the place value of whole numbers up to 999 using <, >, and = (NE 3.1.1; PS #5)		**I**	**D,M**
	1.8	Recognizes and connects number words to numerals up to one hundred (NE 2.1.1; PS #2, 4)	**I**	**D**	**M**
		Skip counts to one hundred: (NE 2.1.1; PS #1)			
	1.9	2's	**I**	**D**	**M**
	1.10	3's			**I**
	1.11	5's	**I, D**	**M**	
	1.12	10's	**I,D,M**		
	1.13	Recognizes odd and even numbers (NE 4.1.1; PS #2)		**I**	**D**
	1.14	Identifies ordinal positions to tenth (NE 1.1.1; PS #2, 5)	**I**	**D,M**	
	1.15	Recognizes fractions (NE 2.1.1; PS #2)	**I**	**D**	**M**
	1.16	Recognizes and applies math ideas in everyday experience (PS #4)	**I**	**D**	**D**
	1.17	Orders and compares whole numbers greater than 1,000 (NE 3.1.1; PS #5)			**I**
	1.18	Rounds whole numbers (NE 3.1.1; PS #5)			**I**
	1.19	Communicates in written, expanded, and standard form using whole numbers (NE 3.1.1; PS #4)			**I**
	1.20	Uses objects, diagrams and pictures to show mathematical concepts (NE 3.1.2, 4.1.2; PS # 1, 2, 4, 5)		**I**	**D**
	1.21	Skip counts by 100 to 1000 (PS #2)		**I, D**	**M**

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			Grade	Grade	Grade
		Primary Grades	**K**	**1**	**2**
	2	**COMPUTATION/ESTIMATION**			
	2.1	Demonstrates the meaning of addition and subtraction with whole numbers (NE 1.1.2; PS #1, 2, 3, 4, 5)	**I**	**D,M**	
	2.2	Adds and subtracts fluently up to 10 using appropriate strategies (NE 1.1.3; PS #1, 3)	**I**	**D,M**	
	2.3	Makes estimations and comparisons to actual results (NE 2.1.4; PS #1, 3)			**I,D,M**
		Recognizes symbols and words (NE 2.1.2; PS #2)			
	2.4	+,-, =, plus, minus	**I**	**D,M**	
	2.5	- greater than, less than, < , >		**I**	**D**
	2.6	- add, subtract, sum, difference, addend, equal	**I**	**D**	**M**
	2.7	Demonstrates the concept of addition up to 20 (NE 2.1.3; PS #1, 3)	**I**	**D**	**M**
		Uses addition strategies (NE 2.1.3, 5.1.2; PS #1, 3)			
	2.8	-commutative property (related facts)		**I**	**D**
	2.9	-doubles/near doubles		**I,D**	**M**
	2.10	-making a ten		**I,D**	**M**
	2.11	-counting up	**I**	**D**	**M**
	2.12	-number lines	**I**	**D**	**M**
	2.13	Demonstrates the concept of subtraction from 20 (NE 2.1.3; PS #1, 3)	**I**	**D**	**M**
		Uses subtraction strategies (NE 2.1.3; PS #1, 3)			
	2.14	-fact families		**I,D**	**M**
	2.15	-counting back/up		**I,D**	**M**
	2.16	-number lines	**I**	**D**	**M**
	2.17	Adds and subtracts whole numbers using estimation (NE 2.1.4; PS #1)			**I,D,M**
	2.18	Adds 2-digit numbers with and without regrouping (NE 2.1.3; PS #1)		**I**	**D,M**
	2.19	Adds 3-digit numbers with and without regrouping (NE 2.1.3; PS #1)			**I,D,M**
	2.20	Adds money combinations with coins and bills(PS #1)		**I**	**D**
	2.21	Subtracts 2-digit numbers with and without regrouping (NE 2.1.3; PS #1)		**I**	**D,M**
	2.22	Subtracts 3-digit numbers with and without regrouping (NE 2.1.3; PS #1)			**I,D,M**
	2.23	Chooses correct operations and solves problems involving one-step solutions (NE 3.1.3; PS #1, 3, 4, 5)	**I**	**D**	**D**
	2.24	Chooses correct operations and solves problems involving multiple steps (NE 3.1.3; PS #1)		**I**	**D**
	2.25	Demonstrates and communicates solutions to problems. (NE 3.1.3; PS #1)		**I**	**D**

Archdiocese of Omaha Math Content Checklist
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		Primary Grades	**K**	**1**	**2**
	2	**COMPUTATION/ESTIMATION** continued			
	2.26	Adds with three addends with sums to 20 (PS #2)		**I,D**	**M**
	2.27	Recognizes and applies math ideas in everyday experience (PS #4)	**I**	**D**	**D**
	2.28	Applies strategies when solving word problems with or without appropriate technology (NE 3.1.3, 3.1.4; PS #1, 3, 4)	**I**	**D**	**M**
	2.29	Develops an understanding of the concept of multiplication and division through the use of models and representations, which involve combining equal groups (NE 4.1.3; PS #1, 4, 5)			**I**
	3	**MEASUREMENT and DATA**			
	3.1	Uses non-standard units of measurement (NE 0.2.5; PS #1, 4)	**I,D,M**		
	3.2	Identifies tools of measurement and their appropriate use: clocks, calendar, ruler, balance scale, thermometer (NE 2.2.5; PS #1, 4, 5)	**I**	**D**	**M**
	3.3	Understands a calendar –days of the week/months of the year (PS #4)	**I**	**D,M**	
		Identifies and uses standard and metric units of measurement (NE 3.2.5; PS #1, 4)			
	3.4	-inches, feet, yard, centimeter	**I**	**D**	**D**
	3.5	-cups, pints, quarts, gallons, liters		**I**	**D**
	3.6	-pounds, grams, kilograms		**I**	**D**
	3.7	-cents, dollars	**I**	**D**	**D**
	3.8	-Fahrenheit, Celsius		**I**	**D**
		Tells and records time using analog and digital clock (NE 3.2.5, 4.2.5; PS #2, 4, 5)			
	3.9	-hour	**I,D**	**D,M**	
	3.10	-half hour	**I**	**D**	**M**
	3.11	-quarter hour			**I,D**
	3.12	-minutes		**I**	**D**
	3.13	-A.M. and P.M.		**I**	**D**
	3.14	-elapsed time			**I**
	3.15	Identifies past, present, and future (NE 1.2.5; PS #2, 4)	**I**	**D,M**	
	3.16	Identifies name and value of penny, nickel, dime, quarter, dollar (PS #4, 5)	**I**	**D**	**M**
	3.17	Counts like coins to a dollar ($1.00) (NE 1.2.5; PS #4, 5)	**I**	**D,M**	
	3.18	Counts mixed coins to a dollar ($1.00) (NE 2.2.5; PS #4, 5)	**I**	**D**	**M**
	3.19	Calculates change using subtraction (PS #4, 5)			**I**
	3.20	Recognizes and applies math ideas in everyday experience (PS #4)	**I**	**D**	**D**

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	4	**GEOMETRY/SPATIAL CONCEPTS**			
		Compares positions (NE 0.2.4, 1.2.4; PS #4)			
	4.1	-above/below	**I,D,M**		
	4.2	-over/under	**I,D,M**		
	4.3	-up/down	**I,D,M**		
	4.4	-near/far	**I,D,M**		
	4.5	-before/after	**I,D,M**		
	4.6	-left/right	**I,D**	**M**	
		Identifies and describes two and three dimensional shapes (NE 1.2.1, 2.2.1, 3.2.1, 4.2.1; PS #4, 5)			
	4.7	-2-Dimensional Shapes: square, circle, triangle, rectangle	**I,D**	**M**	
	4.8	-2-Dimensional Shapes: trapezoid, hexagon, parallelogram,	**I**	**D**	**M**
	4.9	-3-Dimensional Shapes: cubes, sphere, rectangular prism, cone, cylinder, triangular prism, pyramid	**I**	**D**	**D**
	4.10	- open/closed polygons		**I**	**D,M**
	4.11	- edges/vertices/faces		**I**	**D**
	4.12	Describes direction on a positive number line (NE 2.2.2; PS #4, 5)	**I**	**D**	**M**
	4.13	Recognizes and identifies lines of symmetry (NE 1.2.3, 2.2.3; PS #2)	**I**	**D**	**M**
	4.14	Recognizes and applies math ideas in everyday experience (PS #4)	**I**	**D**	**D**
	4.15	Determines perimeter and area of a many sided figure (NE 5.2.5; PS #1, 3, 4, 5)			**I**

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Primary Grades K-2

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	5	**DATA ANALYSIS, PROBABILITY, AND STATISTICAL CONCEPTS**			
	5.1	Sorts, classifies, describes and compares sets of objects (NE 0.4.1; PS #1, 2, 3, 4, 5)	**I,D,M**		
	5.2	Organizes and displays collected information using objects and pictures (NE 1.4.1; PS #5)	**I**	**D,M**	
	5.3	Compares and interprets information from displayed data using more, less, and fewer (NE 1.4.1; PS #1, 2)	**I**	**D,M**	
		Creates graphs and tables (NE 4.3.1; PS #5)			
	5.4	- bar graphs up to four categories	**I**	**D**	**M**
	5.5	- picture graphs up to four categories	**I**	**D**	**M**
	5.6	- simple tables (tally sheet)	**I**	**D**	**M**
	5.7	- simple chart		**I**	**D**
	5.8	Describes the likelihood of an event (probability) (NE 3.4; PS #1, 2, 3, 4, 5)		**I**	**D**
	5.9	Recognizes and applies math ideas in everyday experience (PS #1, 2, 3, 4, 5)	**I**	**D**	**D**
	6	**ALGEBRAIC CONCEPTS**			
	6.1	Sorts objects by color, shape or size (NE 0.3.1; PS #1, 3, 4)	**I,D,M**		
	6.2	Identifies simple patterns of colors, shapes, numbers (NE 1.3.1; PS #3)	**I,D**	**M**	
	6.3	Creates patterns (NE 1.3.1; PS #3)	**I**	**D,M**	
	6.4	Identifies and creates patterns using words, tables and graphs (NE 3.3.1; PS #3, 5)		**I**	**D**
	6.5	Sorts and classifies objects according to one attribute then identifies the classifying attribute (NE 1.3.1; PS #1, 3)	**I,D**	**M**	
	6.6	Describes and extends simple patterns (NE 2.3.1; PS #3)	**I**	**D**	**M**
	6.7	Uses input/output table to identify patterns (PS #1, 3, 4, 5)		**I**	**D**
	6.8	Sorts and classifies objects according to more than one attribute (NE 3.3.1; PS #1, 3)	**I**	**D**	**D**
	6.9	Recognizes and applies math ideas in everyday experience (PS #4)	**I**	**D**	**D**