

**ESU #13 SOAR
COMMON CURRICULUM
Math Standards Model**

**2001
KINDERGARTEN**



MA	Gr		Strand		NE Standard		Objective	Books and Resources
MA	K	1.1	Numeration/ Number Sense	1.1.1	Recognize, write, and orally express the sequential order of the number system	1.1.1 a K	Count forward by 1s to 20	
MA	K	1.1	Numeration	1.1.1	Recognize, write, and orally express the sequential order of the number system	1.1.1 b K	Recognize and write numerals from 0-20	
MA	K	1.1	Numeration	1.1.1	Recognize, write, and orally express the sequential order of the number system	1.1.1 c K	Identify ordinal position of first, second..through 5th	
MA	K	1.1	Numeration	1.1.1	Recognize, write, and orally express the sequential order of the number system	1.1.1 d K	Count backward from 10-0 by 1s	
MA	K	1.1	Numeration	1.1.2	Demonstrate ways of representing numbers and compare relations among numbers	1.1.2 a K	Count objects to demonstrate one-to-one correspondence	
MA	K	1.1	Numeration	1.1.2	Demonstrate ways of representing numbers and compare relations among numbers	1.1.2 b K	Use comparison vocabulary; bigger, smaller, more less, equal, higher, lower	
MA	K	1.1	Numeration	1.1.2	Demonstrate ways of representing numbers and compare relations among numbers	1.1.2 c K	Identify and represent wholes into equal parts for fractions of 1/2.	
MA	K	1.1	Numeration	1.1.3	Identify numbers and applications in everyday situations	1.1.3 a K	Identify how numbers are used in counting situations i.e setting table, passing out treats	
MA	K	1.1	Numeration	1.1.3	Identify numbers and applications in everyday situations	1.1.3 b K	Identify how numbers are used for identification i.e. room and phone numbers	
MA	K	1.1	Numeration	1.1.4	Demonstrate the value of numbers (0-20) using concrete objects.	1.1.4 a K	Demonstrate the value of numbers (0-10) using concrete objects.	

MA	K	1.2	Computa / Estimat	1.2.1	Demonstrate concepts of addition and subtraction up to 10	1.2.1 a K	Combine two sets of items (up to ten) using manipulatives.	
MA	K	1.3	Msr	1.3.1	Measure two or more items or sets using nonstandard units of measure and compare attributes	1.3.1 a K	Make linear comparisons with items such as human foot, toothpick.	
MA	K	1.3	Msr	1.3.2	Identify tools of measurement and their appropriate use (clocks, calendar, ruler, balance scale, and thermometer)	1.3.2 a k	Match clocks and calendar / time, ruler with length.	
MA	K	1.3	Msr	1.3.4	Identify the different units of measurement used in their environment (cents,dollars,pounds,gallons,lite rs, meters, miles, minutes, and	1.3.4 a K	Match tools to units: clock/hour, ruler/foot.	
MA	K	1.4	Geo	1.4.1	Compare relative position (left/right,above/below,over/und er,up/down, and near/far)	1.4.1 a K	Identify above/below, over/under, up/down, near/far.	
	K	1.4	Geo	1.4.2	Identify, describe and create circles, squares, triangles, and rectangles	1.4.2 a K	Name circles, squares, triangles and rectangles	
MA	K	1.5	Data	1.5.1	Collect information about objects and events in their environment	1.5.1 a K	Find and count a specified set of objects within a mixed set.	
MA	K	1.5	Data	1.5.2	Organize and display collected information using objects and pictures	1.5.2 a K	Group objects or pictures according to a criteria.	

MA	K	1.6	Alg	1.6.1	Identify, describe, extend and create a variety of patterns (objects,sounds,movements,shapes,numbers,colors)	1.6.1 a K	Create patterns using objects, shapes and colors
MA	K	1.6	Alg	1.6.2	Sort and classify objects according to one or more attributes (size,shape,color,thickness)	1.6.2 a K	Sort by a single attribute such as size, shape, color..

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GRADE 1

MA	Gr		Strand		NE Standard		Objective	
MA	1	1.1	Numera	1.1.1	Recognize, write, and orally express the sequential order of the number system	1.1.1 e 1	Recognize and write numerals from 21-100	
MA	1	1.1	Numera	1.1.1	Recognize, write, and orally express the sequential order of the number system	1.1.1 f 1	Count forward by 1s, 2, 5, and 10s up to 100	
MA	1	1.1	Numera	1.1.1	Recognize, write, and orally express the sequential order of the number system	1.1.1 g 1	Identify ordinal position of fifth through tenth	
MA	1	1.1	Numera	1.1.2	Demonstrate ways of representing numbers and compare relations among numbers	1.1.2 d 1	Identify and represent wholes into equal parts for fractions of 1/4	
MA	1	1.1	Numera	1.1.2	Demonstrate ways of representing numbers and compare relations among numbers	1.1.2 e 1	Connect number words and numerals up to 20 to quantities they represent	
MA	1	1.1	Numera	1.1.2	Demonstrate ways of representing numbers and compare relations among numbers	1.1.2 f 1	Demonstrate place value and base 10 number system to 100 using multiple models	
MA	1	1.1	Numera	1.1.3	Identify numbers and applications in everyday situations	1.1.3 c 1	Recognize and demonstrate the value of a collection of pennies, nickels, dimes and quarters whose total value is 100 cents or less	
MA	1	1.1	Numera	1.1.3	Identify numbers and applications in everyday situations	1.1.3 d 1	Demonstrate the number system of base ten using one dime to ten pennies and ten dimes to one dollar	
MA	1	1.1	Numera	1.1.4	Demonstrate the value of numbers (0-20) using concrete objects.	1.1.4 b 1	Demonstrate the value of numbers (11-20) using concrete objects.	
MA	1	1.2	Computa / Estimat	1.2.1	Demonstrate concepts of addition, subtraction to 10	1.2.1 b 1	Illustrate basic addition and subtraction facts w/ concrete objects, with digits to 10.	

MA	1	1.2	Computa / Estimat	1.2.1	Demonstrate concepts of addition, subtraction to 10	1.2.1 c 1	Use the symbols + and - to represent the operations of addition and subtraction	
MA	1	1.2	Computa / Estimat	1.2.1	Demonstrate concepts of addition, subtraction to 10	1.2.1 d 1	Use the symbol = to represent equal quantities	
MA	1	1.2	Computa / Estimat	1.2.1	Demonstrate concepts of addition, subtraction to 10	1.2.1 e 1	Solve addition and subtraction problems involving one-step solutions.	
MA	1	1.2	Computa / Estimat	1.2.2	Demonstrate concepts of addition, subtraction to 10	1.2.2 f 1	Make estimations and compare to actual results in addition and subtraction	
MA	1	1.3	Msr	1.3.2	Identify tools of measurement and their appropriate use (clocks, calendar, ruler, balance scale, and thermometer)	1.3.2 b 1	Match scale/weight, thermometer/temperature.	
	1	1.3	Msr	1.3.3	Tell time to half-hour: analog, digital clock	1.3.3 a 1	Tell time to the half-hour using an analog and digital clock	
MA	1	1.3	Msr	1.3.4	Identify the different units of measurement used in their environment (cents, dollars, pounds, gallons, liters, meters, miles, minutes, and hours)	1.3.4 b 1	Match units to tools: scale/pound, thermometer/degree.	
MA	1	1.3	Msr	1.3.5	Demonstrate time: past, present, future, earlier, later.	1.3.5 a 1	Sequence images in time.	
MA	1	1.4	Geo	1.4.1	Compare relative position (left/right, above/below, over/under, up/down, and near/far)	1.4.1 b 1	Identify left/right.	
MA	1	1.4	Geo	1.4.2	Identify, describe and create circles, squares, triangles, and rectangles	1.4.2 b 1	Sketch circles, squares, triangles and rectangles	

MA	1	1.4	Geo	1.4.2	Identify, describe and create circles, squares, triangles, and rectangles	1.4.2 c 1	Match congruent shapes and designs using manipulatives	
MA	1	1.4	Geo	1.4.2	Identify, describe and create circles, squares, triangles, and rectangles	1.4.2 d 1	Identify, describe common geometric shapes in environment	
MA	1	1.5	Data	1.5.2	Organize and display collected information using objects and pictures	1.5.2 b 1	Stack or arrange items in rows.	
MA	1	1.5	Data	1.5.3	Compare and interpret information from displayed data (more,less,fewer)	1.5.3 a 1	State the relative size between rows or stacks using comparative words such as least, tallest, shorter.	
MA	1	1.5	Data	1.5.4	Describe the process used in data collection and analysis	1.5.4 a 1	Verbally describe how to collect data and what it shows	
MA	1	1.6	Alg	1.6.1	Identify, describe, extend and create a variety of patterns (objects,sounds,movements,shapes,numbers,colors)	1.6.1 b 1	Create patterns using numbers.	
MA	1	1.6	Alg	1.6.2	Sort and classify objects according to one or more attributes (size,shape,color,thickness)	1.6.2 b 1	Sort by multiple attributes (round and red).	
MA	1	1.6	Alg	1.6.3	Identify and describe patterns in their environment	1.6.3 a 1	Identify patterns in the classroom, on playground.	

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GRADE 2

MA	Gr		Strand		NE Standard		Objective	
MA	2	4.1	Numeration	4.1.1	Demonstrate place value of whole numbers through millions, decimals to the hundredth place	4.1.1 a 2	Read, write and correctly order numerals (in digits) through the hundreds place.	
MA	2	4.1	Numeration	4.1.3	Describe, apply relationships between whole number, decimals, fractions by order, comparison, operation.	4.1.3 a 2	Order and compare whole numbers using the symbols $<$, $>$, and $=$	
MA	2	4.1	Numeration	4.1.3	Describe, apply relationships between whole number, decimals, fractions by order, comparison, operation.	4.1.3 c 2	Illustrate mathematical concepts by using objects and drawing pictures or diagrams to show operation: subtraction as opposite of addition.	
MA	2	4.1	Numeration	4.1.5	Make change and count out in amounts up to \$20.00	4.1.5 a 2	Identify and count money: coins and bills to \$5.00.	
MA	2	4.2	Computation / Estimation	4.2.1	Estimate, add, subtract, multiply, and divide whole numbers w/wo calculators and solve word problems	4.2.1 a 2	Demonstrate with accuracy and speed the basic facts of addition, subtraction (1-20)	
MA	2	4.2	Computation / Estimation	4.2.1	Estimate, add, subtract, multiply, and divide whole numbers w/wo calculators and solve word problems	4.2.1 b 2	Add two-digit numbers with and without regrouping, including columns of numbers.	
MA	2	4.2	Computation / Estimation	4.2.1	Estimate, add, subtract, multiply, and divide whole numbers w/wo calculators and solve word problems	4.2.1 c 2	Subtract two-digit numbers without regrouping.	
MA	2	4.2	Computation / Estimation	4.2.2	Estimate, add, and subtract decimals w/wo calculators and solve word problems	4.2.2 a 2	Use the decimal point in writing money.	

MA	2	4.3	Msr	4.3.1	Estimate, measure, solve word problems using metric units for linear, area, mass/weight, capacity and temperature	4.3.1 a 2	Measure length to meter.	
MA	2	4.3	Msr	4.3.2	Estimate, measure, solve word problems using standard units for linear measure, area, mass/weight, capacity and temperature	4.3.2 a 2	Estimate, measure length to nearest yard, foot, inch.	
MA	2	4.3	Msr	4.3.3	Tell and write correct time to the minute using an analog clock	4.3.3 a 2	Identify a.m., p.m., noon, midnight.	
MA	2	4.3	Msr	4.3.3	Tell and write correct time to the minute using an analog clock	4.3.3 b 2	Tell time in five minute increments.	
MA	2	4.4	Geo	4.4.1	Identify, describe, and create two and three-dimensional geometric shapes	4.4.1 a 2	Name all 2 dimensional geometric shapes with up to 5 sides	
MA	2	4.5	Data	4.5.1	Collect, organize, record, and interpret data and describe the findings	4.5.1 a 2	Organize data from a survey with tally.	
MA	2	4.6	Alg	4.6.1	Use and interpret variables and mathematical symbols to write and solve one-step equations.	4.6.1 a 2	Write number sentences with + - =.	
MA	2	4.6	Alg	4.6.2	Identify, describe and extend arithmetic patterns, using concrete materials and tables	4.6.2 a 2	Extend patterns with concrete materials.	

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GRADE 3

MA	Gr		Strand		NE Standard		Objective	
MA	3	4.1	Numera	4.1.1	Demonstrate place value of whole numbers through millions, decimals to the hundredth place	4.1.1 b 3	Read, write (in digits and words) and correctly order numerals through the thousands place and decimals to the tenths place.	
MA	3	4.1	Numera	4.1.2	Write and illustrate equivalences of whole numbers in expanded form, decimals, and fractions	4.1.2 a 3	Write whole numbers in expanded form, such as $432 = 400 + 30 + 2$	
MA	3	4.1	Numera	4.1.3	Describe, apply relationships between whole number, decimals, fractions by order, comparison, operation.	4.1.3 b 3	Order and compare common decimals (related to money) using symbols $<$, $>$, $=$	
MA	3	4.1	Numera	4.1.3	Describe, apply relationships between whole number, decimals, fractions by order, comparison, operation.	4.1.3 d 3	Illustrate mathematical concepts by using objects and drawing pictures or diagrams to show operation: multiplication as repeated addition.	
MA	3	4.1	Numera	4.1.4	Identify examples of positive and negative numbers and zero	4.1.4 a 3	Read a thermometer for temperature above and below zero degrees.	
MA	3	4.1	Numera	4.1.5	Make change and count out in amounts up to \$20.00	4.1.5 b 3	Identify and count money: coins and bills to \$20.00.	
MA	3	4.2	Computa / Estimat	4.2.1	Estimate, add, subtract, multiply, and divide whole numbers w/wo calculators and solve word problems	4.2.1 d 3	Add and subtract accurately three and four-digit numbers with and without regrouping and zeros.	
MA	3	4.2	Computa / Estimat	4.2.1	Estimate, add, subtract, multiply, and divide whole numbers w/wo calculators and solve word problems	4.2.1 e 3	Demonstrate with accuracy and speed the basic facts of multiplication and division through the 5s.	
	3	4.2	Computa / Estimat	4.2.2	Estimate, add, and subtract decimals w/wo calculators and solve word problems	4.2.2 b 3	Add and subtract decimals to the hundredths place related to money.	

MA	3	4.3	Msr	4.3.1	Estimate, measure, solve word problems using metric units for linear, area, mass/weight, capacity and temperature	4.3.1 a 3	Read Celsius thermometer to nearest degree.	
MA	3	4.3	Msr	4.3.1	Estimate, measure, solve word problems using metric units for linear, area, mass/weight, capacity and temperature	4.3.1 e 3	Read linear to closest centimeter.	
MA	3	4.3	Msr	4.3.2	Estimate, measure, solve word problems using standard units for linear measure, area, mass/weight, capacity and temperature	4.3.2 b 3	Estimate, measure length to the nearest quarter inch	
MA	3	4.3	Msr	4.3.2	Estimate, measure, solve word problems using standard units for linear measure, area, mass/weight, capacity and temperature	4.3.2 g 3	Read temperature to nearest degree Fahrenheit.	
MA	3	4.3	Msr	4.3.3	Tell and write correct time to the minute using an analog clock	4.3.3 c 3	Set analog clock to a given time	
MA	3	4.3	Msr	4.3.4	Measure, determine perimeter of many-sided figure w/o a formula using standard and metric units of measure	4.3.4 a 3	Measure, add the length of sides of figures.	
MA	3	4.4	Geo	4.4.1	Identify, describe, and create two and three-dimensional geometric shapes	4.4.1 b 3	Name all 2 dimensional geometric shapes with up to 8 sides	
MA	3	4.4	Geo	4.4.1	Identify, describe, and create two and three-dimensional geometric shapes	4.4.1 c 3	Draw an example of a geometric shape with less than 8 sides.	

MA	3	4.4	Geo	4.4.2	Identify and draw points, lines, line segments, rays, and angles	4.4.2 a 3	Name and draw points, lines, line segments.	
MA	3	4.5	Data	4.5.1	Collect, organize, record, and interpret data and describe the findings	4.5.1 b 3	Collect data using interview techniques.	
MA	3	4.5	Data	4.5.1	Collect, organize, record, and interpret data and describe the findings	4.5.1 d 3	Organize data using frequency charts	
MA	3	4.6	Alg	4.6.1	Use and interpret variables and mathematical symbols to write and solve one-step equations.	4.6.1 b 3	Write number sentences with X, =.	
MA	3	4.6	Alg	4.6.1	Use and interpret variables and mathematical symbols to write and solve one-step equations.	4.6.1 d 3	Use boxes to stand for any number, in basic operations	
MA	3	4.6	Alg	4.6.2	Identify, describe and extend arithmetic patterns, using concrete materials and tables	4.6.2 b 3	Identify and extend patterns with addition and subtraction i.e.in/out box.	

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GRADE 4

MA	Gr		Strand		NE Standard		Objective	Book/Resource
MA	4	4.1	Numera	4.1.1	Demonstrate place value of whole numbers through millions, decimals to the hundredth place	4.1.1 c 4	Read, write (in digits and words) and correctly order numerals through the millions place/ and decimals to the hundredths place	
MA	4	4.1	Numera	4.1.2	Write and illustrate equivalences of whole numbers in expanded form, decimals, and fractions	4.1.2 b 4	Show ways to write or illustrate a whole number as a fraction (4/1) or as a decimal (1.0).	
MA	4	4.1	Numera	4.1.3	Describe, apply relationships between whole number, decimals, fractions by order, comparison, operation.	4.1.3 e 4	Solve and check a mathematical problem by using the related facts.	
MA	4	4.1	Numera	4.1.5	Make change and count out in amounts up to \$20.00	4.1.5 c 4	Count back change from purchase price to amount given using fewest coins and bills possible.	
MA	4	4.1	Numera	4.1.5	Make change and count out in amounts up to \$20.00	4.1.5 d 4	Calculate change through subtraction and select correct bills and coins to make this amount.	
MA	4	4.2	Computa / Estimat	4.2.1	Estimate, add, subtract, multiply, and divide whole numbers w/wo calculators and solve word problems	4.2.1 f 4	Demonstrate with accuracy and speed the basic facts of multiplication up to 12 (1-144), and division up to 12 (1-144)	
MA	4	4.2	Computa / Estimat	4.2.1	Estimate, add, subtract, multiply, and divide whole numbers w/wo calculators and solve word problems	4.2.1 g 4	Multiply numbers up to three-digits by two-digit numbers.	
MA	4	4.2	Computa / Estimat	4.2.1	Estimate, add, subtract, multiply, and divide whole numbers w/wo calculators and solve word problems	4.2.1 h 4	Divide up to a three-digit number by a one-digit divisor.	
MA	4	4.2	Computa / Estimat	4.2.1	Estimate, add, subtract, multiply, and divide whole numbers w/wo calculators and solve word problems	4.2.1 I 4	Solve problems involving basic computation facts. May also use concrete objects and/or illustrations.	

MA	4	4.2	Computa / Estimat	4.2.3	Estimate, add, and subtract fractions with like denominators w/o calculators and solve word problems	4.2.3 a 4	Solve addition and subtraction problems involving common fractions (1/4,1/2) with like denominators.	
MA	4	4.3	Msr	4.3.1	Estimate, measure, solve word problems using metric units for linear,area,mass/weight,capacity and temperature	4.3.1 c 4	Estimate, measure mass/weight to the nearest kilogram (i.e).	
MA	4	4.3	Msr	4.3.1	Estimate, measure, solve word problems using metric units for linear,area,mass/weight,capacity and temperature	4.3.1 d 4	Estimate, measure capacity to the nearest milliliter.	
MA	4	4.3	Msr	4.3.2	Estimate, measure, solve word problems using standard units for linear measure, area, mass/weight, capacity and temperature	4.3.2 c 4	Estimate, measure mass/weight to nearest pound i.e. using bathroom scale.	
MA	4	4.3	Msr	4.3.2	Estimate, measure, solve word problems using standard units for linear measure, area, mass/weight, capacity and temperature	4.3.2 e 4	Estimate, count area to nearest foot i.e. using floor tile.	
MA	4	4.3	MSr	4.3.2	Estimate, measure, solve word problems using standard units for linear measure, area, mass/weight, capacity and temperature	4.3.2 f 4	Estimate, measure capacity to nearest 1/4 cup or ounce i.e. using measuring cups.	
MA	4	4.3	Msr	4.3.3	Tell and write correct time to the minute using an analog clock	4.3.3 d 4	State time in different ways such as 8:35, 35 minutes past 8:00, or 25 minutes before 9:00	

MA	4	4.4	Geo	4.4.1	Identify, describe, and create two and three-dimensional geometric shapes	4.4.1 d 4	Name cube, cone, cylinder, pyramid and prism	
MA	4	4.4	Geo	4.4.1	Identify, describe, and create two and three-dimensional geometric shapes	4.4.1 e 4	Describe cube, cone, cylinder, pyramid and prism	
MA	4	4.4	Geo	4.4.1	Identify, describe, and create two and three-dimensional geometric shapes	4.4.1 f 4	Make a model or provide a physical example of a cube, cone, cylinder, pyramid and prism	
MA	4	4.4	Geo	4.4.2	Identify and draw points, lines, line segments, rays, and angles	4.4.2 b 4	Name and draw rays and angles	
MA	4	4.4	Geo	4.4.3	Identify, analyze, and compare two dimensional geometric figures using congruence, symmetry, similarity and simple transformations.	4.4.3 a 4	Define congruence, symmetry, similarity, and transformation of slides, flips and turns	
MA	4	4.4	Geo	4.4.3	Identify, analyze, and compare two-dimensional geometric figures using congruence, symmetry, similarity and simple transformations.	4.4.3 b 4	Apply transformations to confirm similarity, congruence and symmetry	
MA	4	4.5	Data	4.5.1	Collect, organize, record, and interpret data and describe the findings	4.5.1 c 4	Collect data using a variety of techniques such as research, literature review, experiments.	
MA	4	4.5	Data	4.5.1	Collect, organize, record, and interpret data and describe the findings	4.5.1 e 4	Represent data using charts and graphs	
MA	4	4.5	Data	4.5.1	Collect, organize, record, and interpret data and describe the findings	4.5.1 f 4	Interpret.state conclusions related to data display.	

MA	4	4.5	Data	4.5.2	Collect, organize, record, and interpret data and describe the findings	4.5.2 a 4	Investigate and record patterns in a simple probability situation in an organized way	
MA	4	4.6	Alg	4.6.1	Use and interpret variables and mathematical symbols to write and solve one-step equations.	4.6.1 c 4	Identify and use various indicators of multiplication (\times , $()$, $*$, \bullet) and division ($/$, $?$, \div)	
MA	4	4.6	Alg	4.6.1	Use and interpret variables and mathematical symbols to write and solve one-step equations.	4.6.1 e 4	Use letters, boxes, or variables to stand for any number, in basic operations	
MA	4	4.6	Alg	4.6.1	Use and interpret variables and mathematical symbols to write and solve one-step equations.	4.6.1 f 4	Substitute value for a variable in simple expressions	
MA	4	4.6	Alg	4.6.2	Identify, describe and extend arithmetic patterns, using concrete materials and tables	4.6.2 c 4	Use in/out box to identify and extend patterns with multiplication and division.	

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GRADE 5

MA	Gr		Strand		NE Standard		Objective	
MA	5	8.1	Numera	8.1.1	Recognize natural numbers, wholes numbers, integers, and rational numbers	8.1.1 a 5	Find place value of decimals to the thousandths.	
MA	5	8.1	Numera	8.1.1	Recognize natural numbers, wholes numbers, integers, and rational numbers	8.1.1 b 5	Compare decimals to the thousandths place.	
MA	5	8.2	Computa / Estimat	8.2.1	Add, subtract, multiply, divide decimals, proper, improper,mixed fractions w/ uncommon/common denominators w/wo use of technology.	8.2.1 a 5	Add and subtract decimals beyond the hundredths place with and without the use of technology.	
MA	5	8.2	Computa / Estimat	8.2.1	Add, subtract, multiply, divide decimals, proper, improper,mixed fractions w/ uncommon/common denominators w/wo use of technology.	8.2.1 d 5	Add and subtract fractions with like denominators.	
MA	5	8.2	Computa / Estimat	8.2.2	Identify appropriate operation, do the correct calculations when solving word problems	8.2.2 a 5	Identify and correctly use the operations when solving word problems.	
MA	5	8.2	Computa / Estimat	8.2.3	Solve problems involving whole number, integers, and rational numbers (fraction, decimals, ratios, proportions, and percents) w/wo the use of technology	8.2.3 a 5	Solve real-life problems involving whole numbers	
MA	5	8.2	Computa / Estimat	8.2.5	Apply strategies of estimation when solving problems w/wo the use of technology	8.2.5 a 5	Properly round to a specified place value.	
MA	5	8.2	Computa / Estimat	8.2.5	Apply strategies of estimation when solving problems w/wo the use of technology	8.2.5 b 5	Perform estimation by rounding prior to calculation to perform mental math and verify the accuracy of answers with or without the use of technology.	

		8.3	Msr	8.3.1	Select measurement tools and measure quantities for temperature, time, money, distance, angles, area, perimeter, volume, capacity, and weight/mass in standard and metric units at the designated level of precision	8.3.1 a 5	Find distance and perimeter in standard and metric units.	
MA	5							
		8.3	Msr	8.3.1	Select measurement tools and measure quantities for temperature, time, money, distance, angles, area, perimeter, volume, capacity, and weight/mass in standard and metric units at the designated level of precision	8.3.1 b 5	Find area in standard and metric units.	
MA	5							
		8.4	Geo	8.4.1	Identify, describe, compare, and classify two- and three-dimensional geometric figures (plane figures like polygons) and (circles and solid figures like prisms, pyramids, cones, spheres, and cylinders) and lines, line segments, rays, angles, parallel and	8.4.1 a 5	Identify, describe, compare, and classify polygons and circles.	
MA	5							
		8.4	Geo	8.4.3	Use formulas to solve problems involving perimeter and area of a square, rectangle, parallelogram, trapezoid and triangle and area and circumference of circles	8.4.3 a 5	Apply formulas involving perimeter and area of squares and rectangles.	
MA	5							

MA	5	8.4	Geo	8.4.3	Apply the formulas to solve problems involving perimeter and area of a square, rectangle, parallelogram, trapezoid and triangle and area and circumference of circles	8.4.3 b 5	Distinguish between units of measure for determining perimeter and area	
MA	5	8.5	Data	8.5.1	Collect, construct, and interpret data displays and compute mean, median, and mode	8.5.1 a 5	Construct bar graphs and line graphs .	
MA	5	8.5	Data	8.5.2	Read and interpret tables, charts, and graphs to make comparisons and predictions	8.5.2 a 5	Interpret tables, charts and graphs.	
MA	5	8.6	Alg	8.6.2	Apply algebraic concepts and operations to solve linear equations and word problems	8.6.2 a 5	Solve one-step equations with one unknown.	

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GRADE 6

MA	Gr		Strand		NE Standard		Objective	Resources
MA	6	8.1	Numer	8.1.1	Recognize natural numbers, wholes numbers, integers, and rational numbers	8.1.1 c 6	Order sets of numbers including using whole numbers and their opposites (integers).	
MA	6	8.1	Numera	8.1.2	Determine equivalences among fractions, decimals, and percents	8.1.2 a 6	Find the equivalencies between common (1/4,1/2.3/4) fractions, decimals, and percents.	
MA	6	8.1	Numer	8.1.2	Determine equivalences among fractions, decimals, and percents	8.1.2 b 6	Solve problems with appropriate equivalencies of fractions/decimals/%	
MA	6	8.1	Numera	8.1.3.	Write and use numbers in expanded exponential form and scientific notation	8.1.3 a 6	Write numbers including decimals in expanded form.	
MA	6	8.1	Numer	8.1.3	Write and use numbers in expanded exponential form and scientific notation	8.1.3 b 6	Multiply and divide by powers of ten using whole numbers and decimals	
MA	6	8.1	Numer	8.1.4	Identify and display numbers including prime and composite, factors and multiples, divisibility, powers, and properties	8.1.4 a 6	Find common denominators using prime factorization and common multiples.	
MA	6	8.2	Computa / Estimat	8.2.1	Add, subtract, multiply, divide decimals, proper, improper,mixed fractions w/ uncommon/common denominators w/wo use of technology.	8.2.1 b 6	Multiply and diivide decimals using whole number divisors with and without the use of technology.	
MA	6	8.2	Computa / Estimat	8.2.1	Add, subtract, multiply, divide decimals, proper, improper,mixed fractions w/ uncommon/common denominators w/wo use of technology.	8.2.1 c 6	Multiply decimals and divide decimals with decimals divisors without technology.	

MA	6	8.2	Computa / Estimat	8.2.1	Add, subtract, multiply, divide decimals, proper, improper, mixed fractions w/ uncommon/common denominators w/wo use of technology.	8.2.1 e 6	Add and subtract proper, improper and mixed fractions using common and uncommon denominators (without technology)	
MA	6		Computa / Estimat	8.2.1	Add, subtract, multiply, divide decimals, proper, improper, mixed fractions w/ uncommon/common denominators w/wo use of technology.	8.2.1 f 6	Multiply and divide proper, improper and mixed fractions without the use of technology.	
MA	6	8.2	Computa / Estimat	8.2.2.	Identify appropriate operation, do the correct calculations when solving word problems	8.2. 2 b 6	Identify and correctly use the operations when solving word problems with too much or too little information	
MA	6	8.2	Computa / Estimat	8.2.3	Solve problems involving whole number, integers, and rational numbers (fraction, decimals, ratios, proportions, and percents) w/wo the use of technology	8.2.3 b 6	Solve real-life problems involving fractions and decimals.	
MA	6	8.2	Computa / Estimat	8.2.4	Apply the order of operations to solve problems w/wo the use of technology	8.2.4 a 6	Use order of operations to evaluate numerical expressions including whole numbers, fractions and decimals.	
MA	6	8.2	Computa / Estimat	8.2.5	Apply strategies of estimation when solving problems w/wo the use of technology	8.2.5 c 6	Perform estimation using front end estimation and compatible numbers to solve problems.	

MA	6	8.3	Msr	8.3.1	Select measurement tools and measure quantities for temperature, time, money, distance, angles, area, perimeter, volume, capacity, and weight/mass in standard and metric units at the designated level of precision	8.3.1 d 6	Use tools for weight/mass in both standard and metric units to milligrams and ounces.	
MA	6	8.4	Geo	8.4.1	Identify, describe, compare, and classify two- and three-dimensional geometric figures (plane figures like polygons) and (circles and solid figures like prisms, pyramids, cones, spheres, and cylinders) and lines, line segments, rays, angles, parallel and	8.4.1 b 6	Identify, describe, compare, and classify solid figures such as prisms, pyramids, cones, spheres and cylinders.	
MA	6	8.4	Geo	8.4.1	Identify, describe, compare, and classify two- and three-dimensional geometric figures (plane figures like polygons) and (circles and solid figures like prisms, pyramids, cones, spheres, and cylinders) and lines, line segments, rays, angles, parallel and	8.4.1 c 6	Identify, describe, compare, and classify lines, line segments, rays, angles, parallel and perpendicular lines.	
MA	6	8.4	Geo	8.4.3	Use formulas to solve problems involving perimeter and area of a square, rectangle, parallelogram, trapezoid and triangle and area and circumference of circles	8.4.3 c 6	Apply formulas for perimeter and area for triangles, parallelograms, and trapezoids (quadrilaterals).	

MA	6	8.5	Data	8.5.1	Collect, construct, and interpret data displays and compute mean, median, and mode	8.5.1 b 6	Show data in more than one way.	
MA	6	8.5	Data	8.5.2	Read and interpret tables, charts, and graphs to make comparisons and predictions	8.5.2 b 6	Read & interpret tables, charts & graphs to make comparisons.	
MA	6	8.6	Alg	8.6.1	Demonstrate knowledge and use of the one- and two-dimensional coordinate systems	8.6.1 a 6	Order integers (positive and negative) on a number line	
MA	6	8.6	Alg	8.6.2	Apply algebraic concepts and operations to solve linear equations and word problems	8.6.2 b 6	Solve one-step equations with one variable using fractions and decimals.	

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GRADE 7

MA	Gr		Strand		NE Standard		Objective	Resources
MA	7	8.1	Numera	8.1.1	Recognize natural numbers, wholes numbers, integers, and rational numbers	8.1.1 d 7	Use per cent and square root.	
MA	7	8.1	Numera	8.1.2	Determine equivalences among fractions, decimals, and percents	8.1.2 c 7	Find equivalences between fractions, decimals and percents.	
MA	7	8.1	Numera	8.1.2	Determine equivalences among fractions, decimals, and percents	8.1.2 d 7	Solve problems with appropriate equivalencies	
MA	7	8.1	Numera	8.1.3.	Write and use numbers in expanded exponential form and scientific notation	8.1.3 c 7	Multiply and divide by powers of ten larger than 1000 and as a decimal	
MA	7	8.1	Numera	8.1.3	Write and use numbers in expanded exponential form and scientific notation	8.1.3 d 7	Express numbers and decimals using scientific notation.	
	7		Computa / Estimat	8.2.1	Add, subtract, multiply, divide decimals, proper, improper, mixed fractions w/ uncommon/common denominators w/wo use of technology.	8.2.1 g 7	Add, subtract, multiply and divide proper and improper fractions and mixed fractions with and without common denominators using technology.	
	7	8.2	Computa / Estimat	8.2.2.	Identify appropriate operation, do the correct calculations when solving word problems	8.2.2 c 7	Identify and correctly use the operations when solving word problems with multiple steps.	
	7	8.2	Computa / Estimat	8.2.3	Solve problems involving whole number, integers, and rational numbers (fraction, decimals, ratios, proportions, and percents) w/wo the use of technology	8.2.3 c 7	Solve real-life problems involving ratios, proportions and percents.	

MA	7	8.2	Computa / Estimat	8.2.4	Apply the order of operations to solve problems w/wo the use of technology	8.2.4 b 7	Use order of operations to evaluate all types of numerical expressions, including grouping, symbols and exponents	
	7	8.2	Computa / Estimat	8.2.5	Apply strategies of estimation when solving problems w/wo the use of technology	8.2.5 d 7	Perform estimation to verify the accuracy of answers using front end estimation and compatible numbers.	
MA	7	8.3	Msr	8.3.1	Select measurement tools and measure quantities for temperature, time, money, distance, angles, area, perimeter, volume, capacity, and weight/mass in standard and metric units at the designated level of precision	8.3.1 e 7	Use tool to measure angles.	
MA	7	8.3	Msr	8.3.1	Select measurement tools and measure quantities for temperature, time, money, distance, angles, area, perimeter, volume, capacity, and weight/mass in standard and metric units at the designated level of precision	8.3.1 f 7	Use tools for volume and capacity in both standard and metric units.	
MA	7	8.3	Msr	8.3.2	Convert units within measurement systems using standard and metric, given conversion factors	8.3.2 a 7	Convert within linear units, such as foot to yards and centimeters to meters.	

MA	7	8.4	Geo	8.4.3	Use formulas to solve problems involving perimeter and area of a square, rectangle, parallelogram, trapezoid and triangle and area and circumference of circles	8.4.3 d 7	Apply formulas for circumference and area of circles, given the radius or diameter.	
MA	7	8.4	Geo	8.4.4	Solve problems given formulas for volume and surface area of rectangular prisms, cylinders, and cones	8.4.4 a 7	Distinguish between units of measure for determining surface area and volume	
MA	7	8.4	Geo	8.4.4	Solve problems given formulas for volume and surface area of rectangular prisms, cylinders, and cones	8.4.4 b 7	Apply formulas for surface area and volume of rectangular prisms.	
MA	7	8.4	Geo	8.4.6	Use geometric terms and representations to describe the physical world	8.4.6 a 7	Solve word problems using maps, scale drawings, perspective and shapes in the real world.	
MA	7	8.5	Data	8.5.1	Collect, construct, and interpret data displays and compute mean, median, and mode	8.5.1 c 7	Construct circle graphs	
MA	7	8.5	Data	8.5.2	Read and interpret tables, charts, and graphs to make comparisons and predictions	8.5.2 c 7	Read & interpret tables, charts & graphs to make comparisons, predictions and inferences.	
MA	7	8.6	Alg	8.6.2	Apply algebraic concepts and operations to solve linear equations and word problems	8.6.2 c 7	Solve one-step equations with one variable using fractions and decimals.	

MA	7	8.6	Alg	8.6.2	Apply algebraic concepts and operations to solve linear equations and word problems	8.6.2 d 7	Solve two-step equations with one variable including fractions, decimals and exponents.	
MA	7	8.6	Alg	8.6.2	Apply algebraic concepts and operations to solve linear equations and word problems	8.6.2 e 7	Recognize and apply the commutative, associative, distributive, inverse, identity and the properties of zero.	
MA	7	8.6	Alg	8.6.3	Describe and represent relations, using tables, graphs, and rules	8.6.3 a 7	Use variables to recognize and describe patterns	

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GRADE 8

MA	Gr		Strand		NE Standard		Objective	Resources
MA	8	8.1	Numeration/ Number Sense	8.1.2	Determine equivalences among fractions, decimals, and percents	8.1.2 e 8	Use ratio and proportion to solve problems.	
MA	8	8.1	Numeration/ Number Sense	8.1.3	Write and use numbers in expanded exponential form and scientific notation	8.1.3 e 8	Write numbers in expanded form using exponential notation	
	8	8.2	Computa / Estimat	8.2.4	Apply the order of operations to solve problems w/wo the use of technology	8.2.4 c 8	Use order of operations to evaluate all types of numerical expressions with positive and negative integers, including grouping, symbols and exponents.	
MA	8	8.3	Msr	8.3.2	Convert units within measurement systems using standard and metric, given conversion factors	8.3.2 b 8	Convert within various units of area and various units of volume, such as square foot to square yards and cubic decimeters to liters, etc.	
MA	8	8.4	Geo	8.4.1	Identify, describe, compare, and classify two- and three-dimensional geometric figures (plane figures like polygons) and (circles and solid figures like prisms, pyramids, cones, spheres, and cylinders) and lines, line segments, rays, angles, parallel and	8.4.1 c 8	Construct lines, angles, perpendicular bisectors, and angular bisectors.	
MA	8	8.4	Geo	8.4.2	Use geometric properties, the Pythagorean theorem, and the relationships of congruence, similarity, and symmetry	8.4.2 a 8	Apply geometric properties include but not limited to: angle congruency, proportional length of sides, lines and points of symmetry	

MA	8	8.4	Geo	8.4.2	Use geometric properties, the Pythagorean theorem, and the relationships of congruence, similarity, and symmetry	8.4.2 b 8	Calculate the length of the missing side of a right triangle using the Pythagorean Theory	
MA	8	8.4	Geo	8.4.4	Solve problems given formulas for volume and surface area of rectangular prisms, cylinders, and cones	8.4.4 c 8	Apply formulas for surface area and volume of cones and cylinders	
MA	8	8.4	Geo	8.4.5	Apply transformations to two- and three-dimensional geometric figures	8.4.5 a 8	Determine translations or slides, rotations or turns, reflections or flips, and scale	
MA	8	8.5	Data	8.5.1	Collect, construct, and interpret data displays and compute mean, median, and mode	8.5.1 d 8	Determine and calculate measures of central tendency (mean, median, mode) to describe the data set.	
MA	8	8.5	Data	8.5.1	Collect, construct, and interpret data displays and compute mean, median, and mode	8.5.1 e 8	Use representations of data such as circle graphs, tables and charts when computing mean, median and mode.	
MA	8	8.5	Data	8.5.3	Conduct experiments, simulations-demonstrate theoretical probability, relative frequency	8.5.3 a 8	Conduct experiments or simulations to demonstrate relative frequency	
MA	8	8.5	Data	8.5.3	Conduct experiments or simulations to demonstrate theoretical probability and relative frequency	8.5.3 b 8	Conduct experiments or simulations to demonstrate theoretical probability	
MA	8	8.5	Data	8.5.4	Identify statistical methods and probability for making decisions	8.5.4 a 8	Recognize and use sampling techniques	
MA	8	8.5	Data	8.5.4	Identify statistical methods and probability for making decisions	8.5.4 b 8	Recognize and use measures of central tendency.	

MA	8	8.5	Data	8.5.4	Identify statistical methods and probability for making decisions	8.5.4 c 8	Assess use of statistical methods and probability for decision making.	
MA	8	8.6	Alg	8.6.1	Demonstrate knowledge and use of the one- and two-dimensional coordinate systems	8.6.1 b 8	Graph ordered pairs on a coordinate plane using integers	
MA	8	8.6	Alg	8.6.1	Demonstrate knowledge and use of the one- and two-dimensional coordinate systems	8.6.1 c 8	Solve inequalities with one variable and graph results.	
MA	8	8.6	Alg	8.6.1	Demonstrate knowledge and use of the one- and two-dimensional coordinate systems	8.6.1 d 8	Generate a function table of ordered pairs to graph an equation in two variables	
MA	8	8.6	Alg	8.6.2	Apply algebraic concepts and operations to solve linear equations and word problems	8.6.2 f 8	Solve multi-stepped equations with one variable	
MA	8	8.6	Alg	8.6.2	Apply algebraic concepts and operations to solve linear equations and word problems	8.6.2 g 8	Use order of operations to evaluate algebraic expressions for given replacement value of the variables	
MA	8	8.6	Alg	8.6.3	Describe and represent relations, using tables, graphs, and rules	8.6.3 b 8	Describe and represent relations, using tables, graphs and rules.	