

Lincoln Elementary School District #27

Math Curriculum Alignment

Grade Level	Goal 6: Demonstrate and apply a knowledge and sense of numbers, including numeration and operations (addition, subtraction, multiplication, division), patterns, ratios and proportions.	I=Introduce P=Progressing M=Mastery	Assessment:
Pre-K			
	Goal 7: Estimate, make and use measurements of objects, quantities and relationships and determine acceptable levels of accuracy.		
	Goal 8: Use algebraic and analytical methods to identify and describe patterns and relationships in data, solve problems and predict results.		
	Goal 9: Use geometric methods to analyze, categorize and draw conclusions about points, lines, planes and space.		
	Goal 10: Collect, organize and analyze data using statistical methods; predict results; and interpret uncertainty using concepts of probability.		

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Kindergarten	I can understand and recognize how many are in a set. I can estimate how many are in a set.	M P	Given a random number, the student must count on.
	I can recognize and count 0 – 100, sequence of numbers, and count with one-to-one correspondence, and use ordinal numbers.	M, I	
	I can solve simple math problems mentally, by using objects, or by drawing pictures.	P	
	I can write numbers from 0 – 20.		
	I can add and subtract numbers from 1 – 10 using concrete objects.	M	
	I can connect numbers to quantities they represent using models and representations.	P	
	I can make comparisons of different amounts.		
	Goal 7: Estimate, make and use measurements of objects, quantities and relationships and determine acceptable levels of accuracy.		
	I can name penny, nickel, dime, and quarter, and identify the amount of each.	M, P	
	I can tell time to the hour on analog and digital clocks.	M	
	I can identify different times of the day: morning, afternoon, night.	M	Daily schedule, calendar Too many kids on a bench, Pouring water into a cup Thermometers, clocks, scales
	I can use estimation skills to solve measurement problems.	P	
	I can use common instruments for measuring during work or play.	P	
	I can begin to understand measurement using non-standard measurement. (i.e. cubes)	P	
	I can use tools to explore and extend mathematical competence.	P	

	I can compare and describe objects by size, length, capacity, and weight.	M	
	Goal 8: Use algebraic and analytical methods to identify and describe patterns and relationships in data, solve problems and predict results.		
	I can sort objects into groups.	M	Sort into color, shape, size
	I can create and extend patterns.	M	
	I can represent math ideas with symbols, pictures, or objects.	P	
	I can talk about the thinking involved in solving math problems.		
	I can describe changes in size over time.	I	Growing a plant
	Goal 9: Use geometric methods to analyze, categorize and draw conclusions about points, lines, planes and space.		
	I can recognize and name six shapes.	M	
	I can describe shapes and solid shapes.	M	
	I can use direction, location, and position words.	M	Follow directions
	Goal 10: Collect, organize and analyze data using statistical methods; predict results; and interpret uncertainty using concepts of probability.		
	I can gather data to answer a simple question.		
	I can make predictions based on objects, pictures, and graphs.		
	I can construct and explain a simple graph.	M	

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First Grade	I can skip count by 2s, 5s, and 10s.	I, P	

I can count how many objects are in a set.	M	
I can show sets of odd and even numbers using objects.	I	
I can show numbers using Base ten blocks.	I	
I can match number words and numbers to a set of objects.	P	
I can order unit fractions.	I	
I can solve addition and subtraction problems by using objects.	P	
I can write a number sentence to solve a word problem.	I, P	
I can explain how to solve a problem.	P	
I can use fact families to solve problems.	I	
I can use different strategies to add and subtract.	I	
I can check to see if my answer makes sense.	I	
I can create and compare sets of objects to solve problems.	P	
Goal 7: Estimate, make and use measurements of objects, quantities and relationships and determine acceptable levels of accuracy.		
I can choose what part to measure on an object.	I	
I can compare and order objects by measurements.	I	
I can measure objects using items in the room. (i.e. paperclips)	I, P	
I can discuss the calendar and seasons.	P	
I can identify types of money and how much they are worth.	P	
I can count groups of coins.	P	
I can estimate how long, heavy, or how much an object holds by using objects in the room.	I	
Goal 8: Use algebraic and analytical methods to identify and describe patterns and relationships in data, solve problems and predict results.		
I can list common and uncommon attributes.		
I can see and do patterns with sounds, motions, shapes, and numbers.	P	
I can identify repeating patterns.	P	

	Goal 9: Use geometric methods to analyze, categorize and draw conclusions about points, lines, planes and space.		
	Goal 10: Collect, organize and analyze data using statistical methods; predict results; and interpret uncertainty using concepts of probability.		

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Second Grade	I can count by 2s and 10s.		
	I can identify ones, tens, and hundreds place.		
	I can compare numbers using >, <, = symbols.		
	I can use cardinal (1,2,3) and ordinal (first, second, third) numbers.		
	I can identify odd and even numbers.		
	I can understand fractions (1/2, 1/3, 1/4).		
	I can solve two-step addition and subtraction problems.		
	I can show multiplication with repeated addition.		
	I can solve addition and subtraction facts.		
	I can use mental math to solve addition and subtraction problems.		
	I can estimate sums and differences using one- and two-digit numbers.		
	I can decide whether to use exact numbers or estimate.		
	I can use a calculator to solve addition and subtraction problems.		
	I can use objects to solve fractions.		

Goal 7: Estimate, make and use measurements of objects, quantities and relationships and determine acceptable levels of accuracy.		
I can estimate length, weight, and capacity.		
I can choose the right tool for measurement.		
I can identify and use different types of measurements.		
I can describe relationships using time, money, and length.		
I can tell time.		
I can estimate time passing.		
I can count money and compare sets of coins and order them, or show equal amounts.		
I can use money to make change.		
I can estimate the money I will need to buy something.		
I can solve problems using money and time.		
Goal 8: Use algebraic and analytical methods to identify and describe patterns and relationships in data, solve problems and predict results.		
I can identify, describe, create, and extend patterns.		
I can finish a number pattern.		
I can use objects to create a pattern.		
I can identify the missing part of a pattern.		
I can describe and compare how something changes.		
I can read a problem to find the missing number.		
I can identify and complete fact families.		
I can use patterns to prove my answer.		
Goal 9: Use geometric methods to analyze, categorize and draw conclusions about points, lines, planes and space.		
I can explain how geometric solids are alike and different.		
I can find the perimeter and area of an object.		
I can identify a line of symmetry in a shape.		
I can predict the results of what 2 and 3 dimensional shapes will look like when taken apart.		
I can use a grid to understand direction and distance.		
I can slide, flip, and turn concrete objects.		
I can identify objects that are the same size and shape.		
I can identify plane and geometric solids.		
I can finish a pattern and prove if it's right.		

	Goal 10: Collect, organize and analyze data using statistical methods; predict results; and interpret uncertainty using concepts of probability.		
	I can read and understand different kinds of graphs.		
	I can make predictions from simple information.		
	I can interview my classmates to gather information.		
	I can identify likely, unlikely, and impossible events.		
	I can make predictions based on events that have already happened.		

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Third Grade	I can name, order, and compare numbers.	M	
	I can write a number in expanded form.	M	
	I can tell the size of fractions using examples.	M	
	I can draw a picture of a fraction and label it. I can compare and order fractions.	M	
	I can draw equal forms of fractions.	M	
	I can write money amounts using the dollar sign, decimal point, and cent sign.	M	
	I can figure out the value of a number using place value.	M	
	I can write a number in number form and using words.	M	
	I can show a number in different ways. (five, 4+1, 2+3)	M	
	I can identify odd and even numbers.	M	
	I can write multiplication and division number sentences in fact families.	I, P	
	I can use math words to describe what happens when I multiply and divide.	I, P	
	I can understand and use the commutative, associative, and identity property for addition, subtraction, and multiplication.	I, P	

I can say my multiplication and division facts quickly.	I, P	
I can solve multiplication and division number sentences and word problems.	I, P	
I can use patterns when I multiply (e.g. $3 \times 4 = 12$, $30 \times 4 = 120$, $300 \times 4 = 1200$).	I, P	
I can show one of many ways to add and subtract.	I, P	
I can round and use a simpler problem to estimate an answer and check my work when I am finished.		
I can choose mental math, estimation, calculators, or paper/pencil to solve a math problem.	P	
I can decide when to round or give an exact answer.	I, P I, P	
I can compare numbers by using $>$, $<$, and $=$.		
Goal 7: Estimate, make and use measurements of objects, quantities and relationships and determine acceptable levels of accuracy.		
I can explain why we use the customary and metric system when we measure.	I, P	
I can measure objects using customary and metric systems.	I, P	
I can describe an object by its measurements (ex. Length, mass/weight, time, temperature, area, volume, capacity).	I, P	
I can use the correct units and tools to measure length, area, volume, weight, time, and temperature.	M	
I can convert (ex. Three feet is the same as a yard).	I I, P	
I can make change using money.		
I can find the area of an object by counting square units and half units.	M M M M	
I can figure out the perimeter of polygons.		
I can find the perimeter of an object by measuring and adding.		
I can solve problems using perimeter and area of polygons.		
I know which measurement terms to use when I measure.	M P	
I can figure out how much time has passed between events.		
I can discuss temperature using degrees Celsius and degrees Fahrenheit.	P	
Goal 8: Use algebraic and analytical methods to identify and describe patterns and relationships in data, solve problems and predict results.		
I can finish a pattern of shapes or numbers.	M	
I can create a pattern.		
I can find a mistake in a pattern.		
I can use a letter to represent a number in a number sentence.		

I can create a number sentence to show information from a story problem.		
I can show information using words, tables, and graphs.		
I can describe situations with constant rates of change using words, table, and graphs (e.g. walking at a constant rate of speed).		
I can use fact families to solve a problem with a missing number.		
I can use one of the four operations to solve problems involving patterns (e. g. save one penny on day 1, double that amount each day for 10 days).		
I can figure out what a letter stands for in a number sentence. $2 + x = 7$		
Goal 9: Use geometric methods to analyze, categorize and draw conclusions about points, lines, planes and space.		
I can give a location using a coordinate graph.		
I can predict and describe the results of translations, rotations, and reflections of two-dimensional shapes.		
I can identify, draw, and build polygons.		
I can relate a three-dimensional object into two-dimensional components. (sphere – circle, cube – square)		
I can explain the difference between congruent and similar.		
I can explain how to move an object to show it is congruent.		
I can build a three-dimensional shape from two-dimensional shapes.		
I can use geometry to solve a problem in my classroom or in everyday life. I can use geometry in other subjects.		
I can make a prediction about a math problem, figure out if I am correct, and explain my answer.		
Goal 10: Collect, organize and analyze data using statistical methods; predict results; and interpret uncertainty using concepts of probability.		
I can look at information, organize and describe it, and make predictions.		
I can show information using tables and graphs such as tallies and bar graphs.		
I can explain important information on a graph.		
I can determine the median (middle) on a graph.		
I can make and give a survey that answers real life questions.		
I can follow up my survey to answer questions that came from my first survey.		
I can use the words “certain”, “equally likely”, “likely”, “unlikely”, or “impossible” to talk about probability.		
I can show probability as a fraction (ex. A tossed coin can land on heads or tails. The probability of landing on heads is $\frac{1}{2}$.)		
I can make predictions after I conduct a probability experiment.		

	I can create and perform a probability experiment (ex. A penny is flipped 100 times) and record the results.		
	I can explain that probability can be described as a fraction between zero (never) and one (always).		

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Fourth Grade	I can read and write numbers up to 1,000,000.	P	Flip charts, read How Much is a Million?
	I can represent multiplication as repeated addition.	M	cubes
	I can compare and order numbers up to 100,000.	P	
	I can compare decimals through one-hundredths.	P	Decimal strips
	I can compare fractions with like denominators.	P P P	Fraction strips Number lines
	I can locate whole numbers, halves, and fourths on a number line.		
	I can solve problems with odds/evens and greater than/ less than.		
	I can regroup for addition and subtraction up to 5 digits.	P	
	I can solve money problems using bills and coins up to \$100.00	P	Money bags, games
	I can multiply and divide basic facts up to 12 x 12.	P	Contig, flashcards, races, games, Rocket math
	I can add and subtract fractions with like denominators.	P	Fraction strips
	I can use the commutative and distributive properties.	P	
	I can use fact families to solve add/sub and mult/div problems.	P	
	I can estimate whole numbers.	P	
	Goal 7: Estimate, make and use measurements of objects, quantities and relationships and determine acceptable levels of accuracy.		
	I can solve problems involving elapsed time in compound units.	P	Judy clocks
	I can select and use appropriate standard units and tools to measure lengths, time, and temperature.	P	Use rulers, balance scale, computers
	I can solve problems using perimeter and area of polygons, squares, rectangles, or irregular shapes.	P	Tangram shapes

I can compare and estimate length, area and volume, weight/mass.	P	Calculators
I can determine volume of a solid figure in cubic units.	P	calculators
I can solve problems involving unit conversions for length, time, and weight/mass.	P	Make conversion charts
Goal 8: Use algebraic and analytical methods to identify and describe patterns and relationships in data, solve problems and predict results.		
I can find and extend patterns.	P	Clap, snap, pat, stomp, and art projects
I can write expressions using variables for unknown quantities.	I	Board work
I can evaluate expressions with a whole number variable value ($3 + m$, when $m = 4$).	I	
I can identify or represent situations with patterns using words, tables, and graphs.	I	
I can show information from graphs, tables, and charts in written form.	I	Excel - computers
I can represent mathematical relationships with number sentences.	M	
I can solve for an unknown in an equation with one operation.	P	
I can solve word problems involving unknown quantities.	P	calculators
Goal 9: Use geometric methods to analyze, categorize and draw conclusions about points, lines, planes and space.		
I can tell 2-dimensional shapes from each other. I know what octagons, hexagons, pentagons, quadrilaterals, and triangles are and can tell the number of sides, vertices, and right angles for each.	P	
I can identify and describe 3-dimensional shapes (cubes, spheres, cones, cylinders, prisms, and pyramids) by their characteristics (faces, edges, vertices).	P	Nets, solid shapes
I can tell the difference between polygons and non-polygons.	M	Overhead use
I can graph and locate ordered pairs and identify points.	P	computers
I can identify lines of symmetry.	P	Miras
I know the difference between a flip, slide, and turn.	P	Tangram shapes
I can identify and sketch parallel and perpendicular lines.	P	
I can find and draw a right angle.	I, P	Pipe cleaner
I can identify the plane figures that make up a 3-dimensional figure.	P	nets
I can identify a 3-dimensional object by looking at its net.	P	
I can look at figures and tell if they are congruent or similar.	M	
I can find the distance between 2 points on a number line with whole numbers.	P	

	Goal 10: Collect, organize and analyze data using statistical methods; predict results; and interpret uncertainty using concepts of probability.		
	I can read pictographs, bar graphs, line plots, tally charts, tables, line graphs, circle graphs, and Venn diagrams.	P	Group graphs, tables, tally charts
	I can create a pictograph, bar graph, tally chart, or table.	P	
	I can find the mode and range of a set of numbers.	P P	calculators Colored tile bag time
	I can use terms such as certain, most likely, equally likely, least likely, possible, and impossible.		
	I can associate chance using “3 out of 4” or $3/4$.	P	

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Fifth Grade	I can read, write, and recognize whole numbers and place value up to 100,000,000.		
	I can read, write, recognize, model, and interpret number sentences.		
	I can read, write, recognize, and model fractions, improper fractions, and mixed numbers.		
	I can recognize, translate, and model decimals, fractions less than one, and percents.		
	I can read, write, recognize, and model decimals through thousandths.		
		Goal 7: Estimate, make and use measurements of objects, quantities and relationships and determine acceptable levels of accuracy.	
	I can figure time using addition or subtraction in hours and minutes.		

I can use tools to measure weight, length, and liquid in standard measurements.		
I can use tools to measure weight, length, and liquid in metric measurements.		
I can use a protractor and compass to measure angles.		
I can use formulas or measurements to figure perimeter and area of geometric shapes.		
I can compare or estimate length, area, volume, weight/mass, and angles using referents.		
I can determine the volume of a right rectangular prism using the appropriate formula.		
I can solve problems with unit conversions using customary measurements.		
I can solve problems with unit conversions using metric measurements.		
I can interpret distances on a map using a map scale.		
Goal 8: Use algebraic and analytical methods to identify and describe patterns and relationships in data, solve problems and predict results.		
I can find a missing term in a sequence and extend a sequence.		
I can create and name a rule for a given sequence.		
I can write an expression using variables to represent unknown quantities.		
I can solve algebraic expressions with a whole number variable.		
I can use an input/output function table.		
I can show different relationships of whole numbers by tables and pictorials.		
Goal 9: Use geometric methods to analyze, categorize and draw conclusions about points, lines, planes and space.		
I can describe and draw 2-dimensional figures (triangles, quadrilaterals, pentagons, hexagons, and octagons).		
I can identify and draw 3-dimensional shapes (cubes, spheres, cones, cylinders, prisms, and pyramids) by their faces, edges, and vertices.		
I can solve problems about triangles.		
I can describe and draw circles with radius and diameter.		
I can graph, locate, and find points using ordered pairs in the first quadrant.		
I can identify lines of symmetry and draw them on figures.		
I can describe and predict the results of reflections, translations, and rotations of 2-dimensional shapes.		
I can find and sketch parallel, perpendicular, and intersecting lines.		
I can find and sketch acute, right, and obtuse angles.		

	I can find 2-dimensional parts of a 3-dimensional object.		
	I can identify a 3-dimensional object from its net.		
	I can predict the result of making or taking apart shapes and figures.		
	I can find congruent and similar figures by looking at them.		
	I can find if figures are similar and find relationships between parts of similar figures.		
	I can find the distance between 2 points on a horizontal or vertical number line in whole numbers.		
	Goal 10: Collect, organize and analyze data using statistical methods; predict results; and interpret uncertainty using concepts of probability.		
	I can interpret data given in a Venn diagram with 2 circles.		
	I can create and explain a stem and leaf plot.		
	I can read and make predictions from a chart or table.		
	I can create a line or bar graph using given data.		
	I can, using given data, find the mean, median, mode, and range.		
	I can read, create, and explain a pictograph.		
	I can read and interpret a circle graph.		
I can figure the number of combinations from 2 or more given objects. (fundamental counting principle)			
I can figure the probability of a simple event occurring using a fraction as the representation.			

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Sixth Grade	I can model and solve patterns, exponents, and equations.		
	I can read, write, and compare decimals.		
	I can add and subtract decimals.		
	I can estimate and calculate products and quotients using decimals.		
	I can model and use ratios and proportions.		
	I can relate to fractions, decimals, and percents.		
	I can estimate percents and find percent of a number.		

I can solve equations involving fractions and mixed numbers.		
Goal 7: Estimate, make and use measurements of objects, quantities and relationships and determine acceptable levels of accuracy.		
I can use metric units for length, mass, and capacity.		
Goal 8: Use algebraic and analytical methods to identify and describe patterns and relationships in data, solve problems and predict results.		
Goal 9: Use geometric methods to analyze, categorize and draw conclusions about points, lines, planes and space.		
Goal 10: Collect, organize and analyze data using statistical methods; predict results; and interpret uncertainty using concepts of probability.		
I can use statistics to analyze data.		Students will complete WS, quizzes, checkpoints, tests.

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Seventh Grade	I can identify prime numbers.	M	
	I can determine factors and multiples.	M	
	I can find the prime factorization of numbers.	M	
	I can find square roots and perfect squares.	I	
	I can compare and round decimals.	M	
	I can estimate decimals.	M	
	I can show how to add, subtract, multiply, and divide decimals.	M	
	I can identify and select properties to add and multiply problems.	M	
	I can solve problems using order of operations.	M	
	I can solve story problems with decimals.	M	
	Goal 7: Estimate, make and use measurements of objects, quantities and relationships and determine acceptable levels of accuracy.		
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Eighth Grade	I can add, subtract, multiply, and divide integers.	M	
	I can use order of operations to evaluate numeric expressions.	M	
	I can write variable expressions for word phrases.	M	
	I can evaluate variable expressions using order of operations.	M	
	I can use exponents in expressions.	M	
	I can multiply and divide powers with the same bases.	M	
	I can evaluate expressions with zero and negative exponents.	P	
	I can evaluate numeric and variable expressions with exponents.	M	
	I can write numbers using scientific notation.	M	
	I can write numbers in standard form.	M	

I can combine like terms and simplify expressions.	M	
I can simplify variable expressions using the distributive property.	M	
I can solve one-step and multi-step equations.	M	
I can write and solve one-step equations based on real world situations.	M	
I can write and solve multi-step equations based on real world situations.	P	
I can write ratios and rates and express them in simplest form.	M	
I can find unit rates.	M	
I can solve proportions.	M	
I can write proportions to solve problems.	M	
I can write fractions and decimals as percents.	M	
I can solve percent problems using proportions and equations.	M	
I can solve problems involving percent of change.	M	
I can solve problems involving mark-ups, discounts, and interest.	P	
Goal 7: Estimate, make and use measurements of objects, quantities and relationships and determine acceptable levels of accuracy.		
Goal 8: Use algebraic and analytical methods to identify and describe patterns and relationships in data, solve problems and predict results.		
I can solve one-step inequalities.	M	
I can graph solutions to inequalities.	M	
I can graph points in a coordinate plane.	M	
I can graph solutions of linear equations with and without the use of technology.	P	
Goal 9: Use geometric methods to analyze, categorize and draw conclusions about points, lines, planes and space.		
I can use proportions to find side lengths of similar polygons.	M	

I can use proportions to create scale drawings.	P M M M	
I can compute lengths using the Pythagorean theorem.		
I can identify and describe pyramids, prisms, cones, and their parts.		
I can find the surface area and volume of prisms, cylinders, pyramids, and cones.		
I can find perimeter or circumference and area of two-dimensional regions and apply them in practical situations.	P	
Goal 10: Collect, organize and analyze data using statistical methods; predict results; and interpret uncertainty using concepts of probability.		
I can find the probability that an event will occur.	M	
I can use tree diagrams and the fundamental counting principle to find the number of possible outcomes.	M	
I can compute measures of central tendency (mean, median, mode).	M	
I can organize and display data in many forms with and without technology.	M M M	
I can read graphs critically.		
I can make predictions based on data displays.		