

“Teaching hasn’t happened unless learning occurs.” –Chester Finn

Standards Reference	GRADE 3: MATH Grade Level Expectations	Notes
*Assessed locally		
Understanding Numbers	The student understands WHOLE NUMBERS and SIMPLE FRACTIONS. Student can:	
N-1	Read, write, order, and count numbers between 1 & 1,000.	
N-2	Model using base ten blocks and identify place value positions to thousands.	
N-3	Use appropriate representations of ordinal and cardinal numbers.	
N-4	Identify, describe with explanations, or illustrate equal parts of a whole, a region, or a set using models.	
N-5	Identify, describe w/ explanations, or illustrate equivalent representation of fractions with denominators of 2, 3, 4, or 10 using models.	
Understanding Operations	The student understands MATHEMATICAL OPERATIONS. Student can:	
N-6	Use models, explanations, number lines, or real life situations to describe or illustrate addition and subtraction.	
Number Theory	The student understands NUMBER THEORY. Using manipulatives or models, student can:	
N-7 *	Describe or illustrate identity property of addition.	
N-8 *	Explain commutative property of addition.	
N-9	Identify or use patterns in the number system (skip count by 2’s, 5’s, or 10’s; add or subtract by 10; even or odd numbers).	
Measurable Attributes	The student understands MEASURABLE ATTRIBUTES. Student can:	
MEA-1 *	Estimate length to the nearest inch or foot.	
MEA-2 *	Compare and order objects according to measurable attributes (calendar, length, temperature, weight, area, & volume).	
MEA-3	Identify or describe objects that are greater than, less than, or equal to a unit of measure.	
MEA-4	Select an appropriate unit of English, metric, or non-standards measurement to estimate length, time, weight, or temperature.	
MEA-5	Identify coins, their value, or the value of a set of coins.	
Measurement Techniques	The student understands MEASUREMENT TECHNIQUES. Student can:	
MEA-6	Measure length to nearest half-inch.	
MEA-7 *	Tell time to nearest quarter-hour using an analog clock and distinguish between morning, afternoon, and evening.	
MEA-8	Determine elapsed time using a calendar.	
MEA-9 *	Count back change from \$1.00.	
Estimation	The student understands ESTIMATION. Student can:	
E&C-1	Find “how many” or “how much” to 50.	
E&C-2	Estimate results of simple addition and subtraction problems up to 1,000.	
Computation	The student understands COMPUTATION. Student can:	
E&C-3 *	Efficiently recall basic addition and subtraction facts, sums up to 20, and corresponding subtraction facts.	
E&C-4	Add or subtract two-digit whole numbers.	
E&C-5	Use repeated addition to model multiplication with whole numbers with products to 25.	
E&C-6	Use grouping or “sharing equally” to model division with whole numbers to 25.	

Math Content Strand Key: N = Numeration; MEA = Measurement; E&C = Estimation & Computation; F&R = Functions & Relationships; G = Geometry; S&P = Statistics & Probability; PS = Process Skills

Standards Reference <small>*Assessed locally</small>	GRADE 3: MATH Grade Level Expectations <i>CONTINUED</i>	Notes
Patterns & Functions	The student understands PATTERNS & FUNCTIONS. Student can:	
F&R-1	Identify a missing element in a pattern up to the next three terms, or explain how missing elements could be found.	
F&R-2 *	Express a generalization of a pattern using words.	
F&R-3 *	Use manipulatives, including a calculator, as tools when describing, extending, or representing patterns.	
Equations/ Inequalities	The student understands EQUATIONS & INEQUALITIES. Student can:	
F&R-4	Use an open number sentence (addition or subtraction) to solve for an unknown represented by a box or circle (e.g. $5 + \square = 16$).	
F&R-5	Use appropriate vocabulary or symbols for greater than, less than, or equal to.	
Geometric Relationships	The student understands GEOMETRIC RELATIONSHIPS. Student can:	
G-1	Use the number or length of sides to identify, describe, model, or compare triangles or rectangles (using squares).	
G-2	Use the attributes and properties of plane figures to model, identify, compare, or describe plan figures (circles, rectangles, squares, and triangles) and solid figures (cubes, cylinders, or spheres).	
Shapes	Student understands SIMILARITY, CONGRUENCE, SYMMETRY, & TRANSFORMATION OF SHAPES & can:	
G-3	Identify, create, or draw lines of symmetry for real-world objects (e.g. block letters, flags, insects).	
G-4	Compare or describe shapes (circles, triangles, or rectangles) as "larger than," "smaller than," or "congruent to" a given shape.	
G-5	Illustrate or identify the results of transformations (slides) of polygons.	
Perimeter & Area	The student understands PERIMETER, AREA, VOLUME, AND SURFACE AREA. Student can:	
G-6	Estimate or determine area or perimeter of rectangle or square shapes on grids.	
Position & Direction	The student understands POSITION & DIRECTION. Student can:	
G-7 *	Use directional terms (inside, outside, right, left, horizontal, vertical) to describe relative location of objects in a picture.	
Construction	The student understands GEOMETRIC DRAWINGS OR CONSTRUCTIONS. Student can:	
G-8	Draw real-world objects that consist of geometric shapes (squares, rectangles, triangles, or circles).	
Data Display	The student understands ORGANIZATION & CLASSIFICATION OF DATA. Student can:	
S&P-1	Design an investigation and collect, record, organize, display, or explain the classification of data in real-world problems (e.g. literature, self, or family) using bar graphs and Venn diagrams.	
Analysis & Central Tend.	The student understands ANALYSIS & CENTRAL TENDENCY. Student can:	
S&P-2	Use information from a variety of displays (tallies, tables, pictographs, bar graphs, or Venn diagrams).	
S&P-3	Use the terms "maximum" or "minimum."	
Probability	The student understands PROBABILITY. Student can:	
S&P-4 *	Explain the differences between chance and certainty or recognize events that may be certain or chance events.	
S&P-5	Find, record, & make predictions about the likelihood of outcomes of a simple probability experiment (e.g. spinner, tossing a coin).	
Problem Solving	The student understands PROBLEM SOLVING STRATEGIES. Student can:	
PS-1*	Select & apply appropriate strategy (e.g. guess & check, draw a picture, make a model, extend a pattern) to solve a problem.	
Communication	The student COMMUNICATES MATHEMATICAL THINKING. Student can:	
PS-2*	Represent math problems using manipulatives, models, pictures, and/or everyday language, or use everyday language to explain thinking about the problem-solving strategies and solutions to problems.	
Reasoning	The student uses LOGIC & REASONING to solve mathematical problems. Student can:	
PS-3*	Draw conclusions about math problems or find examples that support or refute mathematical statements.	
PS-4*	Explain whether or not a prediction, estimation, or solution is reasonable.	
Connections	The student CONNECTS & APPLIES MATHEMATICAL CONCEPTS. Student can:	
PS-5*	Understand & apply math skills & processes in real-world contexts such as literature, self, and family.	