

CHECK LIST FOR THIRD GRADE MATHEMATICS CHECKS FOR UNDERSTANDING

✓	DATE	CHECKS FOR UNDERSTANDING
		Standard 1 – Mathematical Processes
		Checks for Understanding
		0306.1.1 Read and write time to the nearest minute.
		0306.1.2 Compare and order decimal amounts in the context of money.
		0306.1.3 Count the value of combinations of coins and bills up to five dollars.
		0306.1.4 Analyze problems by identifying relationships, distinguishing relevant from irrelevant information, and observing patterns.
		0306.1.5 Determine when and how to break a problem into simpler parts.
		0306.1.6 Use estimation to check answers for reasonableness, and calculators to check for accuracy.
		0306.1.7 Make and investigate mathematical conjectures.
		0306.1.8 Explain and justify answers on the basis of mathematical properties, structures, and relationships.
		0306.1.9 Use manipulatives to demonstrate that the commutative property holds for addition but not for subtraction.
		0306.1.10 Use correct, clearly written and oral mathematical language to pose questions and communicate ideas.
		0306.1.11 Develop strategies for solving problems involving addition and subtraction of measurements.
		0306.1.12 Analyze and evaluate the mathematical thinking and strategies of others.
		0306.1.13 Create and use representations to organize, record, and communicate mathematical ideas.
		0306.1.14 Use age-appropriate books, stories, and videos to convey ideas of mathematics.
		Standard 2 – Number & Operations
		0306.2.1 Represent whole numbers up to 10,000 using various models (such as base-ten blocks, number lines, place-value charts) and in standard form, written form, and expanded form.
		0306.2.2 Understand and use the symbols =, < and > to signify order and comparison.
		0306.2.3 Use parentheses to indicate grouping.
		0306.2.4 Use a variety of methods to perform mental computations and compare the efficiency of those methods.
		0306.2.5 Use highest order value (such as tens or hundreds digit) to make simple estimates.
		0306.2.6 Solve a variety of addition and subtraction story problems including those with irrelevant information.
		0306.2.7 Represent multiplication using various representations such as equal-size groups, arrays, area models, and equal jumps on number lines.
		0306.2.8 Represent division using various representations such as successive subtraction, the number of equal jumps, partitioning, and sharing.
		0306.2.9 Describe contexts for multiplication and division facts.
		0306.2.10 Understand that symbols such as $\frac{1}{2}$, $\frac{1}{3}$, and $\frac{1}{4}$ represent numbers called unit fractions.
		0306.2.11 Identify fractions as parts of whole units, as parts of sets, as locations on number lines, and as division of two whole numbers.

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	0306.2.12 Compare fractions using drawings, concrete objects, and benchmark fractions.
	0306.2.13 Understand that when a whole is divided into equal parts to create unit fractions, the sum of all the parts adds up to one.
	Standard 3 – Algebra
	0306.3.1 Show that addition and multiplication are commutative operations.
	0306.3.2 Show that subtraction and division are not commutative operations.
	0306.3.3 Use commutative, associative, and distributive properties to multiply whole numbers.
	0306.3.4 Solve problems using the commutative, associative, and distributive properties.
	0306.3.5 Find unknowns in number sentences and problems involving addition, subtraction, multiplication, or division.
	0306.3.6 Analyze patterns in words, tables, and graphs to draw conclusions.
	0306.3.7 Create different representations of a pattern given a verbal description.
	0306.3.8 Analyze patterns in quantitative change resulting from computation.
	Standard 4 – Geometry & Measurement
	0306.4.1 Describe properties of plane figures (such as circles, triangles, squares and rectangles) and solid shapes (such as spheres, cubes and cylinders).
	0306.4.2 Classify polygons according to the number of their sides and angles.
	0306.4.3 Classify lines and segments as parallel, perpendicular, or intersecting.
	0306.4.4 Identify, create, and describe figures with line symmetry.
	0306.4.5 Understand that all measurements require units.
	0306.4.6 Recognize the use of fractions in liquid measures.
	0306.4.7 Recognize the relationships among cups, pints, quarts, and gallons.
	0306.4.8 Estimate and/or measure the capacity of a container.
	0306.4.11 Know common equivalences for length (1 meter = 100 centimeters, 1 yard = 3 feet, 1 foot = 12 inches).
	0306.4.12 Make and record measurements that use mixed units within the same system of measurement (such as feet and inches, meters and centimeters).
	0306.4.13 Use common abbreviations: km, m, cm, in, ft, yd, mi.
	Standard 5 – Data Analysis, Statistics, & Probability
	0306.5.1 Collect and organize data using observations, surveys, and experiments.
	0306.5.2 Construct a frequency table, bar graph, pictograph, or line plot of collected data.
	0306.5.3 Compare and interpret different representations of the same data.
	0306.5.4 Solve problems using data from frequency tables, bar graphs, pictographs, or line plots.