

4th GRADE KID-FRIENDLY MATH STANDARDS

Standards Being Tested	FOURTH GRADE-MATH		Check for Progress 1	Check for Progress 2	Check for Progress 3	Check for Progress 4	Check for Progress 5
		By the end of grade four, students understand large numbers and addition, subtraction, multiplication, and division of whole numbers. They describe and compare simple fractions and decimals. They understand the properties of, and the relationships between, plane geometric figures. They collect, represent, and analyze data to answer questions.					
31 ITEMS 48%		NUMBER SENSE					
	1.0	<i>Students understand the place value of whole numbers and decimals to two decimal places and how whole numbers and decimals relate to simple fractions. Students use the concepts of negative numbers:</i>					
3	1.1*	<ul style="list-style-type: none"> • I can read and write whole numbers up to and in the millions. 					
2	1.2*	<ul style="list-style-type: none"> • I can compare and put in order whole numbers. • I can compare and put in order decimals to two decimal places. 					
2	1.3*	<ul style="list-style-type: none"> • I can round whole numbers through the millions to the nearest ten, hundred, thousand, ten thousand, or hundred thousand. 					
NA***	1.4*	<ul style="list-style-type: none"> • I can decide when a rounded solution is called for, and • I can explain why such a solution may be appropriate. 					
$\frac{1}{2}$ ***	1.5	<ul style="list-style-type: none"> • I can explain how fractions are used to describe different situations. (Examples: parts of a whole, parts of a set, and division of whole numbers by whole numbers). • I can explain which fractions are equivalent to which others. (See Std. 4.0) 					
$\frac{1}{2}$ ***	1.6	<ul style="list-style-type: none"> • I correctly write tenths and hundredths in decimal form. • I correctly write tenths and hundredths in fraction form. • I know the fraction and decimal equivalents for halves and fourths. (Examples: $\frac{1}{2} = 0.5$ or $.50$; $7/4 = 1 \frac{3}{4} = 1.75$). 					
1	1.7	<ul style="list-style-type: none"> • I can write the fraction I see in a drawing of parts of a figure. • I can using drawings to represent a given fraction. • I can show where a fraction is compared to a simple decimal on a number line. 					
3	1.8*	<ul style="list-style-type: none"> • I show that I know the concepts of negative numbers. (Examples: on a number line, in counting, in temperature, in "owing"). 					
3	1.9*	<ul style="list-style-type: none"> • I can show, on a number line, how far from a given number a positive fraction is. • I can show, on a number line, how far from a given number a positive mixed number is. • I can show on a number line how far from a given number a positive decimal to two decimal places is. 					
	2.0	<i>Students extend their use and understanding of whole numbers to the addition and subtraction of simple decimals:</i>					
1	2.1	<ul style="list-style-type: none"> • I can estimate the sum or difference of whole numbers and positive decimals to two places. • I can compare the sum or difference of whole numbers and positive decimals to two places. 					
$\frac{1}{2}$ ***	2.2	<ul style="list-style-type: none"> • I can round two-place decimals to one decimal or the nearest whole number. • I can judge the reasonableness of the rounded answer. 					

* Key standards (*Mathematics Framework for California Public Schools, chapter 3*) comprise a minimum of 70% of the test

** Fractional values indicate rotated standards (e.g., $\frac{1}{2}$ -rotated every two years; $\frac{1}{3}$ -rotated every three years)

*** Not assessable in a multiple-choice format

Embedded: Content of standard is embedded within items in other strands

4th GRADE KID-FRIENDLY MATH STANDARDS

Standards Being Tested	FOURTH GRADE-MATH (cont)	Check for Progress 1	Check for Progress 2	Check for Progress 3	Check for Progress 4	Check for Progress 5
	3.0* <i>Students solve problems involving addition, subtraction, multiplication, and division of whole numbers. Students understand the relationship between whole numbers, simple fractions, and decimals:</i>					
3	3.1* <ul style="list-style-type: none"> • I can demonstrate that I understand standard algorithms in addition and subtraction of multi-digit numbers. • I can accurately use standard algorithms for the addition and subtraction of multi-digit numbers. 					
3	3.2* <ul style="list-style-type: none"> • I understand and accurately use standard algorithms for multiplying a multi-digit number by a two-digit number. • I understand and accurately use standard algorithms for dividing a multi-digit number by a one-digit number. • I can use relationships between algorithms to simplify computations and to check results. 					
3	3.3* <ul style="list-style-type: none"> • I correctly solve multiplication problems involving multi-digit numbers multiplied by two-digit numbers. 					
3	3.4* <ul style="list-style-type: none"> • I correctly solve problems involving division of multi-digit numbers by one-digit numbers. 					
	4.0 <i>Students know how to factor small whole numbers:</i>					
$\frac{1}{2}$ **	4.1 <ul style="list-style-type: none"> • I understand that many whole numbers break down in different ways. (Example: $12=4 \times 3=2 \times 6=2 \times 2 \times 3$) 					
2	4.2 <ul style="list-style-type: none"> • I know numbers such as 2, 3, 5, 7, and 11 do not have any factors except 1 and themselves and that such numbers are called <i>prime numbers</i>. 					
18 Items 28%	ALGEBRA AND FUNCTIONS					
	1.0 <i>Students use and interpret variables, mathematical symbols, and properties to write and simplify expressions and sentences:</i>					
1	1.1 <ul style="list-style-type: none"> • I use letters, boxes, or other symbols (called <i>variables</i>) to stand for any number in simple expressions or equations. 					
5	1.2* <ul style="list-style-type: none"> • I can interpret and evaluate mathematical expressions that now use parentheses. 					
3	1.3* <ul style="list-style-type: none"> • I use parentheses to show which operation to perform first when writing expressions containing more than two terms and different operations. 					
1	1.4 <ul style="list-style-type: none"> • I use and interpret formulas to answer questions about quantities and their relationships. (Example: $\text{area} = \text{length} \times \text{width}$ or $A = lw$) 					
2	1.5* <ul style="list-style-type: none"> • I understand that an equation such as $y = 3x + 5$ is a formula for determining a second number when a first number is given. 					
	2.0* <i>Students know how to manipulate equations:</i>					
3	2.1* <ul style="list-style-type: none"> • I know and understand that equals added to equals are equal. 					
3	2.2* <ul style="list-style-type: none"> • I know and understand that equals multiplied by equals are equal. 					

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4th GRADE KID-FRIENDLY MATH STANDARDS

Standards Being Tested	FOURTH GRADE-MATH (cont)				Check for Progress 1	Check for Progress 2	Check for Progress 3	Check for Progress 4	Check for Progress 5
12 ITEMS 18%	MEASUREMENT AND GEOMETRY								
	1.0	<i>Students understand perimeter and area:</i>							
$\frac{1}{2}$ **	1.1	<ul style="list-style-type: none"> I can measure the area of rectangular shapes by using the appropriate units, such as square centimeter (cm²), square meter (m²), square kilometer (km²), square inch (in²), square yard (yd²), or square mile (mi²). 							
$\frac{1}{2}$ **	1.2	<ul style="list-style-type: none"> I recognize that rectangles that have the same area can have different perimeters. 							
$\frac{1}{2}$ **	1.3	<ul style="list-style-type: none"> I understand that rectangles that have the same perimeter can have different areas. 							
$\frac{1}{2}$ **	1.4	<ul style="list-style-type: none"> I understand and use formulas to solve problems involving perimeters and areas of rectangles and squares. I use those formulas to find the areas of more complex figures by dividing the figures into basic shapes. 							
	2.0*	<i>Students use two-dimensional coordinate grids to represent points and graph lines and simple figures:</i>							
2	2.1*	<ul style="list-style-type: none"> I can plot the points corresponding to linear relationships on graph paper. (Example: I can place 10 points on the graph of the equation $y = 3x$ and connect them by using a straight line.) 							
2	2.2*	<ul style="list-style-type: none"> I understand that the length of a horizontal line segment equals the difference of the x- coordinates. 							
2	2.3*	<ul style="list-style-type: none"> I understand that the length of a vertical line segment equals the difference of the y- coordinates. 							
	3.0	<i>Students demonstrate an understanding of plane and solid geometric objects and use this knowledge to show relationships and solve problems.</i>							
1	3.1	<ul style="list-style-type: none"> I can identify lines that are parallel and perpendicular. 							
7	3.2	<ul style="list-style-type: none"> I can identify the radius and diameter of a circle. 							
1/3**	3.3	<ul style="list-style-type: none"> I can identify congruent figures. 							
1/3**	3.4	<ul style="list-style-type: none"> I can identify figures that have bilateral symmetry. I can identify figures that have rotational symmetry 							
1/3**	3.5	<ul style="list-style-type: none"> I know the definitions of a right angle, acute angle, and an obtuse angle. I understand that 90°, 180°, 270° and 360° are associated respectively with $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$, and full turns. 							
1/3**	3.6	<ul style="list-style-type: none"> I can imagine, describe and make models of geometric solids. (Examples: prisms, pyramids) in terms of the number and shape of faces, edges, and vertices. I can interpret two-dimensional representations of three-dimensional objects. I can draw patterns (of faces) for a solid that, when cut and folded, will make a model of the solid. 							
1/3**	3.7	<ul style="list-style-type: none"> I know the definition of different triangles and identify their attributes. (Examples: equilateral, isosceles, scalene.) 							
1/3**	3.8	<ul style="list-style-type: none"> I know the definition of different quadrilaterals. (Examples: rhombus, square, rectangle, parallelogram.) 							

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Standards Being Tested	FOURTH GRADE-MATH (cont)				Check for Progress 1	Check for Progress 2	Check for Progress 3	Check for Progress 4	Check for Progress 5
4 ITEMS 6%	STATISTICS, DATA, ANALYSIS AND PROBABILITY								
	1.0	<i>Students organize, represent, and interpret numerical and categorical data and clearly communicate their findings:</i>							
1	1.1	<ul style="list-style-type: none"> • I can create survey questions. • I can systematically collect and represent data on a number line. • I can create coordinate graphs, tables and charts to show data. 							
2/3**	1.2	<ul style="list-style-type: none"> • I can identify the mode(s) for sets of categorical data. • I can identify the mode(s), median, and any apparent outliers for numerical data sets. 							
1	1.3	<ul style="list-style-type: none"> • I can interpret one- and two-variable data graphs to answer questions about a situation. 							
	2.0	<i>Students make predictions for simple probability situations:</i>							
2/3**	2.1	<ul style="list-style-type: none"> • I can represent all possible outcomes for a simple probability situation in an organized way. (Example: tables) 							
2/3**	2.2	<ul style="list-style-type: none"> • I can express possible outcomes of experimental probability situations verbally and numerically (Examples: 3 out of 4, $\frac{3}{4}$) 							
Embedded	MATHEMATICAL REASONING								
Embedded	1.0	<i>Students make decisions about how to approach problems:</i>							
Embedded	1.1	<ul style="list-style-type: none"> • I can analyze problems by identifying relationships. • I can distinguish relevant from irrelevant information. • I can put in order and prioritize information. • I can recognize patterns. 							
Embedded	1.2	<ul style="list-style-type: none"> • I can determine when and how to break a problem into simpler parts. 							
Embedded	2.0	<i>Students use strategies, skills, and concepts in finding solutions:</i>							
Embedded	2.1	<ul style="list-style-type: none"> • I use estimation to verify the reasonableness of calculated results. 							
Embedded	2.2	<ul style="list-style-type: none"> • I apply strategies and results from simpler problems to more complex problems. 							
Embedded	2.3	<ul style="list-style-type: none"> • I use a variety of methods, such as words, numbers, symbols, charts, graphs, tables, diagrams, and models, to explain mathematical reasoning. 							
Embedded	2.4	<ul style="list-style-type: none"> • I express the solution clearly and logically by using the appropriate mathematical notation and terms and clear language. • I support solutions with evidence in both verbal and symbolic work. 							
Embedded	2.5	<ul style="list-style-type: none"> • I can indicate the relative advantages of exact and approximate solutions to problems. • I can give answers to a specified degree of accuracy. 							
Embedded	2.6	<ul style="list-style-type: none"> • I make precise calculations and check the validity of the results from the context of the problem. 							
Embedded	3.0	<i>Students move beyond a particular problem by generalizing to other situations.</i>							
Embedded	3.1	<ul style="list-style-type: none"> • I evaluate the reasonableness of the solution in the context of the original solution. 							
Embedded	3.2	<ul style="list-style-type: none"> • I notice the method of arriving at the solution and demonstrate a understanding of the solution path by solving similar problems. 							
Embedded	3.3	<ul style="list-style-type: none"> • I can find and understand the rules for how to find solutions and apply these rules in other circumstances. 							
65 ITEMS	MATH TOTAL								

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