Topic: Fractions, Decimals, and Numbers – Grade 4

Standards Plus® Reteach - Math - Lesson Index

Lesson	Focus	Lesson Objective	Standards
Assess 1A	Place Value/Naming & Ordering Numbers/Expanded Notation		
Lesson 1	Place Value Ones and Tens	*Demonstrate an understanding of place value to the millions place.*	*2 NS 1.1* *3 NS 1.3* *4 NS 1.1*
Lesson 2	Place Value to 100s		
Lesson 3	Place Value to 1,000s		
Lesson 4	Place Value to 1,000,000s		
Lesson 5	Naming Numbers	*Demonstrate an understanding of the names of numbers and their numerical representations.*	*2 NS 1.1* *3 NS 1.1* *4 NS 1.1*
Lesson 6	Naming Numbers		
Lesson 7	Naming Numbers		
Lesson 8	Expanded Notation	*Demonstrate the ability to identify numbers from expanded notation and to write numbers using expanded notation.*	*2 NS 1.2* *3 NS 1.5*
Lesson 9	Expanded Notation		
Lesson 10	Ordering Numbers	*Demonstrate the ability to place numbers in order from least to greatest.*	*2 NS 1.3* *3 NS 1.2* *4 NS 1.2*
Lesson 11	Ordering Numbers		
Lesson 12	Ordering Numbers		
Assess 1B	Place Value/Naming & Ordering Numbers/Expanded Notation		
Assess 2A	Ordering & Comparing Numbers		
Lesson 13	# Lines – Whole Numbers	*Identify and place whole numbers, decimals, and positive and negative integers on a number line.*	*2 NS 1.3* *3 NS 1.2* *4 NS 1.9*
Lesson 14	# Lines – Decimals		
Lesson 15	# Lines – Positive & Negative Integers		
Lesson 16	Comparing Numbers	*Demonstrate the ability to use the symbols <, >, + to compare whole numbers.*	*2 NS 1.3* *3 NS 1.2* *4 NS 1.2*
Lesson 17	Comparing Whole Numbers		
Lesson 18	Comparing Whole Numbers		
Lesson 19	Comparing Decimals	*Demonstrate the ability to use the symbols <, >, = to compare decimals.*	*4 NS 1.2*
Lesson 20	Comparing Decimals		
Lesson 21	Comparing Positive & Negative Integers	*Demonstrate the ability to use the symbols <, >, = to compare positive and negative integers.*	*4 NS 1.8*
Lesson 22	Comparing Positive & Negative Integers		
Assess 2B	Ordering & Comparing Numbers		
Assess 3A	Fractions and Decimals		
Lesson 23	Identify and Write Fractions to 1/12	*Demonstrate an understanding of place value of numbers to the 1,000s place.*	*2 NS 1.1*
Lesson 24	Fractions: Part of the Group	*Identify fractions that are part of a group.*	*2 NS 4.2*
Lesson 25	Fractions: Part of the Whole	*Identify fractions that are part of the whole.*	*2 NS 4.2*

California Standards References

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Lesson 26	Fractions: Equal to One	*Recognize fractions that are equal to one.*	*2 NS 4.3*
Lesson 27	Fraction Models	*Use models to represent fractions and decimals.*	*3 NS 3.1* *4 NS 1.5, 1.7*
Lesson 28	Decimal Models		
Lesson 29	Finding Fractions on a Number Line	*Identify and place fractions, mixed numbers, and decimals on a number line.*	*3 NS 3.1* *4 NS 1.9*
Lesson 30	Finding Mixed Numbers on a Number Line		
Lesson 31	Finding Fractions & Decimals on a Number Line		
Lesson 32	Adding with Decimals	*Add, subtract, multiply, and divide with decimals.*	*3 NS 3.3* *4 NS 2.1*
Lesson 33	Subtracting with Decimals		
Assess 3B	Fractions and Decimals		

1.0 Number Sense

1.1 Read and write whole numbers in the millions. (3 items on CST)

1.2 Order and compare whole numbers and decimals to two decimal places. (2 items on CST)

1.5 Explain different interpretations of fractions, for example, parts of a whole, parts of a set, and division of whole numbers by whole numbers; explain equivalence of fractions (see Standard 4.0). (1 item every 2 yrs. on CST)

1.7 Write the fraction represented by a drawing of parts of a figure; represent a given fraction by using drawings; and relate a fraction to a simple decimal on a number line. (1 item on CST)

1.8 Use concepts of negative numbers (e.g., on a number line, in counting, in temperature, in "owing"). (3 items on CST)

1.9 Identify on a number line the relative position of positive fractions, positive mixed numbers, and positive decimals to two decimal places. (3 items on CST)

2.0 Number Sense

2.1 Estimate and compute the sum or difference of whole numbers and positive decimals to two places. (1 item on CST)

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Topic: Computing and Problem Solving – Grade 4

Standards Plus® Reteach - Math - Lesson Index

Lesson	Focus	Lesson Objective	Standards
Assess 1A	Addition & Subtraction		
Lesson 1	Fact Families	*Recognize the facts in addition/subtraction fact families*	*2 NS 2.1*
Lesson 2	Fact Families		
Lesson 3	Adding Whole Numbers – No Regrouping	*Demonstrate the ability to add whole numbers with or without regrouping.*	*3 NS 2.1* *4 NS 2.1, 3.1*
Lesson 4	Adding Whole Numbers – Regrouping		
Lesson 5	Adding Whole Numbers – Regrouping		
Lesson 6	Checking the Validity of Answers with Addition	*Check answers to addition word problems to verify validity.*	*2 MR 2.2*
Lesson 7	Subtracting Whole Numbers – No Regrouping	*Demonstrate the ability to subtract whole numbers with or without regrouping.*	*3 NS 2.1* *4 NS 2.1, 3.1*
Lesson 8	Subtracting Whole Numbers – Regrouping		
Lesson 9	Subtracting Whole Numbers – Regrouping		
Lesson 10	Checking the Validity of Answers with Subtraction	*Check answers to subtraction word problems to verify validity.*	*2 MR 2.2*
Lesson 11	Addition/Subtraction in Context	*Add and subtract whole numbers in context.*	*3 NS 2.1* *4 NS 2.1*
Lesson 12	Addition/Subtraction of Decimals in Context	*Add and subtract decimals from context.*	*3 NS 3.3* *4 NS 2.1*
Assess 1B	Addition & Subtraction		
Assess 2A	Multiplication		
Lesson 13	Multiplication Facts: 2s	*Practice the multiplication facts for the 2s, 5s, and 10s.*	*2 NS 3.3*
Lesson 14	Multiplication Facts: 5s and 10s		
Lesson 15	Multiplication Facts	*Demonstrate the knowledge of the basic multiplication facts.*	*3 NS 2.2, 2.6*
Lesson 16	Multiplication Facts		
Lesson 17	Multi-digit Multiplication	*Demonstrate the ability to multiply multi-digit whole numbers.*	*3 NS 2.4* *4 NS 3.2, 3.3*
Lesson 18	Multi-digit Multiplication		
Lesson 19	Multi-digit Multiplication		
Lesson 20	Multiplication in Context	*Multiply and divide whole numbers in context.*	*3 NS 2.4, 2.5* *4 NS 3.2, 3.3, 3.4*
Assess 2B	Multiplication		
Assess 3A	Division/Multiplication & Division in Context		
Lesson 21	Division Facts	*Demonstrate the knowledge of the basic division facts.*	*3 NS 2.5* *4 NS 3.4*
Lesson 22	Division Facts		
Lesson 23	Long Division	*Demonstrate the ability to divide multi-digit whole numbers by single digit divisors.*	*3 NS 2.5* *4 NS 3.4*
Lesson 24	Long Division		
Lesson 25	Long Division		
Lesson 26	Division in Context	*Multiply and divide whole numbers in context.*	*3 NS 2.4, 2.5* *4 NS 3.2, 3.3, 3.4*
Lesson 27	Multiplication/Division in Context		

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Topic: Computing and Problem Solving – Grade 4

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Lesson 28	Multiplication/Division of Decimals in Context	*Multiply and divide decimals from context.*	*3 NS 3.3* *4 NS 2.1, 3.2, 3.3, 3.4*
Lesson 29	Multiplication/Division of Decimals in Context		
Lesson 30	Multiple Operations in Context	*Solve multi-step computation problems from context.*	*3 NS 2.1, 2.4, 2.5, 2.8* *4 NS 2.1, 3.2, 3.3, 3.4*
Lesson 31	Multiple Operations in Context		
Assess 3B	Division/Multiplication & Division in Context		

Assess 4A	Factors/Fraction & Decimal Equivalence/Rounding & Estimating		
Lesson 32	Factors	*Demonstrate the understanding of the factors of larger numbers.*	*4 NS 4.2*
Lesson 33	Factors		
Lesson 34	Fraction/Decimals Equivalents	*Demonstrate the ability to show fraction and decimal equivalents.*	*4 NS 1.5*
Lesson 35	Fraction/Decimals Equivalents		
Lesson 36	Round to the Nearest 10	*Demonstrate the ability to round whole numbers to the given place values.*	*3 NS 1.4* *4 NS 1.3*
Lesson 37	Round to the Nearest 100 or 1,000		
Lesson 38	Round to the Nearest 10,000, 100,000, or 1,000,000		
Lesson 39	Estimating with Addition and Subtraction	*Demonstrate the ability to estimate when computing.*	*4 NS 1.4*
Lesson 40	Estimating with Multiplication and Division		
Assess 4B	Factors/Fraction & Decimal Equivalence/Rounding & Estimating		

1.0 Number Sense

1.3 Round whole numbers through the millions to the nearest ten, hundred, thousand, ten thousand, or hundred thousand. (2 items on CST)

1.4 Decide when a rounded solution is called for and explain why such a solution may be appropriate. (Not assessed on CST)

1.5 Explain different interpretations of fractions, for example, parts of a whole, parts of a set, and division of whole numbers by whole numbers; explain equivalence of fractions. (1 item every 2 yrs. on CST)

2.0 Number Sense

2.1 Estimate and compute the sum or difference of whole numbers and positive decimals to two places. (1 item on CST)

3.0 Number Sense

3.1 Demonstrate an understanding of, and the ability to use, standard algorithms for the addition and subtraction of multidigit numbers. (3 items on CST)

3.2 Demonstrate an understanding of, and the ability to use, standard algorithms for multiplying a multidigit number by a two-digit number and for dividing a multidigit number by a one-digit number; use relationships between them to simplify computations and to check results. (3 items on CST)

3.3 Solve problems involving multiplication of multidigit numbers by two-digit numbers. (3 items on CST)

3.4 Solve problems involving division of multidigit numbers by one-digit numbers. (3 items on CST)

4.0 Number Sense

4.2 Know that numbers such as 2, 3, 5, 7, and 11 do not have any factors excepts 1 and themselves and that such numbers are called prime numbers. (2 items on CST)

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Topic: Algebraic Operations and Problem Solving – Grade 4

Standards Plus® Reteach - Math - Lesson Index

Lesson	Focus	Lesson Objective	Standards
Assess 1A	Addition & Subtraction Number Sentences		
Lesson 1	Use Tables to Solve Problems	*Determine answers to questions about the information in a table.*	*2 AF 1.2, 1.3*
Lesson 2	Use Bar Graphs to Solve Problems	*Determine answers to questions about the information in a bar graph.*	*2 AF 1.2, 1.3*
Lesson 3	Determining the Operation	*Demonstrate the ability to determine the operation needed to solve a problem.*	*3 AF 1.1, 1.2, 1.3*
Lesson 4	Using Variables	*Use variables to represent numbers in number sentences.*	*2 AF 1.2*
Lesson 5	Solving Addition Problems with Variables	*Use variables in addition problems.*	*2 AF 1.2* *4 AF 1.1*
Lesson 6	Using Variables with Addition		
Lesson 7	Solving Subtraction Problems with Variables	*Use variables in subtraction problems.*	*2 AF 1.2, 1.3* *4 AF 1.1*
Lesson 8	Using Variables with Subtraction		
Lesson 9	Matching Number Sentences to Problems	*Determine the number sentence that matches a given problem situation.*	*2 AF 1.2, 1.3*
Lesson 10	Matching Number Sentences to Problems		
Assess 1B	Addition & Subtraction Number Sentences		
Assess 2A	Properties & Variables		
Lesson 11	Using Variables with Multiplication	*Use variables in multiplication problems.*	*4 AF 1.1*
Lesson 12	Using Variables with Multiplication		
Lesson 13	Using Variables with Division	*Use variables in division problems.*	*4 AF 1.1*
Lesson 14	Solving Equations with Variables	*Use variables in computing solutions to problems.*	*4 AF 1.1, 1.5, 2.1, 2.2*
Lesson 15	Solving Equations with Variables		
Lesson 16	Commutative Property of Addition	*Demonstrate an understanding of the properties used in problem solving.*	*3 AF 1.5*
Lesson 17	Commutative Property of Multiplication		
Lesson 18	Associative Property of Multiplication		
Lesson 19	Order of Operations	*Demonstrate an understanding of the order of operations.*	*4 AF 1.2, 1.3*
Lesson 20	Order of Operations		
Assess 2B	Properties & Variables		
Assess 3A	Equations/Inequalities/Unit Conversions/Total Cost		
Lesson 21	Using Simple Formulas	*Use simple formulas to solve problems.*	*4 AF 1.4*
Lesson 22	Using Simple Formulas		
Lesson 23	Writing Equations	*Demonstrate the ability write an equation to fit a given problem situation.*	*3 AF 1.1, 1.3* *4 AF 1.1*
Lesson 24	Writing Equations		
Lesson 25	Solving Linear Equations	*Solve linear equations.*	*4 AF 1.5, 2.1, 2.2*
Lesson 26	Solving Linear Equations		

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Topic: Algebraic Operations and Problem Solving – Grade 4

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Lesson 27	Solving Linear Equations	*Solve linear equations.*	*4 AF 2.1, 2.2*
Lesson 28	Solving Linear Equations		
Lesson 29	Solving and Graphing Linear Equations	*Solve and graph linear equations.*	*4 AF 2.1, 2.2*
Lesson 30	Solving and Graphing Linear Equations		
Lesson 31	Writing Inequalities	*Demonstrate an ability to write and solve inequalities.*	*3 AF 1.2* *4 AF 2.1, 2.2*
Lesson 32	Writing and Solving Inequalities		
Lesson 33	Writing and Solving Inequalities		
Assess 3B	Equations/Inequalities/Unit Conversions/Total Cost		

1.0 Algebra and Functions

1.1 Use letters, boxes, or other symbols to stand for any number in simple expressions or equations (e.g., demonstrate an understanding and the use of the concept of a variable). (1 item on CST)

1.2 Interpret and evaluate mathematical expressions that now use parentheses. (5 items on CST)

1.3 Use parentheses to indicate which operation to perform first when writing expressions containing more than two terms and different operations. (3 items on CST)

1.4 Use and interpret formulas (e.g., area = length × width or $A = lw$) to answer questions about quantities and their relationships. (1 item on CST)

1.5 Understand that an equation such as $y = 3x + 5$ is a prescription for determining a second number when a first number is given. (2 items on CST)

2.0 Algebra and Functions

2.1 Know and understand that equals added to equals are equal. (3 items on CST)

2.2 Know and understand that equals multiplied by equals are equal. (3 items on CST)

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Topic: Measurement, Geometry, Statistics, and Probability – Grade 4

Standards Plus® Reteach - Math - Lesson Index

Lesson	Focus	Lesson Objective	Standards
Assess 1A	Measurement		
Lesson 1	Triangles, Rectangles, Squares, Circles	*Identify, describe, and compare triangles, rectangles, squares, and circles.*	*2 MG 2.1*
Lesson 2	Parallel / Perpendicular Lines	*Identify parallel and perpendicular lines.*	*4 MG 3.1*
Lesson 3	Parallel / Perpendicular Lines		
Lesson 4	Parts of a Circle	*Identify the parts of a circle.*	*4 MG 3.2*
Lesson 5	Parts of a Circle		
Lesson 6	Identify & Classify Polygons	*Identify polygons and classify by number of sides and angles.*	*3 MG 2.1*
Lesson 7	Attributes of Polygons	*Compare polygons using number of sides and angles, size, and angle measure.*	*3 MG 2.1*
Lesson 8	Attributes of Polygons		
Lesson 9	Cubes, Spheres, Cones	*Describe plane and solid figures by their edges, vertices, and faces.*	*2 MG 2.1*
Lesson 10	Identify & Classify Solids	*Identify solids and classify by sides, angles, and faces.*	*3 MG 2.5*
Lesson 11	Attributes of Solids	*Compare solids using number of sides, angles, and faces, and size and angle measure.*	*3 MG 2.5* *4 MG 3.3*
Lesson 12	Attributes of Solids		
Lesson 13	Determining Perimeter	*Determine perimeter of given figures.*	*3 MG 1.3* *4 MG 1.4*
Lesson 14	Determining Perimeter		
Lesson 15	Determining Area	*Determine area of given figures.*	*4 MG 1.1, 1.4*
Lesson 16	Determining Area		
Lesson 17	Determining Area		
Assess 1B	Measurement		
Assess 2A	Geometry		
Lesson 18	Classifying Triangles	*Classify triangles by angle measure and side length.*	*3 MG 2.2* *4 MG 3.5, 3.7*
Lesson 19	Attributes of Triangles	*Compare triangles by angle measure, side length, and size.*	*3 MG 2.2* *4 MG 3.3*
Lesson 20	Attributes of Triangles		
Lesson 21	Classifying Angles by their Measure	*Classify angles as acute, right, or obtuse.*	*3 MG 2.4* *4 MG 3.5*
Lesson 22	Classifying Triangles by their Angles	*Classify triangles as acute, right, or obtuse.*	*3 MG 2.4* *4 MG 3.7*
Lesson 23	Find the Measure of an Angle in a Triangle	*Determine the measure of a missing angle in a triangle.*	*3 MG 2.4* *4 MG 3.5*
Lesson 24	Find the Measure of an Angle in a Triangle		
Lesson 25	Classifying Quadrilaterals	*Classify quadrilaterals by angle measure and side length.*	*3 MG 2.3* *4 MG 3.8*
Lesson 26	Attributes of Quadrilaterals	*Compare quadrilaterals by angle measure, side length, and size.*	*3 MG 2.3* *4 MG 3.3, 3.8*
Lesson 27	Attributes of Quadrilaterals		
Lesson 28	Classifying Quadrilaterals	*Classify quadrilaterals by their angles and sides.*	*4 MG 3.8*
Assess 2B	Geometry		

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Topic: Measurement, Geometry, Statistics, and Probability – Grade 4

Standards Plus® Reteach - Math - Lesson Index

Assess 3A	Statistics, Data Analysis, and Probability		
Lesson 29	Predicting Outcomes	*Predict outcomes for simple probability experiments.*	*3 SDAP 1.4*
Lesson 30	Recording Outcomes	*Record outcomes for simple probability experiments.*	*3 SDAP 1.2* *4 SDAP 2.1*
Lesson 31	Recording Outcomes		
Lesson 32	Displaying Outcomes	*Display outcomes for simple probability experiments.*	*3 SDAP 1.3* *4 SDAP 1.1, 2.2*
Lesson 33	Displaying Outcomes		
Lesson 34	Data from a Bar Graph	*Answer questions about data displayed on a bar graph.*	*3 SDAP 1.3* *4 SDAP 1.3*
Lesson 35	Data from a Bar Graph		
Lesson 36	Data from a Tally Chart	*Answer questions about data displayed on a tally chart.*	*3 SDAP 1.3* *4 SDAP 1.3*
Lesson 37	Data from a Tally Chart		
Lesson 38	Displaying Data	*Display given data in an organized manner.*	*3 SDAP 1.3* *4 SDAP 1.1*
Lesson 39	Displaying Data		
Lesson 40	Determining Mode	*Determine mode for a given data set.*	*2 SDAP 1.3*
Lesson 41	Determining Mode		
Lesson 42	Determining Mode	*Determine mode for a given data set.*	*4 SDAP 1.2*
Lesson 43	Determining Median	*Determine median for a given data set.*	*4 SDAP 1.2*
Assess 3B	Statistics, Data Analysis, and Probability		

1.0 Measurement & Geometry

1.1 Measure the area of rectangular shapes by using appropriate units, such as square centimeter (cm^2), square meter (m^2), square kilometer (km^2), square inch ($in.^2$), square yard ($yd.^2$), or square mile ($mi.^2$). (1 item every 2 yrs. on CST)

1.4 Understand and use formulas to solve problems involving perimeters and areas of rectangles and squares. Use those formulas to find the areas of more complex figures by dividing the figures into basic shapes. (1 item every 2 yrs. on CST)

3.0 Measurement & Geometry

3.1 Identify lines that are parallel and perpendicular. (1 item on CST)

3.2 Identify the radius and diameter of a circle. (1 item on CST)

3.3 Identify congruent figures. (1 item every 3 yrs. on CST)

3.5 Know the definitions of a right angle, an acute angle, and an obtuse angle. Understand that 90°, 180°, 270°, and 360° are associated, respectively, with $\frac{1}{4}, \frac{1}{2}, \frac{3}{4}$ and full turns. (1 item every 3 yrs. on CST)

3.7 Know the definitions of different triangles (e.g., equilateral, isosceles, scalene) and identify their attributes. (1 item every 3 yrs. on CST)

3.8 Know the definition of different quadrilaterals (e.g., rhombus, square, rectangle, parallelogram, trapezoid). (1 item every 3 yrs. on CST)

1.0 Statistics, Data Analysis, & Probability

1.1 Formulate survey questions; systematically collect and represent data on a number line; and coordinate graphs, tables, and charts. (1 item on CST)

1.2 Identify the mode(s) for sets of categorical data and the mode(s), median, and any apparent outliers for numerical data sets. (2 items every 3 yrs. on CST)

1.3 Interpret one- and two-variable data graphs to answer questions about a situation. (1 item on CST)

2.0 Statistics, Data Analysis, & Probability

2.1 Represent all possible outcomes for a simple probability situation in an organized way (e.g., tables, grids, tree diagrams). (2 items every 3 yrs. on CST)

2.2 Express outcomes of experimental probability situations verbally and numerically (e.g., 3 out of 4; $\frac{3}{4}$). (2 items every 3 yrs. on CST)

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