

SCOPE & SEQUENCE

K-6 MATH FOR *SMART* NOTEBOOK™



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K-6 Math for SMART Notebook — Scope and Sequence

STRAND KEY

A = Algebra

D = Data Analysis & Probability

G = Geometry

M = Measurement

N & O = Number and Operations

K-6 Math for SMART Notebook — Scope and Sequence K-2

Code	Strand	Lesson Title	Lesson Description
K2M001	N & O	Skip Counting	Skip count by 2's, 5's, and 10's up to 100.
K2M002	N & O	Place Value	Determine the value of a digit to hundreds. Model numbers using Base 10 Blocks.
K2M003	N & O	Odd and Even Numbers	Identify odd and even numbers and determine whether a set of objects contains an odd or even number of objects. Sort a given set of numbers into even and odd.
K2M004	N & O	Ordinal Numbers	Concepts of ordinal and cardinal numbers. Identify ordinal position to the tenth
K2M005	N & O	Compare and Order numbers	Compare and order numbers using a number line. Compare numbers using less than, greater than and equal to symbols.
K2M006	N & O	Addition and Subtraction	Beginning addition and subtraction facts. Add and subtract one digit numbers without regrouping. Understand that addition and subtraction are opposite/inverse operations.
K2M007	N & O	Fractions	Use $\frac{1}{2}$ and $\frac{1}{4}$ appropriately. Picture and name fractions.
K2M008	N & O	Money	Identify the value of a penny, nickel, dime, quarter, half-dollar. Determine the total value to \$1.00 of a mixed group of coins (using pennies, nickels, dimes, quarters, and half-dollars).
K2M009	N & O	Patterns	Identify and extend simple geometric, number and letter patterns. Recognize, describe, extend, and explain how to get the next term in patterns that grow in a linear way.
K2M010	G	Plane Shapes	Identify common plane shapes including squares, circles, rectangles, triangles. Identify polygons up to six sides. Classify shapes by common characteristics.
K2M011	G	Solid Shapes	Identify geometric solids including cubes, cylinders, cones, spheres, rectangular prisms, and pyramids; relate them to objects in the environment.

K-6 Math for SMART Notebook — Scope and Sequence K-2

Code	Strand	Lesson Title	Lesson Description
K2M012	M	Units of Measure	Understand basic customary and metric units of weight and mass using pounds, ounces, grams and kilograms.
K2M013	M	Time	Recognizing time (to 1/2 hour and hour) using an analog and digital clock.
K2M014	M	Days, Weeks, Months and Years	Identify days of the week and months of the year. Understand the relationship between days, months and years. Read a calendar.
K2M015	D	Charts and Graphs	Basic chart and graph concepts. Create, read, and write observations from real graphs, pictographs, and bar graphs

K-6 Math for SMART Notebook — Scope and Sequence Grade 3

Code	Strand	Lesson Title	Lesson Description
G3M001	N & O	Place Value	Determining the value of a digit to thousands.
G3M002	N & O	Compare and Order Numbers	Comparing numbers using symbols (greater than, less than, equal to). Write a four digit number in words and locate it on a number line.
G3M003	N & O	Rounding Whole Numbers	Round whole numbers to the nearest ten and hundred.
G3M004	N & O	Money	Use coins to make change up to \$1.00. Determine monetary values. Understand the use of decimals when writing dollar amounts
G3M005	N & O	Estimation	Estimate sums and differences.
G3M006	N & O	Addition and Subtraction	Solve addition and subtraction problems, including word problems involving two-and-three digit numbers with regrouping. Complete an addition and subtraction sentence with missing addends including inverse relationships between and addition and subtraction.
G3M007	N & O	Multiplication Facts	Multiplication facts (e.g. 4 groups of 3 and 3 groups of 4).
G3M008	N & O	Division Facts	Understand and practice dividing without remainders. Use fact families to see how multiplication and division are related.
G3M009	N & O	Properties of Operations	Identify properties of operations such as commutative, associative, and distributive and use them to compute whole numbers, including inverse relationships between and addition and subtraction.
G3M010	N & O	Word Problems	Identify necessary information, missing information, and unnecessary information when solving math word problems.
G3M011	N & O	Multiply Whole Numbers	Multiply whole numbers by multiples of 10.
G3M012	N & O	Divide Whole Numbers	Divide 2 digit dividends by one digit divisors with and without remainders. Divide whole numbers using 3 and 4 digit dividends by one digit divisors.
G3M013	N & O	Fractions	Recognize and model equivalent fractions with concrete objects or pictures. Identify fractional parts of a group.
G3M014	N & O	Add and Subtract Fractions with Like Denominators	Develop fluency with addition and subtraction of non-negative rational numbers with like denominators.

K-6 Math for SMART Notebook — Scope and Sequence Grade 3

Code	Strand	Lesson Title	Lesson Description
G3M015	N & O	Simple Problem Solving Strategies	Introduce simple solving problem strategies including looking guess and check, drawing a picture, making a table and making an organized list.
G3M016	G	Two- and Three-dimensional shapes	Identify, compare, classify, and analyze attributes of two and three dimensional shapes.
G3M017	G	Congruency and Similarity	Find congruent and similar shapes. Distinguish between congruency and similarity.
G3M018	G	Angles	Identify angles as right, less than a right angle or greater than right angle.
G3M019	G	Line Symmetry	Identify and draw lines of symmetry in two-dimensional shapes.
G3M020	G	Flips, Slides, and Turns	Introduce the terms flips, slides, and turns.
G3M021	G	Lines, Rays and Angles	Identify geometric representations for points, lines (horizontal, vertical, diagonal), perpendicular lines, parallel lines, angles, and rays. Recognize real-life examples of point, line, perpendicular lines, and parallel lines.
G3M022	M	Units of Measure	Understand the need for measuring with standard units and become familiar with standard units in the customary and metric systems for length. Carry out simple unit conversions (for example cm to m) within a system.
G3M023	M	Perimeter and Area	Understand the concept of perimeter and area. Find the perimeter and area of simple polygons. Find the area of rectangles and squares using length x width.
G3M024	M	Time	Solve problems involving elapsed time. Apply vocabulary with time (a.m., p.m. noon, midnight, etc.)
G3M025	D	Collecting and Displaying Data	Use circle graphs, bar graphs and Venn diagrams. Read and interpret graphs.

K-6 Math for SMART Notebook — Scope and Sequence Grade 4

Code	Strand	Lesson Title	Lesson Description
G4M001	N & O	Place Value	Build understanding of place value (hundredths through millions place).
G4M002	N & O	Addition and Subtraction	Develop and analyze strategies for adding and subtracting numbers.
G4M003	N & O	Multiplication	Multiplication by one- digit and two-digit numbers (larger numbers with calculator).
G4M004	N & O	Division	Strategies for dividing numbers - up to three-digit by two-digit division.
G4M005	N & O	Order of Operations	Understand that parentheses can change the outcome in a math equation and will practice solving equations using order of operations.
G4M006	N & O	Number Properties	Identity, commutative, associative, and distributive properties.
G4M007	N & O	Rounding Numbers	Round numbers thru 100,000 to the nearest 10,100,1000,10000 and 100000
G4M008	N & O	Judging Reasonable Answers	Students will estimate to judge if answers are reasonable in addition, subtraction, division, and multiplication problems.
G4M009	N & O	Problem Solving Strategies: inverse operations	Solve problems using inverse operations.
G4M010	N & O	Problem Solving Strategies: patterns and tables	Solve problems by extending the pattern, finding the rule and using tables.
G4M011	N & O	Decimals	Read and write decimals through thousandths. Compare decimals through thousandths.
G4M012	N & O	Equivalent Fractions	Use models and points of reference to find equivalent fractions.
G4M013	N & O	Fractions and Mixed Numbers	Use and explain models to relate whole numbers and fractions.
G4M014	N & O	Add and Subtract Fractions	Develop fluency with addition and subtraction of non-negative rational numbers with unlike denominators.
G4M015	A	Patterns and Functions	Extend, describe, and create numeric patterns. Use words and symbols to describe rules for functions and use the rules to solve simple problems.
G4M016	G	The Coordinate Plane	Use the coordinate system to describe the location and relative position of points and draw figures in the first quadrant.
G4M017	G	Angles	Identify angles as acute, right or obtuse. Find the measure of an angle using a protractor.

K-6 Math for SMART Notebook — Scope and Sequence Grade 4

Code	Strand	Lesson Title	Lesson Description
G4M018	G	Transformations	Identify, predict, and describe the results of transformations of plane figures (reflections, rotations, translations.)
G4M019	M	Units of Measure	Understand the need for measuring with standard units and become familiar with standard units in the customary system. Carry out simple unit conversions within the customary system.
G4M020	M	Perimeter	Develop strategies to determine the perimeter of rectangles and plane figures.
G4M021	M	Area	Develop strategies to determine the area of rectangles and plane figures.
G4M022	D	Finding the Average	Introduce mean average using a line plot.
G4M023	D	Measures of Central Tendency	Describe the distribution of data using mean, median, range and mode. Include minimum and maximum values (outliers).
G4M024	D	Bar Graphs	Collect, organize, analyze, and display data. Use bar graphs and double bar graphs to solve problems.
G4M025	D	Probability	Design experiments and list all possible outcomes and probabilities for an event. Describe events using certain, very likely, likely, unlikely, very unlikely, impossible and other basic probability terms; use basic probability terms to compare events.

K-6 Math for SMART Notebook — Scope and Sequence Grade 5

Code	Strand	Lesson Title	Lesson Description
G5M001	N & O	Words and Numbers	Develop number sense for rational numbers 0.001 through 999,999. Connect model, number word, and number using a variety of representations.
G5M002	N & O	Expanded Notation	Build an understanding of place value (thousandths through hundred thousands).
G5M003	N & O	Estimation	Make estimates of rational numbers in appropriate situations. Estimate sums and differences and judge the reasonableness of solutions.
G5M004	N & O	Add and Subtract Whole Numbers	Develop and analyze strategies for adding and subtracting numbers.
G5M005	N & O	Multiply and Divide Whole Numbers	Develop and analyze strategies for multiplying and dividing numbers.
G5M006	N & O	Exponents	Use exponents. Calculate with exponents. Compare numbers written with exponential notation.
G5M007	N & O	Equivalent Fractions	Use models, points of reference and equivalent forms to judge the size of fractions. Round fractions to the nearest half.
G5M008	N & O	Add and Subtract Fractions (with like and unlike denominators)	Develop fluency in adding and subtracting non-negative rational numbers (halves, fourths, eighths; thirds, sixths, twelfths; fifths, tenths, hundredths, thousandths; mixed numbers).
G5M009	N & O	Decimals	Read, name and write decimals between 0 and 1 up to the hundredths.
G5M010	N & O	Add and Subtract Decimals	Add and subtract decimals to solve problems. Solve problems involving money.
G5M011	N & O	Ratio and Proportion	Write ratios and apply to solve simple ratio problems. Find the number of boys and girls in a class given the ratio of boys to girls.
G5M012	N & O	Percents	Use models and visual representations to develop the concept of ratio as part-to-part and part-to-whole, and the concept of percent as part-to-whole. Specifically using halves, thirds, fourths, and tenths.
G5M013	N & O	Factors and Multiples	Develop an understanding of multiples and factors and use to solve problems.
G5M014	N & O	Integers	Order integers on a number line. Compare integers using the less than, greater than, and equal to symbols. Model adding and subtracting integers using a chip board.
G5M015	A	Patterns & Functions	The learner will demonstrate an understanding of patterns, relationships, and elementary algebraic representation. Describe, extend, and generalize numeric and geometric patterns using function tables, words, and symbols.

K-6 Math for SMART Notebook — Scope and Sequence Grade 5

Code	Strand	Lesson Title	Lesson Description
G5M016	A	Algebraic Expressions	Develop an understanding of A as a language of patterns, rules, and symbols and further develop the fundamental concept of a variable having a letter stand for all numbers of a certain kind. Use this to translate simple verbal expressions into algebraic expressions.
G5M017	A	One-Step Equations	Use one-step equations to solve problems.
G5M018	G	The Coordinate Plane	Graph points on a coordinate plane (first quadrant only).
G5M019	G	Properties of Quadrilaterals	Classify quadrilaterals by their sides and by their angles.
G5M020	G	Triangle Classification	Identify, define, describe, and accurately represent triangles.
G5M021	G	Exploring Symmetry	Classify plane figures according to types of symmetry (line, rotational).
G5M022	G	Angle Properties	Identify, estimate, and measure the angles of plane figures using appropriate tools.
G5M023	M	Units of Measure	Recognize and use standard units of metric and customary M. Estimate the measure of an object in one system given the measure of that object in another system.
G5M024	M	Area	Find the areas of squares, rectangles, parallelograms and triangles.
G5M025	M	Perimeter and Area of Irregular Figures	Find the perimeter and area of irregular figures. Estimate the perimeter and area of irregular figures.
G5M026	M	Volume of Rectangular Prisms	Find the volume of rectangular prisms.
G5M027	M	Solid Figures	Identify solid figures including prisms, pyramids, cones and spheres. Identify the nets of solid figures.
G5M028	D	Measures of Central Tendency	Solve problems with data using median, range, and mode. Use line plots to find measures of central tendency.
G5M029	D	Displaying Data	Collect, organize, analyze, and display data (stem-and-leaf plots and bar graphs) to solve problems.
G5M030	D	Probability	Define probability, discuss the vocabulary associated with probability, learn different ways to express probability. Find possible outcomes and the probability of single events.

K-6 Math for SMART Notebook — Scope and Sequence Grade 6

Code	Strand	Lesson Title	Lesson Description
G6M001	N	Order of Operations	Apply the order of operations to solve number problems. Arrange numbers and symbols to come up with a given answer. Insert parentheses correctly into a number problem given the answer.
G6M002	N	Multiples and Least Common Multiples	Review multiples. Find the Least Common Multiple (LCM) of two or more numbers. Solve problems using multiples and LCM.
G6M003	N	Greatest Common Factor	Find the Greatest Common Factor (GCF) of two or more numbers and apply to solve real-world problems.
G6M004	N	Prime Factorization	Find the prime factors of a number. Complete factor trees. Write prime factors using exponent form. Apply to solve real-life problems.
G6M005	N	Compare and Order Fractions	Compare and order fractions by finding equivalent fractions with a common denominator using pictures, number lines, and by writing fractions as decimals.
G6M006	N	Adding and Subtracting Fractions with Unlike Denominators	Use fraction models to add and subtract fractions with unlike denominators, and progressing to solve addition and subtraction problems without modeling.
G6M007	N	Adding and Subtracting Mixed Numbers with Unlike Denominators	Use fraction models to add and subtract mixed numbers with unlike denominators, and progressing to solving mixed number problems without modeling.
G6M008	N	Multiplying Mixed Numbers	Multiply a mixed number by a mixed number; multiply a whole number by a mixed number. Apply to solve contextual problems.
G6M009	N	Dividing Fractions and Mixed numbers	Dividing fractions and mixed numbers. Apply to contextual problems.
G6M010	N	Compare and Order Decimals	Compare and order decimals. Order decimals on a number line. Use the greater than, less than or equal to symbols to compare decimals. Identify equivalent decimals. Order times, heights and times in a race.
G6M011	N	Adding and Subtracting Decimals	Add and subtract decimals, with instruction and practice targeted at correctly organizing numbers to avoid typical computational errors.
G6M012	N	Multiplying and Dividing Decimals	Extend understanding, and introduce strategies, for multiplying decimals by whole numbers and by decimals.
G6M013	N	Estimation	Use a range of estimation strategies (rounding, front end and clustering) in order to make reasonable estimates and to be able to estimate efficiently.

K-6 Math for SMART Notebook — Scope and Sequence Grade 6

Code	Strand	Lesson Title	Lesson Description
G6M014	N	Fractions, Decimals and Percents	Write numbers as percents, fractions and decimals. Match equivalent fractions, decimals and percents.
G6M015	N	Finding the Percent of a Number	Find the percent of a number and apply in real-life scenarios.
G6M016	N	Proportion	Introduce strategies for solving proportion problems including 'common sense' computation, equivalent fractions and cross multiplication.
G6M017	A	Aic Expressions	Write verbal expressions and sentences as Aic expressions; evaluate Aic expressions.
G6M018	A	Graphing Linear Functions	Recognize and continue a number pattern and find rules. Complete a function based on a given rule. Represent patterns and functions with tables and graphs; extend to using symbols.
G6M019	A	Solving Equations	Solve simple word problems using equations by translating a situation explained in words into a mathematical equation using symbols.
G6M020	G	The Coordinate Plane	Graph points on a coordinate plane. Identify quadrants. Locate the vertices of a shape on the coordinate plane. Find the area and perimeter of the shapes.
G6M021	G	Transformations in the Coordinate Plane	Perform translations and reflections in the coordinate plane. Identify the mirror line in a reflection.
G6M022	M	Customary Measure	Identify and convert units of length, weight and capacity within the customary system of M.
G6M023	M	Metric Measure for Mass and Capacity	Develop estimation skills using metric units of measure for capacity and mass, and convert within metric measures for mass and capacity.
G6M024	M	Area of Irregular Figures	Find the area of irregular figures by dividing them into familiar shapes (rectangles and triangles.)
G6M025	M	Nets and Surface Area	Draw the net of a cube. Find the surface area of a cube. Extend to find the surface area of rectangular prisms.
G6M026	M	Volume of a Rectangular Prism	Find the volume of a rectangular prism. Solve contextual problems. Find the largest and smallest volume for a piece of luggage.
G6M027	D	Measures of Central Tendency - the Mean	Find the arithmetic mean for a set of data. Find the missing value in a set of data given the mean.
G6M028	D	Line Plots	The objective of this lesson is display data using line plots. Use line plots to find measures of central tendency. Interpret data using a line plot.

K-6 Math for SMART Notebook — Scope and Sequence Grade 6

Code	Strand	Lesson Title	Lesson Description
G6M029	D	Circle Graphs	Draw and interpret circle graphs. Use the data to find the degrees needed for each piece of a pie graph.
G6M030	D	Probability	Define probability, discuss the vocabulary associated with probability, learn different ways to express probability, and develop understanding of strategies for solving probability problems including sample space and tree diagrams.