SpringMath alignment with TEKS

SpringMath focuses on strategic, high-leverage skills at each grade level that are necessary for algebra readiness.

A full alignment study was conducted to identify specific Common Core standards addressed in SpringMath for grades K-8 and can be viewed at sourcewell.co/ccss. Specifically, across grade levels, SpringMath provides extensive coverage via assessment and intervention for Counting and Cardinality, Operations and Algebraic Thinking, Number and Operations in Base Ten, Number and Operations with Fractions, The Number System, Expressions and Equations, and Ratios and Proportional Relationships. SpringMath does not provide assessment and instruction for Measurement and Data, Geometry, and Statistics and Probability.

SpringMath builds mastery for 143 skills ranging from numeracy to algebra — a full list of skills assessed can be viewed at sourcewell.co/skills.

Fall, winter, and spring screening skills (see sourcewell.co/screening) are the “dropping-in” points from which the individual intervention skill target is located following standard CBM survey-level assessment procedures. If classwide intervention is needed, then teachers are guided through classwide intervention which follows a standard protocol and requires about 15-20 minutes per day to conduct. Student growth with classwide intervention is monitored and students are recommended for individual intervention as needed. Classwide intervention skill sequences are unique to each grade level and begin with below-grade-level skills to verify mastery of prerequisite understandings and proceed through high-leverage grade-level skills.

In intervention, two lesson types are available for all skills: acquisition and fluency building. The specific type of intervention assigned depends upon student performance on the target skill. Intervention skill target and type (acquisition versus fluency building) is adjusted weekly based on student performance to maintain optimal alignment.

The following tables outline the TEKS focal points, related TEKS, and how SpringMath assessments and interventions relate to these standards.
### Kindergarten - SpringMath alignment with TEKS

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| Developing an understanding of whole numbers | Students count, represent, and compare quantities and collections fluently to at least 20. | Using technically valid and coordinated assessments and instructional activities and materials which include creating equivalent quantities, manipulatives, games, making quantities in multiple ways, and think-aloud work, SpringMath covers:  
  - Object-number correspondence in counting, rote counting, number naming to 20 (using responses of number selection, number production, and production of dots to match number)  
  - Ordinal understanding of numbers ranging from 0-20  
| Developing an understanding of addition and subtraction | Students use meanings of addition and subtraction as adding to and taking from, and they explain strategies for solving problems and responding to practical situations involving addition and subtraction. | Using technically valid and coordinated assessments and instructional materials and activities which include manipulatives, solving for unknowns, creating equivalent quantities, and representing quantity in multiple ways, SpringMath covers:  
  - Changing quantities to make 10  
  - Quantity discrimination with dot sets ranging from 0-20  
### Grade 1 - SpringMath alignment with TEKS

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| Developing an understanding of place value | Students count, represent, compare, and order quantities and collections fluently to 120. Students use base-10 place value to interpret numbers as groups of hundreds, tens, and ones. | Using technically valid and coordinated assessments, instructional materials and activities, which include manipulatives, mapping quantities on a number line, solving for unknowns, and creating equivalent quantities via composing and decomposing tens and hundreds, SpringMath covers:  
- Place value understanding in the context of number representations ranging from 1-999  
- Place value understanding in addition and subtraction with numbers greater than 9 | 1(1)(A)(B)(C)(D)(E)(F)(G) |
| Solving problems involving addition and subtraction | Students recognize situations involving addition and subtraction. Students develop and use efficient, accurate, and generalizable methods to add and subtract and use this knowledge to solve problems. | Using technically valid and coordinated assessments, instructional materials and activities, which include manipulatives, mapping quantities on a number line, solving for unknowns, and creating equivalent quantities via composing and decomposing tens and hundreds, SpringMath covers:  
- Sums to 20  
- Subtraction 0-20  
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<td>Developing proficiency in the use of place value within the base-10 numeration system</td>
<td>Students continue to develop an understanding of the base-10 place value system and place value concepts up to 1,200. Students use base-10 place value to count in multiples of thousands, hundreds, tens, and ones and demonstrate number relationships in a variety of ways.</td>
<td>Using technically valid and coordinated assessments, instructional materials and activities, which include manipulatives, mapping quantities on a number line, solving for unknowns, and creating equivalent quantities via composing and decomposing tens and hundreds, SpringMath covers:  - Add and subtract 2-digit numbers using place value understanding  - Add and subtract 3-digit numbers using place value understanding  - Creating equivalent addition and subtraction equations using place value understanding and decomposition  - Creating equivalent addition and subtraction equations using near-easy problems and understanding of associative property</td>
<td>2(1)(A)(B)(C)(D)(E)(F)(G); 2(2)(A)(B)(C)(D)(E)(F); 2(5)(A)(B); 2(7)(B); 2(10)(A)(B)</td>
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<td>Using place value and properties of operations to solve problems involving addition and subtraction of whole numbers within 1,000</td>
<td>Students identify situations in which addition and subtraction are useful to solve problems. Students develop and use strategies based on place value and properties of operations to add and subtract multi-digit whole numbers.</td>
<td>Using technically valid and coordinated assessments and coordinated instructional materials and activities, which include manipulatives, mapping quantities on a number line, solving for unknowns, and creating equivalent quantities including composing and decomposing tens and hundreds, SpringMath covers:  - Sums to 20  - Subtraction 0-20  - Fact families add/subtract 0-20  - Quantity comparison with numbers 1000-9999  - Quantity comparison for sums and differences to 20  - 2-digit addition with and without regrouping  - 2-digit subtraction with and without regrouping</td>
<td>2(1)(A)(B)(C)(D)(E)(F)(G); 2(4)(A)(B)(C)(D); 2(7)(B)(C); 2(10)(C)(D)</td>
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| Understanding and applying place value and properties of operations to solve problems involving addition and subtraction of whole numbers within 1,000 | Students extend their understanding of the base-10 system to numbers up to 100,000 and represent addition and subtraction of numbers within 1,000 using pictorial models, number lines, and equations. They use efficient, accurate, and generalizable methods based on place value, properties of operations, and the relationship between addition and subtraction to solve problems involving addition and subtraction of whole numbers within 1,000. | Using technically valid and coordinated assessments and instructional materials and activities, which include mapping quantities on a number line, creating equivalent quantities and expressions including composing and decomposing tens and hundreds, solving for unknowns, and addition and subtraction with expanded notation, SpringMath covers:  
  - Fact families add/subtract 0-20  
  - Adding and subtracting 3-digit numbers (with and without regrouping) using place value understanding | 3(1)(A)(B)(C)(D)(E)(F)(G)                                                                                                                   |
| Solving problems with multiplication and division within 100               | Students develop an understanding of multiplication and division of whole numbers through the use of representations. Students use properties of addition and multiplication to multiply whole numbers and apply increasingly sophisticated strategies based on these properties to solve multiplication and division problems. Students relate multiplication and division as inverse operations. | Using technically valid and coordinated assessments, instructional materials and activities, which include mapping quantities on a number line, visual arrays, creating equivalent quantities and expressions including repeated addition, identifying known facts plus addends, solving for unknowns, and multiplication and division with expanded notation, SpringMath covers:  
  - Multiplication 0-12  
  - Division 0-12  
  - Fact families multiplication/division 0-12  
  - Multiplying 1-digit by 2-3-digit numbers using place value understanding  
  - Dividing 1-digit into 2- and 3-digit dividend using place value understanding | 3(2)(A)(B)(C)(D)                                                                                                                                |
| Understanding fractions as numbers and representing equivalent fractions  | Students develop an understanding of the fraction as A parts, each of size of the whole using models. Students use fraction models, names, and symbols to describe and compare fractional parts of whole objects, sets of objects, and points or distances on a number line. Students construct models of equivalent fractions. | Using technically valid and coordinated assessments and instructional materials and activities, which include mapping fraction quantities on a number line using the fraction base unit, creating equivalent quantities and expressions including repeated addition of fraction base units, understanding “1” in the context of fractions, estimating quantity based on familiar referent fractions, and relating fraction quantities to division, SpringMath covers:  
  - Comparing fraction quantities for fractions with like denominators  
  - Placing fraction quantities on a number line using denominators 2, 4, 8  
  - Placing fractions on a number line using denominators 2, 4, 8 | 3(4)(A)(B)(C)                                                                                                                                  |
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| Developing fluency with efficient use of the four arithmetic operations on whole numbers and using this knowledge to solve problems | Students add, subtract, multiply, and divide whole numbers fluently; justify these procedures; and use them to solve problems, including developing formulas for perimeter and area. | Using technically valid and coordinated assessments and instructional materials and activities, which include mapping quantities on a number line, visual arrays, creating equivalent quantities and expressions including repeated addition, identifying known facts plus addends, solving for unknowns, and multiplication and division with expanded notation, SpringMath covers:  
- Fact families multiplication/division 0-12  
- Multiplying 1-digit by 2- and 3-digit numbers using place value understanding  
- Multiplying 2-digit by 2-digit numbers using place value understanding  
- Dividing 1-digit into 2- and 3-digit dividend using place value understanding  
| Understanding decimals and addition and subtraction of decimals | Students use understanding of base-10 place value and equivalent fractions to develop understanding of decimals as numbers and of procedures for adding and subtracting decimals. | Using technically valid and coordinated assessments and instructional materials and activities, which include mapping decimal quantities on a number line, creating equivalent quantities and expressions, estimating quantity based on familiar referent fractions, examining questions to determine when a fraction or decimal is easier to work with, and flexible conversion of quantities, SpringMath covers:  
- Quantity comparison with decimals to the hundredths  
- Adding and subtracting with decimals to the hundredths  
- Quantity comparison fractions, whole numbers, and decimals  
| Building foundations for addition and subtraction of fractions | Students use their understanding of fractions as numbers along with their understanding of addition and subtraction to develop understanding of and procedures for adding and subtracting fractions with like denominators. Students use these understandings and procedures to solve problems. | Using technically valid and coordinated assessments and instructional materials and activities, which include mapping fraction quantities on a number line using the fraction base unit and using number lines that extend beyond “1,” creating equivalent quantities and expressions including repeated addition of fraction base units, understanding “1” in the context of fractions, estimating quantity based on familiar referent fractions, and relating fraction quantities to division, SpringMath covers:  
- Placing fractions on a number line with quantities >1 and denominators of 1, 2, 3, 4, 5, 6, 8, 10  
- Quantity comparison with fractions with unlike denominators  
- Creating equivalent multiplication expressions using common factors  
- Adding and subtracting mixed numbers with like denominators and regrouping | 4(5)(A)(B)(C)(D) |
## Grade 5 - SpringMath alignment with TEKS

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| Developing an understanding of and fluency with addition, subtraction, multiplication, and division of fractions and decimals | Students apply their understanding of fractions and fraction models to represent the addition and subtraction of fractions with unlike denominators as equivalent calculations of fractions with like denominators. Students make reasonable estimates of fraction and decimal sums and differences and add and subtract fractions and add, subtract, multiply, and divide decimals to solve problems. Students apply their understanding of multiplication and division to build understanding of multiplication and division of fractions. | Using technically valid and coordinated assessments and instructional materials and activities, which include mapping decimal quantities and fraction quantities on a number line using the fraction base unit and using number lines that extend beyond “1,” creating equivalent quantities and expressions including repeated addition of fraction base units or repeated addition of decimal units and composing higher-value units when needed (or decomposing units), relating fraction and decimal quantities to division, examining questions to determine when a fraction or decimal is easier to work with, and flexible conversion of quantities, SpringMath covers:  
  - Adding and subtracting with decimals to the hundredths  
  - Creating equivalent fractions that share least common denominator  
  - Converting improper fractions to mixed numbers  
  - Converting mixed numbers to improper fractions  
  - Adding and subtracting fractions with unlike denominators  
  - Quantity comparison for whole numbers, fractions, and decimals  
  - Simplifying fractions  
  - Multiplying and dividing with decimals  
| Understanding and generating expressions and equations to solve problems    | Students use or generate expressions and equations to solve problems involving the four operations.                                                                                                                                                                                                                                               | Using technically valid and coordinated assessments and instructional materials and activities, which include solving for unknowns, constructing “solve for unknown” problem types from word problems, using expanded notation and place value understanding to solve multi-digit multiplication and division, creating equivalent quantities and expressions to reflect the underlying relationships, SpringMath covers:  
  - Fact families multiplication/division 0-12  
  - Multiplying 2-digit by 2-digit numbers using place value understanding  
  - Dividing 2-digit into 3- and 4-digit dividend using place value understanding  
  - Adding and subtracting with decimals to the hundredths  
  - Converting improper fractions to mixed numbers  
  - Converting mixed numbers to improper fractions  
  - Simplifying fractions  
  - Comparing quantities in various representations (whole number, fraction, decimal, percent)  
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| Using operations with integers and positive rational numbers to solve problems | Students extend understanding of and develop procedures for addition, subtraction, multiplication, and division of integers and positive rational numbers.                                                                 | Using technically valid and coordinated assessments and instructional materials and activities, which include creating equivalent operations for the four operations and understanding magnitude of operation on quantity as the basis for order of operations; using place value understanding and expanded notation to solve for multi-digit, fraction, and decimal operations; quantity comparison with integers including mapping integers on a number line, SpringMath covers:  
  - Order of operations (excluding exponents)  
  - Multiplying 2-digit by 2-digit numbers with decimals to the hundredths  
  - Adding, subtracting, multiplying, and dividing decimals to tenths and hundredths  
  - Adding and subtracting fractions with unlike denominators  
  - Multiplying and dividing mixed numbers  
  - Adding, subtracting, multiplying, and dividing fractions and mixed numbers  
| Understanding and applying ratios and rates and using equivalent ratios to represent proportional relationships | Students use their knowledge of multiplication and division and fractions to develop understanding of and solve ratio and rate problems. Students extend their understanding of equivalent fractions to create equivalent ratios that describe situations that involve proportionality and use various representations (e.g., graphs, tables, equations) to solve problems involving proportional relationships. | Using technically valid and coordinated assessments and instructional materials and activities, which include identifying and plotting coordinate points, connecting the points with a line, understanding a line as connected points in a coordinate plane, using linear change to estimate and identify points on the line, using understanding of proportion to solve for a percent of a whole number constructed as two proportions with an unknown, and solving for the unknown, SpringMath covers:  
  - Graphing points in a coordinate plane  
  - Finding percent of a whole number  
  - Using fractions to represent division in order of operations applications when they are more efficient                                                                                             | 6(2)(B)(C)(D)(E)     |
### Grade 6 - SpringMath alignment with TEKS, continued

| Using expressions and equations to represent relationships in a variety of contexts | Students use expressions and equations to represent relationships in a variety of contexts. Students use mathematical symbols to represent linear relationships and formulas. | Using technically valid and coordinated assessments and instructional materials and activities, which include solving for unknowns in the context of equivalent proportions, using all four operations with a solve-for-unknown set-up to demonstrate understanding of inverse operations, and distributing and collecting to create equivalent expressions, SpringMath covers:  
- Finding percent of a whole number  
- Substituting whole numbers to solve equations  
- Distributive property of expression  
- Collecting like terms  
- Using fractions to represent division in order of operations applications when they are more efficient  
- Choosing when to use decimals versus fractions, and choosing to simplify fractions prior to operations versus working with an unsimplified fraction or a mixed number | 6(3)(A)(B)(C)(D)(E) |
| Understanding data representation | Students understand and use descriptions of center, spread and shape to summarize and compare data sets. Students organize and display data to pose and solve problems. | Using technically valid and coordinated assessments and instructional materials and activities, which include identifying and plotting coordinate points, connecting the points with a line, understanding a line as connected points in a coordinate plane, and using linear change to estimate and identify points on the line, SpringMath covers:  
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| Developing fluency with rational numbers and operations to solve problems in a variety of contexts | Students understand how operations extend across different sets of numbers. Students develop fluency with addition, subtraction, multiplication, and division of rational numbers and use the operations to solve problems. | Using technically valid and coordinated assessments and instructional materials and activities, which include creating equivalent operations for the four operations with integers, using place value understanding and expanded notation to solve for multi-digit, fraction, and decimal operations, and applying inverse operations to construct and solve for unknowns with all four operations with whole numbers, proportions, and negative numbers, SpringMath covers:  
- Adding, subtracting, multiplying, and dividing integers of varied sign  
- Order of operations  
- Translating verbal expressions into numerical expressions  
- Solving 2-step equations  
- Solving for missing value in two equivalent algebraic proportions  
- Solving equations with percentages  
- Solving missing value in a percentage problem  
- Complex fractions  
- Inverse operations for addition, subtraction, multiplication, and division  
- Converting decimals to fractions and fractions to decimals  
| Representing and applying proportional relationships             | Students use reasoning about ratios, rates, proportionality, and percent to solve problems.                                                                                                                  | Using technically valid and coordinated assessments and instructional materials and activities, which include identifying and plotting coordinate points, connecting the points with a line, and understanding a line as connected points in a coordinate plane, using linear change to estimate and identify points on the line, and using understanding of proportion to solve for a percent of a whole number constructed as two proportions with an unknown and solving for the unknown, SpringMath covers:  
- Solving for missing value in two equivalent algebraic proportions  
- Solving equations with percentages  
- Solving missing value in a percentage problem  
- Complex fractions  
- Converting decimals to fractions and fractions to decimals  
- Solving one-step equations with rational numbers  
- Solving 2-step equations  
- Translating verbal expressions into numerical expressions  
- Solving 2-step equations with fractions | 7(2); 7(3)(A)(B) |
| Using expressions and equations to describe relationships in a variety of contexts, including geometric problems | Students select, justify, and use appropriate symbolic representations to solve problems in varied contexts, including use of geometric formulas for pyramids and circles. | Using technically valid and coordinated assessments and instructional materials and activities, which include constructing problems to solve for unknowns, SpringMath covers:  
- Inverse operations for addition and subtraction (including integers)  
- Inverse operations for multiplication and division (including integers) | 7(1)(A)(B)(C)(D)(E)(F)(G) |
### Grade 8 - SpringMath alignment with TEKS

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| Representing, applying, and analyzing proportional relationships | Students extend their understanding of proportionality to include representations on a coordinate plane and applications, including slopes of lines. They contrast proportional relationships with relationships that are not proportional. | Using technically valid and coordinated assessments and instructional materials and activities, which include identifying and plotting coordinate points, connecting the points with a line, and understanding a line as connected points in a coordinate plane, using linear change to estimate and identify points on the line, and using understanding of proportion to solve for a percent of a whole number constructed as two proportions with an unknown and solving for the unknown, SpringMath covers:  
- Solving for slope and intercept using linear function \( y=mx+b \)  
- Determining if a given point falls on a line  
- Solving for slope given two points on a line  
- Solving for \( y \)-intercept given slope and a point. | 8(1)(A)(B)(C)(D)(E)(F)(G) |
| Using expressions and equations to describe relationships, including the Pythagorean Theorem | Students select and use expressions and equations to represent and solve problems involving rational numbers. Students use geometric properties, including the Pythagorean Theorem, to solve problems. | Using technically valid and coordinated assessments and instructional materials and activities, which include using understanding of inverse relationships and integer operations to create equivalent expressions and solve for unknowns, modeling linear change and identify points on the line, expressing rate of change and representing as an operation, transforming expressions to simplify, and applying order of operations to solve equations involving all prior operations plus exponents, and graphing solutions for systems of linear equations, SpringMath covers:  
- Distributive property to simplify expressions  
- Collecting like terms to simplify expressions  
- Simplifying expressions  
- Mixed operations with exponents attached to variables  
- Order of operations including exponents attached to rational numbers  
- Linear combinations to solve equations  
- Solving 1- and 2-step equations with rational numbers  
- Linear combinations to solve systems of equations  
- Substituting to solve systems of linear equations  
- Comparison method to solve systems of linear equations | 8(3)(A)(B)(C) |
### Grade 8 - SpringMath alignment with TEKS, continued

| Making inferences from data | Students use representations of association, center, and variation to make inferences from data. | Using technically valid and coordinated assessments and instructional materials and activities, which include modeling linear change and identifying points on the line, expressing rate of change and representing as an operation, and solving real-world problems using linear equations, SpringMath covers:  
- Solving for slope and intercept using linear function $y=mx+b$  
- Determining if a given point falls on a line  
- Solving for slope given two points on a line  
- Solving for $y$-intercept given slope and a point  
- Graphing solutions to systems of linear equations | 8(4)(A)(B)(C) |