



Math Curriculum

Alignment to Common Core State Standards

COMMON CORE MATHEMATICS PRACTICES

Throughout our curriculum DreamBox incorporates the Standards for Mathematical Practice, which describe expertise that math educators at all levels seek to develop in students. These practices rest on key “processes and proficiencies” with longstanding importance in mathematics education, including the NCTM process standards and the strands of mathematical proficiency from the National Research Council’s report Adding It Up.

- Make sense of problems and persevere in solving them.
- Reason abstract and quantitatively.
- Model with mathematics.
- Use appropriate tools strategically.
- Attend to precision.
- Look for and make use of structure.



Introduction

The Common Core State Standards Initiative is a state-led effort coordinated by the National Governors Association Center for Best Practices and the Council of Chief State School Officers.

The release of the Common Core State Standards (CCSS) is a milestone in the standards movement that began more than 20 years ago when the National Council of Teachers of Mathematics (NCTM) published Curriculum and Evaluation Standards for Schools. NCTM, along with the National Council of Supervisors of Mathematics and other mathematics organizations, supports the goal of the CCSS to describe a coherent, focused curriculum that has realistically high expectations and supports an equitable mathematics education for all students.

The DreamBox Learning Math curriculum aligns with Common Core through the standards of Counting and Cardinality, Operations and Algebraic Thinking, Number and Operations in Base Ten, and Number and Operations in Fractions. DreamBox uses a rich adaptive learning environment that enhances and deepens the foundational learning that is so essential to future success in mathematics.

• Dots indicate the grade level at which DreamBox teaches this standard

 Fully Covered

 Partially Covered

 Not Covered

Dots (•) indicate the grade level at which Dreambox teaches the standard.					DreamBox Learning Alignment					DreamBox Learning Activities
Grade	ID	DOMAIN	CLUSTER	STANDARD	K	1	2	3	4	(Fully Covered or Partially Covered)
K	K.CC.1	Counting & Cardinality	Know number names and the count sequence.	Count to 100 by ones and by tens.	•					Ordering Numbers: Students order numbers and identify missing numbers in decades from 1 to 100
K	K.CC.2	Counting & Cardinality	Know number names and the count sequence.	Count forward beginning from a given number within the known sequence (instead of having to begin at 1).	•					Build 1 to 10 Optimally: Students build and identify numbers from static and flashed sets of 1 to 10 objects, using the least number of mouse clicks.
K	K.CC.3	Counting & Cardinality	Know number names and the count sequence.	Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).		•				Build up to 20 Optimally: Students build and identify numbers from static and flashed sets of 1 to 20 objects, using the least number of mouse clicks.
K	K.CC.4	Counting & Cardinality	Count to tell the number of objects.	Understand the relationship between numbers and quantities; connect counting to cardinality.	•	•				Beginning Adding & Removing: Students build and identify amounts that are 0, 1, or 2 more or less than a given quantity of 0 to 10. Identify Number Pairs: Students identify sets of objects and pairs of numbers that add up to 8, 9, and 10.
K	K.CC.4a	Counting & Cardinality	Count to tell the number of objects.	When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object.	•	•				Beginning Adding & Removing: Students build and identify amounts that are 0, 1, or 2 more or less than a given quantity of 0 to 10. Identify Number Pairs: Students identify sets of objects and pairs of numbers that add up to 8, 9, and 10.
K	K.CC.4b	Counting & Cardinality	Count to tell the number of objects.	Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.	•	•				Beginning Adding & Removing: Students build and identify amounts that are 0, 1, or 2 more or less than a given quantity of 0 to 10. Identify Number Pairs: Students identify sets of objects and pairs of numbers that add up to 8, 9, and 10.
K	K.CC.4c	Counting & Cardinality	Count to tell the number of objects.	Understand that each successive number name refers to a quantity that is one larger.	•	•				Beginning Adding & Removing: Students build and identify amounts that are 0, 1, or 2 more or less than a given quantity of 0 to 10. Identify Number Pairs: Students identify sets of objects and pairs of numbers that add up to 8, 9, and 10.
K	K.CC.5	Counting & Cardinality	Count to tell the number of objects.	Count to answer “how many?” questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.	•					Identify Missing Addend: Students identify a missing part (addend) when given one part (addend) and a whole (sum) from 3 to 10.
K	K.CC.6	Counting & Cardinality	Compare numbers.	Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.	•					Identify More, Less, & Equal: Students compare flashed sets and numerals of 1 to 10 objects and identify the set that is more, less, and/or equal.
K	K.CC.7	Counting & Cardinality	Compare numbers.	Compare two numbers between 1 and 10 presented as written numerals.	•					Compare 1 to 10: Students compare sets of 1 to 10 objects and identify which is more and/or less.
K	K.OA.1	Operations & Algebraic Thinking	Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.	Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.	•					Beginning Adding & Removing: Students build and identify amounts that are 0, 1, or 2 more or less than a given quantity of 0 to 10.
K	K.OA.2	Operations & Algebraic Thinking	Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.	Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.	•					Beginning Adding & Removing: Students build and identify amounts that are 0, 1, or 2 more or less than a given quantity of 0 to 10. Identify Number Pairs: Students identify sets of objects and pairs of numbers that add up to 8, 9, and 10.

Dots (•) indicate the grade level at which Dreambox teaches the standard.					DreamBox Learning Alignment					DreamBox Learning Activities
Grade	ID	DOMAIN	CLUSTER	STANDARD	K	1	2	3	4	(Fully Covered or Partially Covered)
K	K.OA.3	Operations & Algebraic Thinking	Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.	Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$).	•					Build 1 to 10 Optimally: Students build and identify numbers from static and flashed sets of 1 to 10 objects, using the least number of mouse clicks. (Includes Build Equal Not Identical lessons) Identify Missing Addend: Students identify a missing part (addend) when given one part (addend) and a whole (sum) from 3 to 10. Identify Number Pairs: Students identify sets of objects and pairs of numbers that add up to 8, 9, and 10.
K	K.OA.4	Operations & Algebraic Thinking	Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.	For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.	•	•				Doubling & Making 10: Students use the strategies of "Doubling" and "Making Ten" to add and subtract single digit numbers (sums to 40). Identify Missing Addend: Students identify a missing part (addend) when given one part (addend) and a whole (sum) from 3 to 10.
K	K.OA.5	Operations & Algebraic Thinking	Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.	Fluently add and subtract within 5.	•	•				"Identify Missing Addend: Students identify a missing part (addend) when given one part (addend) and a whole (sum) from 3 to 10. Identify Number Pairs: Students identify sets of objects and pairs of numbers that add up to 8, 9, and 10. Build 1 to 10 Optimally: Students build and identify numbers from static and flashed sets of 1 to 10 objects, using the least number of mouse clicks. (Includes Build Equal Not Identical lessons)"
K	K.NBT.1	Number & Operations in Base Ten	Work with numbers 11-19 to gain foundations for place value.	Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (such as $18 = 10 + 8$); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.					•	Build up to 20 Optimally: Students build and identify numbers from static and flashed sets of 1 to 20 objects, using the least number of mouse clicks.
K	K.MD.1	Measurement & Data	Describe and compare measurable attributes.	Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.						
K	K.MD.2	Measurement & Data	Describe and compare measurable attributes.	Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter.						
K	K.MD.3	Measurement & Data	Classify objects and count the number of objects in each category.	Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.						
K	K.G.1	Geometry	Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).	Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.						
K	K.G.2	Geometry	Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).	Correctly name shapes regardless of their orientations or overall size.						

Dots (•) indicate the grade level at which Dreambox teaches the standard.					DreamBox Learning Alignment					DreamBox Learning Activities
Grade	ID	DOMAIN	CLUSTER	STANDARD	K	1	2	3	4	(Fully Covered or Partially Covered)
K	K.G.3	Geometry	Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).	Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").						
K	K.G.4	Geometry	Analyze, compare, create, and compose shapes.	Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).						
K	K.G.5	Geometry	Analyze, compare, create, and compose shapes.	Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.						
K	K.G.6	Geometry	Analyze, compare, create, and compose shapes.	Compose simple shapes to form larger shapes. For example, "Can you join these two triangles with full sides touching to make a rectangle?"						
1	1.OA.1	Operations & Algebraic Thinking	Represent and solve problems involving addition and subtraction.	Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.						
1	1.OA.2	Operations & Algebraic Thinking	Represent and solve problems involving addition and subtraction.	Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.						
1	1.OA.3	Operations & Algebraic Thinking	Understand and apply properties of operations and the relationship between addition and subtraction.	Apply properties of operations as strategies to add and subtract. Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.)		•				Using 10 as a Landmark: Students use landmarks of ten when adding two numbers with sums to 24 (12+12). Identifying Number Pairs: Students identify pairs of numbers that add up to 15, 20, 50, and 100 using multiples of 5 and 10.
1	1.OA.4	Operations & Algebraic Thinking	Understand and apply properties of operations and the relationship between addition and subtraction.	Understand subtraction as an unknown-addend problem. For example, subtract $10 - 8$ by finding the number that makes 10 when added to 8. Add and subtract within 20.		•				Identify Missing Addend: Students identify a missing part (addend) when given one part (addend) and a whole (sum) from 3 to 10.
1	1.OA.5	Operations & Algebraic Thinking	Add and subtract within 20.	Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).		•	•			Doubles & Near Doubles: Students build and identify numbers from 1 to 20 that are grouped as doubles and near doubles. Making Jumps of 3 to 9: Students add and subtract 3 to 10 from numbers between -200 and 200.

Dots (•) indicate the grade level at which Dreambox teaches the standard.					DreamBox Learning Alignment					DreamBox Learning Activities
Grade	ID	DOMAIN	CLUSTER	STANDARD	K	1	2	3	4	(Fully Covered or Partially Covered)
1	1.OA.6	Operations & Algebraic Thinking	Add and subtract within 20.	Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a ten (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).		•				Doubling to 20: Students build and identify numbers from 1 to 20 when told to double a number (and at times, add or subtract 1) from 1 to 10.
1	1.OA.7	Operations & Algebraic Thinking	Work with addition and subtraction equations.	Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? $6 = 6$, $7 = 8 - 1$, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$.				•		Assessing Equality: Students determine whether a statement is true, false, greater than, less than, equal or not equal.
1	1.OA.8	Operations & Algebraic Thinking	Work with addition and subtraction equations.	Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11$, $5 = _ - 3$, $6 + 6 = _$.				•		Finding Equal Expressions: Students use numerals to make as many groups of equivalent expressions as possible.
1	1.NBT.1	Number & Operations in Base Ten	Extend the counting sequence.	Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.		•	•			Build up to 50 Optimally: Students build and identify numbers from static and flashed sets of 1 to 50 objects, using the least number of mouse clicks. Build up to 100 Optimally: Students build and identify numbers from static and flashed sets of 1 to 100 objects, using the least number of mouse clicks. Place Value to 500: Students use groups of tens and ones to build and pack amounts of objects and determine totals (up to 500).
1	1.NBT.2	Number & Operations in Base Ten	Understand place value.	Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases:		•				Place Value to 100: Students use groups of tens and ones to build and pack amounts of objects and determine totals (up to 100).
1	1.NBT.2a	Number & Operations in Base Ten	Understand place value.	10 can be thought of as a bundle of ten ones — called a “ten.”		•				Place Value to 100: Students use groups of tens and ones to build and pack amounts of objects and determine totals (up to 100).
1	1.NBT.2b	Number & Operations in Base Ten	Understand place value.	The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones.		•				Place Value to 100: Students use groups of tens and ones to build and pack amounts of objects and determine totals (up to 100).
1	1.NBT.2c	Number & Operations in Base Ten	Understand place value.	The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).		•				Place Value to 100: Students use groups of tens and ones to build and pack amounts of objects and determine totals (up to 100).
1	1.NBT.3	Number & Operations in Base Ten	Understand place value.	Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$.		•				Comparison Symbols: students compare sets of objects and numbers from 1 to 100 and make true equations using the greater than ($>$), less than ($<$), or equal ($=$) symbols. Identify More & Less Up To 100: Students compare sets of 1 to 100 objects and identify which is more or less.

Dots (•) indicate the grade level at which Dreambox teaches the standard.					DreamBox Learning Alignment					DreamBox Learning Activities
Grade	ID	DOMAIN	CLUSTER	STANDARD	K	1	2	3	4	(Fully Covered or Partially Covered)
1	1.NBT.4	Number & Operations in Base Ten	Use place value understanding and properties of operations to add and subtract.	Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.		•	•			<p>Moving on a Hundreds Chart: Students identify the number on the hundreds chart that is 1, 2, 8, 9, 10, or 11 away from a starting number.</p> <p>Place Value to 100: Students use groups of tens and ones to build and pack amounts of objects and determine totals (up to 100).</p> <p>Making Jumps of 3 to 9: Students add and subtract 3 to 10 from numbers between -200 and 200.</p> <p>Making Jumps of 10: Students add and subtract 10 to and from numbers between -200 and 200.</p> <p>Add & Subtract Landmark Numbers: Students add or subtract two numbers by jumping to the nearest multiple of ten, then adding additional tens and leftovers (45+28 becomes 45+5+10+10+3).</p> <p>Addition Compensation: Students manipulate two addends to create an equivalent but friendlier problem, which can be solved mentally (31+26 become 30+27).</p> <p>Adding & Subtracting Groups Of Tens: Students add and subtract multiples of 10 and leftovers between -100 to 200.</p>
1	1.NBT.5	Number & Operations in Base Ten	Use place value understanding and properties of operations to add and subtract.	Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.		•	•			<p>Counting Forward & Backward: Students place numbers in a row of the hundreds chart when given two numbers.</p> <p>Moving on a Hundreds Chart: Students identify the number on the hundreds chart that is 1, 2, 8, 9, 10, or 11 away from a starting number.</p> <p>Making Jumps of 10: Students add and subtract 10 to and from numbers between -200 and 200.</p>
1	1.NBT.6	Number & Operations in Base Ten	Use place value understanding and properties of operations to add and subtract.	Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.			•			<p>Making Jumps of 10: Students add and subtract 10 to and from numbers between -200 and 200.</p>
1	1.MD.1	Measurement & Data	Measure lengths indirectly and by iterating length units.	Order three objects by length; compare the lengths of two objects indirectly by using a third object.						
1	1.MD.2	Measurement & Data	Measure lengths indirectly and by iterating length units.	Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.						
1	1.MD.3	Measurement & Data	Tell and write time.	Tell and write time in hours and half-hours using analog and digital clocks.						

Dots (•) indicate the grade level at which Dreambox teaches the standard.					DreamBox Learning Alignment					DreamBox Learning Activities
Grade	ID	DOMAIN	CLUSTER	STANDARD	K	1	2	3	4	(Fully Covered or Partially Covered)
1	1.MD.4	Measurement & Data	Represent and interpret data.	Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.						
1	1.G.1	Geometry	Reason with shapes and their attributes.	Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.						
1	1.G.2	Geometry	Reason with shapes and their attributes.	Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape.						
1	1.G.3	Geometry	Reason with shapes and their attributes.	Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.						
2	2.OA.1	Operations & Algebraic Thinking	Represent and solve problems involving addition and subtraction.	Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.						
2	2.OA.2	Operations & Algebraic Thinking	Add and subtract within 20.	Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers.						<p>"Add & Subtract Landmark Numbers: Students add or subtract two numbers by jumping to the nearest multiple of ten, then adding additional tens and leftovers (45+28 becomes 45+5+10+10+3).</p> <p>Making Jumps of 3 to 9: Students add and subtract 3 to 10 from numbers between -200 and 200.</p> <p>Doubling to 20: Students build and identify numbers from 1 to 20 when told to double a number (and at times, add or subtract 1) from 1 to 10."</p>
2	2.OA.3	Operations & Algebraic Thinking	Work with equal groups of objects to gain foundations for multiplication.	Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.						<p>"Identifying Number Pairs: Students identify pairs of numbers that add up to 15, 20, 50, and 100 using multiples of 5 and 10.</p> <p>Addition Compensation: Students manipulate two addends to create an equivalent but friendlier problem, which can be solved mentally (31+26 become 30+27)."</p>

Dots (•) indicate the grade level at which Dreambox teaches the standard.					DreamBox Learning Alignment					DreamBox Learning Activities
Grade	ID	DOMAIN	CLUSTER	STANDARD	K	1	2	3	4	(Fully Covered or Partially Covered)
2	2.OA.4	Operations & Algebraic Thinking	Work with equal groups of objects to gain foundations for multiplication.	Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.						Multiplication & Division Situations: Students use various tools and groupings to develop an understanding of multiplication and division.
2	2.NBT.1	Number & Operations in Base Ten	Understand place value.	Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:			•			Place Value To 500: Students use groups of hundreds, tens, and ones to build and pack amounts of objects and determine totals (up to 500). Place Value To 1000: Students use groups of hundreds, tens, and ones to build and pack amounts of objects and determine totals (up to 1000).
2	2.NBT.1a	Number & Operations in Base Ten	Understand place value.	100 can be thought of as a bundle of ten tens — called a “hundred.”			•			Place Value To 500: Students use groups of hundreds, tens, and ones to build and pack amounts of objects and determine totals (up to 500). Place Value To 1000: Students use groups of hundreds, tens, and ones to build and pack amounts of objects and determine totals (up to 1000).
2	2.NBT.1b	Number & Operations in Base Ten	Understand place value.	The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).			•			Place Value To 500: Students use groups of hundreds, tens, and ones to build and pack amounts of objects and determine totals (up to 500). Place Value To 1000: Students use groups of hundreds, tens, and ones to build and pack amounts of objects and determine totals (up to 1000).
2	2.NBT.2	Number & Operations in Base Ten	Understand place value.	Count within 1000; skip-count by 5s, 10s, and 100s.			•			Hundreds Charts to 500: Students place numbers up to 500 on hundreds charts and number lines. Making Jumps of 3 to 9: Students add and subtract 3 to 10 from numbers between -200 and 200. Making Jumps of 10: Students add and subtract 10 to and from numbers between -200 and 200. Place Value To 500: Students use groups of hundreds, tens, and ones to build and pack amounts of objects and determine totals (up to 500). Place Value To 1000: Students use groups of hundreds, tens, and ones to build and pack amounts of objects and determine totals (up to 1000).
2	2.NBT.3	Number & Operations in Base Ten	Understand place value.	Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.			•			Place Value To 500: Students use groups of hundreds, tens, and ones to build and pack amounts of objects and determine totals (up to 500). Place Value To 1000: Students use groups of hundreds, tens, and ones to build and pack amounts of objects and determine totals (up to 1000).

Dots (•) indicate the grade level at which Dreambox teaches the standard.					DreamBox Learning Alignment					DreamBox Learning Activities
Grade	ID	DOMAIN	CLUSTER	STANDARD	K	1	2	3	4	(Fully Covered or Partially Covered)
2	2.NBT.4	Number & Operations in Base Ten	Understand place value.	Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons.			•			Compare Numbers Up To 500: Students compare numbers up to 500 using comparison symbols $<$ and $>$, with special attention to the placement of zeros and digit reversals. Compare Numbers Up To 1000: Students compare numbers up to 1000 using comparison symbols $<$ and $>$, with special attention to the placement of zeros and digit reversals.
2	2.NBT.5	Number & Operations in Base Ten	Use place value understanding and properties of operations to add and subtract.	Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.			•			Add & Subtract Landmark Numbers: Students add or subtract two numbers by jumping to the nearest multiple of ten, then adding additional tens and leftovers (45+28 becomes 45+5+10+10+3). Addition Compensation: Students manipulate two addends to create an equivalent but friendlier problem, which can be solved mentally (31+26 become 30+27).
2	2.NBT.6	Number & Operations in Base Ten	Use place value understanding and properties of operations to add and subtract.	Add up to four two-digit numbers using strategies based on place value and properties of operations.			•			Add & Subtract Landmark Numbers: Students add or subtract two numbers by jumping to the nearest multiple of ten, then adding additional tens and leftovers (45+28 becomes 45+5+10+10+3). Finding Groups Of Tens: Students group numbers into tens and multiples of ten when adding up to 12 addends.
2	2.NBT.7	Number & Operations in Base Ten	Use place value understanding and properties of operations to add and subtract.	Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.			•			Add & Subtract Landmark Numbers: Students add or subtract two numbers by jumping to the nearest multiple of ten, then adding additional tens and leftovers (45+28 becomes 45+5+10+10+3).
2	2.NBT.8	Number & Operations in Base Ten	Use place value understanding and properties of operations to add and subtract.	Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.			•			Adding & Subtracting Groups Of Tens: Students add and subtract multiples of 10 and leftovers between -100 to 200
2	2.NBT.9	Number & Operations in Base Ten	Use place value understanding and properties of operations to add and subtract.	Explain why addition and subtraction strategies work, using place value and the properties of operations.						
2	2.MD.1	Measurement & Data	Measure and estimate lengths in standard units.	Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.						
2	2.MD.2	Measurement & Data	Measure and estimate lengths in standard units.	Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.						
2	2.MD.3	Measurement & Data	Measure and estimate lengths in standard units.	Estimate lengths using units of inches, feet, centimeters, and meters.						

Dots (•) indicate the grade level at which Dreambox teaches the standard.					DreamBox Learning Alignment					DreamBox Learning Activities
Grade	ID	DOMAIN	CLUSTER	STANDARD	K	1	2	3	4	(Fully Covered or Partially Covered)
2	2.MD.4	Measurement & Data	Measure and estimate lengths in standard units.	Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.						
2	2.MD.5	Measurement & Data	Relate addition and subtraction to length.	Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.						
2	2.MD.6	Measurement & Data	Relate addition and subtraction to length.	Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.						
2	2.MD.7	Measurement & Data	Work with time and money.	Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.						
2	2.MD.8	Measurement & Data	Work with time and money.	Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?						
2	2.MD.9	Measurement & Data	Represent and interpret data.	Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.						
2	2.MD.10	Measurement & Data	Represent and interpret data.	Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.						
2	2.G.1	Geometry	Reason with shapes and their attributes.	Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.						
2	2.G.2	Geometry	Reason with shapes and their attributes.	Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.						
2	2.G.3	Geometry	Reason with shapes and their attributes.	Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.						

Dots (•) indicate the grade level at which Dreambox teaches the standard.					DreamBox Learning Alignment					DreamBox Learning Activities
Grade	ID	DOMAIN	CLUSTER	STANDARD	K	1	2	3	4	(Fully Covered or Partially Covered)
3	3.OA.1	Operations & Algebraic Thinking	Represent and solve problems involving multiplication and division.	Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as 5×7 .				•		<p>Identifying Common Multiples: Students find common multiples of two factors (2-12).</p> <p>Identifying Factors: Students identify factors of numbers to 100.</p> <p>Multiplication & Division Situations: Students use various tools and groupings to develop an understanding of multiplication and division.</p>
3	3.OA.2	Operations & Algebraic Thinking	Represent and solve problems involving multiplication and division.	Interpret whole-number quotients of whole numbers, e.g., interpret $56 \div 8$ as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. For example, describe a context in which a number of shares or a number of groups can be expressed as $56 \div 8$.				•		<p>Multiplication & Division Situations: Students use various tools and groupings to develop an understanding of multiplication and division.</p> <p>Multiplication: Adding or Removing Groups: Students add or remove a group from a known basic fact to determine the product of another basic fact.</p> <p>Multiplication: Double & Halve: Students use known basic facts and double one factor and halve the other to determine the product of a more challenging problem.</p>
3	3.OA.3	Operations & Algebraic Thinking	Represent and solve problems involving multiplication and division.	Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.				•		<p>Multiplication & Division Situations: Students use various tools and groupings to develop an understanding of multiplication and division.</p> <p>Partial Products Using Arrays: Students build arrays and use partial products to “cover” a rectangular area model of multiplication up to 12×12.</p> <p>Multiplication: Adding or Removing Groups: Students add or remove a group from a known basic fact to determine the product of another basic fact.</p>
3	3.OA.4	Operations & Algebraic Thinking	Represent and solve problems involving multiplication and division.	Determine the unknown whole number in a multiplication or division equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 \times ? = 48$, $5 = _ \div 3$, $6 \times 6 = ?$				•		<p>Multiplication & Division Situations: Students use various tools and groupings to develop an understanding of multiplication and division.</p> <p>Multiplication: Doubling: Students double known basic facts to find the product of more challenging basic facts.</p> <p>Multiplication: Partial Products: Students use the sum of two known basic facts to determine the product of a more challenging problem.</p> <p>Multiplication: Double & Halve: Students use known basic facts and double one factor and halve the other to determine the product of a more challenging problem.</p> <p>Multiplication: Adding or Removing Groups: Students add or remove a group from a known basic fact to determine the product of another basic fact.</p>

Dots (•) indicate the grade level at which Dreambox teaches the standard.					DreamBox Learning Alignment					DreamBox Learning Activities
Grade	ID	DOMAIN	CLUSTER	STANDARD	K	1	2	3	4	(Fully Covered or Partially Covered)
3	3.OA.5	Operations & Algebraic Thinking	Understand properties of multiplication and the relationship between multiplication and division.	Apply properties of operations as strategies to multiply and divide. Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$, then $15 \times 2 = 30$, or by $5 \times 2 = 10$, then $3 \times 10 = 30$. (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.)						<p>Multiplication: Mixed Strategies: Students explore the commutative property ($3 \times 5 = 5 \times 3$) and apply various strategies to solve double digit multiplication problems.</p> <p>Multiplication: Doubling: Students double known basic facts to find the product of more challenging basic facts.</p> <p>Multiplication: Partial Products: Students use the sum of two known basic facts to determine the product of a more challenging problem.</p> <p>Multiplication: Double & Halve: Students use known basic facts and double one factor and halve the other to determine the product of a more challenging problem.</p> <p>Multiplication: Adding or Removing Groups: Students add or remove a group from a known basic fact to determine the product of another basic fact.</p>
3	3.OA.6	Operations & Algebraic Thinking	Understand properties of multiplication and the relationship between multiplication and division.	Understand division as an unknown-factor problem. For example, find $32 \div 8$ by finding the number that makes 32 when multiplied by 8.						
3	3.OA.7	Operations & Algebraic Thinking	Multiply and divide within 100.	Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.						<p>Multiplication & Division Situations: Students use various tools and groupings to develop an understanding of multiplication and division.</p> <p>Multiplication: Mixed Strategies: Students explore the commutative property ($3 \times 5 = 5 \times 3$) and apply various strategies to solve double digit multiplication problems.</p> <p>Multiplication: Doubling: Students double known basic facts to find the product of more challenging basic facts.</p> <p>Multiplication: Partial Products: Students use the sum of two known basic facts to determine the product of a more challenging problem.</p> <p>Multiplication: Double & Halve: Students use known basic facts and double one factor and halve the other to determine the product of a more challenging problem.</p> <p>Multiplication: Adding or Removing Groups: Students add or remove a group from a known basic fact to determine the product of another basic fact.</p>
3	3.OA.8	Operations & Algebraic Thinking	Solve problems involving the four operations, and identify and explain patterns in arithmetic.	Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.						

Dots (•) indicate the grade level at which Dreambox teaches the standard.					DreamBox Learning Alignment					DreamBox Learning Activities
Grade	ID	DOMAIN	CLUSTER	STANDARD	K	1	2	3	4	(Fully Covered or Partially Covered)
3	3.OA.9	Operations & Algebraic Thinking	Solve problems involving the four operations, and identify and explain patterns in arithmetic.	Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.						
3	3.NBT.1	Number & Operations in Base Ten	Use place value understanding and properties of operations to perform multi-digit arithmetic.	Use place value understanding to round whole numbers to the nearest 10 or 100.				•		Place Value to 9,999: Students use groups of thousands, hundreds, tens, and ones to build and pack amounts of objects and determine totals (up to 9,999). Frog Race: Rounding to the nearest 10.
3	3.NBT.2	Number & Operations in Base Ten	Use place value understanding and properties of operations to perform multi-digit arithmetic.	Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.				•		Add & Subtract Landmark Numbers: Students add or subtract two numbers by jumping to the nearest multiple of ten, then adding additional tens and leftovers (45+28 becomes 45+5+10+10+3).
3	3.NBT.3	Number & Operations in Base Ten	Use place value understanding and properties of operations to perform multi-digit arithmetic.	Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9×80 , 5×60) using strategies based on place value and properties of operations.				•		Multiplication: Mixed Strategies: Students explore the commutative property ($3 \times 5 = 5 \times 3$) and apply various strategies to solve double digit multiplication problems.
3	3.NF.1	Number & Operations—Fractions	Develop understanding of fractions as numbers.	Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size $1/b$.				•		"Make & Compare Rods: Students divide objects into equal parts as they compare fractions with either like numerators or like denominators. Decomposing Fractions: Students build a given fraction in multiple ways using blocks."
3	3.NF.2	Number & Operations—Fractions	Develop understanding of fractions as numbers.	Understand a fraction as a number on the number line; represent fractions on a number line diagram.				•		Fractions on a Number Line: Students identify and place fractions, improper fractions and mixed numbers in their correct location on a number line. (NOTE: This unit is mapped to the standard and bullet points A & B.)
3	3.NF.2a	Number & Operations—Fractions	Develop understanding of fractions as numbers.	Represent a fraction $1/b$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size $1/b$ and that the endpoint of the part based at 0 locates the number $1/b$ on the number line.				•		Fractions on a Number Line: Students identify and place fractions, improper fractions and mixed numbers in their correct location on a number line. (NOTE: This unit is mapped to the standard and bullet points A & B.)
3	3.NF.2b	Number & Operations—Fractions	Develop understanding of fractions as numbers.	Represent a fraction a/b on a number line diagram by marking off a lengths $1/b$ from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line.				•		Fractions on a Number Line: Students identify and place fractions, improper fractions and mixed numbers in their correct location on a number line. (NOTE: This unit is mapped to the standard and bullet points A & B.)
3	3.NF.3	Number & Operations—Fractions	Develop understanding of fractions as numbers.	Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.				•		Make & Compare Rods: Students divide objects into equal parts as they compare fractions with either like numerators or like denominators.
3	3.NF.3a	Number & Operations—Fractions	Develop understanding of fractions as numbers.	Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.				•		Fractions: Money and Time: Students build equivalent fractions when given money and time as contexts
3	3.NF.3b	Number & Operations—Fractions	Develop understanding of fractions as numbers.	Recognize and generate simple equivalent fractions, e.g., $1/2 = 2/4$, $4/6 = 2/3$. Explain why the fractions are equivalent, e.g., by using a visual fraction model.				•		Early Equivalency I: Students use familiar contexts, commonly used fractions and a table to generate equivalent fractions and find scaling factors.

Dots (•) indicate the grade level at which Dreambox teaches the standard.					DreamBox Learning Alignment					DreamBox Learning Activities
Grade	ID	DOMAIN	CLUSTER	STANDARD	K	1	2	3	4	(Fully Covered or Partially Covered)
3	3.NF.3c	Number & Operations—Fractions	Develop understanding of fractions as numbers.	Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. Examples: Express 3 in the form $3 = 3/1$; recognize that $6/1 = 6$; locate $4/4$ and 1 at the same point of a number line diagram.				•		Fractions on a Number Line: Students identify and place fractions, improper fractions and mixed numbers in their correct location on a number line.
3	3.NF.3d	Number & Operations—Fractions	Develop understanding of fractions as numbers.	Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.				•		Make & Compare Rods: Students divide objects into equal parts as they compare fractions with either like numerators or like denominators.
3	3.MD.1	Measurement & Data	Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.	Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.						
3	3.MD.2	Measurement & Data	Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.	Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.						
3	3.MD.3	Measurement & Data	Represent and interpret data.	Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs. For example, draw a bar graph in which each square in the bar graph might represent 5 pets.						
3	3.MD.4	Measurement & Data	Represent and interpret data.	Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units— whole numbers, halves, or quarters.						
3	3.MD.5	Measurement & Data	Geometric measurement: understand concepts of area and relate area to multiplication and to addition.	Recognize area as an attribute of plane figures and understand concepts of area measurement.						
3	3.MD.5a	Measurement & Data	Geometric measurement: understand concepts of area and relate area to multiplication and to addition.	A square with side length 1 unit, called “a unit square,” is said to have “one square unit” of area, and can be used to measure area.						
3	3.MD.5b	Measurement & Data	Geometric measurement: understand concepts of area and relate area to multiplication and to addition.	A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units.						
3	3.MD.6	Measurement & Data	Geometric measurement: understand concepts of area and relate area to multiplication and to addition.	Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).						

Dots (•) indicate the grade level at which Dreambox teaches the standard.					DreamBox Learning Alignment					DreamBox Learning Activities
Grade	ID	DOMAIN	CLUSTER	STANDARD	K	1	2	3	4	(Fully Covered or Partially Covered)
3	3.MD.7	Measurement & Data	Geometric measurement: understand concepts of area and relate area to multiplication and to addition.	Relate area to the operations of multiplication and addition.						
3	3.MD.7a	Measurement & Data	Geometric measurement: understand concepts of area and relate area to multiplication and to addition.	Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths.						
3	3.MD.7b	Measurement & Data	Geometric measurement: understand concepts of area and relate area to multiplication and to addition.	Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning.						
3	3.MD.7c	Measurement & Data	Geometric measurement: understand concepts of area and relate area to multiplication and to addition.	Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths a and $b + c$ is the sum of $a \times b$ and $a \times c$. Use area models to represent the distributive property in mathematical reasoning.						
3	3.MD.7d	Measurement & Data	Geometric measurement: understand concepts of area and relate area to multiplication and to addition.	Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems.						
3	3.MD.8	Measurement & Data	Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.	Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.						
3	3.G.1	Geometry	Reason with shapes and their attributes.	Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.						
3	3.G.2	Geometry	Reason with shapes and their attributes.	Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. For example, partition a shape into 4 parts with equal area, and describe the area of each part as $\frac{1}{4}$ of the area of the shape.						
4	4.OA.1	Operations & Algebraic Thinking	Use the four operations with whole numbers to solve problems.	Interpret a multiplication equation as a comparison, e.g., interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.						Multiplication: Mixed Strategies: Students explore the commutative property ($3 \times 5 = 5 \times 3$) and apply various strategies to solve double-digit multiplication problems.

Dots (•) indicate the grade level at which Dreambox teaches the standard.					DreamBox Learning Alignment					DreamBox Learning Activities
Grade	ID	DOMAIN	CLUSTER	STANDARD	K	1	2	3	4	(Fully Covered or Partially Covered)
4	4.OA.2	Operations & Algebraic Thinking	Use the four operations with whole numbers to solve problems.	Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.					•	Multiplication & Division Situations: Students use various tools and groupings to develop an understanding of multiplication and division.
4	4.OA.3	Operations & Algebraic Thinking	Use the four operations with whole numbers to solve problems.	"Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity.						
"										
4	4.OA.4	Operations & Algebraic Thinking	Gain familiarity with factors and multiples.	Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite.					•	"Identifying Common Multiples: Students find common multiples of two factors (2–12). Identifying Factors: Students identify factors of numbers to 100."
4	4.OA.5	Operations & Algebraic Thinking	Generate and analyze patterns.	Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. For example, given the rule "Add 3" and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.					•	"Making Jumps of 3 to 9: Students add and subtract 3 to 10 from numbers between -200 and 200. Identify Missing Tens: Students identify the difference between two addends when that difference is a multiple of 10."
4	4.NBT.1	Number & Operations in Base Ten	Generalize place value understanding for multidigit whole numbers.	Recognize that in a multidigit whole number, a digit in one place represents 10 times what it represents in the place to its right. For example, recognize that $700 \div 70 = 10$ by applying concepts of place value and division.					•	Place Value to 9,999: Students use groups of thousands, hundreds, tens, and ones to build and pack amounts of objects and determine totals (up to 9,999).
4	4.NBT.2	Number & Operations in Base Ten	Generalize place value understanding for multidigit whole numbers.	Read and write multidigit whole numbers using base-ten numerals, number names, and expanded form. Compare two multidigit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.					•	"Place Value to 9,999: Students use groups of thousands, hundreds, tens, and ones to build and pack amounts of objects and determine totals (up to 9,999). Compare Numbers Up To 1000: Students compare numbers up to 1000 using comparison symbols $<$ and $>$, with special attention to the placement of zeros and digit reversals."
4	4.NBT.3	Number & Operations in Base Ten	Generalize place value understanding for multidigit whole numbers.	Use place value understanding to round multidigit whole numbers to any place.					•	Place Value to 9,999: Students use groups of thousands, hundreds, tens, and ones to build and pack amounts of objects and determine totals (up to 9,999).
4	4.NBT.4	Number & Operations in Base Ten	Use place value understanding and properties of operations to perform multidigit arithmetic.	Fluently add and subtract multidigit whole numbers using the standard algorithm.						

Dots (•) indicate the grade level at which Dreambox teaches the standard.					DreamBox Learning Alignment					DreamBox Learning Activities
Grade	ID	DOMAIN	CLUSTER	STANDARD	K	1	2	3	4	(Fully Covered or Partially Covered)
4	4.NBT.5	Number & Operations in Base Ten	Use place value understanding and properties of operations to perform multidigit arithmetic.	Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.						
4	4.NBT.6	Number & Operations in Base Ten	Use place value understanding and properties of operations to perform multidigit arithmetic.	Find whole-number quotients and remainders with up-to-four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.						
4	4.NF.1	Number & Operations—Fractions	Extend understanding of fraction equivalence and ordering.	Explain why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.					•	Early Equivalency II: Students generate equivalent fractions and find scaling factors using a table.
4	4.NF.2	Number & Operations—Fractions	Extend understanding of fraction equivalence and ordering.	Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $1/2$. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.					•	"Comparing Fractions I: Students use a table to compare fractions with unlike numerators and unlike denominators. Comparing Fractions II: Students compare fractions, including improper fractions, with unlike numerators and unlike denominators."
4	4.NF.3	Number & Operations—Fractions	Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.	Understand a fraction a/b with $a > 1$ as a sum of fractions $1/b$.					•	Decomposing Fractions: Students build a given fraction in multiple ways using blocks.
4	4.NF.3a	Number & Operations—Fractions	Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.	Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.					•	"Fractions: Add and Subtract I: Students add and subtract fractions with like denominators using blocks as a model. Fractions: Add and Subtract II: Students add and subtract fractions with like denominators (including improper fractions and mixed numbers) using blocks as a model for the removal strategy."
4	4.NF.3b	Number & Operations—Fractions	Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.	Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. Examples: $3/8 = 1/8 + 1/8 + 1/8$; $3/8 = 1/8 + 2/8$; $2 \frac{1}{8} = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8$.					•	Decomposing Fractions: Students build a given fraction in multiple ways using blocks.
4	4.NF.3c	Number & Operations—Fractions	Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.	Add and subtract mixed numbers with like denominators.					•	"Fractions: Add and Subtract I: Students add and subtract fractions with like denominators using blocks as a model. Fractions: Add and Subtract II: Students add and subtract fractions with like denominators (including improper fractions and mixed numbers) using blocks as a model for the removal strategy."

Dots (•) indicate the grade level at which Dreambox teaches the standard.					DreamBox Learning Alignment					DreamBox Learning Activities
Grade	ID	DOMAIN	CLUSTER	STANDARD	K	1	2	3	4	(Fully Covered or Partially Covered)
4	4.NF.3d	Number & Operations—Fractions	Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.	Solve word problems involving addition and subtraction of fractions referring to the same whole.						<p>"Fractions: Add and Subtract I: Students add and subtract fractions with like denominators using blocks as a model.</p> <ul style="list-style-type: none"> Fractions: Add and Subtract II: Students add and subtract fractions with like denominators (including improper fractions and mixed numbers) using blocks as a model for the removal strategy."
4	4.NF.4	Number & Operations—Fractions	Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.	Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.						<p>Fraction Multiplication: Students multiply fractions by whole numbers.</p> <ul style="list-style-type: none">
4	4.NF.4a	Number & Operations—Fractions	Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.	Understand a fraction a/b as a multiple of $1/b$.						<p>Fraction Multiplication: Students multiply fractions by whole numbers.</p> <ul style="list-style-type: none">
4	4.NF.4b	Number & Operations—Fractions	Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.	Understand a multiple of a/b as a multiple of $1/b$.						<p>Fraction Multiplication: Students multiply fractions by whole numbers.</p> <ul style="list-style-type: none">
4	4.NF.4c	Number & Operations—Fractions	Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.	Solve word problems involving multiplication of a fraction by a whole number.						
4	4.NF.5	Number & Operations—Fractions	Understand decimal notation for fractions, and compare decimal fractions.	Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100.						<p>"Fractions in the Real World I: Students build equivalent fractions for values from zero up to 1.</p> <ul style="list-style-type: none"> Fractions in the Real World II: Students generate equivalent fractions for values from zero up to 2."
4	4.NF.6	Number & Operations—Fractions	Understand decimal notation for fractions, and compare decimal fractions.	Use decimal notation for fractions with denominators 10 or 100.						
4	4.NF.7	Number & Operations—Fractions	Understand decimal notation for fractions, and compare decimal fractions.	Compare two decimals by reasoning about their size.						
4	4.MD.1	Measurement & Data	Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.							
4	4.MD.2	Measurement & Data	Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.							
4	4.MD.3	Measurement & Data	Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.							
4	4.MD.4	Measurement & Data	Represent and interpret data.							
4	4.MD.5	Measurement & Data	Geometric measurement: understand concepts of angle and measure angles							

Dots (•) indicate the grade level at which Dreambox teaches the standard.					DreamBox Learning Alignment					DreamBox Learning Activities
Grade	ID	DOMAIN	CLUSTER	STANDARD	K	1	2	3	4	(Fully Covered or Partially Covered)
4	4.MD.5a	Measurement & Data	Geometric measurement: understand concepts of angle and measure angles							
4	4.MD.5b	Measurement & Data	Geometric measurement: understand concepts of angle and measure angles							
4	4.MD.6	Measurement & Data	Geometric measurement: understand concepts of angle and measure angles							
4	4.MD.7	Measurement & Data	Geometric measurement: understand concepts of angle and measure angles							
4	4.G.1	Geometry	Draw and identify lines and angles, and classify shapes by properties of their lines and angles.							
4	4.G.2	Geometry	Draw and identify lines and angles, and classify shapes by properties of their lines and angles.							
4	4.G.3	Geometry	Draw and identify lines and angles, and classify shapes by properties of their lines and angles.							



www.dreambox.com



For more information, contact Client Care at 877.451.7845, email schools@dreambox.com or visit dreambox.com.