






# Pacing Guide

	Build Understanding
	Connect Concepts and Skills
	Apply and Practice

Lesson	Mathematics Standards, Grade 3	Pacing
<b>Unit 1 UNDERSTAND MULTIPLICATION AND AREA</b>		
<b>Module 1: Understand Multiplication</b>		
 Lesson 1.1 Count Equal Groups	<ul style="list-style-type: none"> <li>Interpret products of whole numbers, e.g., interpret <math>5 \times 7</math> as the total number of objects in 5 groups of 7 objects each.</li> </ul>	1 day
 Lesson 1.2 Relate Addition and Multiplication	<ul style="list-style-type: none"> <li>Interpret products of whole numbers, e.g., interpret <math>5 \times 7</math> as the total number of objects in 5 groups of 7 objects each.</li> </ul>	1 day
 Lesson 1.3 Represent Multiplication with Arrays	<ul style="list-style-type: none"> <li>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.</li> </ul>	1 day
 Lesson 1.4 Understand the Commutative Property of Multiplication	<ul style="list-style-type: none"> <li>Apply properties of operations as strategies to multiply and divide.</li> </ul>	1 day
 Lesson 1.5 Represent Multiplication with Number Lines	<ul style="list-style-type: none"> <li>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.</li> </ul>	1 day
 Lesson 1.6 Represent Multiplication with Bar Models	<ul style="list-style-type: none"> <li>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.</li> </ul>	2 days
<b>Module 2: Relate Multiplication and Area</b>		
 Lesson 2.1 Understand Area by Counting Unit Squares	<ul style="list-style-type: none"> <li>Recognize area as an attribute of plane figures and understand concepts of area measurement.</li> <li>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.</li> </ul>	1 day
 Lesson 2.2 Measure Area by Counting Unit Squares	<ul style="list-style-type: none"> <li>A plane figure which can be covered without gaps or overlaps by <math>n</math> unit squares is said to have an area of <math>n</math> square units.</li> <li>Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).</li> </ul>	1 day
 Lesson 2.3 Relate Area to Addition and Multiplication	<ul style="list-style-type: none"> <li>Relate area to the operations of multiplication and addition.</li> <li>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.</li> </ul>	1 day
 Lesson 2.4 Solve Problems with Area	<ul style="list-style-type: none"> <li>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.</li> </ul>	1 day

- Major
- Supporting
- Additional




In addition to the core instructional pacing, HMH recommends the following:

- 3 days per year for the Growth Measure assessments
  - 2 days per module for the Module Opener, Are You Ready?, Module Review, and Module Test
  - 1 day per unit for the Performance Task
- Using these recommendations, the total pacing for Grade 3 is 165 days.

Lesson	Mathematics Standards, Grade 3	Pacing
Lesson 2.5 Find the Area of Combined Rectangles	<ul style="list-style-type: none"> <li>■ Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths <math>a</math> and <math>b + c</math> is the sum of <math>a \times b</math> and <math>a \times c</math>. Use area models to represent the distributive property in mathematical reasoning.</li> <li>■ 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.</li> </ul>	1 day
<b>Unit 2 MULTIPLICATION AND DIVISION</b>		
<b>Module 3: Understand Multiplication Strategies</b>		
Lesson 3.1 Multiply with 2 and 4	<ul style="list-style-type: none"> <li>■ 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.</li> </ul>	2 days
Lesson 3.2 Multiply with 5 and 10	<ul style="list-style-type: none"> <li>■ 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.</li> </ul>	2 days
Lesson 3.3 Multiply with 3 and 6	<ul style="list-style-type: none"> <li>■ 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.</li> </ul>	2 days
<b>Module 4: Apply Multiplication Properties as Strategies</b>		
Lesson 4.1 Understand the Identity and Zero Properties of Multiplication	<ul style="list-style-type: none"> <li>■ Apply properties of operations as strategies to multiply and divide.</li> </ul>	1 day
Lesson 4.2 Understand the Distributive Property	<ul style="list-style-type: none"> <li>■ Apply properties of operations as strategies to multiply and divide.</li> </ul>	1 day
Lesson 4.3 Understand the Associative Property of Multiplication	<ul style="list-style-type: none"> <li>■ Apply properties of operations as strategies to multiply and divide.</li> <li>■ Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that <math>8 \times 5 = 40</math>, one knows <math>40 \div 5 = 8</math>) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.</li> </ul>	1 day
Lesson 4.4 Multiply with 7	<ul style="list-style-type: none"> <li>■ Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that <math>8 \times 5 = 40</math>, one knows <math>40 \div 5 = 8</math>) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.</li> <li>■ Apply properties of operations as strategies to multiply and divide.</li> </ul>	1 day

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Lesson	Mathematics Standards, Grade 3	Pacing
<b>Module 4: Apply Multiplication Properties as Strategies</b>		
Lesson 4.5 Multiply with 8	<ul style="list-style-type: none"> <li>Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that <math>8 \times 5 = 40</math>, one knows <math>40 \div 5 = 8</math>) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.</li> <li>Apply properties of operations as strategies to multiply and divide.</li> </ul>	1 day
Lesson 4.6 Multiply with 9	<ul style="list-style-type: none"> <li>Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that <math>8 \times 5 = 40</math>, one knows <math>40 \div 5 = 8</math>) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.</li> <li>Apply properties of operations as strategies to multiply and divide.</li> </ul>	1 day
Lesson 4.7 Identify Number Patterns on the Multiplication Table	<ul style="list-style-type: none"> <li>Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations.</li> <li>Apply properties of operations as strategies to multiply and divide.</li> </ul>	2 days
<b>Module 5: Multiplication with Multiples of 10</b>		
Lesson 5.1 Use the Distributive Property	<ul style="list-style-type: none"> <li>Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., <math>9 \times 80</math>, <math>5 \times 60</math>) using strategies based on place value and properties of operations.</li> <li>Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths <math>a</math> and <math>b + c</math> is the sum of <math>a \times b</math> and <math>a \times c</math>. Use area models to represent the distributive property in mathematical reasoning.</li> </ul>	2 days
Lesson 5.2 Use the Associative Property of Multiplication	<ul style="list-style-type: none"> <li>Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., <math>9 \times 80</math>, <math>5 \times 60</math>) using strategies based on place value and properties of operations.</li> <li>Apply properties of operations as strategies to multiply and divide.</li> </ul>	1 day
Lesson 5.3 Use Place-Value Strategies to Multiply with Multiples of 10	<ul style="list-style-type: none"> <li>Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., <math>9 \times 80</math>, <math>5 \times 60</math>) using strategies based on place value and properties of operations.</li> <li>Interpret products of whole numbers, e.g., interpret <math>5 \times 7</math> as the total number of objects in 5 groups of 7 objects each.</li> </ul>	1 day
Lesson 5.4 Multiply Multiples of 10 by 1-Digit Numbers	<ul style="list-style-type: none"> <li>Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., <math>9 \times 80</math>, <math>5 \times 60</math>) using strategies based on place value and properties of operations.</li> <li>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.</li> </ul>	1 day

Lesson	Mathematics Standards, Grade 3	Pacing
<b>Module 6: Understand Division</b>		
Lesson 6.1 Represent 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.	1 day
Lesson 6.2 Separate Objects into Equal Groups	■ 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.	1 day
Lesson 6.3 Find the Number of Equal Groups	■ 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.	1 day
Lesson 6.4 Relate Subtraction 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.	1 day
Lesson 6.5 Represent Division with Arrays	■ 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.	1 day
Lesson 6.6 Represent Division with Bar Models	■ 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.	1 day
Lesson 6.7 Apply Division Rules for 1 and 0	■ Apply properties of operations as strategies to multiply and divide.	1 day
<b>Module 7: Relate Multiplication and Division</b>		
Lesson 7.1 Relate Multiplication and Division	■ Understand division as an unknown-factor problem.	1 day
Lesson 7.2 Write Related Facts	■ 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.	1 day
Lesson 7.3 Multiply and Divide with 2, 4, and 8	■ 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. ■ 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.	2 days

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Lesson	Mathematics Standards, Grade 3	Pacing
<b>Module 7: Relate Multiplication and Division</b>		
 Lesson 7.4 Multiply and Divide with 5 and 10	<ul style="list-style-type: none"> <li>■ 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.</li> <li>■ Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that <math>8 \times 5 = 40</math>, one knows <math>40 \div 5 = 8</math>) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.</li> </ul>	2 days
 Lesson 7.5 Multiply and Divide with 3 and 6	<ul style="list-style-type: none"> <li>■ 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.</li> <li>■ Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that <math>8 \times 5 = 40</math>, one knows <math>40 \div 5 = 8</math>) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.</li> </ul>	2 days
 Lesson 7.6 Multiply and Divide with 7 and 9	<ul style="list-style-type: none"> <li>■ Determine the unknown whole number in a multiplication or division equation relating three whole numbers.</li> <li>■ Apply properties of operations as strategies to multiply and divide.</li> </ul>	2 days
 Lesson 7.7 Build Fluency with Multiplication and Division	<ul style="list-style-type: none"> <li>■ Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that <math>8 \times 5 = 40</math>, one knows <math>40 \div 5 = 8</math>) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.</li> </ul>	1 day
<b>Module 8: Apply Multiplication and Division</b>		
 Lesson 8.1 Identify and Extend Patterns	<ul style="list-style-type: none"> <li>■ Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations.</li> </ul>	1 day
 Lesson 8.2 Find Unknown Factors and Numbers	<ul style="list-style-type: none"> <li>■ Determine the unknown whole number in a multiplication or division equation relating three whole numbers.</li> <li>■ Understand division as an unknown-factor problem.</li> </ul>	2 days
 Lesson 8.3 Use Multiplication and Division to Solve Problem Situations	<ul style="list-style-type: none"> <li>■ 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.</li> <li>■ Determine the unknown whole number in a multiplication or division equation relating three whole numbers.</li> </ul>	1 day
 Lesson 8.4 Solve Two-Step Problems	<ul style="list-style-type: none"> <li>■ 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.</li> <li>■ 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.</li> </ul>	2 days











Lesson	Mathematics Standards, Grade 3	Pacing
Lesson 8.5 Practice with One- and Two-Step Problems	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	1 day
<b>Unit 3 ADDITION AND SUBTRACTION STRATEGIES AND APPLICATIONS</b>		
<b>Module 9: Addition and Subtraction Strategies</b>		
Lesson 9.1 Identify Number Patterns on the Addition Table	<ul style="list-style-type: none"> <li>Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations.</li> </ul>	1 day
Lesson 9.2 Use Mental Math Strategies for Addition and Subtraction	<ul style="list-style-type: none"> <li>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.</li> </ul>	1 day
Lesson 9.3 Use Properties to Add	<ul style="list-style-type: none"> <li>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.</li> </ul>	1 day
Lesson 9.4 Use Mental Math to Assess Reasonableness	<ul style="list-style-type: none"> <li>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.</li> </ul>	1 day
Lesson 9.5 Round to the Nearest Ten or Hundred	<ul style="list-style-type: none"> <li>Use place value understanding to round whole numbers to the nearest 10 or 100.</li> </ul>	1 day
Lesson 9.6 Use Estimation with Sums and Differences	<ul style="list-style-type: none"> <li>Use place value understanding to round whole numbers to the nearest 10 or 100.</li> </ul>	1 day
<b>Module 10: Addition and Subtraction Within 1,000</b>		
Lesson 10.1 Use Expanded Form to Add	<ul style="list-style-type: none"> <li>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.</li> </ul>	1 day
Lesson 10.2 Use Place Value to Add	<ul style="list-style-type: none"> <li>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.</li> </ul>	2 days
Lesson 10.3 Combine Place Values to Subtract	<ul style="list-style-type: none"> <li>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.</li> </ul>	1 day
Lesson 10.4 Use Place Value to Subtract	<ul style="list-style-type: none"> <li>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.</li> </ul>	2 days
Lesson 10.5 Choose a Strategy to Add or Subtract	<ul style="list-style-type: none"> <li>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.</li> </ul>	1 day

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Lesson	Mathematics Standards, Grade 3	Pacing
<b>Module 10: Addition and subtraction Within 1,000</b>		
 Lesson 10.6 Model and Solve Two-Step Problems	 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.	2 days
<b>Module 11: Understand Perimeter</b>		
 Lesson 11.1 Describe Perimeter	 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.	1 day
 Lesson 11.2 Find Perimeter	 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.	1 day
 Lesson 11.3 Find Unknown Side Lengths	 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.	1 day
 Lesson 11.4 Represent Rectangles with the Same Area and Different Perimeters	 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.	1 day
 Lesson 11.5 Represent Rectangles with the Same Perimeter and Different Areas	 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.	1 day
<b>Module 12: Time Measurement and Intervals</b>		
 Lesson 12.1 Tell and Write Time to the Minute	 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.	1 day
 Lesson 12.2 Use a.m. and p.m. to Describe Time	 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.	1 day
 Lesson 12.3 Measure Time Intervals	 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.	1 day

Lesson	Mathematics Standards, Grade 3	Pacing
Lesson 12.4 Find Start and End Times	<div>■</div> 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.	1 day
Lesson 12.5 Solve Time Interval Problems	<div>■</div> 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.	1 day
<b>Unit 4 FRACTIONS</b>		
<b>Module 13: Understand Fractions as Numbers</b>		
Lesson 13.1 Describe Equal Parts of a Whole	<div>■</div> 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 $1/b$ . <div>□</div> Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole.	1 day
Lesson 13.2 Represent and Name Unit Fractions	<div>■</div> 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 $1/b$ . <div>□</div> Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole.	1 day
Lesson 13.3 Represent and Name Fractions of a Whole	<div>■</div> 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 $1/b$ .	1 day
Lesson 13.4 Represent and Name Fractions on a Number Line	<div>■</div> 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. <div>■</div> 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.	1 day
Lesson 13.5 Express Whole Numbers as Fractions	<div>■</div> Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line. <div>■</div> Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers.	1 day
Lesson 13.6 Represent and Name Fractions Greater Than 1	<div>■</div> 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 $1/b$ . <div>■</div> 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.	1 day



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<b>Module 13: Understand Fractions as Numbers</b>		
 Lesson 13.7 Use Fractions to Measure Lengths	 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.	1 day
<b>Module 14: Relate Shapes, Fractions, and Area</b>		
 Lesson 14.1 Relate Fractions and Area	 Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole.	1 day
 Lesson 14.2 Partition Shapes into Equal Areas	 Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole.	1 day
 Lesson 14.3 Use Unit Fractions to Describe Area	 Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole.	1 day
<b>Module 15: Compare Fractions</b>		
 Lesson 15.1 Compare Fractions Using Concrete and Visual Models	 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.  Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.	1 day
 Lesson 15.2 Compare Fractions with the Same Denominator	 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.	1 day
 Lesson 15.3 Compare Fractions with the Same Numerator	 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.	1 day
 Lesson 15.4 Use Reasoning Strategies to Compare Fractions	 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.	1 day
<b>Module 16: Understand Equivalent Fractions</b>		
 Lesson 16.1 Represent Equivalent Fractions with Smaller Parts	 Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.  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.	1 day

Lesson	Mathematics Standards, Grade 3	Pacing
Lesson 16.2 Represent Equivalent Fractions with Larger Parts	<ul style="list-style-type: none"> <li>■ Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.</li> <li>■ Recognize and generate simple equivalent fractions, e.g., <math>\frac{1}{2} = \frac{2}{4}</math>, <math>\frac{4}{6} = \frac{2}{3}</math>. Explain why the fractions are equivalent, e.g., by using a visual fraction model.</li> </ul>	1 day
Lesson 16.3 Recognize and Generate Equivalent Fractions	<ul style="list-style-type: none"> <li>■ Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.</li> <li>■ Recognize and generate simple equivalent fractions, e.g., <math>\frac{1}{2} = \frac{2}{4}</math>, <math>\frac{4}{6} = \frac{2}{3}</math>. Explain why the fractions are equivalent, e.g., by using a visual fraction model.</li> </ul>	1 day
<b>Unit 5 MEASUREMENT AND DATA</b>		
<b>Module 17: Liquid Volume and Mass</b>		
Lesson 17.1 Estimate and Measure Liquid Volume	<ul style="list-style-type: none"> <li>■ 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.</li> </ul>	1 day
Lesson 17.2 Estimate and Measure Mass	<ul style="list-style-type: none"> <li>■ 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.</li> </ul>	1 day
Lesson 17.3 Solve Problems About Liquid Volume and Mass	<ul style="list-style-type: none"> <li>■ 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.</li> </ul>	2 days
<b>Module 18: Represent and Interpret Data</b>		
Lesson 18.1 Use Picture Graphs	<ul style="list-style-type: none"> <li>■ 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.</li> <li>■ 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.</li> </ul>	1 day
Lesson 18.2 Make Picture Graphs	<ul style="list-style-type: none"> <li>■ 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.</li> </ul>	1 day
Lesson 18.3 Use Bar Graphs	<ul style="list-style-type: none"> <li>■ 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.</li> </ul>	1 day

Module continued on next page →

# Pacing Guide

	Build Understanding
	Connect Concepts and Skills
	Apply and Practice

Lesson	Mathematics Standards, Grade 3	Pacing
<b>Module 18: Represent and Interpret Data</b>		
 Lesson 18.4 Make Bar Graphs	 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.	1 day
 Lesson 18.5 Use Line Plots to Display Measurement 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.	1 day
 Lesson 18.6 Make Line Plots to Display Measurement 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.	1 day
 Lesson 18.7 Solve One- and Two-Step Problems Using 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.	1 day
<b>Unit 6 GEOMETRY</b>		
<b>Module 19: Define Two-Dimensional Shapes</b>		
 Lesson 19.1 Describe Shapes	 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.	1 day
 Lesson 19.2 Describe Angles in Shapes	 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.	1 day
 Lesson 19.3 Describe Sides of Shapes	 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.	1 day
 Lesson 19.4 Define Quadrilaterals	 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.	1 day

Lesson	Mathematics Standards, Grade 3	Pacing
Module 20: Categorize Two-Dimensional Shapes		
<div> <div></div> Lesson 20.1 Draw Quadrilaterals </div>	<div> <div></div> 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. </div>	1 day
<div> <div></div> Lesson 20.2 Categorize Quadrilaterals </div>	<div> <div></div> 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. </div>	1 day
<div> <div></div> Lesson 20.3 Categorize Plane Shapes </div>	<div> <div></div> 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. </div>	1 day