

3rd Grade Module 1 QR Codes

Lesson 1



Understand equal groups of as multiplication.

Lesson 2



Relate multiplication to the array model.

Lesson 3



Interpret the meaning of factors—the size of the group or the number of groups.

Lesson 4



Understand the meaning of the unknown as the size of the group in division.

Lesson 5



Understand the meaning of the unknown as the number of groups in division.

Lesson 6



Interpret the unknown in division using the array model.

Lesson 7



Demonstrate commutativity of multiplication, and practice related facts by skip-counting

Lesson 8



Demonstrate commutativity of multiplication, and practice related facts by skip-counting objects in array models.

Lesson 9



Find related multiplication facts by adding and subtracting equal groups in array models.

Lesson 10



Model the distributive property with arrays to decompose units as a strategy to multiply.

Lesson 11



Model division as the unknown factor in multiplication using arrays and tape diagrams.

Lesson 12



Interpret the quotient as the number of groups or the number of objects in each group using units of 2.

Lesson 13



Interpret the quotient as the number of groups or the number of objects in each group using units of 3.

Lesson 14



Skip-count objects in models to build fluency with multiplication facts using units of 4.

Lesson 15



Relate arrays to tape diagrams to model the commutative property of multiplication.

Lesson 16



Use the distributive property as a strategy to find related multiplication facts.

Lesson 17



Model the relationship between multiplication and division.

Lesson 18



Apply the distributive property to decompose units.

Lesson 19



Apply the distributive property to decompose units.

Lesson 20



Solve two-step word problems involving multiplication and division, and assess the reasonableness of answers.

Lesson 21



Solve two-step word problems involving all four operations, and assess the reasonableness of answers.

3rd Grade Module 2 QR Codes

Lesson 1



Explore time as a continuous measurement using a stopwatch.

Lesson 2



Relate skip counting by fives on the clock and telling time to a continuous measurement model, the number line.

Lesson 3



Count by fives and ones on the number line as a strategy to tell time to the nearest minute on the clock.

Lesson 4



Understand the meaning of the unknown as the size of the group in division.

Lesson 5



Solve word problems involving time intervals within 1 hour by counting backward and forwards using the number line and clock.

Lesson 6



Build and decompose a kilogram to reason about the size and weight of 1 kilogram, 100 grams, 10 grams, and 1 gram.

Lesson 7



Develop estimation strategies by reasoning about the weight in kilograms of a series of familiar objects to establish mental benchmark measures.

Lesson 8



Solve one-step word problems involving metric weights with 100 and estimate to reason about solutions.

Lesson 9



Decompose a liter to reason about the size of 1 liter, 100 milliliters, 10 milliliters, and 1 milliliter.

Lesson 10



Estimate and measure liquid volume in liters and milliliters using the vertical number line.

Lesson 11



Solve mixed word problems involving all four operations with grams, kilograms, liters, and milliliters given in the same units.

Lesson 12



Round two-digit measurements to the nearest ten on the vertical number line.

Lesson 13



Round two-digit and three-digit numbers to the nearest ten on the vertical number line.

Lesson 14



Round to the nearest hundred on the vertical number line.

Lesson 15



Add measurements using the standard algorithm to compose larger units once.

Lesson 16



Add measurements using the standard algorithm to compose larger units twice.

Lesson 17



Estimate sums by rounding and apply to solve measurement word problems.

Lesson 18



Decompose once to subtract measurements including three digit minuends with zeros in the tens or ones place.

Lesson 19



Decompose twice to subtract measurements including three digit minuends with zeros in the tens and ones place.

Lesson 20



Estimate differences by rounding and apply to solve measurement word problems.

Lesson 21



Estimate sums and differences of measurements by rounding, then solve mixed word problems.

3rd Grade Module 3 QR Codes

Lesson 1



Study commutativity to find known facts of 6, 7, 8, and 9.

Lesson 2



Apply the distributive and commutative properties to relate multiplication facts $5 \times n + n$ to $6 \times n$ and

Lesson 3



Multiply and divide with familiar facts using a letter to represent the unknown.

Lesson 4



Count by units of 6 to multiply and divide using number bonds to decompose.

Lesson 5



Count by units of 7 to multiply and divide using number bonds to decompose.

Lesson 6



Use the distributive property as a strategy to multiply and divide using units of 6 and 7.

Lesson 7



Interpret the unknown in multiplication and division to model and solve problems using units of 6 and 7.

Lesson 8



Understand the function of parentheses and apply to solving problems.

Lesson 9



Model the associative property as a strategy to multiply.

Lesson 10



Use the distributive property as a strategy to multiply and divide.

Lesson 11



Interpret the unknown in multiplication and division to model and solve problems.

Lesson 12



Apply the distributive property and the fact $9 - 10 - 1$ as a strategy to multiply.

Lesson 13



Identify and use arithmetic patterns to multiply.

Lesson 14



Identify and use arithmetic patterns to multiply.

Lesson 15



Interpret the unknown in multiplication and division to model and solve problems.

Lesson 16



Reason about and explain arithmetic patterns using units of 0 and 1 as they relate to multiplication and division.

Lesson 17



Identify patterns in multiplication and division facts using the multiplication table.

Lesson 18



Solve two-step problems involving all four operations and assess the reasonableness of solutions.

Lesson 19



Multiply by multiples of 10 using the place value chart.

Lesson 20



Use place value strategies and the associative property $n \times (m \times 10) = (n \times m) \times 10$ to multiply by multiples of 10.

Lesson 21



Solve two-step word problems involving multiplying single-digit factors and multiples of 10.

3rd Grade Module 4 QR Codes

Lesson 1



Understand area as an attribute of plane figures.

Lesson 2



Decompose and recompose shapes to compare areas.

Lesson 3



Model tiling with centimeter and inch unit squares as a strategy to measure area.

Lesson 4



Relate side lengths with the number of tiles on a side.

Lesson 5



Form rectangles by tiling with unit squares to make arrays.

Lesson 6



Draw rows and columns to determine the area of a rectangle given an incomplete array.

Lesson 7



Interpret area models to form rectangular arrays.

Lesson 8



Find the area of the rectangle through multiplication of the side lengths.

Lesson 9



Analyze different rectangles and reason about their area.

Lesson 10



Apply the distributive property as a strategy to find the total area of a large rectangle by adding two products.

Lesson 11



Demonstrate the possible whole number side lengths of rectangles with areas of 24, 36, 48, or 72 square units.

Lesson 12



Solve word problems involving area.

Lesson 13



Find areas by decomposing into rectangles or completing composite figures to form rectangles.

Lesson 14



Find areas by decomposing into rectangles or completing composite figures to form rectangles.

Lesson 15



Apply knowledge of area to determine areas of rooms in a given floor plan.

Lesson 16



Apply knowledge of area to determine areas of rooms in a given floor plan.

3rd Grade Module 5 QR Codes

Lesson 1



Specify and partition a whole into equal parts, identifying and counting unit fractions using concrete models.

Lesson 2



Specify and partition a whole into equal parts, identifying and counting unit fractions by folding fraction strips.

Lesson 3



Specify and partition a whole into equal parts, identifying and counting unit fractions by drawing pictorial area models.

Lesson 4



Represent and identify fractional parts of different wholes.

Lesson 5



Partition a whole into equal parts and define the equal parts to identify the unit fraction numerically.

Lesson 6



Build non-unit fractions less than one whole from unit fractions.

Lesson 7



Identify and represent shaded and non-shaded parts of one whole as fractions.

Lesson 8



Represent parts of one whole as fractions with number bonds.

Lesson 9



Build and write fractions greater than one whole using unit fractions.

Lesson 10



Compare unit fractions by reasoning about their size using fraction strips.

Lesson 11



Compare unit fractions with different-sized models representing the whole.

Lesson 12



Specify the corresponding whole when presented with one equal part.

Lesson 13



Identify a shaded fractional part in different ways depending on the designation of the whole.

Lesson 14



Place fractions on a number line with endpoints 0 and 1.

Lesson 15



Place any fraction on a number line with endpoints 0 and 1.

Lesson 16



Place whole number fractions and fractions between whole numbers on the number line.

Lesson 17



Practice placing various fractions on the number line.

Lesson 18



Compare fractions and whole numbers on the number line by reasoning about their distance from 0.

Lesson 19



Understand distance and position on the number line as strategies for comparing fractions.

Lesson 20



Recognize and show that equivalent fractions have the same size, though not necessarily the same shape.

Lesson 21



Recognize and show that equivalent fractions refer to the same point on the number line.

Lesson 22



Generate simple equivalent fractions by using visual fraction models and the number line.

Lesson 23



Generate simple equivalent fractions by using visual fraction models and the number line.

Lesson 24



Express whole numbers as fractions and recognize equivalence with different units.

3rd Grade Module 5 QR Codes

Lesson 25



Express whole number fractions on the number line when the unit interval is 1.

Lesson 26



Decompose whole number fractions greater than 1 using whole number equivalence with various models.

Lesson 27



Explain equivalence by manipulating units and reasoning about their size.

Lesson 28



Compare fractions with the same numerator pictorially.

Lesson 29



Compare fractions with the same numerator using $<$, $>$, or $=$.

Lesson 30



Partition various wholes into equal parts using a number line method.

3rd Grade Module 6 QR Codes

Lesson 1



Generate and organize data.

Lesson 2



Rotate tape diagrams vertically.

Lesson 3



Create scaled bar graphs.

Lesson 4



Solve one- and two-step problems involving graphs.

Lesson 5



Create ruler with 1-inch, 1/2-inch, and 1/4-inch intervals, and generate measurement data.

Lesson 6



Interpret measurement data from various line plots.

Lesson 7



Represent measurement data with line plots.

Lesson 8



Represent measurement data with line plots.

Lesson 9



Analyze data to problem solve.

3rd Grade Module 7 QR Codes

Lesson 1



Solve word problems in varied contexts using a letter to represent the unknown.

Lesson 2



Solve word problems in varied contexts using a letter to represent the unknown.

Lesson 3



Share and critique peer solution strategies to varied word problems.

Lesson 4



Compare and classify quadrilaterals.

Lesson 5



Compare and classify other polygons.

Lesson 6



Draw polygons with specified attributes to solve problems.

Lesson 7



Reason about composing and decomposing polygons using tetrominoes.

Lesson 8



Create a tangram puzzle and observe relationships among the shapes.

Lesson 9



Reason about composing and decomposing polygons using tangrams.

Lesson 10



Decompose quadrilaterals to understand perimeter as the boundary of a shape.

Lesson 11



Tessellate to understand perimeter as the boundary of a shape.

Lesson 12



Measure side lengths in whole number units to determine the perimeter of polygons.

Lesson 13



Explore perimeter as an attribute of plane figures and solve problems.

Lesson 14



Determine the perimeter of regular polygons and rectangles when whole number measurements are unknown.

Lesson 15



Solve word problems to determine perimeter with given side lengths.

Lesson 16



Use string to measure the perimeter of various circles to the nearest quarter inch.

Lesson 17



Use all four operations to solve problems involving perimeter and unknown measurements.

Lesson 18



Construct rectangles from a given number of unit squares and determine the perimeters.

Lesson 19



Use a line plot to record the number of rectangles constructed from a given number of unit squares.

Lesson 20



Construct rectangles with a given perimeter using unit squares and determine their

Lesson 21



Construct rectangles with a given perimeter using unit squares and determine their areas.

Lesson 22



Use a line plot to record the number of rectangles constructed in lessons 20 and 21.

Lesson 23



Solve a variety of word problems with perimeter.

Lesson 24



Use rectangles to draw a robot with specified perimeter measurements, and reason about the different areas that may be produced.

3rd Grade Module 7 QR Codes

Lesson 25



Use rectangles to draw a robot with specified perimeter measurements, and reason about the different areas that may be produced.

Lesson 26



Use rectangles to draw a robot with specified perimeter measurements, and reason about the different areas that may be produced.

Lesson 27



Use rectangles to draw a robot with specified perimeter measurements, and reason about the different areas that may be produced.

Lesson 28



Solve a variety of word problems involving area and perimeter using all four operations.

Lesson 29



Solve a variety of word problems involving area and perimeter using all four operations.

Lesson 30



Share and critique peer strategies for problem solving.

Lesson 31

There is no available video.

Explore and create unconventional representations of one-half.

Lesson 32

There is no available video.

Explore and create unconventional representations of one-half.

Lesson 33

There is no available video.

Solidify fluency with Grade 3 skills.

Lesson 34

There is no available video.

Create resource booklets to support fluency with Grade 3 skills.