

5th Grade Module 1 QR Codes

Lesson 1



Reason concretely and pictorially using place value understanding to relate adjacent base ten units from millions to thousandths

Lesson 2



Reason abstractly using place value understanding to relate adjacent base ten units from millions to thousandths

Lesson 3



Use exponents to name place value units and explain patterns in the placement of the decimal

Lesson 4



Use exponents to denote powers of 10 with application to metric conversions.

Lesson 5



Name decimal fractions in expanded, unit, and word forms by applying place value reasoning

Lesson 6



Compare decimal fractions to the thousandths using like units, and express comparisons with $>$, $<$,

Lesson 7



Round a given decimal to any place using place value understanding and the vertical number

Lesson 8



Round a given decimal to any place using place value understanding and the vertical number

Lesson 9



Add decimals using place value strategies and relate those strategies to a written method

Lesson 10



Subtract decimals using place value strategies and relate those strategies to a written method

Lesson 11



Multiply a decimal fraction by single-digit whole numbers, relate to a written method through application of the area model and place value understanding, and explain the reasoning used

Lesson 12



Multiply a decimal fraction by single-digit whole numbers, including using estimation to confirm the placement of the decimal point

Lesson 13



Divide decimals by single-digit whole numbers involving easily identifiable multiples using place value understanding and relate to a written method

Lesson 14



Divide decimals with a remainder using place value understanding and relate to a written

Lesson 15



Divide decimals using place value understanding including remainders in the smallest unit

Lesson 16



Solve word problems using decimal operations

5th Grade Module 2 QR Codes

Lesson 1



Multiply multi-digit whole numbers and multiples of 10 using place value patterns and the distributive and associative properties

Lesson 2



Estimate multi-digit products by rounding factors to a basic fact and using place value patterns.

Lesson 3



Write and interpret numerical expressions, and compare expressions using a visual model.

Lesson 4



Convert numerical expressions into unit form as a mental strategy for multi-digit multiplication

Lesson 5



Connect visual models and the distributive property to partial products of the standard algorithm without renaming

Lesson 6



Connect area models and the distributive property to partial products of the standard algo-

Lesson 7



Connect area models and the distributive property to partial products of the standard algo-

Lesson 8



Fluently multiply multi-digit whole numbers using the standard algorithm and using estimation to check for reasonableness of the product

Lesson 9



Fluently multiply multi-digit whole numbers using the standard algorithm to solve multi-step

Lesson 10



Multiply decimal fractions with tenths by multi-digit whole numbers using place value understanding to record partial products

Lesson 11



Multiply decimal fractions by multi-digit whole numbers through conversion to a whole number problem and reasoning about the placement of the decimal

Lesson 12



Reason about the product of a whole number and a decimal with hundredths using place value understanding and estimation

Lesson 13



Use whole number multiplication to express equiva-

Lesson 14



Use fraction and decimal multiplication to express

Lesson 15



Solve two-step word problems involving measurement conversions

Lesson 16



Use *divide by 10* patterns for multi-digit whole number division

Lesson 17



Use basic facts to approximate quotients with two-digit divisors.

Lesson 18



Use basic facts to approximate quotients with two-digit divisors.

Lesson 19



Divide two- and three-digit dividends by multiples of 10 with single-digit quotients, and make connections to

Lesson 20



Divide two- and three-digit dividends by two-digit divisors with single-digit quotients, and make connections to

Lesson 21



Divide two- and three-digit dividends by two-digit divisors with single-digit quotients, and make connections to a written method

Lesson 22



Divide three- and four-digit dividends by two-digit divisors resulting in two- and three-digit quotients, reasoning about the decomposition of successive remainders in each place value

Lesson 23



Divide three- and four-digit dividends by two-digit divisors resulting in two- and three-digit quotients, reasoning about the decomposition of successive remainders in each place value

Lesson 24



Divide decimal dividends by multiples of 10, reasoning about the placement of the decimal point and making connections to a written method

5th Grade Module 2 QR Codes

Lesson 25



Use basic facts to approximate decimal quotients with two-digit divisors, reasoning about the placement of the decimal point

Lesson 26



Divide decimal dividends by two-digit divisors, estimating quotients, reasoning about the placement of the decimal point, and making connections to a

Lesson 27



Divide decimal dividends by two-digit divisors, estimating quotients, reasoning about the placement of the decimal point, and making connections to a

Lesson 28



Solve division word problems involving multi-digit division with group size unknown and the number of

Lesson 29



Solve division word problems involving multi-digit division with group size unknown and the number of groups unknown

5th Grade Module 3 QR Codes

Lesson 1



Make equivalent fractions with the number line, the area model, and numbers

Lesson 2



Make equivalent fractions with sums of fractions with like denominators

Lesson 3



Add fractions with unlike units using the strategy of creating equivalent fractions

Lesson 4



Add fractions with sums between 1 and 2

Lesson 5



Subtract fractions with unlike units using the strategy of creating equivalent fractions

Lesson 6



Subtract fractions from numbers between 1 and 2

Lesson 7



Solve two-step word problems

Lesson 8



Add fractions to and subtract fractions from whole numbers using equivalence and the number line as

Lesson 9



Add fractions making like units numerically

Lesson 10



Add fractions with sums greater than 2

Lesson 11



Subtract fractions making like units numerically

Lesson 12



Subtract fractions greater than or equal to 1

Lesson 13



Use fraction benchmark numbers to assess reasonableness of addition and subtraction

Lesson 14



Strategize to solve multi-term problems

Lesson 15



Solve multi-step word problems; assess reasonableness of solutions using benchmark numbers.


Lesson 16



Explore part-to-whole relationships


5th Grade Module 4 QR Codes

Lesson 1




Measure and compare pencil lengths to the nearest half, quarter, and eighth of an inch, and analyze the data

Lesson 2



Interpret a fraction as division

Lesson 3




Interpret a fraction as division

Lesson 4



Use tape diagrams to model fractions as division

Lesson 5




Solve word problems involving the

OMIT


word problems involving the

Lesson 6



Relate fractions as division to fraction of a set through line plots

Lesson 7




Multiply any whole number by a fraction using tape diagrams

Lesson 8



Relate a fraction of a set to the repeated addition interpretation of fraction multiplication

Lesson 9




Find a fraction of a measurement, and solve word problems

Lesson 10




Compare and evaluate expressions with parentheses

Lesson 11



Solve and create fraction word problems involving addition, subtraction, and multiplication

Lesson 12



Solve and create fraction word problems involving addition, subtraction, and multiplication

Lesson 13




Multiply unit fractions by unit fractions

Lesson 14




Multiply unit fractions by non-unit fractions

Lesson 15




Multiply non-unit fractions by non-unit fractions

Lesson 16




Solve word problems using tape diagrams and fraction-by-fraction multiplication

Lesson 17




Relate decimal and fraction multiplication

Lesson 18




Relate decimal and fraction multiplication

Lesson 19




Convert measures involving whole numbers, and

Lesson 20



Convert mixed unit measurements, and solve multi-step

Lesson 21



Explain the size of the product, the

OMIT

the size of the product, the

Lesson 22




Compare the size of the product to the size of the factors

Lesson 23



Compare the size of the product to the size of the factors

Lesson 24



Solve word problems using fraction and decimal multiplication

5th Grade Module 5 QR Codes

Lesson 1



Explore volume by building with and counting unit cubes

Lesson 2



Find the volume of a right rectangular prism by packing with cubic units and counting

Lesson 3



Compose and decompose right rectangular prisms using layers

Lesson 4



Use multiplication to calculate volume

Lesson 5



Use multiplication to connect volume as *packing* with volume as *filling*

Lesson 6



Find the total volume of solid figures composed of two non-overlapping rectangular prisms

Lesson 7



Solve word problems involving the volume of rectangular prisms with whole number

Lesson 8



Apply concepts and formulas of volume to design a sculpture using rectangular prisms within

Lesson 9



Apply concepts and formulas of volume to design a sculpture using rectangular prisms within

Lesson 10



Find the area of rectangles with whole-by-mixed and whole-by-fractional number side lengths by tiling, record by drawing, and relate to fraction multiplication

Lesson 11



Find the area of rectangles with mixed-by-mixed and fraction-by-fraction side lengths by tiling, record by drawing, and relate to fraction multiplication.

Lesson 12



Measure to find the area of rectangles with fractional side lengths

Lesson 13



Multiply mixed number factors, and relate to the distributive property and the area model

Lesson 14



Solve real-world problems involving area of figures with fractional side lengths using visual models and/or equations

Lesson 15



Solve real-world problems involving area of figures with fractional side lengths using visual models and/or equations

Lesson 16



Draw trapezoids to clarify their attributes, and define trapezoids based on those attributes

Lesson 17



Draw parallelograms to clarify their attributes, and define parallelograms based on those

Lesson 18



Draw rectangles and rhombuses to clarify their attributes, and define rectangles and rhombuses based on those attributes

Lesson 19



Draw kites and squares to clarify their attributes, and define kites and squares based on those attributes

Lesson 20



Classify two-dimensional figures in a hierarchy based on properties

Lesson 21



Draw and identify varied two-dimensional figures from given attributes

5th Grade Module 6 QR Codes

Lesson 1



Construct a coordinate system on a line

Lesson 2



Construct a coordinate system on a plane.

Lesson 3



Name points using coordinate pairs, and use the coordinate pairs to plot points

Lesson 4



Name points using coordinate pairs, and use the coordinate pairs to plot points

Lesson 5



Investigate patterns in vertical and horizontal lines, and interpret points on the plane as

Lesson 6



Investigate patterns in vertical and horizontal lines, and interpret points on the plane as

Lesson 7



Plot points, use them to draw lines in the plane, and describe patterns within the coordinate

Lesson 8



Generate a number pattern from a given rule, and plot the points

Lesson 9



Generate two number patterns from given rules, plot the points, and analyze the patterns

Lesson 10



Compare the lines and patterns generated by addition rules and multiplication rules

Lesson 11



Analyze number patterns created from mixed operations

Lesson 12



Create a rule to generate a number pattern, and plot the points

Lesson 13



Construct parallel line segments on a rectangular grid

Lesson 14



Construct parallel line segments, and analyze relationships of the coordinate pairs

Lesson 15



Construct perpendicular line segments on a rectangular grid

Lesson 16



Construct perpendicular line segments, and analyze relationships of the coordinate pairs

Lesson 17



Draw symmetric figures using distance and angle measure from the line of symmetry

Lesson 18



Draw symmetric figures on the coordinate plane

Lesson 19



Plot data on line graphs and analyze trends

Lesson 20



Use coordinate systems to solve real world problems