Department: Cocalico Connections Course: Math 6 Grade Level: 6

Outline for the course:

Numeric Operations

Numbers and Properties

Prime Numbers and Prime Factorization Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you use factors to write a number as a product?

Summary

Review and connect what you learned.

Factors and Multiples Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you use the greatest common factor and the least common multiple to solve problems?

Summarv

Review and connect what you learned.

Assignment

Practice solving problems using the GCF.

Multiplying Whole Numbers Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you multiply multi-digit whole numbers?

Dividing Whole Numbers Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you use a set of steps to divide whole numbers?

Decimals

Adding and Subtracting Decimals Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

Why is place value important when you add and subtract decimals?

Summary

Review and connect what you learned.

Assignment

Solve decimal addition and subtraction problems, and write about the solutions.

Quiz Answers

Real-World Decimal Problems with Addition and Subtraction Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you solve real-world problems using decimal addition or decimal subtraction?

Summary

Review and connect what you learned.

Assignment

Solve real-world decimal problems.

Quiz Answers

Estimating and Finding Decimal Products Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can the product of two decimal numbers be estimated?

Summary

Review and connect what you learned.

Assignment

Solve a problem using estimation and write about the solutions.

Using a Rule to Find Decimal Products Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

What rule is used to place the decimal point when multiplying decimal numbers?

Summary

Review and connect what you learned.

Assignment

Solve problems using decimal multiplication, and write about the solutions.

Dividing Decimals Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you divide with decimals and use estimation to check your answer?

Summary

Review and connect what you learned.

Assignment

Explore the steps for long division.

Assignment

Practice dividing with decimals.

Real-World Decimal Problems with Multiplication and Division Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you use decimal multiplication and division to solve real-world problems?

Summary

Review and connect what you learned.

Assignment

Solve real-world decimal problems and write about the solutions.

Fractions

Fraction Multiplication Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How do you multiply fractions?

Summary

Review and connect what you learned.

Assignment

Practice solving problems involving fraction multiplication.

Quiz Answers

Dividing a Fraction by a Whole Number Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you divide a fraction by a whole number?

Summary

Review and connect what you learned.

Assignment

Solve and write about problems involving dividing a fraction by a whole number.

Using Visual Models in Fraction Division Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you use models to divide whole numbers by fractions?

Summary

Review and connect what you learned.

Assignment

Practice dividing whole numbers by fractions.

Dividing a Fraction by a Fraction Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you divide a fraction by a fraction?

Summary

Review and connect what you learned.

Assignment

Practice modeling fraction division problems.

Finding a Rule for Dividing Fractions Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

What is a rule for dividing fractions?

Summary

Review and connect what you learned.

Assignment

Solve and write about fraction division.

Fraction Division in the Real World Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you solve real-world problems using fraction division?

Assignment

Explore fraction division using fraction bars.

Instruction

How can you solve real-world problems using fraction division?

Summary

Review and connect what you learned.

Assignment

Practice writing and solving fraction division problems.

Fraction Multiplication and Division Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

What situations can be modeled with fraction multiplication and division?

Summary

Review and connect what you learned.

Assignment

Use fraction multiplication and division to solve problems.

Variable and Expressions

Variable and Expressions

Numerical Expressions with Exponents Guided Notes

Warm-Up

Get ready for the lesson.

What are powers and exponents?

Summary

Review and connect what you learned.

Assignment

Practice writing and evaluating powers.

Quiz Answers

Expressions with Unknowns Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How do you represent a quantity that is unknown?

Summary

Review and connect what you learned.

Assignment

Explore unknown quantities with algebra tiles.

Assignment

Practice writing expressions involving unknowns.

Quiz Answers

Expressions to Represent Multiplication and Division Problems Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you represent multiplication and division expressions with unknowns?

Summary

Review and connect what you learned.

Assignment

Solve and write about representing multiplication and division in algebra.

Quiz Answers

Writing and Evaluating Expressions Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How do you evaluate an algebraic expression?

Summary

Review and connect what you learned.

Assignment

Practice writing and evaluating algebraic expressions.

Quiz Answers

Expressions with More Than One Operation Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How do you represent expressions with more than one operation?

Summary

Review and connect what you learned.

Assignment

Practice writing and evaluating algebraic expressions with more than one operation.

Quiz Answers

Expressions with and without Parentheses Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How do you represent algebraic expressions with and without parentheses?

Summarv

Review and connect what you learned.

Assignment

Practice writing and evaluating algebraic expressions with and without parentheses.

Quiz Answers

Equivalent Expressions Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you use the properties of operations to write equivalent expressions?

Summary

Review and connect what you learned.

Assignment

Practice writing and evaluating equivalent expressions.

Quiz Answers

Equivalent Expressions and the Distributive Property Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you use the distributive property to write equivalent expressions?

Summary

Review and connect what you learned.

Assignment

Practice writing and evaluating equivalent expressions.

Quiz Answers

Determining Equivalent Expressions Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you determine if two expressions are equivalent?

Summary

Review and connect what you learned.

Assignment

Practice writing and proving equivalent expressions.

Quiz Answers

Geometry

Area

Area of Parallelograms Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you find the area of parallelograms?

Summary

Review and connect what you learned.

Assignment

Solve problems involving the area of parallelograms and write about the solutions.

Quiz Answers

Area of Triangles Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How do you find the area of a triangle?

Summary

Review and connect what you learned.

Assignment

Practice finding the area of triangles.

Quiz Answers

Area of Special Quadrilaterals Guided Notes

Warm-Up

Get ready for the lesson.

Year-at-a-Glance - Curriculum Overview

How can you find the area of special quadrilaterals?

Summary

Review and connect what you learned.

Assignment

Practice breaking special quadrilaterals into rectangles and triangles.

Quiz Answers

Area of Irregular Figures Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you find the area of irregular figures?

Summary

Review and connect what you learned.

Assignment

Explore breaking irregular figures into parallelograms, rectangles, and triangles.

Assignment

Practice breaking irregular figures into parallelograms, rectangles, and triangles.

Quiz Answers

Understanding Ratios and Rates

Understanding Ratios and Rates

Describing Part-to-Part Relationships Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you compare parts of a set without using the size of the whole?

Summary

Review and connect what you learned.

Assignment

Practice using ratios to describe a relationship between quantities.

Quiz Answers

Using Ratio Notation Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can ratios be written mathematically?

Summary

Review and connect what you learned.

Assignment

Solve and write about ratios.

Quiz Answers

Equivalent Ratios Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you use a ratio table to identify patterns and find equivalent ratios?

Summary

Review and connect what you learned.

Assignment

Practice solving problems about equivalent ratios.

Quiz Answers

Understanding Unit Rates Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

What are unit rates, and how are they used?

Summary

Review and connect what you learned.

Assignment

Solve and write with unit rates.

Quiz Answers

Comparing Ratios Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you compare ratios?

Summary

Review and connect what you learned.

Assignment

Practice problems comparing ratios.

Quiz Answers

Ratios in Real-World Situations Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How are ratios compared in real-world situations?

Summary

Review and connect what you learned.

Assignment

Practice comparing real-world ratios.

Quiz Answers

Applying Ratios and Rates

Applying Ratios and Rates

Unit Pricing Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you use unit rates to solve pricing problems?

Summary

Review and connect what you learned.

Assignment

Solve and write about unit price problems.

Quiz Answers

Other Rate Problems Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you use unit rates to solve real-world problems?

Summary

Review and connect what you learned.

Assignment

Practice problems involving unit rates.

Quiz Answers

Percent

Percent

Understanding Percent Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

What is a percent?

Assignment

Explore modeling percents with a grid.

Instruction

What is a percent?

Summary

Year-at-a-Glance - Curriculum Overview

Review and connect what you learned.

Assignment

Practice solving problems involving percents.

Quiz Answers

Fraction-Decimal-Percent Equivalents Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you convert among fractions, decimals, and percents?

Summarv

Review and connect what you learned.

Assignment

Practice creating equivalent fractions, decimals, and percents.

Quiz Answers

Finding Friendly Percentages Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you use friendly percents?

Summary

Review and connect what you learned.

Assignment

Solve and write about friendly percents.

Quiz Answers

Using Multiplication to Find Percents Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you use multiplication to find any percent of a number?

Summary

Review and connect what you learned.

Assignment

Solve and write about using multiplication to find any percent of a number.

Quiz Answers

Using Equivalent Ratios to Find Percents Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you use equivalent ratios to find the percent of a number?

Summary

Review and connect what you learned.

Assignment

Solve and write about using equivalent ratios to find the percent of a number.

Quiz Answers

Using Equivalent Ratios to Find a Whole Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you use equivalent ratios to find the whole given the part and the percent?

Summary

Review and connect what you learned.

Assignment

Practice using equivalent ratios to find a whole.

Quiz Answers

Rational Numbers

Rational Numbers

Negative Numbers in Real-World Contexts <u>Guided Notes</u>

Year-at-a-Glance - Curriculum Overview

Warm-Up

Get ready for the lesson.

Instruction

How can you represent real-world situations using positive numbers, negative numbers, and zero?

Summary

Review and connect what you learned.

Assignment

Practice using positive numbers, negative numbers, and zero to describe situations.

Quiz Answers

Integers on the Number Line Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

What is the set of integers?

Summary

Review and connect what you learned.

Assignment

Solve problems with integers and number lines and write about the solutions.

Quiz Answers

Absolute Value Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How do you describe a number's distance from zero?

Summary

Review and connect what you learned.

Assignment

Find absolute value in stock price fluctuation.

Quiz Answers

Relationships on the Coordinate Plane

Relationships on the Coordinate Plane

The Coordinate Plane Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How do you describe a location on the coordinate plane?

Summary

Review and connect what you learned.

Assignment

Practice identifying the parts of a coordinate plane.

Quiz Answers

Plotting Points in the Four Quadrants <u>Guided Notes</u>

Warm-Up

Get ready for the lesson.

Instruction

How do the signs of the coordinates affect the position of a point in the coordinate plane?

Summary

Review and connect what you learned.

Assignment

Practice working with all four quadrants of the coordinate plane.

Quiz Answers

Distance between Two Points Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you find the distance between two points in the coordinate plane?

Summary

Year-at-a-Glance - Curriculum Overview

Review and connect what you learned.

Assignment

Solve for the distance between points and write about the process.

Quiz Answers

Polygons in the Coordinate Plane Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you find dimensions of polygons on a coordinate plane?

Summary

Review and connect what you learned.

Assignment

Explore graphing polygons in the coordinate plane.

Assignment

Practice drawing polygons in the coordinate plane given coordinates for the vertices.

Quiz Answers

Finding Area on a Coordinate Plane Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How do you find the area of a rectangle on a coordinate plane?

Summary

Review and connect what you learned.

Assignment

Practice finding the areas of rectangles on a coordinate plane.

Quiz Answers

Surface Area and Volume

Surface Area and Volume

Three-Dimensional Figures Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How do you represent three-dimensional figures using nets?

Summary

Review and connect what you learned.

Assignment

Practice describing three-dimensional figures.

Quiz Answers

Surface Area of Prisms Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you find the surface area of prisms?

Summary

Review and connect what you learned.

Assignment

Find the area of a face of a rectangular prism.

Quiz Answers

Surface Area of Rectangular Pyramids Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you find the surface area of square and rectangular pyramids?

Summary

Review and connect what you learned.

Assignment

Practice describing the net of a pyramid.

Quiz Answers

Application of Surface Area in Context Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How do you solve real-world problems involving the surface area of prisms and pyramids?

Summary

Review and connect what you learned.

Assignment

Practice choosing the net for a given situation.

Quiz Answers

Exploring Volume of a Rectangular Prism Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you use unit cubes to find the volume of a rectangular prism?

Summary

Review and connect what you learned.

Assignment

Practice finding volumes of prisms.

Quiz Answers

Finding a Formula for the Volume of a Rectangular Prism Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you use formulas to find the volume of a rectangular prism?

Summary

Review and connect what you learned.

Assignment

Practice finding volume of a rectangular prism using formulas.

Quiz Answers

Solving Volume Problems with Formulas <u>Guided Notes</u>

Warm-Up

Get ready for the lesson.

Instruction

How can you apply the volume formula for rectangular prisms?

Summary

Review and connect what you learned.

Assignment

Practice calculating the volume of a rectangular prism using formulas.

Quiz Answers

Solving Surface Area and Volume Problems Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How do you distinguish between surface area and volume problems?

Summary

Review and connect what you learned.

Assignment

Solve gardening problems involving surface area and volume, and write about the solutions.

Quiz Answers

Equations and Inequalities

Equations and Inequalities

Finding Unknown Numbers Guided Notes

Warm-Up

Get ready for the lesson.

Year-at-a-Glance - Curriculum Overview

How can reasoning help you solve problems to find unknown numbers?

Summary

Review and connect what you learned.

Assignment

Practice using reasoning to find unknown numbers.

Quiz Answers

Writing Equations to Find Unknowns Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you use equations to model problems about unknown numbers?

Summarv

Review and connect what you learned.

Assignment

Solve and write about writing equations to model problems with unknown numbers.

Quiz Answers

Solving One-Step Equations: Addition and Subtraction Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you use inverse operations to solve equations with addition and subtraction?

Summary

Review and connect what you learned.

Assignment

Practice applying the properties of equality to solve equations.

Quiz Answers

Solving One-Step Equations: Multiplication and Division Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you use inverse operations to solve equations with multiplication and division?

Summary

Review and connect what you learned.

Assignment

Practice writing and solving equations with multiplication and division.

Quiz Answers

Modeling Real-World Problems with One-Step Equations Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

What situations can you model with one-step equations?

Summary

Review and connect what you learned.

Assignment

Explore solving one-step equations.

Assignment

Practice writing and solving one-step equations.

Quiz Answers

Modeling Relationships Between Real-World Quantities Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you use a table to determine the relationship between two quantities?

Summarv

Review and connect what you learned.

Assignment

Practice using a table to determine the relationship between two quantities.

Quiz Answers

Relating Relationships Shown in Tables to Equations Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can equations help you model the relationship between two quantities?

Summary

Review and connect what you learned.

Assignment

Practice modeling problems by writing equations in two variables.

Quiz Answers

Comparing Representations of Modeled Relationships Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How are equations, tables of values, and graphs related?

Summary

Review and connect what you learned.

Assignment

Practice relating equations, tables of values, and graphs.

Quiz Answers

Writing Inequalities Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

In an inequality, what does the variable represent?

Summary

Review and connect what you learned.

Assignment

Represent real-world situations with inequalities.

Quiz Answers

Graphing Inequalities on a Number Line Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

What does the solution to an inequality look like on a number line?

Summary

Review and connect what you learned.

Assignment

Represent real-world situations by graphing solutions of inequalities.

Quiz Answers

Statistics

Data Distributions and Measurement

Plotting Data on a Dot Plot Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you represent data visually using a dot plot?

Summary

Review and connect what you learned.

Assignment

Solve problems involving statistical questions and dot plots, and write about the results.

Quiz Answers

Describing Data on Dot Plots Guided Notes

Warm-Up

Get ready for the lesson.

Year-at-a-Glance - Curriculum Overview

How can you describe data on a dot plot?

Summary

Review and connect what you learned.

Assignment

Practice describing data in dot plots.

Quiz Answers

Representing Data Sets with Histograms Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can a histogram help you represent a large data set?

Summary

Review and connect what you learned.

Assignment

Explore how to represent data sets with histograms.

Assignment

Practice using histograms to display data.

Quiz Answers

Finding the Mean Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you represent a data set with a single "typical" value?

Summary

Review and connect what you learned.

Assignment

Practice calculating the mean of a data set.

Quiz Answers

Comparing Mean and Median Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How does mean compare to median?

Summary

Review and connect what you learned.

Assignment

Practice using the mean and median to describe and compare data sets.

Quiz Answers

Range and Interquartile Range Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How can you describe data with range and interguartile range?

Summary

Review and connect what you learned.

Assignment

Practice understanding how the range and interquartile range describe data.

Quiz Answers

Data Analysis

Summarizing Data Sets with Statistics Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How do you use statistics to summarize data sets?

Summary

Review and connect what you learned.

Assignment

Practice finding statistics for data sets.

Quiz Answers

Box Plots Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How do box plots describe data sets?

Summary

Review and connect what you learned.

Assignment

Practice identifying the values needed to create a box plot.

Quiz Answers

Mean Absolute Deviation Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

What does mean absolute deviation tell you about a set of data?

Summary

Review and connect what you learned.

Assignment

Practice solving problems involving absolute deviation.

Quiz Answers

Data Displays and Statistics Guided Notes

Warm-Up

Get ready for the lesson.

Instruction

How do you summarize numerical data sets using displays and statistics?

Summary

Review and connect what you learned.

Assignment

Practice identifying the data set with the greatest number of observations.

Quiz Answers

% of Course Time: Self-paced, to cover all topics in the outline from above

Textbooks & Supplemental Materials: Edgenuity lessons, supplemented by Cocalico Teachers of Record

Assessments: Edgenuity guizzes and tests, performance tasks

Standards Addressed: Contact the Online Learning Facilitator for a supplemental document from Edgenuity outlining any applicable PA Standards address in the course topics. Note that for some courses, there are no PA Standards which may exist.



Eagle P.A.C.T. Course Connections:

Online Learning courses help to prepare students for the diverse ways in which they will learn outside of school. The self-paced, independent nature of virtual courses also helps to develop important skills such as self-advocacy, time management, organization, study skills, and self-discipline. Such skills are needed for a successful future.