

Learning Targets

Unit Rates and Percentages

Lesson 1: The Burj Khalifa

- I can see that thinking about “how much for 1” is useful for solving different types of problems.

Lesson 2: Anchoring Units of Measurement

- I can name common objects that are about as long as 1 inch, foot, yard, mile, millimeter, centimeter, meter, or kilometer.
- I can name common objects that weigh about 1 ounce, pound, ton, gram, or kilogram, or that hold about 1 cup, quart, gallon, milliliter, or liter.
- When I read or hear a unit of measurement, I know whether it is used to measure length, weight, or volume.

Lesson 3: Measuring with Different-Sized Units

- When I know a measurement in one unit, I can decide whether it takes more or less of a different unit to measure the same quantity.

Lesson 4: Converting Units

- I can convert measurements from one unit to another, using double number lines, tables, or by thinking about “how much for 1.”
- I know that when we measure things in two different units, the pairs of measurements are equivalent ratios.

Lesson 5: Comparing Speeds and Prices

- I understand that if two ratios have the same rate per 1, they are equivalent ratios.
- When measurements are expressed in different units, I can decide who is traveling faster or which item is the better deal by comparing “how much for 1” of the same unit.

Lesson 6: Interpreting Rates

- I can choose which unit rate to use based on how I plan to solve the problem.
- When I have a ratio, I can calculate its two unit rates and explain what each of them means in the situation.

Lesson 7: Equivalent Ratios Have the Same Unit Rates

- I can give an example of two equivalent ratios and show that they have the same unit rates.
- I can multiply or divide by the unit rate to calculate missing values in a table of equivalent ratios.

Lesson 8: More about Constant Speed

- I can solve more complicated problems about constant speed situations.

Lesson 9: Solving Rate Problems

- I can choose how to use unit rates to solve problems.

Lesson 10: What Are Percentages?

- I can create a double number line with percentages on one line and dollar amounts on the other line.
- I can explain the meaning of percentages using dollars and cents as an example.

Lesson 11: Percentages and Double Number Lines

- I can use double number line diagrams to solve different problems like “What is 40% of 60?” or “60 is 40% of what number?”

Lesson 12: Percentages and Tape Diagrams

- I can use tape diagrams to solve different problems like “What is 40% of 60?” or “60 is 40% of what number?”

Lesson 13: Benchmark Percentages

- When I read or hear that something is 10%, 25%, 50%, or 75% of an amount, I know what fraction of that amount they are referring to.

Lesson 14: Solving Percentage Problems

- I can choose and create diagrams to help me solve problems about percentages.

Lesson 15: Finding This Percent of That

- I can solve different problems like “What is 40% of 60?” by dividing and multiplying.

Lesson 16: Finding the Percentage

- I can solve different problems like “60 is what percentage of 40?” by dividing and multiplying.

Lesson 17: Painting a Room

- I can apply what I have learned about unit rates and percentages to predict how long it will take and how much it will cost to paint all the walls in a room.