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Module 12 Attributes and Tools
Lesson 5 Measurement: Weight and Mass

## Lesson Objectives

- Demonstrate how to read a scale and a balance.
- Determine when to and how to measure customary weight.
- Determine when to and how to measure metric mass.
- Determine which unit of measure or measurement tool matches the context for a problem situation involving weight and mass.
- Solve real-world problems involving weight and mass.


## Subtopic 1 Using a Scale

A $\qquad$ is an instrument used to measure weight and mass.

Since gravity is assumed constant on Earth, the terms $\qquad$ and $\qquad$ are often used interchangeably.

In $\qquad$ calculations, mass and weight $\qquad$ be used interchangeably.

## Balance Scale

- Compares the weights of $\qquad$ objects or $\qquad$ sets of objects
- When the weights are $\qquad$ the scale balances.

1 Give the weight shown by each scale.


Which is heavier: the orange or the banana?
Explain the answer.


The scale shown is balanced. How many balls are needed to balance 12 blocks?


## Subtopic 2 Customary Weight

4 Which weighs more: a bag of 13 oranges weighing four ounces each or one bag of tangerines weighing four pounds?

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An airline allows passengers to have up to 40 pounds of carry-on baggage. Saul's three bags weigh 17 pounds, nine ounces; nine pounds, six ounces; and 13 pounds, two ounces. Is Saul's baggage over the airline's 40-pound limit?

## Subtopic 3 Metric Weight

A bag contained 2.2 kilograms of flour. Ming took out 300 grams of flour. What is the mass of the remaining flour?

