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## UNIT 1 • RELATIONSHIPS BETWEEN QUANTITIES AND EXPRESSIONS

### Lesson 2: Units of Measure

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#### Instruction

#### Lesson 1.2.1: Converting Units

##### Georgia Standards of Excellence

MGSE9–12.N.Q.1★

MGSE9–12.N.Q.2★

#### Warm-Up 1.2.1 Debrief

1. How many feet did Miranda run?

There are 5,280 feet in 1 mile. Miranda ran 2 miles, so in total she ran  $2 \text{ miles} \cdot 5,280 \text{ feet per mile} = 10,560 \text{ feet}$ .

2. How many seconds are there in 20 minutes?

There are 60 seconds in 1 minute, so there are  $20 \text{ minutes} \cdot 60 \text{ seconds per minute} = 1,200 \text{ seconds}$  in 20 minutes.

3. What was Miranda's speed in feet per second?

To find Miranda's speed in feet per second, divide the total distance she ran, in feet, by the length of time it took her to run the distance, in seconds:  $10,560 \text{ feet} \div 1,200 \text{ seconds} = 8.8 \text{ feet per second}$ .

#### Connection to the Lesson

- Students will practice converting measurements from one set of units to another.
- Students will identify important quantities and their associated units and solve problems.