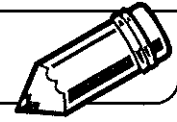


LESSON
2·10**Number Stories and Estimation**

- ◆ Read each number story carefully.
- ◆ Write an open number sentence to use in estimating.
- ◆ Answer the question.

Example:

It is said that the Aztec king, Montezuma, drank about 50 cups of chocolate per day. Did he drink *more* or *less* than 10 gallons of chocolate in a week? (Hint: 16 cups = 1 gallon)

Open number sentence: $10 * 16 = \text{Number of cups in 10 gallons}$

Answer: more

1. Certain varieties of seahorses can move 10.5 inches per minute. At this rate, could these seahorses be able to travel 6 yards in 1 hour?

a. Open number sentence:

b. Answer: _____

2. Orville Wright completed the first airplane flight on December 17, 1903. He traveled 120 feet in 12 seconds. If he had been able to stay in the air for a full minute, would he have traveled 1 mile? (Hint: 1 mile = 5,280 feet)

a. Open number sentence:

b. Answer: _____

3. In 1960, the Triton became the first submarine to circumnavigate the world. It covered 36,014 miles in 76 days. Is that more or less than 100 miles per day?

a. Open number sentence:

b. Answer: _____

Source: *The Kids' World Almanac of Records and Facts*

LESSON
2·10**Using Place Value to Compare Powers of 10**

1 meter	10 decimeters	100 centimeters	1,000 millimeters
1 centimeter	0.01 meter	0.1 decimeter	10 millimeters

Use the information in the conversion table to respond to each statement below. Complete each statement with one of the following phrases:

10 times, 100 times, $\frac{1}{10}$ of, $\frac{1}{100}$ of

- 1 meter is _____ the size of a decimeter.
- 1 centimeter is _____ the size of a meter.
- 1 centimeter is _____ the size of a millimeter.
- 1 decimeter is _____ the size of a meter.
- 1 millimeter is _____ the size of a decimeter.

Write two of your own statements using the information in the table.

- _____
- _____

Complete the table below by making the appropriate conversions.

	millimeters	centimeters	decimeters	meters
8.	9,743			
9.				3
10.		175		

- In Problem 10, explain what happens to the value of the digit 5 when you go from millimeters to centimeters, and then from decimeters to meters.
