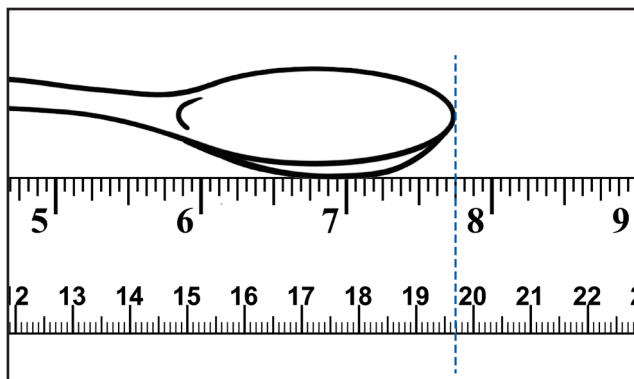![math Antics® Exercises logo]

Name: _____

Date: _____

Measuring Distance

1 Measure the spoon's length to the nearest quarter inch. Express the answer as a mixed number.

$$7\frac{3}{4} \text{ in}$$

2 Measure the spoon's length to the nearest tenth of a centimeter. Express the answer as a decimal.
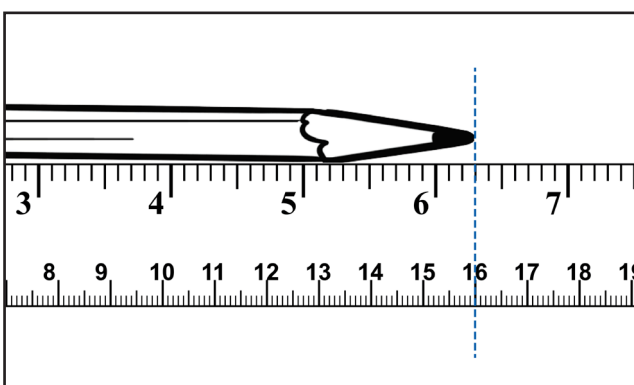
$$19.7 \text{ cm}$$

3 Measure the pencil's length to the nearest <u>tenth</u> of an inch. Express the answer as a decimal.

$$6.3 \text{ in}$$

4 Measure the pencil's length to the nearest tenth of a centimeter. Express the answer as a decimal.
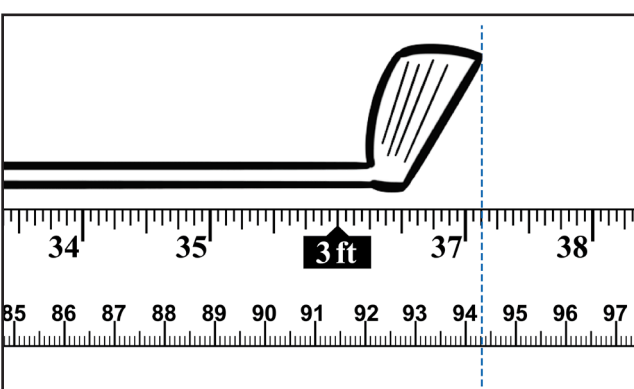
$$16.0 \text{ cm}$$

5 Measure the golf club's length to the nearest eighth of an inch. Express the answer as a mixed number.
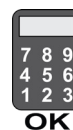
$$37\frac{1}{8} \text{ in}$$

6 Measure the golf club's length to the nearest tenth of a centimeter. Express the answer as a decimal.

$$94.3 \text{ cm}$$

In the video, we learned that inches are sub-divided in two different ways: One is based on dividing by 10 and the other is based on dividing by 2. You can convert from a measurement that has fractions based on powers of 2 simply by dividing to get the equivalent decimal value, which is based on powers of 10. Use a calculator to convert these measurements:

7 $6\frac{3}{8}$ in = $\boxed{6.375 \text{ in}}$

$3 \div 8 = 0.375$

8 $12\frac{9}{16}$ in = $\boxed{12.563 \text{ in}}$

$9 \div 16 = 0.5625$

See Video for step-by-step solutions to each problem.