

MEASURING IN METRICS

Note: You will need a ruler that shows inches and centimeters, or you may cut out and use the ruler below.

Some of the measures we use in the metric system are meters (m), centimeters (cm), and millimeters (mm).

Look at the ruler. It shows whole centimeters and whole inches marked with numbered lines. In this packet, we will be using the centimeter side of the ruler. It is one centimeter from the left end of the ruler to the first numbered line. It is one centimeter from one numbered line to another numbered line.

Measure these lines using the centimeter side of the ruler:

Answer

1 centimeter or cm

2 cm

4 cm

Look at the ruler. From the left end of the ruler to 1 is one centimeter. This centimeter is divided into two equal parts by a line. Two “equal parts” means that it is divided in half. A centimeter can be divided into two half centimeters. A centimeter also can be divided into smaller parts called millimeters. There are 10 millimeters in one centimeter. We use $\frac{1}{2}$ centimeters and millimeters to measure something smaller than a centimeter.

PRACTICE MEASUREMENTS

1. Measure this line: _____

How long is the line in inches?

Answer _____

2. Measure this line: _____

Approximately how long is the line in centimeters?

Answer _____

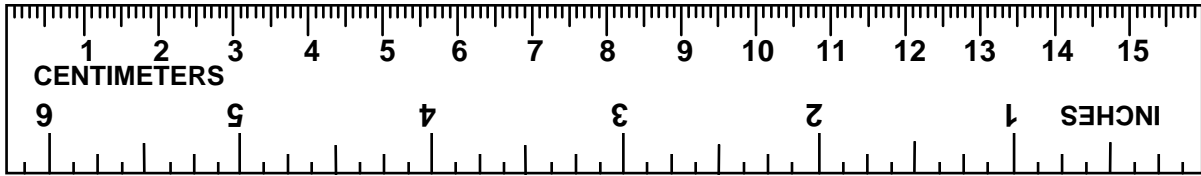
3. How long would the first line be if you made it three times as long?

Answer _____

4. How long would the second line be if you made it twice as long?

Answer _____

(Answers are on the next page.)

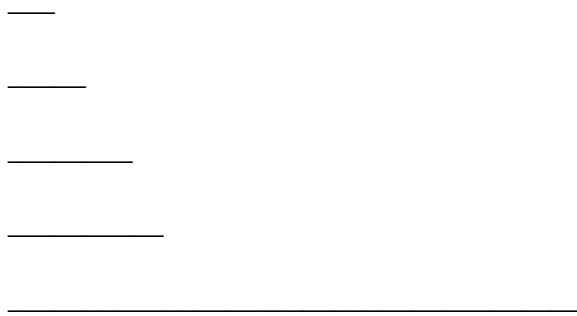


Answers from Practice Measurements:

1. 2 ½ in
2. 7 cm
3. 7 ½ in
4. 14 cm

Sometimes things we measure aren't exactly as long as the lines on the ruler. When measuring for the External Diploma Program, "round off" to the nearest ½ centimeter. That means that the answer will be the closest centimeter or ½ centimeter mark.

Measure these lines:



Answer

½ cm

1 cm

1 ½ cm

2 cm

7 ½ cm

Practice by measuring these lines:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

Answer

Answers

1. 4 cm.
2. 7 cm.
3. $5\frac{1}{2}$ cm.
4. $8\frac{1}{2}$ cm.
5. 3 cm.
6. $4\frac{1}{2}$ cm.