

## Read a Ruler

Name \_\_\_\_\_

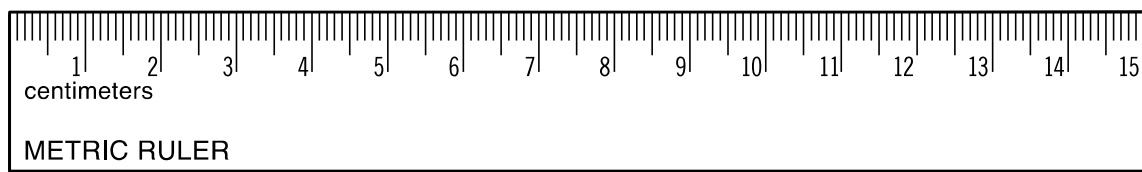
Date \_\_\_\_\_

Class \_\_\_\_\_

The metric system is the internationally accepted system of measurement. All of the measuring you will do in science classes will use the metric system. Let's review how to read a metric ruler.

A metric ruler shows markings for millimeters and centimeters. A millimeter (1 mm) is about as wide as the thickness of a dime. A centimeter (1 cm) is about as wide as your fingernail. Some rulers have inches on one side and centimeters (metric system) on the other. Always remember to measure with the metric side of your ruler for science.

Notice the lines on this ruler:

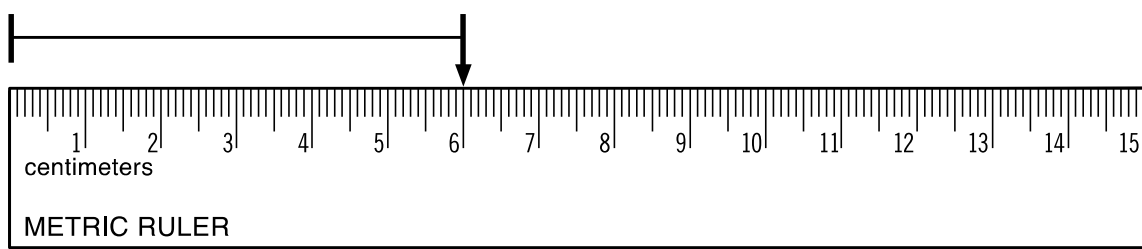


The longest lines are numbered 1, 2, 3... These are the centimeter markings. The shorter lines are not numbered. These are millimeter markings. There are 10 millimeters in each centimeter.

Now take a look at the ruler below. The arrows mark the ends of imaginary lines beginning at the zero end of the ruler.

What is the number of the mark the arrow is pointing to? \_\_\_\_\_

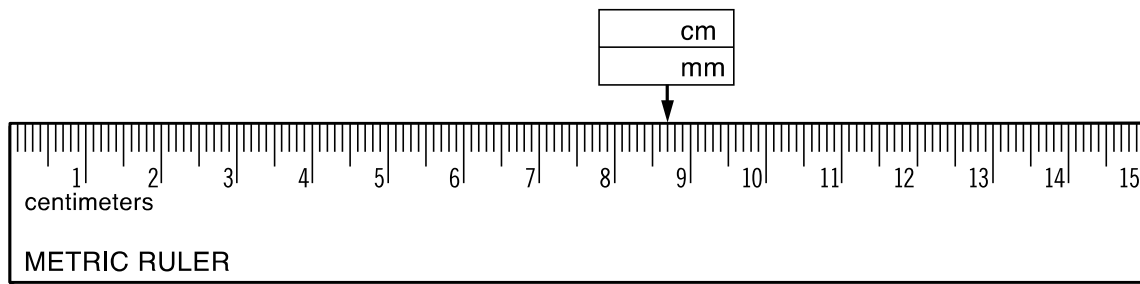
What units were you measuring in, centimeters or millimeters? \_\_\_\_\_



The arrow points to 6.0 centimeters (6.0 cm). This can also be written as 60 millimeters (60 mm). You do not need to count each millimeter marking. Remember, there are 10 mm in each centimeter. To write centimeters as millimeters, just multiply the centimeter reading by 10.

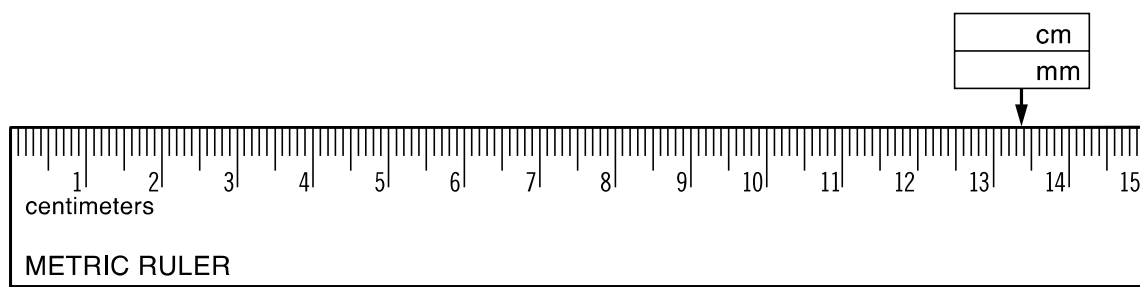
## Read a Ruler

Look at the ruler below. The arrow stands for the end of an imaginary line stretching from the zero edge of the ruler to the arrow. What length measurement does the arrow point to? Write your answer in both centimeters and millimeters in the boxes below:



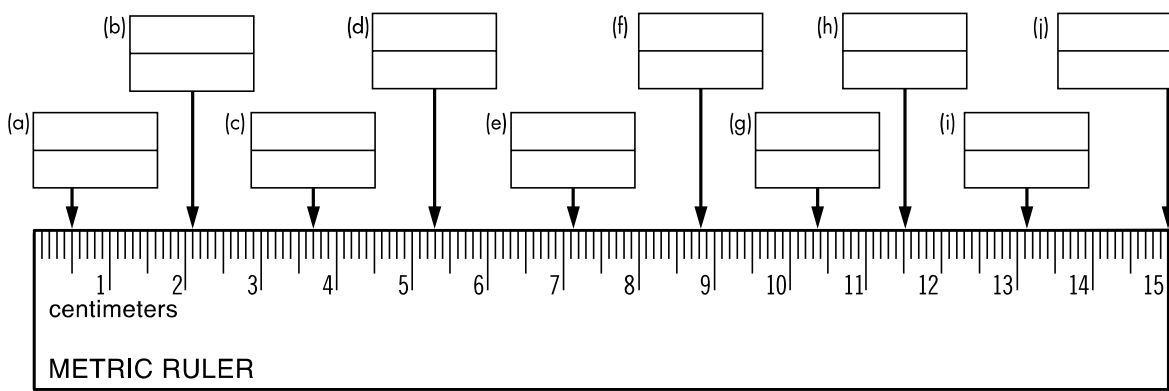
The arrow points to 8.7 centimeters (8.7 cm) or 87 millimeters (87 mm).

Sometimes the end of the line you are measuring falls between two millimeter markings (between two short lines). If it does, choose the closest millimeter marking. For example, what length is the arrow pointing to below?



The arrow falls closest to 13.4 cm or 134 mm. If the arrow falls exactly halfway in between two marks, use the next *highest* millimeter mark.

Now it's your turn to practice measuring with a metric ruler. In each box below, write the length from the zero edge to each arrow in both centimeters and millimeters. Check your answers below.



(a)	0.5cm	5mm
(b)	2.1cm	21mm
(c)	3.7cm	37mm
(d)	5.3cm	53mm
(e)	7.1cm	71mm
(f)	8.8cm	88mm
(g)	10.4cm	104mm
(h)	11.5cm	115mm
(i)	13.1cm	131mm
(j)	15.0cm	150mm