

Metric Madness

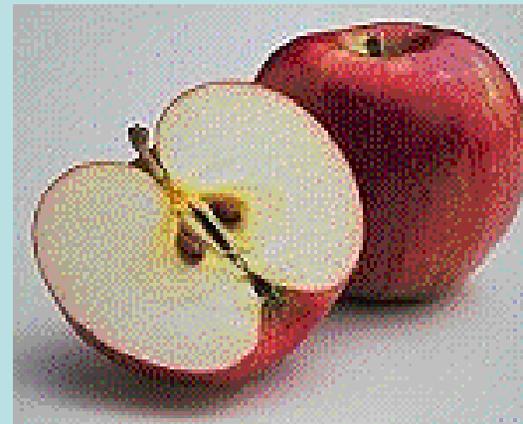
Why might you need to know the metric system?
How can math help me understand my world?

By Shelley, Lynn, Matt, and Trevor

Mrs. Shott
6th period

Millimeters and Centimeters

- A millimeter is the length of the period at the end of this sentence.
- A centimeter is the length of a raisin or the stem on an apple.



Millimeters and Centimeters

- Millimeter is written mm.
- Centimeter is written cm.
- A millimeter is = 0.001 meters (1/1000 meter)
- A centimeter is = 0.01 meters (1/100 meter)

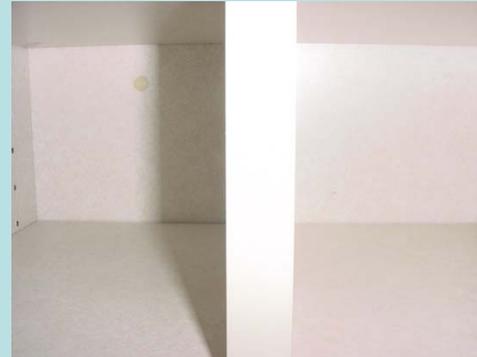
- Both measurements are used to measure length.

- Both are used to measure items that are not too large.

Actual Measuring



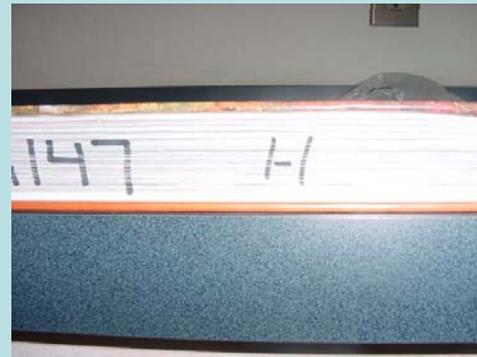
length of calculator = 14 cm



width of the structure between the cubby = 2.5 cm



width of pencil = 7mm



thickness of the orange math book = 3 cm

Problem Solving With Centimeters and Millimeters

Problem

Two kids went to the roller rink. One was a guy, and the other was a girl. At this particular roller skating rink, for some odd reason, the guys all have to add 7 centimeters to their actual shoe size, and girls have to add 75 millimeters.

Can You Solve It?

If Rob's shoe was 260 mm regularly, and Sarah's was 30 cm, how much bigger will Sarah's roller skates be than Rob's? State your answer in centimeters and millimeters.

Solution To The Problem

Sarah's Shoe = 30 cm



Rob's Shoe = 260 mm



To solve the problem, the first thing you need to do is convert each shoe size to the proper measurement being used. I changed Rob's 260 mm to 26 cm since I was adding cm to it, not mm; and I changed Sarah's 30 cm to 300 mm. I then added the correct additional measurement required by the roller rink. Rob's shoe ended up being 33 cm, or 330 mm, and Sarah's was 375 mm, or 37.5 cm. I then subtracted to find out how much bigger Sarah's shoe was than Rob's. The correct answer is 4.2 cm, 42 mm.

Why We Need to Know Millimeters and Centimeters?

- Some items are too small to be measured in feet and inches, so we need to know and understand how to use centimeters and millimeters.
- To make sure parts fit perfectly together, they are made and sold using metric measures. If you want to buy the right part at the hardware store, you better know your millimeters and centimeters.
- If you ever want custom sunglasses, you will need to know the width and length in centimeters.
- In some countries, like Japan, shoes are measured using centimeters.
- Pencil lead is made using the mm measurement. If you want the right lead, you better know how to measure in millimeters.
- If you plan to be an optometrist when you grow up, you will need to know these metrics measurements.