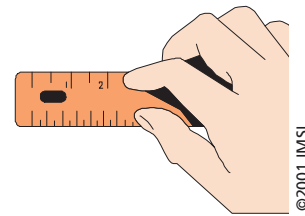


Go to great measures!

Throughout the world people use different standards for measuring things. Some people measure distances they drive in kilometers, while others count the miles. Some people weigh themselves in kilograms, while others use pounds or stones.



©2001 IMSI

Why do you think people from different places use different units for measurements?

Most Americans measure things using pounds, feet, inches, and miles. They usually read the temperature outside in degrees Fahrenheit. Most other countries around the world use kilograms, meters, centimeters, kilometers, and degrees Celsius—a system of measurements called “metric.”

What you measure	English Units (American)	Metric Units
Long distances	Miles (mi.)	Kilometers (km)
Medium size (length) or distance	Feet or yards (ft. or yds.)	Meters (m)
Small sizes (length)	Inches (in.)	Centimeters (cm)
Weight or mass	Pounds (lbs.)	Kilograms (kg)

Americans familiar with the metric system are able to understand distances, lengths, or weights used by people from other countries. In fact, measurements involved with Olympic events are nearly always expressed in metric units (or both metric and American). For example, the men’s downhill ski race is measured in meters of elevation.

To convert from one unit to another, one unit can be multiplied by “a conversion factor” to get the other units.

American units → Metric units

To go from:	To:	Multiply by:
feet (ft.)	meters (m)	0.30
yards (yd.)	meters (m)	0.91
miles (mi.)	kilometers (km)	1.6
inches (in.)	centimeters (cm)	2.54
pounds (lb)	kilograms (kg)	0.45

Metric units → American units

To go from:	To:	Multiply by:
meters (m)	feet (ft.)	3.28
meters (m)	yards (yd.)	1.09
kilometers (km)	miles (mi.)	0.62
centimeters (cm)	inches (in.)	0.394
kilograms (kg)	pounds (lb.)	2.2

For example, if I wanted to know how many yards long a 500-meter speed skating event is, I would multiply 500 meters \times 1.09 = 545 yards. So a 500-meter race is the same as a 545-yard race.

NOW YOU TRY IT, BY CHANGING THE UNITS FOR THE FOLLOWING AMOUNTS:

1. An Olympic bobsled course is 1354 meters long. It's length in yards is:

2. A curling stone weighs 19.94 kilograms. Its weight in pounds is:

3. Figure skates have blades that are 0.16 inches thick. Their thickness in centimeters is:

4. The women's individual cross-country ski event is 15 kilometers long. This is the same as

_____ miles.

5. The Utah Olympic Park is 7130 feet above sea level. Its altitude in meters

is: _____

JUST FOR FUN, CALCULATE YOUR WEIGHT IN KILOGRAMS!

Your weight in pounds: _____ Your weight in kilograms: _____