



The Metric System

**The Way Scientist
Measure**

What is a measurement?

- A measurement is a recording of how much of something we have.
 - How much do you weigh?
 - How tall are you?
 - How fast are you driving?
 - How much soda do you have?

What must every Measurement have?

- Every measurement must have:
 - A number- How Much
 - A Unit- Of What

Examples

Height ??????

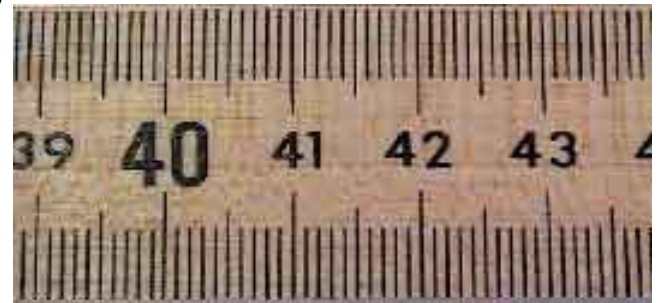
Weight?????

Why the Metric System?

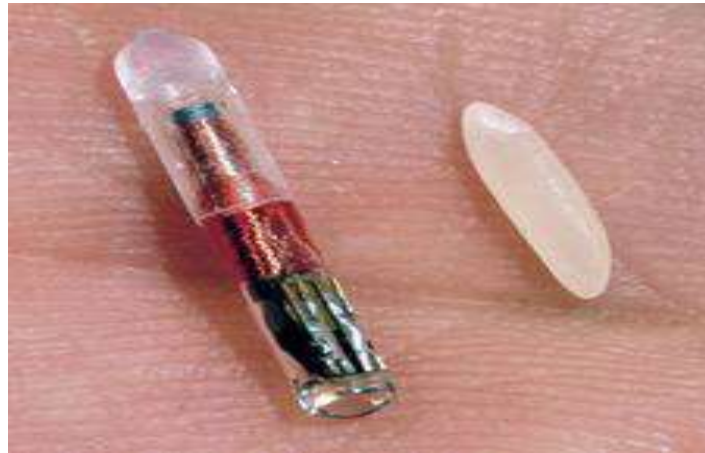
- **America**-In America, we use the English system of measuring. (lbs., feet, inches, etc.). It is very difficult to understand.
- **Rest of the World**- The rest of the world uses the metric system (meters, liters, etc.) This is a very simple system to understand. It is a system of 10's
- **THE SCIENCE WORLD USES THE METRIC SYSTEM!**

Length

- Length- The distance between two objects.
- The Metric unit for length is **METER (m)**
 - Very Small Distances- Millimeter (mm)
 - Small Distances- Centimeter (cm)
 - Average Distances- Meter (m)
 - Long Distances- Kilometer (km)



What length unit would you use to measure this grain of rice?



What length unit would you use to measure this road?



What length unit would you use to measure this candy bar?



Mass

- Mass- Amount of matter (stuff) in an object
- The Metric unit for mass is **Gram (g)**
 - Very Small Masses- Milligram (mg)
 - Small Masses- Grams (g)
 - Large Masses- Kilograms (kg)

What mass unit would you use to measure this sumo wrestler?



What mass unit would you use to measure these gold bands?



What mass unit would you use to
grains of salt?



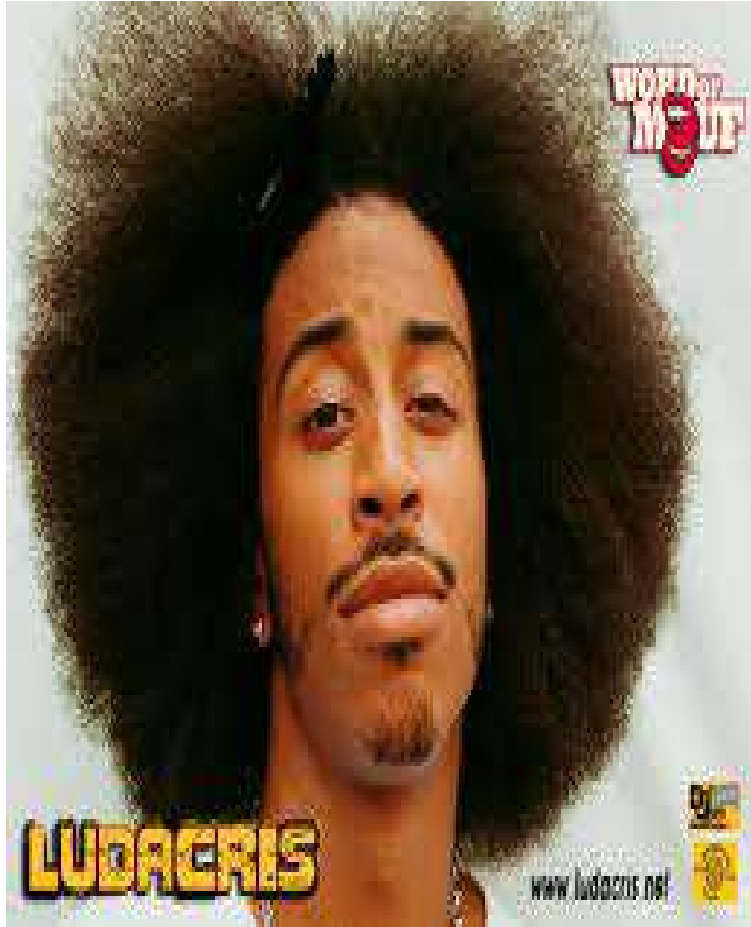
Volume

- Mass- The amount of space an object takes up
- The Metric unit for mass is **grams/cubic centimeters (g/cm³)**

Which has more volume?



Which has more volume?



Which has more volume?

