Earth/Space Science: **name _____**

Casa Grande High School **Fall 2025: instructor: Bartonius Maxiumus**

The Art of Measurement: Which units make the most sense?

Measuring length: ***note: 1 meter = 100 cm = 1000 mm.***

	mm	cm	meters
A Paper Clip			
Your pencil:			
Your height:			

Use this space to *draw the wooden block* at an oblique angle and measure each of the sides in centimeters.

Use this space to determine the VOLUME of the block of wood in cm^3

(note: write out the equation first, then substitute your measured values, then solve the equation).

Determine the MASS of the block of wood in grams _____

Use this space to determine the density in grams/cm^3

(note: write out the equation first, then substitute your measured values, then solve the equation).

Note; Use the correct number of significant figures in your answer! What is the rule?

Measuring Mass:

What is the definition of mass?

How does mass differ from weight?

Calculating Density and more!

Use this space to draw a picture of the Bolt at an oblique angle! Measure the length and include that in your drawing.

Use the scale to determine the mass in grams _____

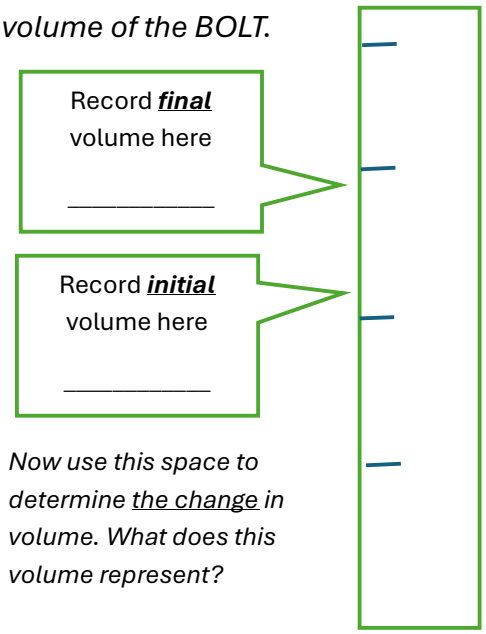
Write down the formula for the volume of a cylinder here.

Using your determination of volume of the bolt and the length, use this space to determine what the DIAMETER should be.

Does your answer seem about right? Why or why not?

Challenge question: What if you had a bolt the size of a 1 Liter Smart Water Bottle: How much would it weigh? (in grams? In Kilograms?

Fill the 100 mL Graduated Cylinder about half full of water. *Use the displacement method to determine the volume of the BOLT.*



Now use this space to determine the change in volume. What does this volume represent?

Now using your measurements of mass and volume, determine the density of the bolt.