

**Name:**  
**Scientific Tools Station Lab**

**Station 1: Measure the amount of water in each. Label correctly.**

Tool	Amount of Water
Large Graduated Cylinder	
Small Graduated Cylinder	
Beaker	
Flask	

What tool gives you the most accurate measurement?

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**Station 2: Find the mass of various objects using the Triple Beam Balance. Label correctly.**

Object	Mass
yarn	
metal swirl	
calculator	

**Station 3: Use the thermometer to find the temperature of the water.**

Temperature in degrees Celsius	Temperature in degrees Fahrenheit

What units will we use when we measure temperature in science class?

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**Station 4: Find the volume of a regular shaped object. Label correctly. Use a calculator.**

Volume = length x width x height

Object	Length	Width	Height	Volume
sm. box				
lg. box				

**Station 5: Find the mass of the objects using an electronic balance. Label correctly.**

Object	Mass
calculator	
Bunsen Burner	
tongs	

**Station 6: Find the volume of irregularly shaped objects. Label Correctly.**

Use the water displacement method.

Object	Starting value	Ending value	Volume-subtract the starting value from the end value.
Rubber Stopper			
metal cylinder			

**Station 7: Use the ruler and triple beam balance to find the Density of the object.**

Density = Mass divided by Volume

Object	Mass (g)	Volume (cm <sup>3</sup> )	Density (g/cm <sup>3</sup> )
Box			

**Station 8: Solve for percent error. Use a calculator. Show all work.**

$$\text{percent error} = \frac{|\text{experimental value} - \text{accepted value}|}{\text{accepted value}} \times 100\%$$

1. Calculate the percent error if the experimental value for the density of sodium chloride is 23.4 g/cm<sup>3</sup> and the accepted value is 21.7 g/cm<sup>3</sup>.