Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_ Period\_\_\_\_\_\_\_\_\_\_

“Measurement Activity”

* Every measurement has a \_\_\_\_\_\_\_\_\_\_\_\_\_ and a \_\_\_\_\_\_\_\_\_\_\_\_\_.
* Scientists record all the digits of a measurement that are known exactly, plus the first one that is uncertain. These digits are collectively referred to as\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* The following are quantities (length, volume, temperature, mass) that will be measured in lab.

**Examples: length**

Measurement \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Example: liquid volume**

 Measurement:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Example: temperature**

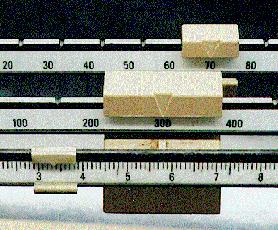
****

**Example:**

Measurement:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Mass**

**Example: Mass**

[](http://www.google.com/url?sa=i&rct=j&q=&esrc=s&source=images&cd=&ved=0ahUKEwi28Kra1NnVAhUJfiYKHdZVCSEQjRwIBw&url=http://dvbiology.org/biologyweb/labeq3.htm&psig=AFQjCNETy6RqI91yRfWv3JaNBOvzW_o23Q&ust=1502900995619213)

Measurement: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

What is the difference between mass and weight?

“Lab Activity”

**Station 1 –**

Record the volume of liquid in each beaker.

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ B. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ C.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Station 2 –**

Record the volume of liquid in each graduated cylinder.

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ B. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ C.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Station 3 –**

Record the length, width and height and then calculate the volume of a regular shaped solid.

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_ W. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ H.\_\_\_\_\_\_\_\_\_\_\_\_\_ V.\_\_\_\_\_\_\_\_\_\_\_\_\_

**Station 4 –**

Record the volume of liquid in the Erlenmeyer flask

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ B. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ C.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Station 5 –**

Record the mass of each metal on the Top Loading (digital) Balance

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ B. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ C.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**(small square) (short brown rectangle) (long silver rectangle)**

**Station 6 –**

Measure and record the length of the green countertop in meters.

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Station 7 –**

Record the mass of each metal using the Triple Beam Balance

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ B. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ C.\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**(small square) (long brown rectangle) (long silver rectangle)**

**Station 8 –**

**Challenge**

Find the volume of this irregular shaped object using only the following: graduated cylinder, water from the faucet, and the object.

Measurement: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Textbook Station**

Using your textbook define:

Accuracy

Precision

Which is more important accuracy or precision?