|  |  |  |
| --- | --- | --- |
| **Task** | **Prediction**  **(your best guess)** | **Measured quantity** |
| Table surface area  (In cm) |  |  |
| Tennis ball fall  **(Time in seconds)** |  |  |
| Mass of  \_\_\_\_\_\_\_\_\_\_\_\_\_  **(name of object)** |  |  |
| Paint (in gallons) for room in your house |  |  |

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Pd:\_\_\_\_\_\_\_\_\_**

**Measurement Lab**

**Purpose:** To estimate various measurable quantities

To practice proper measuring skills

To do quick research for unknown information

**Think about it:**

* Read through each task (1-5) and use the data table to collect your data. Fill in “Prediction” column BEFORE you take measurements.
* Complete the lab and record your measured data.
* Show your work for any calculations you do. Include any conversion factors with your work and units with all your numbers.

**First:**

* Fill in the **“Prediction”** section of the table with your best guess of the table, tennis ball and weight of an object **before** **measuring.**

**Measure it:**

**Optional but a fun challenge!**

1. Measure the surface area of any table (do not include the legs…just the top!)
   1. Which table was this? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. Measure the time it takes for a tennis ball to fall from any given height to the floor (i.e., from the ceiling, or, if outside, as high as you can **safely** manage)
3. Determine the mass (think weight) of any object in your house.
   1. What is the object\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. How did you determine the mass? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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

**Solve it: (THIS IS OPTIONAL but a good challenge!)**

1. You want to paint one room in your house. How much paint you need to purchase? (**Hint:** Paint cans are 1 gallon each)

\*Think about calculating the surface area of one wall & research how much paint 1gallon covers.

1. Which task was the most difficult to measure? Why?

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

**Don’t forget your units for each measurement!**

**Commonly used units**

Lbs (pounds)

m (meters)

cm (centimeters)

s (seconds)