

Good Lab, Bad Lab

Day 1 Station Task Cards

Station 1

- 1) Measure the penny.
- 2) Drop the penny in the water.
- 3) Measure how much the water rose up.
- 4) Record on your station sheet how much the water rose.
- 5) That's the volume of the penny.
- 6) Repeat with the quarter.

Question: Which one had more weight? Volume?

Station 2

- 1) Measure your height in meters (it may work best to stand against a wall and do this). Record.
- 2) Measure the length of your head in meters. (Remember $100 \text{ cm} = 1\text{m}$). Record.
- 3) Divide your height by the length of your head. Record this number. This is your body proportion.

Question: How close is your number to 7.5? Give a specific answer with numbers. FYI: This is average “proportion” for a person. Ancient people claim that 8 means someone is the most beautiful.

Station 3

- 1) Measure the height of a desk. Record.
- 2) Measure the width of the desk. Record.
- 3) Measure the depth of the desk. Record.
- 4) Multiply all these numbers together. That is the volume of the desk.
- 5) How many desks are in the room?
- 6) What is the total volume of desks in the room? (Hint: Multiply the volume by the number of desks)

Question: What units did you use for volume?

Station 4

The first student needs to stand at their desk and walk from their desk to the door and back. They need to record how long it took them to do this. Repeat for all other students in your group. Create a data table and graph to show this data.

Station 5

Goal: We need to figure out the mass of the sand (but we can't just dump it on the scale!)

Create this data table:

Mass of Beaker (g)	Mass of Beaker + Sand (g)	(Mass of Beaker + Sand) - (Mass of Beaker)
1) Mass the beaker when it is empty on the scale. Record in grams.		

2) Pour the sand into the beaker on the scale.

3) Record the new mass of the beaker and sand.

4) Subtract the new mass of the beaker. That is the mass of the sand!

Station 6

Goal: We can see if adding salt to water makes it weigh more.

- 1) Measure out 10 mL of salt.
- 2) Measure the beaker of water.
- 3) Add the salt to the beaker.
- 4) Weigh the salt and water together

Did the mass change? Why or why not?

Station 7

1) Create this data table:

Student Name	Height in Meters	Jump

2) Record the information in the table for you and your partner.

3) Do you have enough information to make a conclusion?

Station 8

Graph the data:

Month	Number of Student Absences
January	281
February	198
March	129
April	189

Do you think data makes sense? Why or why not?