



## Activity 7.2: Liquid Sampling

### Task 1: Experimental Set-Up

- ☒ Retrieve two unknown liquids from a staff member
- ☒ Label all 3 cups and Qtips with pencil or sticky flags (1, 2, & 3)
- ☒ Ensure the LunaSat is still connected and running code from Activity 7.1
- ☒ Open the serial monitor

### Task 2: Test the Capacitive Sensor

- ☒ Lightly dip a cotton swab into one of the three cups
- ☒ **Gently** spread the moist cotton swab onto the capacitive sensor. **Do not get liquid on the other parts of the LunaSat.**
- ☒ Record the analog values that are coming up for the material
- ☒ Wipe liquid off of the capacitive sensor using a paper towel
- ☒ Repeat these steps for the other two liquids using a new cotton swab

Substance	Trial 1	Trial 2 (optional)	Trial 3 (optional)
Cup 1	340	337	339
Cup 2	142	136	145
Cup 3	698	700	696

### Task 3: Identify the Liquids

- ☒ Match the analog value you found in activity one to the closest value you found from the three unknown liquids

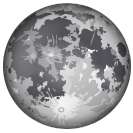
Substance	Sensor Output	Corresponding Cup
Air	~690	N/A
Vinegar	~210	Cup 2
Distilled Water	~320	Cup 1
Mineral Oil	~690	Cup 3

Were you able to match all the unknowns to a substance?

Cup 1 = Water

Cup 2 = Rice Vinegar

Cup 3 = Extra Virgin Oiliv Oil



## **Activity 7.2: Liquid Sampling**

What was the unknown liquid you used in Activity 7.1? Water mixed with regolith