



## **Activity 5.1: Which Way Is Up?**

### Task 1: Understanding your Accelerometer

1. Briefly describe the purpose of the accelerometer?

It can measure Moonquakes, Micrometeorite Impacts, Lander Activity, LunaSat Orientation

2. With the LunaSat back facing you, which direction is +Z?  
Towards my face.

### Task 2: Experimental Set-Up

- ☒ ~~Connect the LunaSat to the FTDI and laptop~~
- ☒ ~~Select the correct board, processor and port~~
- ☒ ~~Load the file onto your LunaSat~~
- ☒ ~~Verify and upload the code~~

### Task 3: Orient the LunaSat

- ☒ ~~Open the serial plotter in Arduino~~
- ☒ ~~Lay the LunaSat flat on the table~~
- ☒ ~~Record the values that appear on the serial monitor: 1.17~~

Which axis reads +/- 1G? Z-Axis

- ☒ ~~Tilt the LunaSat vertically onto one side~~
- ☒ ~~Record the values on the serial monitor: 1.01~~

Which axis reads +/- 1G? Y-Axis

### Task 4: Rotate 90°

- ☒ ~~Rotate the LunaSat 90° and tilt it again~~
- ☒ ~~Record the values on the serial monitor: 1.1~~

Which axis reads +/- 1G? X-Axis

- ☒ ~~Lay the LunaSat flat on the table once you're done~~
- ☒ ~~Record the values on the serial monitor: 1.17~~
- ☒ ~~Confirm they roughly match values in Task 3.~~