



Activity 6.1: Find the Magnet

Task 1: Questions

Briefly describe the purpose of a magnetometer.

The magnetometer detected magnetic field

What does a vector magnetometer measure?

Vector magnetometers measure the vector components of a magnetic field

Task 2: Experimental Set-Up

- ☒ ~~Get a bar magnet and sheet of paper/cardboard/other material to cover the magnet~~
- ☒ ~~Lay the magnet flat on the table and cover the magnet with the material~~
- ☒ ~~Connect the LunaSat to the FTDI and laptop~~
- ☒ ~~Upload the code~~
- ☒ ~~Open the serial plotter~~

Task 3: Locate the Magnet

- ☒ ~~Slowly move the LunaSat above the material covering the magnet~~

Write down the magnitude of the magnetic field near the bar magnet
~75 μT

Task 4: Experiment

- ☒ ~~Try covering the magnet with different materials~~

Material	Thickness	Magnetic Field Magnitude
Metal	0.54 mm	20 μT
Paper	13 mm	64 μT
Rubber glove	0.2 mm	70u