



Experiment S-13

Magnets

Objectives

- To learn about basic properties of magnets.
- To study how different poles have different magnetic field values.

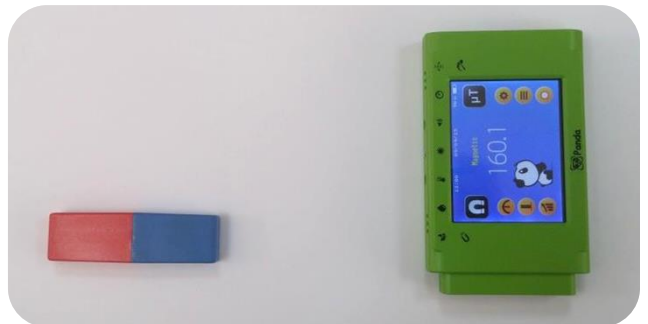
Description

In this experiment you will measure the magnetic field strength at different poles, using two different magnets.



You will need:

- Two types of bar magnets
- A ruler

The equipment is included in the Panda's Accessories kit

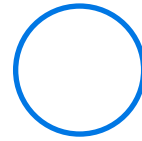
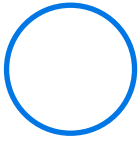


Instructions

- Observe your NeuLog Panda and click on the icon on the top left of the screen; pick the "Magnetic" option (if it is not already selected).
- Press on the  or the  icon that appears on the right side. Press on the "X axis" option.
- Measure the magnetic field at each side of the first bar magnet (as in the picture); the length between the magnet and the ruler should be 10 cm. Write the magnetic field values in the circles in the next page.
- Measure the magnetic field at each side of the second bar magnet (as in the picture); the length between the magnet and the ruler should be 10 cm. Write the magnetic field values in the circles in the next page.



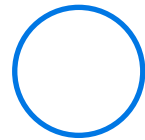
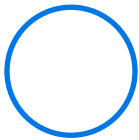
First magnet



North pole (red)

South pole (blue)

Second magnet



North pole (red)

South pole (blue)

- Which magnet is stronger? Explain.

Circle the right answer:

- When measuring the north pole of the magnet (red side) we always obtain a **positive/negative** value.
- When measuring the south pole of the magnet (blue side) we always obtain a **positive/negative** value.

