

MAGNETS



NAME _____ DATE _____

OBJECTIVES: Observe the properties of magnets

METHODS

Materials:

- 2 bar magnets
- 1 compass
- assorted magnets
- 2 round pens or pencils
- various types of metal

Procedure

1. Investigate your magnet. Try different things and write down five observations that you make.

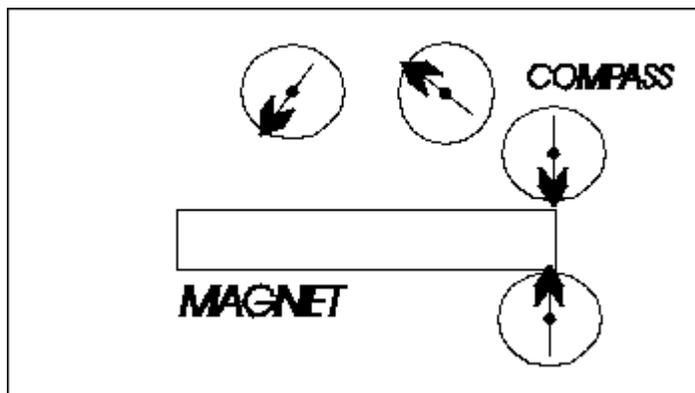
2. The bar magnets are marked with North and South poles. Put the pens under one of the bar magnets for rollers. Use the other bar magnet to determine if like poles attract or repel. Record your findings.

3. Move all of the magnets away from one bar magnet. Put the compass at the end of the magnet marked "N". Draw an arrow on the diagram below showing what direction the pointed end of the compass needle points. Then repeat for the end marked "S".



- Use the compass in the same way to determine the location of the North and South poles for each of the other magnets. Draw a sketch of each one and show the poles.

- Place the magnet in the centre of the magnet diagram on the bottom of the page.
- Put the compass near one end of the magnet. Let the needle stop moving. Note the direction of the needle. Lift the compass and draw an arrow where the compass was. The arrow should point in the same direction as the painted end of the compass needle.



- Move the compass toward the middle of the magnet. When the needle settles, note its direction and draw an arrow as before.
- Repeat this as you move the compass to the other end of the magnet.
- Now start again from a different place near the end of the magnet. Go from end to end at least 3 times. Explore both above and below the magnet.
- When you're done, your arrows show you where the magnetic field is.

MAGNET