Lesson 3: Magnets

An object that attracts certain materials like iron or steel is called a **magnet.** It has two ends that are called **magnetic poles.** One end of the magnet's poles is called the **north seeking pole.** This is because it tries to point **north.** The other pole of a magnet is called a **south-seeking pole.** This is because it always tries to point to the **south.** On the magnet the north seeking pole of the magnet is usually labeled with a **N.** The south seeking pole is usually labeled with an **S.**

What is each end of a magnet called?
A magnetic pole

Magnetic Fields

When you have played with magnets have you ever noticed that they push or pull towards each other? This is caused by the magnetic forces caused by the **magnetic fields.** Magnetic fields are the spaces all around a magnet where the force of the magnet can act. You can't see the field but you know they exist.

The forces between magnetic poles are like the forces of an electric charge. **Opposite** magnetic poles attract and **like** poles repel. The pull of the magnetic charge is strongest at the **poles.** If a magnets ends are not labeled, you can find its poles by finding out where a magnet's pull is the strongest.

Where is the pull of the magnet the strongest?
The pull is the strongest at the poles.

Compasses

For hundreds of years, people have been using magnets to find **direction.** A compass was developed to do this. A compass works because inside it is a north-seeking pole magnetic needle. It is **free turning**. The earth acts like a gigantic magnet. A magnetic field fills the space around the earth. The north seeking needle from the compass points to the earth's **North Pole**.