

Name _____

Date _____

Magnets



Reading and Discussion

Today we are going to learn about magnets. Magnets are pieces of metal which are able to **attract** anything made of iron, or anything that contains iron. They do not usually attract things which do not contain iron. In the pictures of magnets above, there is a bar magnet and a horseshoe magnet.

Let's have a closer look at the bar magnet. All magnets have two ends. These ends are called the **magnetic poles**. There is a **North Pole (N)** and a **South Pole (S)**.



Did you know that if you tie a string to the middle of the bar magnet and let it hang, it will turn around until the north end points north and the south end points south?

Poles which are the same, or **like poles**, **repel** each other. That means they push each other away. Poles which are different **attract** each other, or pull together.

Attraction and **repulsion** are **forces**. The **force** of the magnet is strongest at the poles.



Around every magnet is an invisible **magnetic field**. The magnetic field makes a pattern around and between the poles. We can see the pattern if we place the magnet on iron filings.

Why do you think there is a picture of the earth with the magnets at the top of this page? That's because the earth is like a giant magnet. The magnetic fields are near the earth's north pole and south pole.

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Activities

A. What do you know about magnetism?

Put a cross on the correct answer. The first one has been done for you.

1. A magnet will attract **an elastic band/a paper clip/a cork**.
2. The ends of the magnet are called the **magnesium poles/magnetic points/magnetic poles**.
3. Like poles will **attract/repel/force** each other.
4. Attraction and repulsion are magnetic **forces/fences/poles**.
5. The force of the magnet is **weakest/strongest** in the middle.
6. There is a magnetic **valley/field/hill** around each magnet.
7. The earth is like a giant **force/star/magnet**.
8. The magnetic poles are called **N and S/N and E/S and W**.

B. Which will the magnet attract?

Here is a list of items you might be able to find in your classroom or at home. Test them with a magnet and write them in the correct column.

Paper, pencil, paperclip, nail, cork, screw, crayon, wire, and chalk.

Attracts	Repels

Answer Key

Activity A

1. A magnet will attract **an elastic band/a paper clip/a cork**.
2. The ends of the magnet are called the **magnesium poles/magnetic points/magnetic poles**.
3. Like poles will **attract/repel/force** each other.
4. Attraction and repulsion are magnetic **forces/fences/poles**.
5. The force of the magnet is **weakest/strongest** in the middle.
6. There is a magnetic **valley/field/hill** around each magnet.
7. The earth is like a giant **force/star/magnet**.
8. The magnetic poles are called **N and S/N and E/S and W**.

Activity B

Use objects found in the classroom or brought from home.

Attracts	Repels
Paper clip Nail Screw Wire	Paper Pencil Cork Crayon Chalk