

Explore Magnetism Away from the Classroom!

P01: Introduction to Magnetism (Recommended for Grades 3-5)

Please use the following resources to learn about magnets and magnetism

Watch this Video: Science Buddies: Magnetism and Electromagnetism (for this lesson, you can stop at 3:45)

Answer these questions:

- How many poles does a magnet have? What are they called?
- What different things can happen when two magnetic poles get close to each other?
- What happens when you bring a compass close to a magnet? What does it show you?

Activities: Follow these directions to investigate magnets and how they affect materials in your house.

You will need:

 Magnets (check your fridge door or toy box). If you can find at least 2 different size magnets, you'll be able to do all the activities.

- Different materials:
 - paper clips
 - toothpicks
 - o coins
 - birthday candles
 - silverware

- (more materials)
 - rubber bands
 - string
 - wire
 - paper
 - o nails

<u>Activity #1: Which magnet is the strongest?</u> Put all your paper clips in a pile. Bring each magnet close to the top of the pile, as if it were going to land on it. Slowly raise the magnet again. How many paper clips come along?

<u>Activity #2: Which materials are affected by magnets?</u> Bring your strongest magnet close to each of the different materials. Which ones are attracted to it? Is there a pattern? Are there things that surprise you?

Activity #3: How do magnets affect each other? Hold your strongest magnet. Place your other magnets on a table or the floor. Can you make the other magnets move without touching them? Which ways do they move?

Make observations & use Claims, Evidence, and Reasoning!

- 1. **Claim**: Some magnets are stronger than others.
 - Evidence:
 - Reasoning:
- 2. Claim: Materials that are attracted to magnets are metallic, but not all metals are attracted to magnets.
 - Evidence:
 - Reasoning:

