



SfS Away from the Classroom!

SCIENCE
FROM SCIENTISTS

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:

<ul style="list-style-type: none">• 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.	<ul style="list-style-type: none">• Different materials:<ul style="list-style-type: none">○ paper clips○ toothpicks○ coins○ birthday candles○ silverware	<ul style="list-style-type: none">• (more materials)<ul style="list-style-type: none">○ rubber bands○ string○ wire○ paper○ nails
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Activity #1: Which magnet is the strongest? 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?

Activity #2: Which materials are affected by magnets? 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:**