

## Hands on Chemistry Activity 5

**Topic:** Magnetism

**Learning Objective:** Students will use what they know about following procedures to create slime that is magnetic. They will learn that polymers are special molecules that form in chains and observe how magnets can pull the magnetic slime into long strings.

### Alignment with NGSS Grades 3-5

Crosscutting Concepts and Connections to Engineering, Technology, and Applications of Science  
Structure and Function

- Different materials have different substructures, which can sometimes be observed.

### Performance Expectations

- 3-PS2-3 Ask questions to determine cause and effect relationships of electric or magnetic interactions between two objects not in contact with each other.

### Materials:

- Liquid starch
- Glue
- Iron oxide
- Disposable cups
- Craft sticks
- Magnets
- Tablespoon measure
- Gloves

### Detailed Description

- Activity
  - Check in
    - Recall last week and answer question of the day
  - Discuss Magnetism
    - What are some things that are magnetic? What makes something magnetic, and why do we think it happens? Elicit student ideas and discuss.
  - Slime procedure
    - Distribute and read through the slime procedure with students. After students understand the process, they can get their materials and begin creating their slime.

- Observe slime and magnets
  - Give students small magnets to manipulate their magnetic slime. Explain that polymers are large, stringy molecules that can make things bouncy (like rubber balls), stiff (like plastic), or stretchy (like gum). Students will observe that they can move the slime without touching it with the magnet due to the iron oxide within the slime.
- Clean up & sum up
  - Big clean up! If time, distribute survey to students to ask them for feedback about my teaching, something they learned, and their favorite experiments.

**What science process skills will this lesson exercise?**

Observing, inferring, predicting, experimenting

**Safety precautions**

Students will wear gloves to protect their hands while making the slime. Students will wash their hands at the end of the session.