

Project Exploration creates transformative learning opportunities for youth underrepresented in the sciences –particularly students of color and girls – by equipping them with the skills, practices, and mindset needed for a lifelong pursuit of learning. STEM@Home makes activities around science, technology, engineering, and math accessible and fun to do at home. This STEMbook activity, resources, and more are available at <a href="https://www.projectexploration.org/stemathome">www.projectexploration.org/stemathome</a>.

# In this activity, you will:

discover magnetic forces!



# **Supplies Required:**

1/2c Elmer's washable liquid glue 1/4c liquid starch 1/2c water Small magnets Magnetic wand

### **Video**

What is magnetism? <a href="https://tinyurl.com/hcrl9d2">https://tinyurl.com/hcrl9d2</a>

#### **Overview**

Magnets are objects that produce an area of magnetic force called a magnetic field. Magnetic fields by themselves are invisible to the human eye. Magnets only attract certain types of metals, other materials such as glass, plastic and wood aren't attracted. Metals such as iron, nickel and cobalt are attracted to magnets. Magnetism can attract magnetic objects or push them away. Magnets have a magnetic north pole and a magnetic south pole. If the same pole of two magnets are placed near each other they will push away (repel), while if different poles are placed near each other they will pull together (attract).



### Instructions

- Problem: What do we want to solve? What objects are attracted to magnets?
- Hypothesis: Make a prediction! What objects will be attracted to the magnets? 2.
- Experiment: Test it out and make observations!
- STEP 1: In a bowl add 1/2 cup water and 1/2 cup glue and mix well to combine 4.
- STEP 2: Now's the time to add the magnets and other objects.
- STEP 3: Pour in 1/4 cup of liquid starch and stir well.
- STEP 4: Start kneading your slime! It will appear stringy at first but just work it around with your hands and you will notice the consistency change.
- SLIME MAKING TIP: The trick with liquid starch slime is to put a few drops of the liquid starch onto your hands before picking up the slime. However, keep in mind that although adding more liquid starch reduces the stickiness, and it will eventually create a stiffer slime.
- Place the Magnetic Wand close to the slime and test it out! See what objects attract to the magnet.
- **10.** Analysis: Based on your observations what do we now know? What objects attracted the most? The least? Why do you think this happened?
- 11. Conclusion: Was your hypothesis correct or incorrect?

## **Additional Resources**

- 1. Learn more about magnets with Science Max: https://tinyurl.com/y2488kka
- 2. A video about slime: https://tinyurl.com/yxnkpjuj

#### Share It Out

**Share on social media:** Take a video of your magnetic slime. Explain to your friends and family how magnets work and what your slime pulled in! Use the hashtags on social media:

#MagneticSlime #ProjectExploration #StemAtHome

For more activities like this one, go to www.projectexploration.org/stemhome. If you're interested in learning more about Project Exploration and our free events, programs, and activities, please find us on social media and be sure to follow!







