

## Attract or Repel

**Gallery:** My Big Back Yard

**Course Name:** Magnet Mania

**Grade Level:** 1st

**Activity:** Pre

**Approximate Time Required:** 30 minutes

**Vocabulary:** **MAGNET, ATTRACT, REPEL, MAGNETIC FIELD, NONMAGNETIC, POLE, NORTH POLE, SOUTH POLE, PREDICTION**

### **Objective:**

Demonstrate how magnets attract and repel

### **Materials Needed:**

Two bar or wand magnets per student

Ziploc bag of iron filings - quart size

Magnets of different shapes – round, horseshoe, bar

### **Procedure:**

1. Have them bring north and south poles, north and north poles, and south and south poles of magnets near each other. Have them pretend their hands are the poles and demonstrate what they feel with their hands.
2. Have students take one of the magnets and put bag of iron filings over the magnet and observe what happens to the filings as they take the shape of the magnet's magnetic field. Caution students not to open the bags of iron filings.
3. Have students draw what they observe.
4. Have them repeat step two and three with another shaped magnet.

### **Observations:**

Have students compare their magnetic field drawings with those of other students.

### **Evaluation:**

Using hands as poles, demonstrate what happens as you call out different combinations of north and south poles.

### **Modifications:**

**Georgia Standards:** S1P2a, S1CS3 a, c, S1CS4a, S1CS7, S1CS5a, b,