

**Grade** 2

**Topic** Magnets

**Title** Mysterious Force of Nature

**Standards:**

- 2.1.3 Describe, in both writing and verbally, objects as accurately as possible and compare observations with those of other people.
- 2.2.5 Draw pictures and write brief descriptions that correctly portray key features of an object.
- 2.3.8 Demonstrate and observe that magnets can be used to make some things move without being touched.

**Objectives:**

**Cognitive:**

The learner will predict what will attach to the magnet.

The learner will compare/contrast magnetic and nonmagnetic items.

**Affective:**

The learner will classify magnetic and nonmagnetic items.

The learner will work in cooperative groups to inquire about magnets.

**Psychomotor:**

The learner will manipulate the magnet to see what it will attract.

The learner will initiate what objects to experiment with from a box of diverse objects.

**Materials:**

Teacher Materials:

- Magnet
- Assorted items for testing (metal and nonmetal)
- Sheet of paper with two columns
- A cardboard box for holding items for testing
- String to tie to magnet
- Chart Paper

Student Materials (per 2 students):

- Magnet (1 per student)
- Metal items placed around the classroom (magnetic and nonmagnetic)
- Sheet of paper with two columns
- Clipboards
- Pencils
- Science Journals

**Procedure:**

1. Teacher will pass out magnets to each student.

2. Teacher asks students, "What can you tell me about the item I gave you?" The answers will be an informal pre-assessment for the whole class.
3. Teacher will tie a string to the magnet and lower into the cardboard box of diverse items.
4. Pull out the magnet and show the class what is attached to the magnet.
5. Teacher will ask, "What do you know about magnets?," "Why doesn't it pick up \_\_\_\_\_?," "What can magnets pick up?"
6. Allow each pair of students to take their magnets, two column sheet, clipboard and pencils around the room to explore what items are attracted to the magnet.
7. Students can draw or write items they tested on their two column sheet. They may classify items however they choose.
8. Give the students about 5-10 minutes to explore the classroom and create their lists.
9. Gather the class in a circle on the floor. Discuss what items were attracted to the magnet. Ask students how they sorted the items. Then decide together how the items should be classified.
10. Interactively write on chart paper the characteristics of magnetic and nonmagnetic items. Students will record the characteristics in their Science Journals.

### **Assessment:**

Pre and Post Assessment attached

### **Created by:**

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### **References:**

Ritz, William C. (2007). A Head Start On Science: Encouraging A Sense Of Wonder.  
NSTA Press. Arlington, VA. pg. 109.

**Pre and Post Assessment for “Mysterious Force of Nature” lesson**

**Name** \_\_\_\_\_ **Date** \_\_\_\_\_

1. Name three items that a magnet will attract.

\_\_\_\_\_

2. Why doesn't a magnet attract a plastic cup?

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