

**Project FOCUS
Best Lessons
FIRST GRADE**

Title of Lesson: Magnetism

Theme: Physical Science

Unit Number: 3 **Unit Title:** Magnets

Performance Standard(s) Covered (enter code):

S1CS1

S1P2

Enduring Standards (objectives of activity):

Habits of Mind

- Asks questions
- Uses numbers to quantify
- Works in a group
- Uses tools to measure and view
- Looks at how parts of things are needed
- Describes and compares using physical attributes
- Observes using senses
- Draws and describes observations

Content (key terms and topics covered):

Magnets, magnetic properties, magnet force through materials

Learning Activity (Description in Steps)

Abstract(limit 100 characters): Magnets are powerful enough to work through materials such as cloth, plastic, and paper.

Details: First, divide the classroom into 2 groups. The first group will begin with the activity with the milk jugs. The jugs will be mostly full with water and have numerous paper clips at the bottom. Ask the students to brainstorm and try to find a way to get the paper clips out of the jug without getting their hands wet. After they suggest using magnets, allow them to work together holding the jug and removing the magnets. Once they finish, many of the students will probably want to put the paper clips back in and do it again. In the meantime, the second group will be learning about how magnets work through paper. Each pair of students will have a maze drawn on poster board for a paper clip to follow. They must move their paper clip by moving their magnet from underneath the poster board. One student holds the poster board horizontally flat, while the other moves the paper clip. If more students are put in each group, they can race the paper clips as well. They can trade mazes also to have some variety. After sufficient time has passed, the two groups can switch activities. After both groups had time to test the two materials, I asked the students if the magnets were strong enough to work through their clothing. Immediately, students were placing paper clips on the outside of their clothing and pulling them along through magnets underneath their shirts or inside their pockets.

Next I asked the students to name places they have seen magnets in their homes. Many students talked about refrigerator magnets, and I asked if they would like to make their very own

refrigerator magnet. I passed out construction paper, and each student quickly drew a self-portrait and wrote their names along the bottom. Each picture was approximately 3x5 inches, and they were quite humorous. Next, I had the pictures laminated before attaching magnets for them to take home. The students were excited to tell their parents about what they had learned. Finally, students constructed kites out of tissue paper diamonds, a piece of tape along the back attaching a paper clip, and a piece of tape along the bottom attaching a piece of ribbon. The students flew their kites around the room using magnets to hold the paper clips in the air. They were excited that even their refrigerator magnets could be used to fly their kites.

Materials Needed (Type and Quantity):

1. 2 Pieces of Poster Board
2. Markers
3. Empty, Clear Plastic Milk Jugs
4. Paper Clips
5. Magnets (round, horseshoe, or bar)
6. Construction Paper
7. Adhesive magnetic strip
8. Tissue Paper
9. Tape
10. Ribbon

Notes and Tips (suggested changes, alternative methods, cautions):

The main point of advice I would have would be to use something stronger than tissue paper in making the kites. Several of the students accidentally tore theirs and became upset.

Sources/References:

- 1) Georgia Learning Connections website
- 2)
- 3)