Project FOCUS Best Lessons FIRST GRADE

<u>Title of Lesson:</u> Magnets<u>Theme:</u> Physical Science<u>Unit Number:</u> 3<u>Unit Title:</u> MagnetsPerformance Standard(s) Covered (enter codes):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):

Magnetic force, what are magnets attracted to?

Learning Activity (Description in Steps)

Abstract (limit 100 characters): The students will learn what types of objects magnets are attracted to.

Details: For this experiment, students were put into groups of 4 or 5 and each group was given an assortment of different magnets, and a bunch of different objects including wooden blocks, glass marbles, paperclips, rocks, nuts and bolts (hardware), etc. I told the students to experiment with their magnets and find out what objects they were attracted to. They were provided with a worksheet where they could list every object they tried to stick their magnet to and then they had to circle YES or NO on the worksheet to define whether or not the magnet was attracted to that object. When the students were finished experimenting with the objects I had provided them, I told them to see what the magnet was attracted to around their desk area. They found that the magnets were not attracted to their pencils, gluesticks, etc. But the magnet was attracted to the metal legs of their desk and chairs. After doing this, I discussed why the magnet was attracted to only certain things-- these things had iron in them and were magnetic.

For the second part of the experiment, I set up a small table outside of the classroom with 6 small solo cups filled with about an inch of water. I placed a few paperclips at the bottom of each cup. I also placed a magnet next to each cup. While the class was packing up and doing their closing circle for the day, groups of 4 or 5 students would come out into the hall with me to do this experiment. I asked the students how they would get the paperclips out of the cup without getting wet. After

thinking about it for a moment, they eventually figured out theat they could hold the magnet over the water and the magnetic force would pull the paperclips out of the water.

Materials Needed (Type and Quantity):

Glass marbles Wooden blocks Rocks Paperclips Hardware (nuts and bolts) Magnets (at least one for every student in the class) Water Solo cups

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

The solo cup experiment should be done in small groups in order to prevent the students from spilling the water.

Sources/References:

- 1)
- 2)
- 3)