Magnetic Force

Kindergarten
Activity: 9
Time: 1 Class Period

General Description
Students will investigate how things can move without being touched

Objectives
Students will investigate how to make things move without being touched by another object.

Arizona State Standards
SC00 S1C1 PO1 Observe common objects using multiple senses
SC00 S1C2 PO2 Participate in guided investigations in life, physical, Earth and space sciences
SC00 S1C4 PO1 Communicate observations with pictographs, pictures, models, and/or words
SC00 S5C3 PO2 Investigate how forces can make thing move without another thing touching them. (e.g., magnets, static electricity, air flow)

W00 S1C1 PO1 Generate ideas through class discussion
W00 S1C1 PO2 Draw a picture about ideas generated through class discussion
W00 S3C2 PO1 Participate in crating expository texts (e.g. labels, lists, observations, journals, summaries) through drawing or writing

LS R3 Share ideas, information, opinions and questions

Teacher Background
Students will use the inquiry process to explore how to move things without touching them with something else.

Materials
Variety of magnets (can be purchased in a hardware store or scientific catalog)
Activity Card K-9
Shoe box
Plastic cup
Thin book
Paper clips
Baby food jar
Index card
Pencils

Procedure/Exploration
1. Model for students how to test that a magnetic force can move objects without touching it.
    a. Have a student help you by holding a piece of paper.
    b. Place a paper clip on top of the paper.
    c. Hold the magnet on the underside of the paper and show the students how you can still move the paper clip around without touching it.

2. Give each pair of students a magnet and let them explore the items in the materials list to determine whether or not the paper clip will move.
3. They will record their observations on the Activity Card K-9 circling “yes” or “no”.
4. Have the students answer the following questions.
    a. Can a magnet move a paper clip through an index card?
    b. Can a magnet move a paper clip through a thin book?
    c. Can a magnet move a paper clip through the glass of a baby food jar?
    d. Can a magnet move a paper clip through a plastic cup?
    e. Can a magnet move a paper clip through a shoe box?
5. Let the children share what they discovered and why they think it worked.
    a. Teacher Note: Magnets have magnet fields that fill the area directly next to the magnet.

Magnetic Force

Kindergarten
Activity: 9
Activity Card: K-9

Student's Name: **Date:**

Magnet Strength

Thing	Move? Yes or No
Plastic Cup	Yes No
Baby Food Jar	Yes No
Thin Book	Yes No
Shoe box	Yes No
Index Card	Yes No

APS Power Posse™