

Making a Magnet

Gallery: My Big Back Yard

Course Name: Magnet Mania

Grade Level: 1st

Activity: Post

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.

Identify common objects that are attracted to a magnet.

Materials Needed:

Small nail

Strong magnet

Paper clips

Small washers

Data Table (Column for predictions, and test results)

Procedure:

1. Using a strong magnet, stroke the nail about 20 times in one direction only (large to small end is easiest). Be sure the student is lifting the nail at the end of each stroke and not making a back and forth motion.
2. Have students predict how many paper clips and washers they will attract and record this on their data table.
3. Have student use their magnet to see how many paper clips their magnet will attract. How many washers. Have them record these numbers on the data table.
4. Stroke the nail 20 more times in same direction as before – one direction only.
5. Have them again predict and record on their data table the number of paper clips and washers they will be able to pick up.
6. Have them actual try picking these up and record the results on their data tables.

Observations:

Using a show of hands, determine the number of paper clips and washers attracted in each situation.

Evaluation:

Review data from each student's data table.

Modifications:

For advanced students have them stroke another nail back and forth and attempt to pick up objects.

Georgia Standards: S1P2 a, b, S1CS1, S1CS2a, b, S1CS3a c, S1CS5a, S1CS6, S1CS7

Data Table:

Steps

Number of Paper Clips and Washers

Prediction

Test Number

Steps 2 and 3	Number of Paper Clips (20 strokes)		
	Number of Washers (20 strokes)		
Steps 5 and 6	Number of Paper Clips (40 strokes)		
	Number of Washers (40 strokes)		