Determining Where a Magnet is the Strongest

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:

Determine how magnets attract and repel
Identify common objects that are attracted to a magnet

Materials Needed:

Bar magnet (at least 5 inches long)
Paper clips

Procedure:

1. Hold magnet horizontal
2. Hang paper clips magnetically (not by hooking together) from end, center, and midpoint between end and center.
3. Have students record number of paper clips that can be hung from each position.

Observations:

Have students discuss findings and relate to the location of the strongest part of a magnet

Evaluation:

Check student data for accuracy

Modifications:

For advanced students, try refrigerator, horseshoe, wand magnet with poles in center, and round magnets. Let students determine locations for paper clips and draw conclusions about the strongest part of the different shaped magnets.

Georgia Standards:

S1P2 a, b, S1CS1, S1CS2a, b, S1CS3a, S1CS5a, c, S1CS6, S1CS7a