

Project FOCUS
Best Lessons
FIRST GRADE

Title of Lesson: What is a Magnet?

Theme: Physical Science

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

Performance Standard(s) Covered (enter code):

S1P2 – Students will demonstrate effects of magnets on other magnets and other objects

S1P2 b – Identify common objects that are attracted to a magnet

S1P2 c – Identify objects and materials (water) that do not block magnetic force

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):

Magnet, magnetic field, force, attract, repel, metal, iron, north and south pole

Learning Activity (description in steps)

Abstract (limit 100 characters): In this learning activity, the students will explore what magnets are and what magnets are capable of doing.

Details: The students first watch a video called Magic Metal, part of the Discovery Channel's children's educational series, Blue Dragon. The video introduces magnets and briefly describes what causes magnets to attract some metals. After watching the movie, the children are split up into two groups. One group is challenged to retrieve a paperclip from the bottom of a clear plastic cup using only a magnet and without getting their hands or their magnet wet. The other group goes to their seats and predicts what materials a magnet will attract and writes down their predictions on a piece of paper. They then test their predictions by attempting to stick a magnet to various materials, such as paper, a metal ruler, wood, metal buttons, etc. After testing their predictions, the children write down their observations and whether their initial predictions were correct. The two groups switch so that each student has a turn at both stations. After all children have completed both activities, the entire class gathers on the carpet to discuss their findings.

Materials Needed (type and quantity):

http://www.youtube.com/watch?v=vgFu_SSh6Yc - Blue Dragon: Magic Metal video

Magnets – one per student

Clear plastic cups – 10 (or enough for half of the class to be utilizing at once during paperclip retrieval activity)

Paperclips – 10 (or enough for half of the class to be utilizing at once during paperclip retrieval activity)

Assorted non-magnetic objects (yarn, paper, water, pencils, rubber ball, wooden ruler, etc)

Assorted magnetic objects (metal ruler, paper clips, silverware, etc)

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

During the retrieval of the paperclip from the bottom of the cup, the stronger the magnet used, the easier the retrieval will be for the students. However, if using very strong magnets, be sure to keep them far away from each other at all times (the magnets may quickly attract towards each other, resulting in a surprisingly painful pinch)

Sources/References:

1) http://www.youtube.com/watch?v=vgFu_SSh6Yc - Blue Dragon: Magic Metal