CHILDREN'S MUSEUM OF VIRGINIA PORTSMOUTH

Pre and Post-Visit Activities

What's A Magnet?

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Important Information for Teachers

Thank you for choosing *What's a Magnet?* for your students! This program will cover the following aspects of your SOL's:

K.1 The student will demonstrate an understanding of scientific reasoning, logic, and the nature of science by planning and conducting investigations in which

a) basic characteristics or properties of objects are identified by direct observation;
d) a set of objects is separated into two groups based on a single physical characteristic;
g) a question is developed and predictions are made from one or more observations;
k) objects are described both pictorially and verbally.

K.3 The student will investigate and understand that magnets have an effect on some materials, make some things move without touching them, and have useful applications. Key concepts include

a) magnetism and its effects; and
b) useful applications of magnetism.

K.4 The student will investigate and understand that the position, motion, and physical properties of an object can be described. Key concepts include

b) shapes and forms of objects;
c) textures and feel of objects;

Museum Manners

Please review with students and chaperones prior to your visit to the museum.

1. Please plan to arrive 15 minutes before your scheduled time to allow final counts and payment prior to your visit.
2. Remember to use walking feet.
3. Remember to use inside voices.
4. Teachers and chaperones must stay and explore with their students at all times throughout the museum.
5. Remember to share the exhibits and place items back where you found them.
6. Food and drink are not permitted in the museum.

Vocabulary

North Pole- northern-most point on the Earth's axis.

South Pole- southern-most point on the Earth's axis.

Magnet- materials that create an invisible force, attracting some metals.

Natural Magnets- magnets found in nature; not made by humans.

Artificial Magnets- magnets made by humans.

Magnetic Field- area around a magnet in which an object could be affected by a magnet.

Investigate- carry out a systematic process to discover or examine.

Predict- statement of what is expected to happen in the future.

Classify- to arrange or organize by category.

Pre-Visit Activities

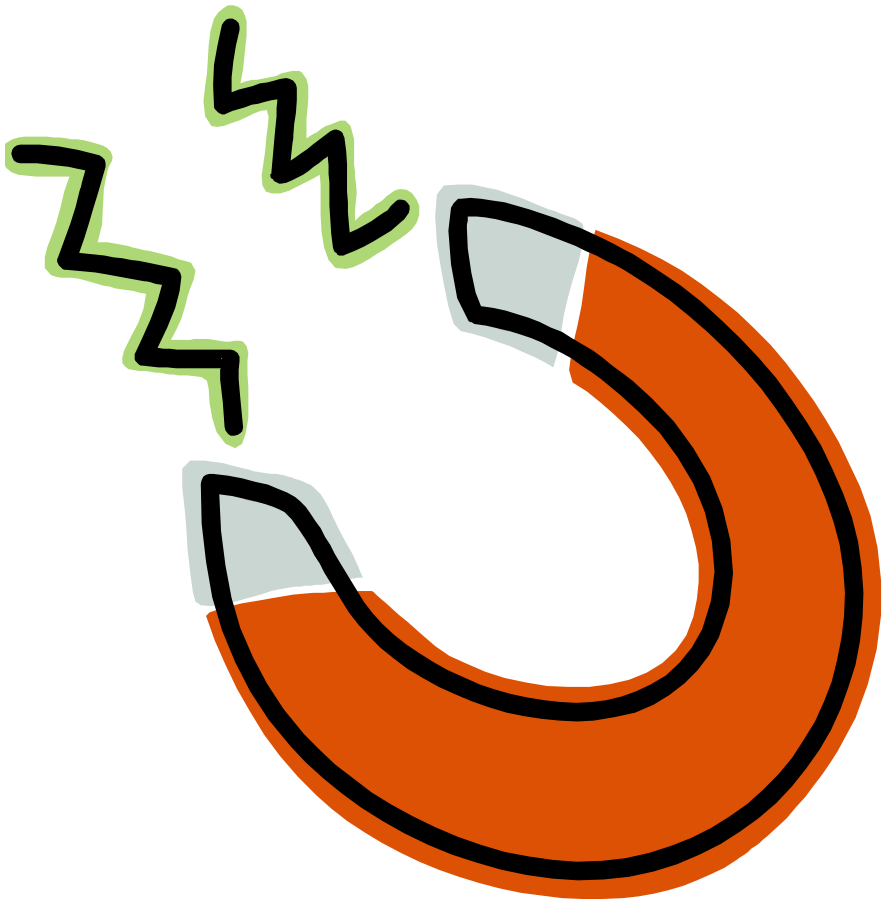
Try these activities before you visit the museum.

Magnetic or Non-Magnetic

Objective: Students will be able to identify magnetic and non magnetic materials. SOL K.3a
Materials: a magnet, a pencil, a rubber band, a paperclip, and other found magnetic/non-magnetic items.
Investigation: Depending on the number of items you have, students may work in groups, pairs or individually. Have them try to pick up each item using the magnet to see which ones are magnetic and which are non magnetic. Students should tell you what they observe.

Push and Pull

Objective: Students will be able to investigate the forces of magnets attracting and repelling. SOL K.3a
Materials: Two magnets per group
Set-up: Make sure your paired magnets have matching markings. For example, the North Poles should have plus sign markings and the South Poles should have minus markings.
Investigation: Have the students note the symbols on the ends of the magnet. Ask them what magnets do. Have them predict what will happen when two same markings are placed near each other. Have them predict what will happen when a plus and minus marking are placed near one another.



Post-Visit Activity

Try this activity after you visit the museum.

Magnets All Around

Objective: Using knowledge from the program, students will be able to identify magnets around their school, home and other places. SOL K.3b
Materials: Pencil, Paper, magnet.
Investigation: Students will investigate different materials and spaces to observe what is magnetic. They can use the scientific method to test if other items attract or repel to their magnet, or to see if there are more items that are magnetic.

*Note for Instructor: Students should also learn that certain objects such as computers, televisions, cellular devices and small appliances should not have a magnet near them due to the large amount of magnetic material inside of them.