Ask Me About Magnets!

Today, an instructor from the Discovery Museum in Acton visited my classroom and led a hands-on program about magnets.

I made a magnetic field viewing box out of a clear plastic container, mineral oil, and iron filings. Ask me to show you what the force around a magnet looks like.

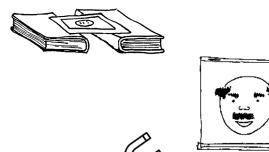
I can also do a neat trick using a pencil and my two new magnets.

Let's discover more with the activity below.



What you need:

- iron filings (ask an adult to help you make filings by cutting steel wool into tiny pieces about 2mm long)
- zip-lock sandwich bag
- stapler
- pencil
- 4"x4" piece of stiff paper (a manila folder cut into quarters works well)
- a magnet



What you do:

- 1. Draw a face without hair on the piece of paper.
- 2. Put 2-3 pinches of iron filings into a zip-lock sandwich bag.
- 3. Place the zip-lock bag over the face and secure it to the paper with two to three staples.
- 4. Shake up the bag to distribute the filings.
- 5. Raise the paper off the table by laying the edges over two books.
- 6. Pull a magnet along the back of the paper to "draw" hair on the face. Try to make beards, bangs, braids, and mustaches!
- 7. For further exploration: use an assortment of magnets with your "funny face" (bar, ring, button, horseshoe.) Do all magnets make the same patterns in the filings?



