



Earth's Magnetism Online Activity

Name: _____ Hour: _____ Date: _____

Directions: Follow the steps below to complete this activity. Stay focused and on task. Stay on the websites to which you are directed. Use the computers appropriately. Do your best quality work. Ask for help as needed and learn. 😊

1. Go to the EMSIB.Weebly.com (both 4th and 5th hours need to do this).
2. Scroll over **Science** and then click on **6th Websites & Resources**.
3. Scroll down to the **Surface Features of Earth: Soil, Agents of Erosion, and Earth's Magnetism** section at the bottom. You will be visiting both of the links at the bottom of this section. You will start with PhET. Click on **PhET Magnetism**.
4. Click the green **RUN NOW!** button. Wait for the program to load.
5. Move the compass all around the magnet. Draw a picture of the **Lines of Force** around the bar magnet below.



6. Click on the box – on the right of your screen - that says **Show Planet Earth**. Move the compass all around the Earth. Draw where Earth belongs on the magnet and draw the correct **Lines of Force**.



Now you will be moving to the next website. Return to the 6th Websites & Resources page.

1. Click on the link **Windows to the Universe - Magnetism**.
2. Read **"Magnetism."** Flip over the paper and continue working on this assignment.
3. Magnetism is one of the main _____ of nature, like the force of gravity.

4. Click on **force of magnetism**. The first picture shows that when two magnets are brought together, the force will attract the two magnets if the poles are _____.
5. Scroll down the page to the bottom section called "***You might also be interested in...***" and click on **Earth's Magnetic Poles**. Answer the following questions as you read.
 - a. If you imagine a gigantic _____ inside the earth, you will have a pretty good idea what _____ is shaped like.
 - b. Of course, Earth does **NOT** have a giant bar magnet inside it. Earth's magnetic field is made by swirling motions of molten iron in Earth's _____.
 - c. Earth's magnetic poles are near, but _____, as the geographic poles.
 - d. Read the rest of the magnetism information on this page. Describe 2 interesting things you learned.

6. Look at the diagram of Earth's magnetic field. Now watch the picture change to the magnetic field of the bar magnet. Are they similar?
7. Under the picture you will find **Related Links**. Click on **Earth's North Magnetic Pole Interactive**.
 - a. Read the paragraph and follow the directions. Can you find the North Magnetic Pole by moving the compass around? Click the box next to **Show Magnetic Pole** and see if you are correct.
 - b. How well (close, somewhat close, way off) does the compass work for showing the geographic North Pole in ...

Mexico? _____	Florida? _____
Alaska? _____	Greenland? _____
 - c. Look at the top of the screen in the first paragraph, find the purple link – **North Magnetic Pole**. Click on it. Read. What is one interesting fact about the Magnetic North Pole? Explain.

Great work! –Turn your extra credit into the **Inbox** by Monday, March 9, 2015 for credit. Late assignments will not be accepted. Study for your Science Test on Tuesday, March 10, 2015.