Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_

**Earth’s Magnetic Field Interactive**  **Windows to the Universe** <https://www.windows2universe.org/?page=/physical_science/magnetism/earth_magnet_dipole_interactive.html>

**Directions:**

1. Open the link above. Read the opening paragraph. Flash is not working and ignore the puzzle piece in the middle of the screen. Click on the link “magnetic field surrounding the earth”
2. Click on the picture of Earth’s magnetic field. The picture will enlarge. Draw, label & color the picture of the Earth’s magnetic field; your picture should fill most of the box below.
3. Click on the solar wind link. What is the solar wind?
4. Read the paragraph. How far does the solar wind blow?
5. What is the heliosphere?
6. Click on the plasma link. What is plasma?
7. Click on the back arrow in the upper left corner of the computer screen. This will take you to the previous page on solar wind. Click on auroral lights. State three facts about the auroras.
*
*
1. Click on the back arrow in the upper left corner of the computer screen. This will take you to the previous page on solar wind. Click on storms. Read the paragraphs. What is a geomagnetic storm?
2. What is the orientation of the IMF?
3. Click on magnetic field. This brings you to IMF. Read the page. How does the Sun’s magnetic field travel?
4. How is the solar wind and magnetic field affected by the Sun’s rotation?
5. What is the boundary between interstellar space and the space dominated by the sun called?
6. Click on heliosphere. How does the magnetic field of the sun move through space?
7. What are Voyager 1 and Voyager 2?
8. Where do scientists describe the location of the Voyagers?

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_**

**Synthesis Essay on Earth’s Magnetosphere**

Directions: Use **all** of the words in the word bank to write an essay describing Earth’s Magnetosphere. **Circle** the words from the list as you use them. Your essay must be written in paragraph form. You may **not** **define** the words. The words must be used in a way that describes the magnetosphere.

**WORD BANK: magnetic field – solar wind – heliosphere - plasma – aurora – geomagnetic storm – IMF - Voyager**