

1. Give, in as much detail as you can, an explanation of what you think happens to ionized particles like those from the solar wind when they enter the Earth's magnetosphere and ionosphere.

In this experiment, cereal will be used to represent the charged particles coming from the solar wind, oil to represent the Earth's magnetosphere, and magnets to represent the alignment of the Earth's magnetic field.

2. Look at the cereal. Describe what is in it.
3. Why do you suppose there are different components to the cereal?
4. As a group, decide how you want to place the magnets. Do you want to place them as a dipolar field with unlike poles facing each other, with like poles facing each other, or just use one?
  - a. How do you want to orient them relative to the beaker?
  - b. Draw a sketch of your magnet placement. Explain why the group chose this configuration.
  - c. Does this configuration represent a specific part of the Earth's magnetosphere or the whole?
5. What do you hypothesize will happen when the cereal is poured into the oil-like substance? Write down your hypotheses.

