


# Student Link

## Lesson Activity for Grade 6 ( *Science: Windows to the Universe: Magnetosphere* )

Student Name: \_\_\_\_\_

### INSTRUCTIONS

Santa Clause supposedly comes from the North Pole and Penguins are in the South Pole, but have you heard about the magnets there too? This lesson takes a closer look at the Earth's magnetic field, otherwise known as the **Magnetosphere**.

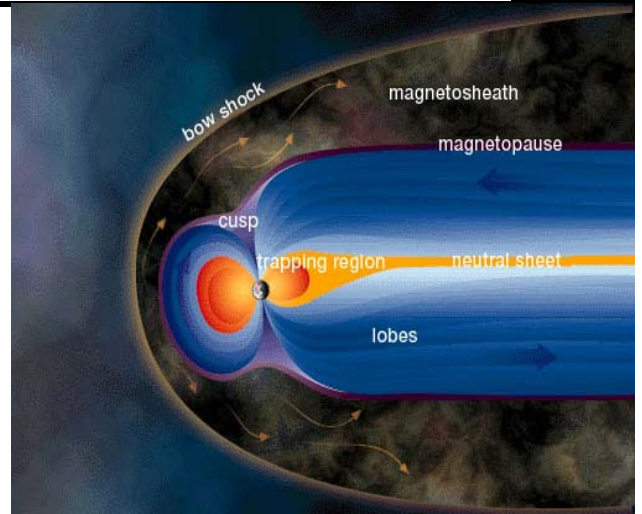
1. Starting from the Grade 6 StudentLink menu, click on **"Science"**.
  2. Next, click on **"Windows: Universe"** under the "Sky and Space" column.
- Then click on  and then **"Magnetosphere"**.



How far out does the Earth's magnetic field reach?

What does the Magnetosphere do for the Earth?

Do other planets have magnetospheres? What is unique about the Earth's?

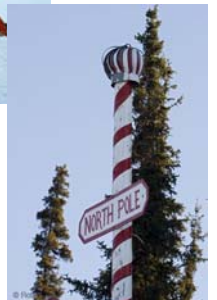


3. You might want to learn more about how magnetism works before we go on. Click on [poles](#).

Explain in your own words what magnetism is.

How does magnetism work?

Why are two opposite poles important in magnetism?



2. Now that we know a little bit more about how magnets work, let's explore the Earth's own magnet. Click on the back button and then click on [solar wind](#).

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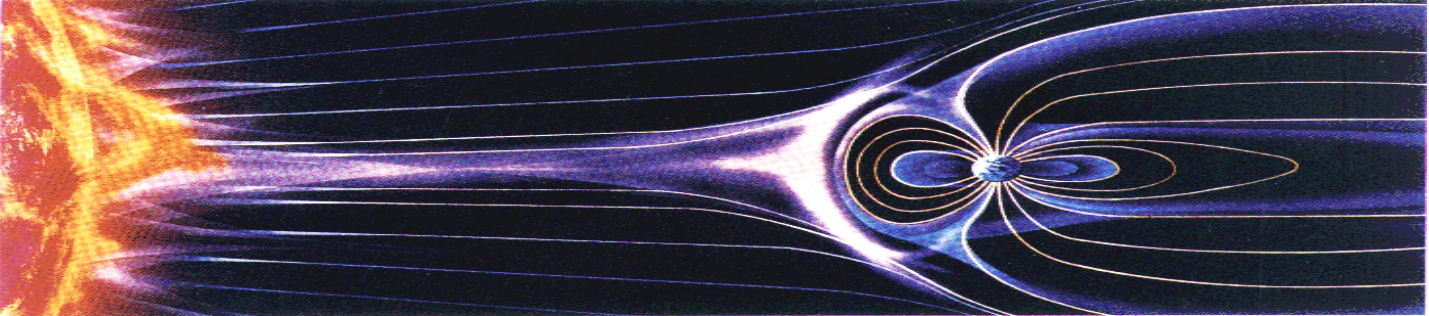
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As mentioned previously, the Earth is protected by its magnetic shield from particles thrown off by the sun. According to the description, why would the Earth need to be protected from the sun?

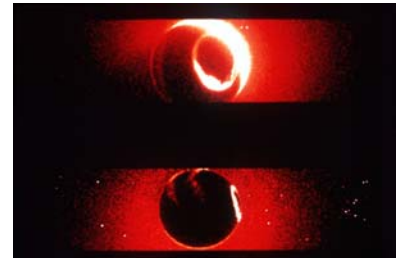


What three things are the solar winds responsible for?

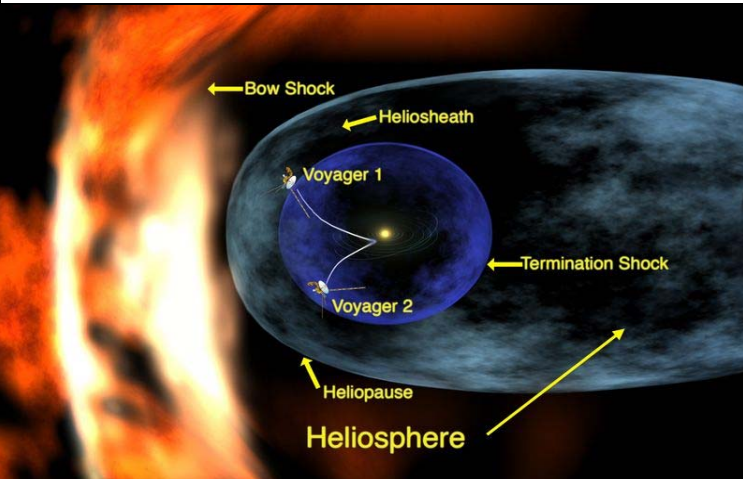
- 1.
- 2.
- 3.

4. Click the back button once and then click on [enters the magnetosphere](#) to learn more about how the magnetosphere protects us.

The graphic illustration on the right depicts how the magnetic shield protects us from the sun's particles. Describe how the magnetic shield does this.



The \_\_\_\_\_ lights are a result of the presence of the Earth's magnetic field.



So you've heard a lot about the aurora lights, but do you want to learn more? Click on [aurora lights](#).

Explain how the aurora is formed. How do charged particles play a role?

