

The Sun: A Diagram

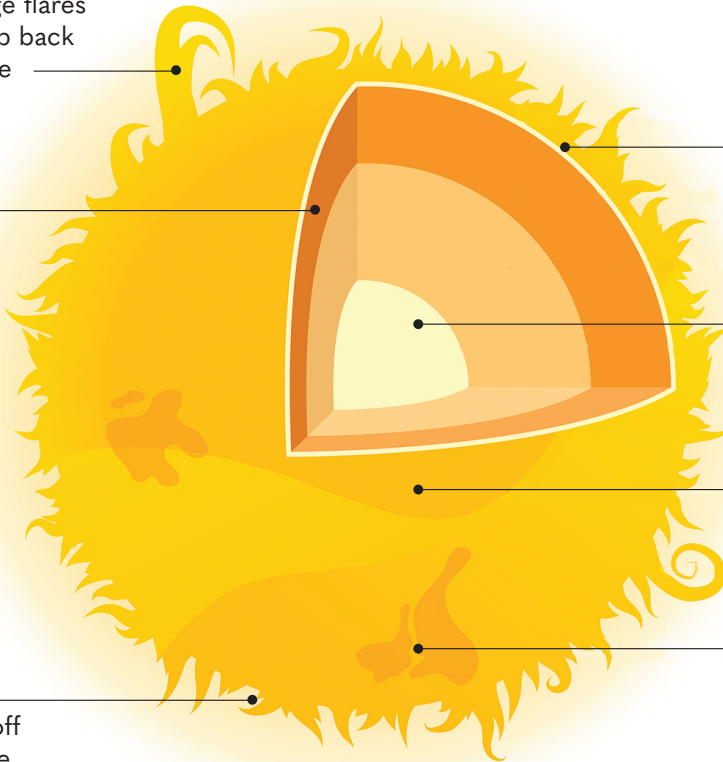
The sun is our star. All of the planets in our solar system orbit around it. It is made of very hot gases, mostly hydrogen and helium, that provide the light and heat for our solar system.

Answer the questions at the bottom of the page using what you have learned.

prominences: large flares of energy that loop back to the sun's surface

photosphere: the visible layer of the sun, but it is cooler than the outer two layers

flares: bursts of energy that flash off of the sun's surface



corona: the outermost surface of the sun. It is only visible during a solar eclipse, and is much hotter than the visible surface of the sun.

core: the hottest part of the solar system. Almost all of the sun's energy is produced here by fusion, and moves outwards.

chromosphere: a reddish color, but it is not visible to the eye normally. We can only see it during a solar eclipse.

sunspots: areas on the sun's surface that appear darker because they are of a lower temperature than surrounding areas

Questions

1. What is the difference between a flare and a prominence?

A flare flashes off of the sun's surface, while a prominence loops back to the sun's surface.

2. What part of the sun produces the most amount of heat and light?

The core produces the majority of the sun's heat and light.

3. What two parts of the sun's outer layer are only visible from Earth during a solar eclipse?

The corona and the chromosphere are both only visible during a solar eclipse.

4. Why are sunspots darker than surrounding areas?

Sunspots are darker than surrounding areas because they are a lower temperature.

5. What part of the sun do we see from Earth?

We can see the photosphere from Earth.