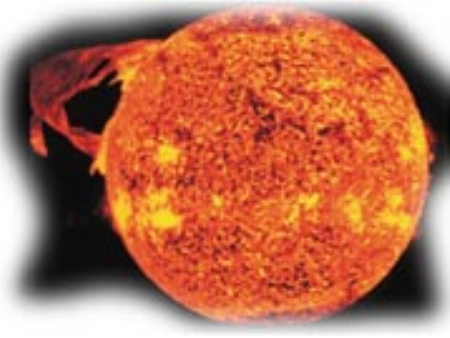




Geoscientists study... SPACE

The Sun is one of more than one hundred billion stars in our galaxy. Nine known planets orbit it. Mercury, Venus, Earth, and Mars are the closest to the Sun. They are the smallest planets and are all rocky. Jupiter, Saturn, Uranus, and Neptune are much larger and are mostly made of gases. The planet farthest out (most of the time) and the smallest is Pluto, and there may be more that are undiscovered.



Asteroids, meteoroids, and comets also orbit our Sun. Did you ever wonder what is beyond the planets and stars? The answer seems to be space and more stars, some with their own planets.

Did you know?

Elements such as calcium and iron are made in stars. These same elements are used by your body for strong bones and healthy blood. Quite literally, you are made of star dust!

Some geoscientists use information from satellites, space probes, telescopes, meteorites and computers to explore the planets of our solar system. They also investigate the moons of the planets, asteroids, comets, meteors, and

even the dust between the planets. They work with biologists and geologists to search for evidence of life on other planets and for the reasons that some animals on Earth, such as dinosaurs, became extinct. What they learn not only leads to exciting new discoveries about other planets and moons, but helps us to better understand Earth and the origin of life. What do we call these geoscientists? **Planetary Scientists**



Did you know?

The surface of the Sun is boiling gases that are about ten thousand degrees (F).

Some geoscientists use radio receivers on Earth, instruments on satellites, and space probes to investigate the Sun and space. They study solar flares, solar

wind, and how the steady stream of electrically charged particles produced by the Sun interacts with the magnetic fields of Earth. These particles occasionally cause

a fantastic light show called the northern lights, or aurora borealis, in the Northern Hemisphere; and, the southern lights, or aurora australis, in the Southern Hemisphere. From their studies of the Sun, they are learning about the solar bursts that cause magnetic storms in Earth's upper atmosphere. These solar storms can disrupt electrical power, computer and telephone communications, and satellite operations. Predicting these storms and their strength has become more important because we now rely on satellites for many things, including weather reports and communications.

What these geoscientists are learning will be increasingly important to us as we continue to explore other planets both in our own solar system and around other stars. What do we call these geoscientists? **Solar and Space Physicists.**

