

Section 13.4 Surveying the Solar System

- 1) What is the Sun mostly made up of? **The Sun is mostly made up of hydrogen.**
- 2) How long is the Sun's diameter? **The Sun's diameter is approximately 1.4 million kilometers.**
- 3) How many times larger is the Sun's diameter compared to Earth? **The Sun's diameter is 110 times longer than the diameter of Earth.**
- 4) Define Sun spot. **A sun spot is a region on the Sun that is cooler and looks darker than its surroundings.**
- 5) Define solar flares. **Solar flares are high temperature eruptions of gases that occur near sun spots. They can cause radio and magnetic disturbances on Earth.**
- 6) Define solar wind. **Solar winds are streams of electrically charged protons and electrons discharged by the Sun. Often associated with sun spots and solar flares.**
- 7) Why is the Sun all "atmosphere"? **The Sun is all "atmosphere" because it is made entirely of gas.**
- 8) What is the second element that the Sun is made of? **The second most abundant element that the Sun is composed of is Helium.**
- 9) What is the energy source of the Sun? **The energy source of the Sun is the process of fusion, where hydrogen is converted into helium.**
- 10) Define corona. **A corona is an irregular shaped halo around the Sun.**
- 11) Define photosphere. **The photosphere is the edge of the Sun where its light comes from.**
- 12) Which planets are the inner planets? **Mercury, Venus, Earth and Mars are the inner planets.**
- 13) Which planets are the outer planets? **Jupiter, Saturn, Uranus and Neptune are the outer planets.**

14) Why is Pluto no longer considered a planet? **Pluto is no longer considered a planet because of its irregular orbit and small size.**

15) Which planet has two moons? **Mars has two moons.**

16) Which is the largest planet? **Jupiter is the largest planet.**

17) Which planet has the highest average surface temperature? **Venus has the highest average surface temperature.**

18) What are the rings of Saturn made of? **The rings of Saturn are made up of ice-covered rock fragments and dust.**

19) What was one of the risks Voyager 2 had to face? **Voyager 2 had to pass through a region containing millions of Asteroids located between Mars and Jupiter.**

20) What is the diameter of the largest known asteroid? **The diameter of the largest known asteroid is 1000km.**

21) What do some asteroids have that could be harmful to Earth? **Some asteroids have orbits that cross the path of Earth.**

22) Define comets. **Comets are small celestial bodies that orbit the Sun and are made up of dust and ice.**

23) What is Earth hit by every day? **Every day Earth is hit by thousands of dust and rock fragments from space.**

24) Why are meteors some times called shooting stars? **Meteors are sometimes called shooting stars because when they enter Earth's atmosphere, they burn up, generating enough light to make them visible.**

25) How long will Voyager 1 be able to send back images and measurements for?

Voyager 1 should be able to send back images and measurements until about the year 2030.