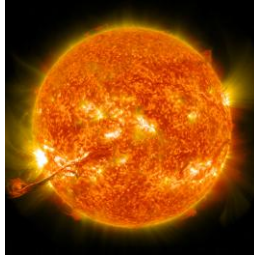


The Sun

Name: _____



PASSAGE

Our sun is a star. A star is a huge ball of hot gases that gives off heat and light. The sun is much bigger than the Earth. The sun's radius is about 100 times bigger than Earth's radius. A million Earth-sized planets could fit inside our sun! The sun looks small to us because it is so far away -- about 93 million miles away from Earth. The sun is the center of our solar system. The solar system is the sun and the system of planets that go around it.

There are eight planets in our solar system. Earth is the third planet from the sun. The Earth travels around the sun. This trip takes one year. The Earth spins around, too. One complete spin takes one day. When we have day, the sun is shining its light on the part of the Earth we are on. When we have night, the sun is still shining! It's because of the Earth's spin that we can't see it. The sun is shining its light on the other side of the Earth when we have night.

Why can we see the sun but not other stars during the day? Our sun makes so much light that it hides the other stars in the daytime. At night, when the sun is not in our part of the sky, we can see the other stars. The sun's light can hurt your eyes. You should never look directly at the sun!

The sun gives off energy. A small part of the sun's energy travels to Earth. It gives us heat and light. Without the energy from the sun, the Earth would be lifeless. There would be no people. There would be no plants. There would be no animals.

Plants need the sunlight. It helps plants make food for us to eat and oxygen for us to breathe. Without plants, there is no food for animals to eat. People eat plants, too. There would be no food for people.

QUESTIONS

1. What is a star?

- A. a huge ball of burning gases
- B. our sun
- C. both A and B

2. Our sun is big enough to hold _____ Earth-sized planets inside it.

- A. eight hundred
- B. a million
- C. a hundred

3. The sun's radius is _____ times bigger than Earth's radius.

- A. 100
- B. 1,000
- C. 10

4. How far away from Earth is the sun?

- A. 93 million miles
- B. 93 miles
- C. 100 miles

5. What is the solar system?

- A. stars
- B. the sun and eight planets that go around it
- C. a system of stars

6. How many planets are in our solar system?

- A. seven
- B. eight
- C. nine

7. How long does it take the Earth to travel around the sun?

- A. one year
- B. one month
- C. one day

8. Plants need sunlight to make _____.

- A. heat and light
- B. food and oxygen
- C. food and water

Earth

Earth is the third planet from the Sun and the fifth largest planet in our solar system. Earth is the only planet in our solar system that has liquid water. The atmosphere of Earth is made up of nitrogen, oxygen, a little carbon dioxide, and some other gasses. This mix of liquid water and atmosphere make Earth the perfect place for us to live!

The Earth orbits around the Sun once every 365 days (365.24 days to be exact). The Earth also rotates, or spins, on its axis once every 24 hours (23.934 hours to be exact). This rotation is what causes day and night. Because the Earth's axis is tilted a little bit, we also get a change of seasons. If the axis of the Earth were straight up and down, the temperature where you live would stay almost the same all year long.



Image courtesy of <http://solarsystem.nasa.gov>

Like Mars and Venus, Earth has volcanoes, mountains, and valleys. Earth has only one naturally occurring satellite, the Moon. From Earth, you can only see one side of the moon.

After reading the information above, fold your paper on the line and try to answer the questions below without referring back to the data. (Check the box with the correct answer.)

1. Which planet in our solar system is the only one known to have liquid water?
☐ Venus ☐ Earth ☐ Mars
2. It takes the Earth about _____ days to orbit the sun.
☐ 635 ☐ 356 ☐ 365
3. Which of the following causes us to have day and night?
☐ the Earth's orbit ☐ the Earth's rotation ☐ the tilt of the Earth's axis
4. Which of the following causes Earth to have seasons?
☐ spinning of the moon ☐ orbit of the Earth ☐ tilt of Earth's axis
5. Earth is the _____ planet from the Sun.
☐ fifth ☐ fourth ☐ third