



Name: _____ Date: _____

The Sun: Important to Our Earth

1 Have you ever looked up into the sky on a clear night? Were you able to see the stars? Our galaxy has over 100 billion stars in it! But did you know that you can see one star during the day? You can because the Sun is a star!



2 Like other stars, the Sun is made up of gases. It is mostly made up of two gases. They are called helium and hydrogen. Hydrogen turns into helium, giving off **massive**, or large, amounts of energy. This energy is the reason why the Sun shines.

3 The Sun is important to life on Earth. In fact, life could not exist without it. It provides us with light, thermal energy, seasons, day and night, and weather.

4 Let's take a closer look at how the Sun affects our Earth.

5 **Energy:**

The center of the Sun is called the core. This is where the Sun's thermal energy is created. The thermal energy is so great that it makes light. This is the light that supports life on Earth. Plants on Earth use this light to make food and the animals and humans then eat the plants.

6 **Seasons:**

Earth **orbits**, or travels around, the Sun once every 365 days. During this time, some areas of Earth are tilted toward the Sun. Those parts get more direct light and thermal energy. This light and thermal energy cause these parts to have spring and summer. The other parts are tilted away from the Sun. They get less direct light and thermal energy. They have fall and winter.

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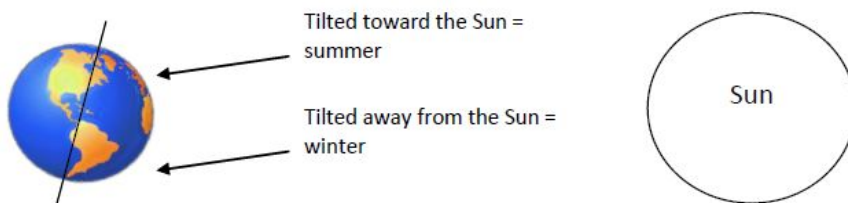


Diagram of Earth's Tilt Toward the Sun

7 Day and Night:

It takes Earth almost 24 hours to make one full rotation, or turn. This is why we have night and day. The parts of Earth that are facing the Sun have day. The parts that are facing away have night.

8 Gravity:

Gravity is the force that keeps everything on Earth from floating out into space. Items with more mass have a stronger pull of gravity than items with less mass. Because the Sun is large and has so much mass, it has very strong gravity. Its gravity keeps Earth and all the other planets in our solar system orbiting around the Sun.

9 Scientists believe that our Sun will eventually burn out. But, do not worry. It will still be around for about five billion more years!



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1. Which one of these is NOT a way that the Sun affects Earth?
 - A. The Sun heats Earth.
 - B. The Sun provides light.
 - C. The Sun causes Earth to wobble in space.
 - D. The Sun's gravity causes Earth to orbit the Sun

2. Which of these is the least **massive** (second paragraph)?
 - A. A mouse
 - B. A dog
 - C. A giraffe
 - D. A whale

3. The diagram in the passage shows—
 - A. how the Sun creates energy.
 - B. how plants use the Sun's energy to make food.
 - C. how the tilt of Earth toward the Sun creates seasons.
 - D. how Earth's rotation causes day and night.



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4. To **orbit** (sixth paragraph) means—
- A. to move around something.
 - B. to spin.
 - C. to fly.
 - D. to sink.
5. Why is the Sun important to Earth?
- A. The Sun creates water.
 - B. The Moon heats the Sun.
 - C. Rain comes from the Sun.
 - D. The Sun provides us with light.