

## The Movement of Earth

Our Earth and sun are parts of a system. Because they are part of a system they have a relationship. Their relationship explains why we have day and night and seasons.

### Day and Night

Earth has periods of light times and dark times. We call these times *day* and *night*. When it is day on one side of Earth, it is night on the other side. We have day and night because the Earth is always turning.

Earth turns, or rotates, on its axis. The axis is an imaginary line through the center of Earth. It goes straight through from the north pole to the south pole. Earth makes a complete rotation on its axis once every 24 hours. One day is one complete turn of the Earth on its axis.



### Seasons

Earth does more than just rotate. It also revolves, or travels around the sun. The trip the Earth takes around the sun is called an orbit. Earth takes 365 days, or one year, to travel all the way around



the sun. Each year is divided into four periods of time called seasons. Each season lasts a few months.

The Earth is divided into parts called hemispheres. The top half of Earth is the northern hemisphere. The bottom half of Earth is the southern hemisphere. The axis of the Earth is not straight up and down, but it is tilted, or slanted, toward the sun. Some part of Earth is always tilted toward the sun, and some part is always tilted away. This helps determine what season it is.

When Earth travels around the sun, the part of the Earth that is tilted toward the sun will receive more sunlight, making it warmer in that hemisphere. The other hemisphere will be tilted away from the Sun, making it colder.

