



# Day and night

The Earth spins through one complete turn in a day. This produces sunrise, daylight, sunset and night.

The Earth does not sit still in space. It is constantly spinning like a top.

## Spinning Earth

The spinning of the Earth is what gives us our day. It takes 24 hours for the Earth to make one complete spin.

From the ground, it is not easy to see that the Earth is spinning at all. Instead, we get the impression that the Earth remains still, while the Sun appears to rise in the east and fall towards the west each day (Pictures 1 and 2).

## Sunrise

Because the Earth is spinning, different parts of the Earth receive sunlight at different times of the day.

When you wake up and see the sunrise, the part of the Earth where you are standing turns out of the shadow (it was in shadow because it was facing away from the Sun) and begins to turn towards the Sun (Picture 1A).

You see this as the Sun just rising above the horizon in the eastern part of the sky.



## Daylight

Daylight lasts for as long as our part of the Earth is turned towards the Sun.

As the morning passes, the Earth turns to face the Sun more directly (Picture 1B). We see

this as the Sun rising in the sky.

The Sun is highest in the sky at midday, or noon (Picture 1C).

## Sunset

After midday, the part of the Earth where we are begins to turn away from the Sun. We see this as the Sun sinking in the sky towards the west (Picture 1D). As the Earth finally turns away from the Sun, the Sun appears to set.

## Night

While the part of the Earth where we are is turned away from the Sun we are in shadow so darkness, or night, occurs.

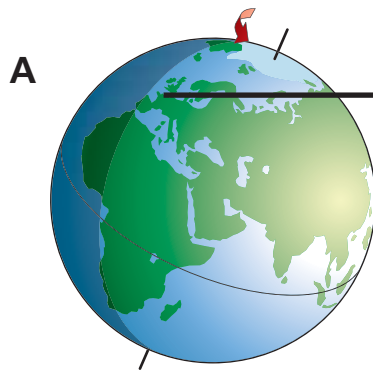
## Summary

- Day and night are caused by the spinning of the Earth.
- The Earth spins towards the east, so that the Sun appears to rise in the east, travel across the sky and sink in the west.

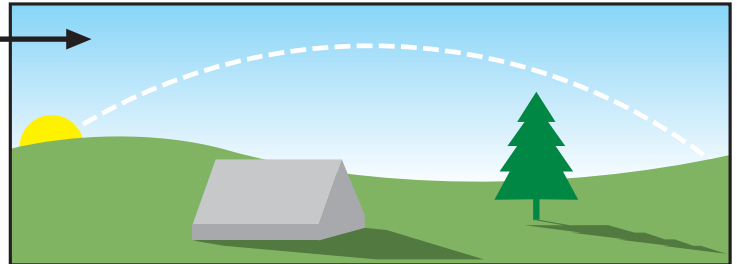


Never look directly at the Sun, especially with binoculars or a telescope. To do so could damage your eyes.

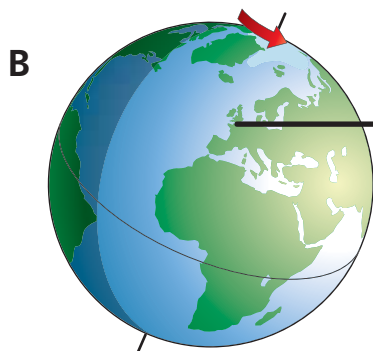
▼ (Picture 1) The spinning of the Earth causes different parts of the Earth to receive sunlight at different times of the day.



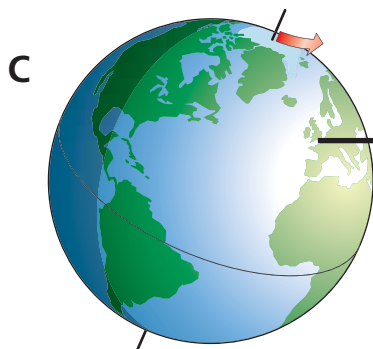
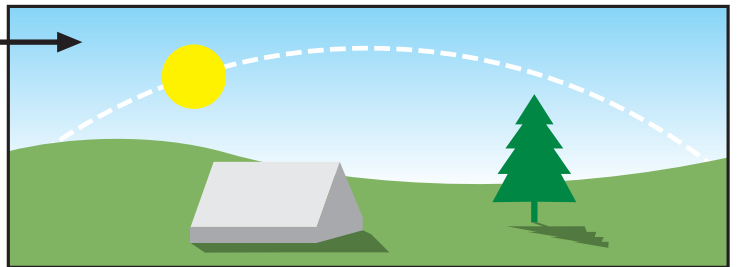
Sunrise



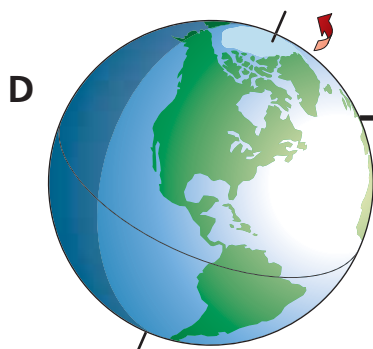
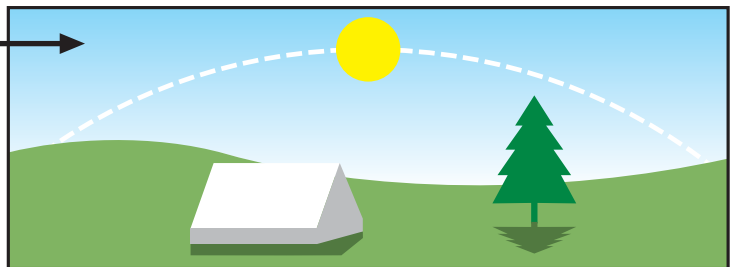
▼ (Picture 2) The Sun appears to move in a curve across the sky, rising at dawn, then reaching its highest at midday before sinking at sunset.



Mid-morning



Midday



Mid-afternoon

