
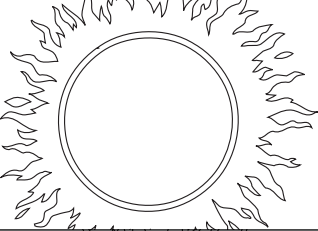


## Guided Notes–Seasons

- Earth revolves around the sun in a path that repeats itself every year.
- This path is called an orbit.
- Earth's axis is not straight up and down but tilted at an angle of 23.5°.
- The North Star is almost directly above the North Pole. Because of this the North Star always stays in the same place in the sky. All the other stars seem to revolve around the North Star.
- This means that Earth's axis of rotation always points in the same direction while it revolves around the sun.
- Because of this the northern hemisphere is tilted towards the sun around the 21st of June. The southern hemisphere is tilted towards the sun about the 21st of December.
- When the Northern hemisphere has summer the southern hemisphere has winter. When the northern hemisphere has spring the southern hemisphere has fall.
- When the northern hemisphere is tilted away from the sun in December, the sun appears low in the sky. The angle of the sunlight hitting Earth is low. This means that the northern hemisphere receives little energy from the sun.
- When the northern hemisphere is tilted toward the sun in June, the sun appears high in the sky. The angle of the sunlight hitting Earth is high. This means that the northern hemisphere receives more energy from the sun.
- In summer the sun is high overhead and the days are longer. This gives the sun plenty of time to heat Earth.
- In the winter the sun is low overhead and the days are shorter. This gives the sun little time to heat Earth.
- The two reasons that we have seasons are:
  - The Earth is tilted
  - The Earth moves around the sun

In the diagram below, label the picture that shows when it is summer in Utah, “Summer;” and the picture that shows when it is winter in Utah, “Winter.”

<p><b>Example A</b> Summer</p>	 
<p><b>Example B</b> Winter</p>	