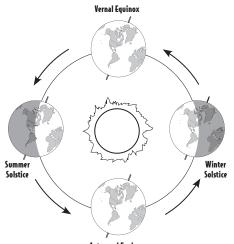
Seasons: The Reasons

- 0 Spring, summer, autumn, and winter bring changes in the
- 9 weather, plant and animal life, and the length of days and nights.
- 21 Seasons change because of three factors. Reason number one: Earth
- 31 is tilted on its axis to one side. Reason number two: Earth rotates, or
- 45 turns, on its axis every 24 hours. Reason number three: Earth
- 56 revolves around the sun once every year.
- 63 There is an imaginary line that runs through the center of the
- 75 Earth. This line is called an axis. The two points where the axis
- passes through the Earth are called poles. The Earth has a North Pole
- and a South Pole. As the Earth moves around the sun, it spins on its
- 116 axis. This spinning, called rotation, causes day and night.
- 125 Our planet is always tilted in one direction towards Polaris, or
- 136 the North Star. The North Pole is always tilted towards this star as
- 149 Earth moves in a path around the sun.
- 157 Our planet is always moving around the sun in a path called an
- 170 orbit. This action around the sun is called Earth's revolution. One
- 181 revolution of Earth takes about 365 days. The days change as Earth
- orbits the sun. The length of the days changes. The temperatures onEarth also change.
- 208 In summer, the Northern Hemisphere, where we live, points
- 217 toward the sun, bringing more direct and powerful sunrays. Summer
- days are longer, and the sun is higher in the sky. Temperatures rise inthe summer.
- 243 In winter, the Northern Hemisphere is tilted away from the sun.
- 252 The sun is low in the sky, even at midday. The Earth has the year's
- 267 fewest daylight hours, and receives the least direct rays from the sun.
- 279 Winter is a time of short days, long nights, and low temperatures.
- 291 Because Earth's axis is tilted neither toward nor away from the
- 302 sun in spring and autumn, equal periods of daylight and darkness result.
- 314 The directness of the sun's rays are changing, causing warming in
- 325 spring and cooling in autumn.
- 330



Autumnal Equinox