

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
88 passes through the Earth are called poles. The Earth has a North Pole
106 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
193 orbits the sun. The length of the days changes. The temperatures on
205 Earth also change.
208 In summer, the Northern Hemisphere, where we live, points
217 toward the sun, bringing more direct and powerful sunrays. Summer
227 days are longer, and the sun is higher in the sky. Temperatures rise in
241 the 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

