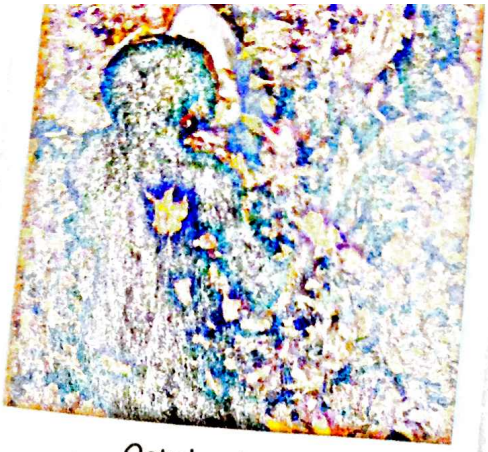
October in the Southern Hemisphere



October in the Northern Hemisphere

Equinoxes Halfway between the solstices, neither hemisphere is tilted toward or away from the sun. This occurs twice a year, when the noon sun is directly overhead at the equator. Each of these days is known as an **equinox,** which means "equal night." During an equinox, day and night are each about 12 hours long everywhere on Earth. The vernal (spring) equinox occurs around March 21 and marks the beginning of spring in the Northern Hemisphere. The autumnal equinox occurs around September 22. It marks the beginning of fall in the Northern Hemisphere.

Reading Checkpoint What is an equinox?

Section 1 Assessment

Target Reading Skill **Using Prior Knowledge** Review your graphic organizer and revise it based on what you just learned in this section. Use it to help answer Question 2.

Reviewing Key Concepts

1. a. **Identifying** What are the two major motions of Earth as it travels through space?
   b. **Explaining** Which motion causes day and night?
2. a. **Relating Cause and Effect** What causes the seasons?
   b. **Comparing and Contrasting** What are solstices and equinoxes? How are they related to the seasons?
   c. **Predicting** How would the seasons be different if Earth were not tilted on its axis?

Writing in Science

Descriptive Paragraph What seasons occur where you live? Write a detailed paragraph describing the changes that take place each season in your region. Explain how seasonal changes in temperature and hours of daylight relate to changes in Earth's position as it moves around the sun.