

Encyclopedic Entry

solstice

midsummer, midwinter

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Solstices now mark the beginning of summer and winter. Because some **ancient European cultures** only recognized these **two seasons** (there was no autumn or spring), the solstices occurred in the middle of the season. Solstices are known as **midsummer** and **midwinter** for this reason.

The **summer solstice** is the longest day of the year, meaning it has the most hours of sunlight. The **winter solstice** is the shortest day of the year and has the fewest hours of daylight.

Solstices happen due to the way the **Earth** circles, or **orbits**, the sun. The Earth is tilted on its **axis**, not straight up-and-down. When the Earth orbits the sun, one half of the Earth is tilted toward the sun, while the other half is tilted away from the sun. The Earth's tilt changes throughout the year, causing the **latitude**, or location, where the sun appears directly overhead at noon to change also.

Around June 22, the Earth's **Northern Hemisphere** is tilted toward the sun. The sun's **vertical** rays strike the **Tropic of Cancer**, 23.5 degrees north of the **Equator**. The June solstice is the longest day of the year in the Northern Hemisphere (the summer solstice) and the shortest day of the year in the Southern Hemisphere (the winter solstice.)

The opposite occurs on December 22, when the Earth's **Southern Hemisphere** is tilted toward the sun. The sun's vertical rays strike the **Tropic of Capricorn**, 23.5 degrees south of the Equator. The December solstice is the shortest day of the year (winter solstice) in the Northern Hemisphere and the longest day of the year (summer solstice) in the Southern Hemisphere.

Since ancient times, many cultures have marked the solstices as the longest and shortest days of the year.

Ancient European **tribes** celebrated midsummer with **feasts** and **bonfires**. Many of these traditions still survive in Europe and countries that have large populations of European (especially **Scandinavian**) **heritage**, such as Canada and the United States. In 1595, the English writer **William Shakespeare** wrote a comic play called *A Midsummer Night's Dream*. The play tells the story of two sets of couples enchanted by a **magical forest** during the summer solstice. Brazil celebrates midsummer with St. John festivals. (Many **Christian** countries **associate** midsummer with the birthday of **St. John the Baptist**. John is a **saint**, or holy man, to Christians.) Brazil's St. John celebrations are among the largest outdoor parties in the world.

Followers of ancient **traditions** also honor the winter solstice. **Monuments** to this event can be seen at **Stonehenge**, in the United Kingdom, and the so-called Intihuatana Stone, or Hitching Post of the Sun at the **Incan** ruin of Machu Picchu in Peru. At these sites, people gathered to celebrate and pray for their survival through the winter. Religious holidays surrounded midwinter as well. In the **Roman Empire**, the midwinter festival (**Saturnalia**) was celebrated the

week of December 25. Early Christians adopted the timing of the holiday for one of their most important holidays, [Christmas](#). [Pagans](#) and neopagans, followers of early European religious traditions, still celebrate the winter solstice as a holiday called Yule.

VOCABULARY

Term	Part of Speech	Definition
ancient	<i>adjective</i>	very old.
associate	<i>verb</i>	to connect.
axis	<i>noun</i>	an invisible line around which an object spins.
bonfire	<i>noun</i>	large outdoor fire.
celebrate	<i>verb</i>	to observe or mark an important event with public and private ceremonies or festivities.
Christian	<i>noun</i>	people and culture focused on the teachings of Jesus and his followers.
Christmas	<i>noun</i>	Christian holiday celebrating the birth of Jesus of Nazareth.
culture	<i>noun</i>	learned behavior of people, including their languages, belief systems, social structures, institutions, and material goods.
Earth	<i>noun</i>	our planet, the third from the Sun. The Earth is the only place in the known universe that supports life.
Equator	<i>noun</i>	imaginary line around the Earth, another planet, or star running east-west, 0 degrees latitude.
feast	<i>verb</i>	to eat large amounts of food, usually to celebrate or honor something.
forest	<i>noun</i>	ecosystem filled with trees and underbrush.
heritage	<i>noun</i>	cultural or family background.
holiday	<i>noun</i>	period of celebration or honor.
Inca	<i>noun</i>	people and culture native to the Andes Mountains and Pacific coast of South America.
latitude	<i>noun</i>	distance north or south of the Equator, measured in degrees.
magic	<i>noun</i>	control of natural or spiritual forces.
midsummer	<i>noun</i>	period around the summer solstice, the longest day of the year.
midwinter	<i>noun</i>	(Dec. 22 in the Northern Hemisphere, June 22 in the Southern Hemisphere) winter solstice.
monument	<i>noun</i>	large structure representing an event, idea, or person.
Northern Hemisphere	<i>noun</i>	half of the Earth between the North Pole and the Equator.
orbit	<i>verb</i>	to move in a circular pattern around a more massive object.
pagan	<i>adjective</i>	following the religious traditions of ancient Europe, including polytheism and nature worship.
Roman Empire	<i>noun</i>	(27 BCE-476 CE) period in the history of ancient Rome when the state was ruled by an emperor.
saint	<i>noun</i>	holy person in Christian religions.

Saturnalia	<i>noun</i>	Roman festival around the winter solstice.
Scandinavia	<i>noun</i>	region and name for some countries in Northern Europe: Iceland, Norway, Sweden, Finland, and Denmark.
season	<i>noun</i>	period of the year distinguished by special climatic conditions.
solstice	<i>noun</i>	astronomical event that occurs twice a year, when the sun appears directly overhead to observers at the Tropic of Cancer or the Tropic of Capricorn.
Southern Hemisphere	<i>noun</i>	half of the Earth between the South Pole and the Equator.
St. John the Baptist	<i>noun</i>	Christian holy man who baptized Jesus of Nazareth.
Stonehenge	<i>noun</i>	prehistoric monument in Salisbury Plain, England.
summer solstice	<i>noun</i>	day of the year with the most hours of sunlight, June 20 or 21 in the Northern Hemisphere and December 21 or 22 in the Southern Hemisphere.
survival	<i>noun</i>	ability to live.
tradition	<i>noun</i>	beliefs, customs, and cultural characteristics handed down from one generation to the next.
tribe	<i>noun</i>	community made of one or several family groups sharing a common culture.
Tropic of Cancer	<i>noun</i>	line of latitude 23.5 degrees north of the Equator.
Tropic of Capricorn	<i>noun</i>	line of latitude 23.5 degrees south of the Equator.
vertical	<i>noun</i>	up-down direction, or at a right angle to Earth and the horizon.
William Shakespeare	<i>noun</i>	(1564-1616) English writer.
winter solstice	<i>noun</i>	(December 22 in the Northern Hemisphere, June 22 in the Southern Hemisphere) longest night of the year and the beginning of winter.

For Further Exploration

Articles & Profiles

- National Geographic News: Summer Solstice Facts
- National Geographic News: Solstice a cause for celebration since ancient times

Websites

- NASA: The Seasons of the Year



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