

Watch the Brain Pop called SEASONS. Take the Review Quiz. Record your answers and notes. Complete the framed paragraph below.

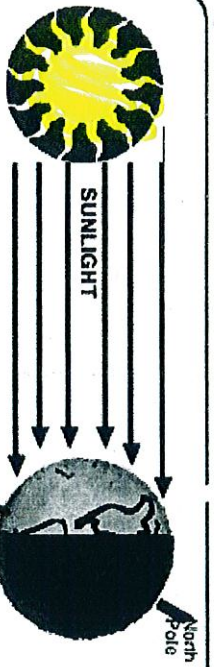


**COMPLETE THE STORY** Fill in the blanks using words from the word bank.

WINTER	TOWARD	NORTHERN	DEGREES	SUMMER	EQUATOR
GRADUAL	DARK	OPPOSITE	TEMPERATURES		

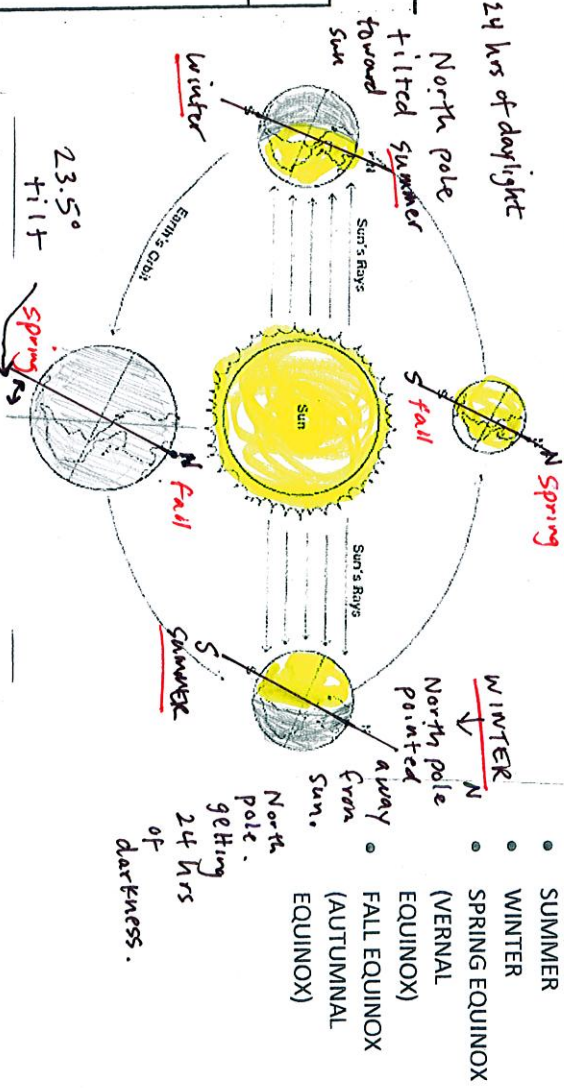
The earth orbits around the sun, spinning on its axis. The axis of the spin is tilted by about 23.5 degrees in relation to the orbit. This tilt makes the seasons change. Without a tilt in the earth's axis, the temperature would stay the same year round. When the North Pole is tilted toward the sun, the days are longer and hotter in the northern Hemisphere. In other words, it's summer. Meanwhile, sunlight is hitting the Southern Hemisphere at an angle. The days are shorter and colder, and it's winter there. Thus, the seasons in the Southern Hemisphere are always opposite of the Northern Hemisphere. Tropical places are located close to the equator, the border of the Northern and Southern Hemispheres. The tropics get the about the same amount of sunlight all year round, so the temperature there do not change much. At the poles, there is no gradual change of seasons: it goes from summer to winter or winter to summer without a fall or a spring. Summer on the Arctic Circle means that there is light out even when you sleep. In winter, the Arctic Circle is all day long.

Complete questions 1-8.



- Answer questions 1, 2, 3 and 4 using the diagram of the Earth shown above.
- Which season of the year would it be at the North Pole?
    - summer
    - fall
    - winter
    - spring
  - Which season of the year would it be at the South Pole?
    - summer
    - fall
    - winter
    - spring
  - Which area would get the most hours of sunlight?
    - North Pole
    - South Pole
    - the Equator
    - the Arctic Circle
  - Which area would have the longest nights and shortest days?
    - North Pole
    - South Pole
    - the Equator
    - the Arctic Circle

What causes the seasons?



On the diagram label the following:

- SUMMER
- WINTER
- SPRING EQUINOX
- FALL EQUINOX (AUTUMNAL EQUINOX)

Explain what causes seasons in your own words.

The earth is tilted 23.5°. As the earth revolves around the sun, the poles can be tilted either forward or away from the sun. If the pole is pointed or tilted toward the sun, it is summer. If the pole is tilted away from the sun, it is winter.



- Answer questions 4, 5, and 6 using the diagram of the Earth shown above.
- Which season of the year would it be at the North Pole?
    - summer
    - fall
    - winter
    - spring
  - Which season of the year would it be at the South Pole?
    - summer
    - fall
    - winter
    - spring
  - Which area would get the most hours of sunlight?
    - North Pole
    - South Pole
    - the Equator
    - the Arctic Circle
  - Which area would have the shortest days and longest nights?
    - North Pole
    - South Pole
    - the Equator
    - the Arctic Circle

