

1. What determines how the height of the sun in the sky at noontime changes through the year?
the tilt of Earth's axis relative to the direction of the noontime sun
the tidal cycle which in turn depends on the position of our Moon
Earth's distance from the sun—closest in summer, furthest in winter
trick question—the height of the sun at noontime does not change during the year
2. If you lived in the Southern Hemisphere, during which months would Autumn occur?
December—February
June—August
March—May
September—November
3. Gradual temperature changes through the seasons are caused by the distance...
from the earth to the sun
from your location to where the central sun ray hits Earth at noon
from your location to the equator
none of the above—temperature changes are determined by God
4. During the month of May in the Northern Hemisphere...
the number of daylight hours slowly decreases each day
the sun is lower in the sky each day at noon
the sun rises and sets farther northward each day
the earth gets closer to the sun each day
5. Which of the following always occurs when the sun is directly above Earth's equator?
an equinox
an eclipse
a new moon
it's noon time
6. In the Northern Hemisphere, the longest number of hours between sunrise and sunset occur...
on the winter solstice
on the vernal equinox
on the summer solstice
on the autumnal equinox
7. Ptolemy thought that the sun revolves around the earth which is fixed in space. Was he...
right—the earth is fixed in space and the sun, moon, and stars revolve around it
partially right—the sun revolves about the earth but only once every year
partially wrong—the sun doesn't revolve on Feb 29 in leap years
wrong—the planets revolve around the earth but the sun does not
8. Absent geographical influences (ocean currents, etc,) it would be warmest at the equator...
on the winter solstice
equally on the vernal and autumnal equinoxes
on the summer solstice
only on the autumnal equinox
9. The apparent motion of the sun across the sky each day is due to...
predominantly the actual motion of the sun around the solar system
predominantly the spin of the earth on its axis
solely the spin of the earth on its axis
solely the actual motion of the sun around the solar system
10. At noon on the Northern Hemisphere Winter Solstice, the sun is directly overhead on...
Greenwich—longitude 0
some place on the Arctic circle
some place on the Tropic of Capricorn
the South Pole