



CLICK "VIEW"
* FULL SCREEN

THE REASON FOR THE SEASONS

FOURTH GRADE SCIENCE ENRICHMENT - ASKEW

*Answer questions 1-4 by reading
the information and looking
carefully at the diagrams.*

#1) *Is the United States in the Northern or Southern hemisphere?*

Northern Hemisphere



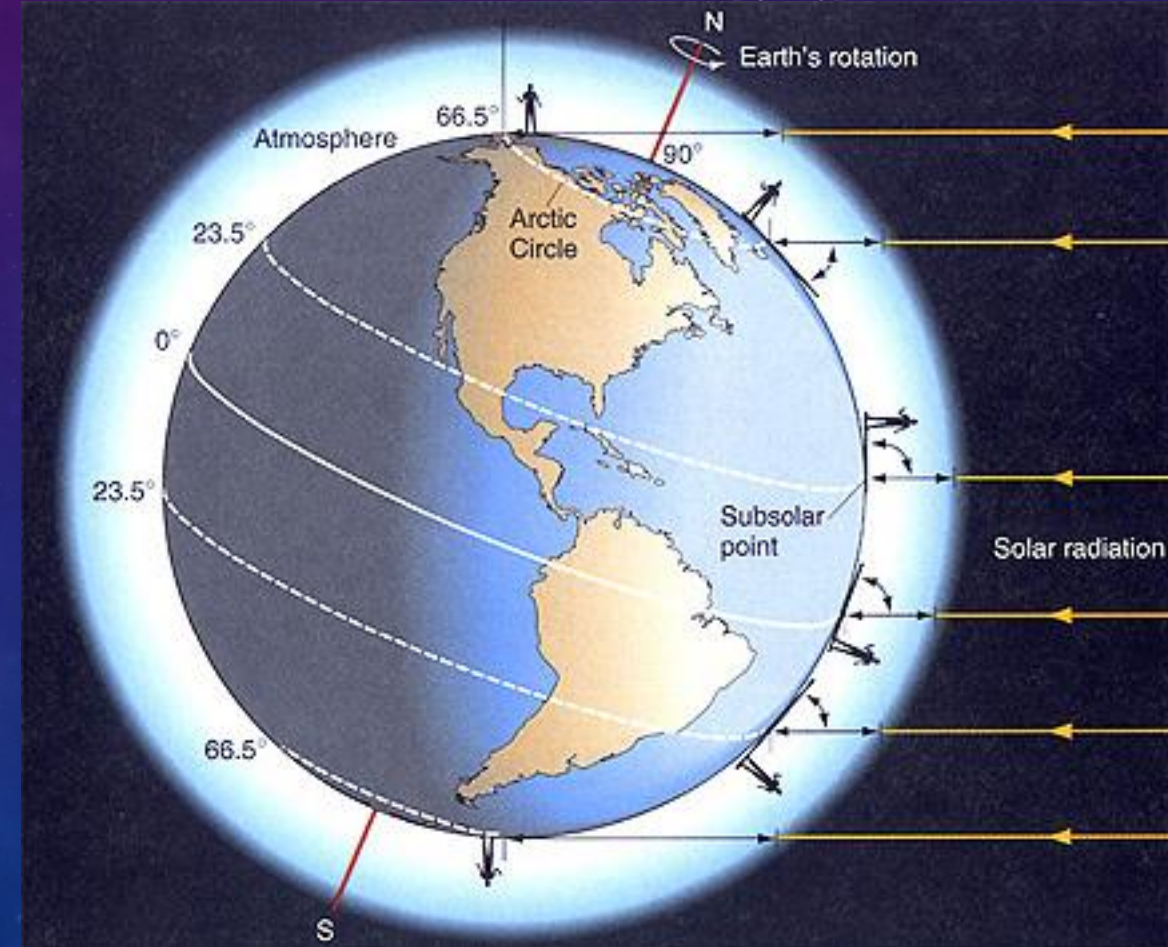
Equator 0°



Southern Hemisphere

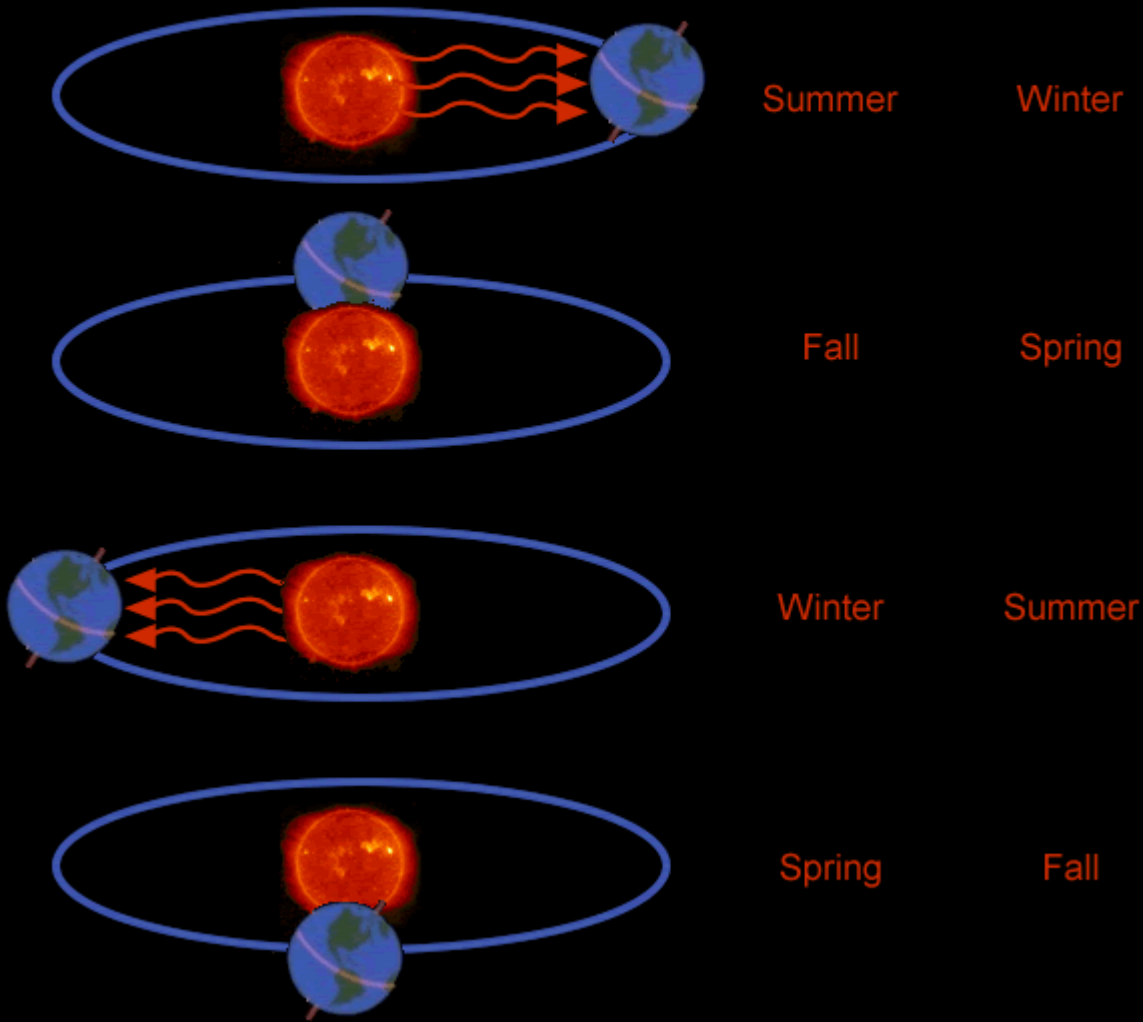
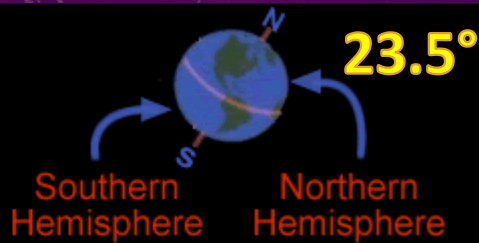


Hemisphere



*The prefix hemi-
means "half."*

Earth's tilt is the reason for the seasons!



#2

- *During the year, the seasons change depending on the amount of sunlight reaching the Earth as it revolves around the Sun.*
- *The seasons are caused as the Earth, tilted on its axis, travels in a loop around the Sun each year.*
- *Summer happens in the hemisphere tilted towards the Sun, and winter happens in the hemisphere tilted away from the Sun.*

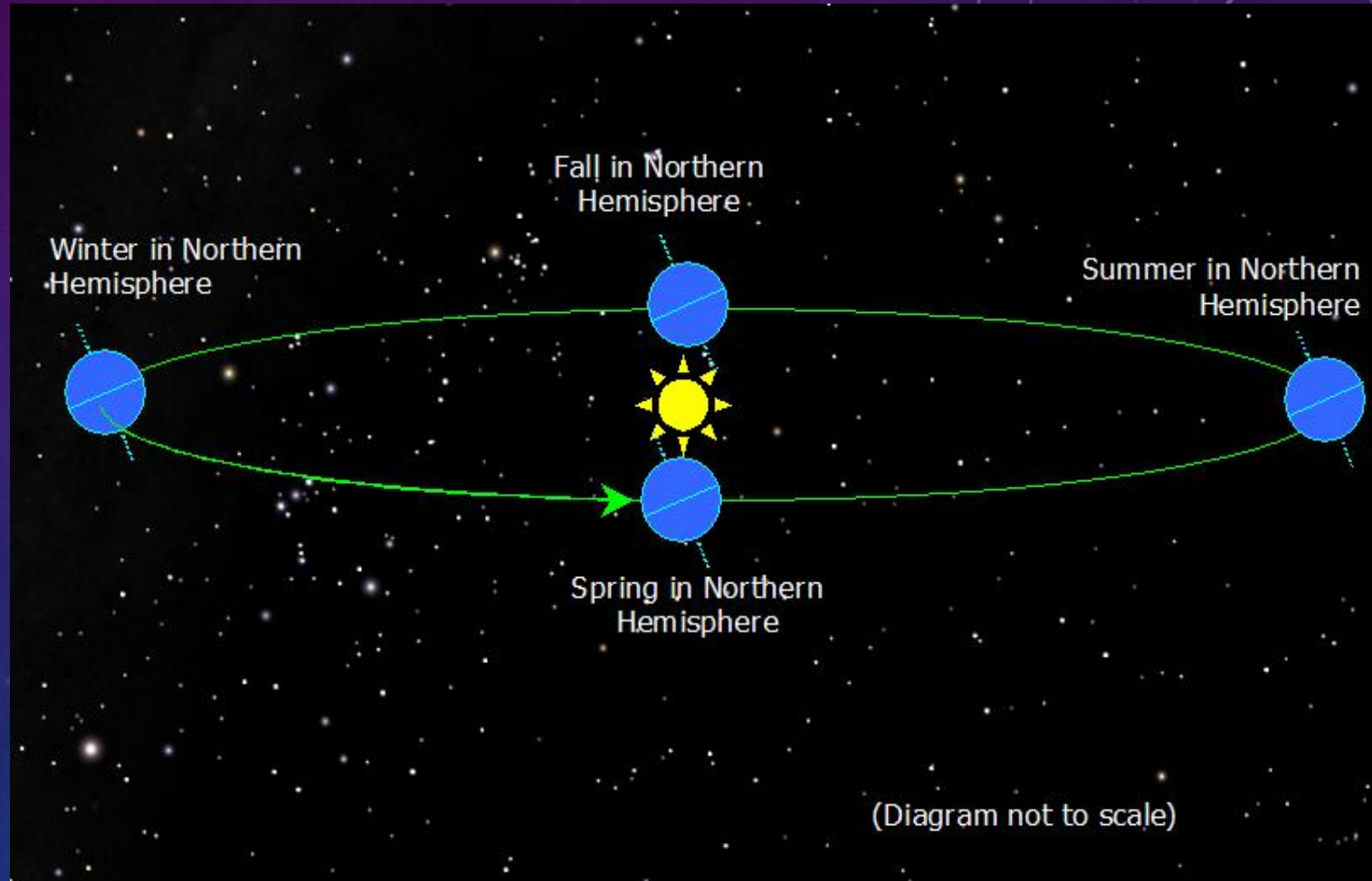
#3

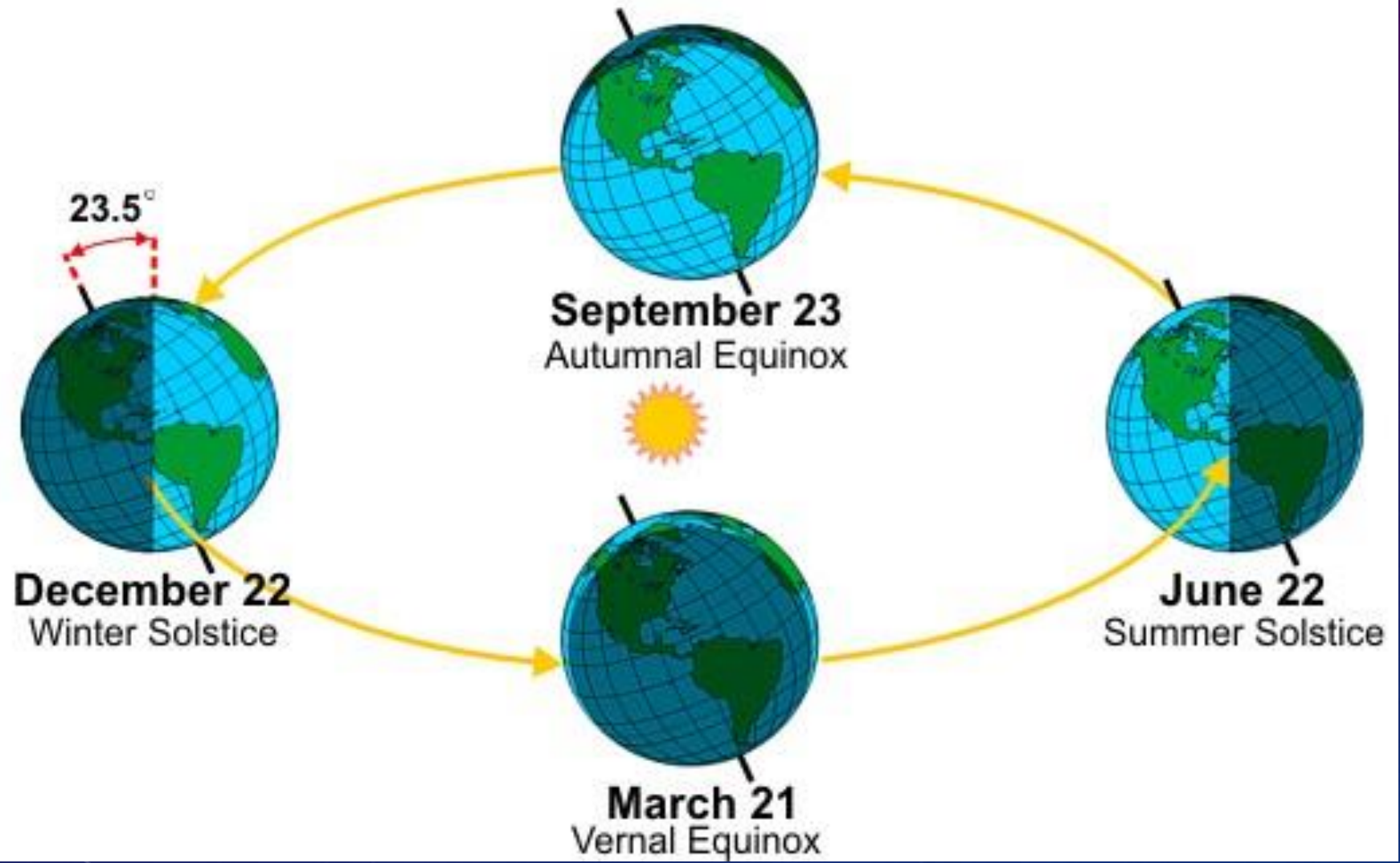
Why do we have seasons?

There is a **misunderstanding** that the earth's distance from the sun causes the seasons. If that were the case, then the whole planet would experience summer at the same time and winter at the same time. *However, this is not true. When it is summer in the northern hemisphere, it is winter in the southern hemisphere.*



In fact, the **REAL** reason for seasons is the **tilt of the earth**. The earth's axis is tilted by about 23.5° from vertical. This tilt remains the same as the earth orbits around the sun.





Notice where sunlight is shining on the United States in the northern hemisphere.

#4

What do you think this has to do with our climate and temperatures during the seasons?