Q: Why do we have seasons?

A: 1. Revolution = Earth's yearly orbit around the sun

- Elliptical orbit
- Closest to sun = January 3
- Farthest from sun = July 4

## 2. Tilted Axis = 23.5°

- this tilt causes seasons
- tilted away from the sun = shorter days
- tilted toward the sun = longer days (I.e. "Land of the Midnight Sun")

## 3. Radiation

- Sun's rays hit Earth at different angles
- Solstice = day when the Sun reaches its greatest distance north or south of the equator
  - Winter Solstice First Day of Winter December 21st
  - Summer Solstice First Day of Summer June 21st
  - Opposite in the Southern Hemisphere
- Equinox = number of daylight/ nighttime hours is nearly equal all over the world
  - Fall Equinox First Day of Fall September 22nd
  - Spring Equinox First Day of Spring March 21st

## Curved Earth = Sun rays hit Earth at angles



