# **Notes for Earth's Seasons**

## Earth's Tilt

- Earth is tilted on its axis by 23.5 degrees
- Earth's tilted axis is the reason for the seasons

#### <u>Winter</u>

- Hemisphere is tilted away from the Sun
- Light strikes at an angle less intense sunlight
- Sun sits lower in sky shorter day
- Less intense light and shorter days = colder temperatures

#### <u>Summer</u>

- Hemisphere is tilted towards the Sun
- Direct sunlight more intense
- Sun sits higher in the sky longer day
- More intense sunlight and longer days = warmer temperatures

## **Hemispheres**

- Equator divides Earth into two hemispheres north and south
- Hemispheres experience opposite seasons
- <u>Solstices</u>
  - Longer and shortest days of the year
  - Winter solstice shortest day December 21 in northern hemisphere
  - Summer solstice longest day June 21 in northern hemisphere

### **Equinoxes**

- Earth is not tilted towards or away from Sun
- Equal hours of daylight and night
- Spring (Vernal) Equinox March 21 in northern hemisphere
- Autumn Equinox September 21 in northern hemisphere