



Seasons

The Reason for the Seasons

1. The **longest day** of the year for us (in the Northern Hemisphere) occurs on:

B) June 21

The Summer Solstice

The Reason for the Seasons

2. The **hottest** month(s) of the year for us in the Northern Hemisphere are usually:

B) July & August

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3. Planet Earth is **closest to the Sun** during the month of:

B) January !

Date	Earth-Sun Distance	Date	Earth-Sun Distance
January 12	147,122,000 km (91,417,000 miles)	July 12:	152,076,000 km (94,496,000 miles)
February 11:	147,623,000 km (91,729,000 miles)	August 17	151,470,000 km (94,119,000 miles)
March 26:	149,206,000 km (92,712,000 miles)	September 14:	150,499,000 km (93,516,000 miles)
April 10:	149,891,000 km (93,198,000 miles)	October 15:	149,194,000 km (92,705,000 miles)
May 23	151,452,000 km (94,108,000 miles)	November 16	147,534,000 km (91,673,000 miles)
June 15	151,947,000 km (94,415,000 miles)	December 15:	147,249,000 km (91,496,000 miles)
Perihelion		Aphelion	
Jan 4	147,097,641 km (91,402,237 miles)	July 4:	152,087,478 km (94,502,778 miles)

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4. Seasons in the **Southern Hemisphere** are:

D) Exactly opposite
Of Northern Hemisphere

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5. Summer for us in the Northern Hemisphere occurs because:

**C) The Earth's Tilt
towards The Sun!**

As North Pole **tilts toward the sun**, the Northern Hemisphere has **longer days** and **shorter nights**... & vice versa

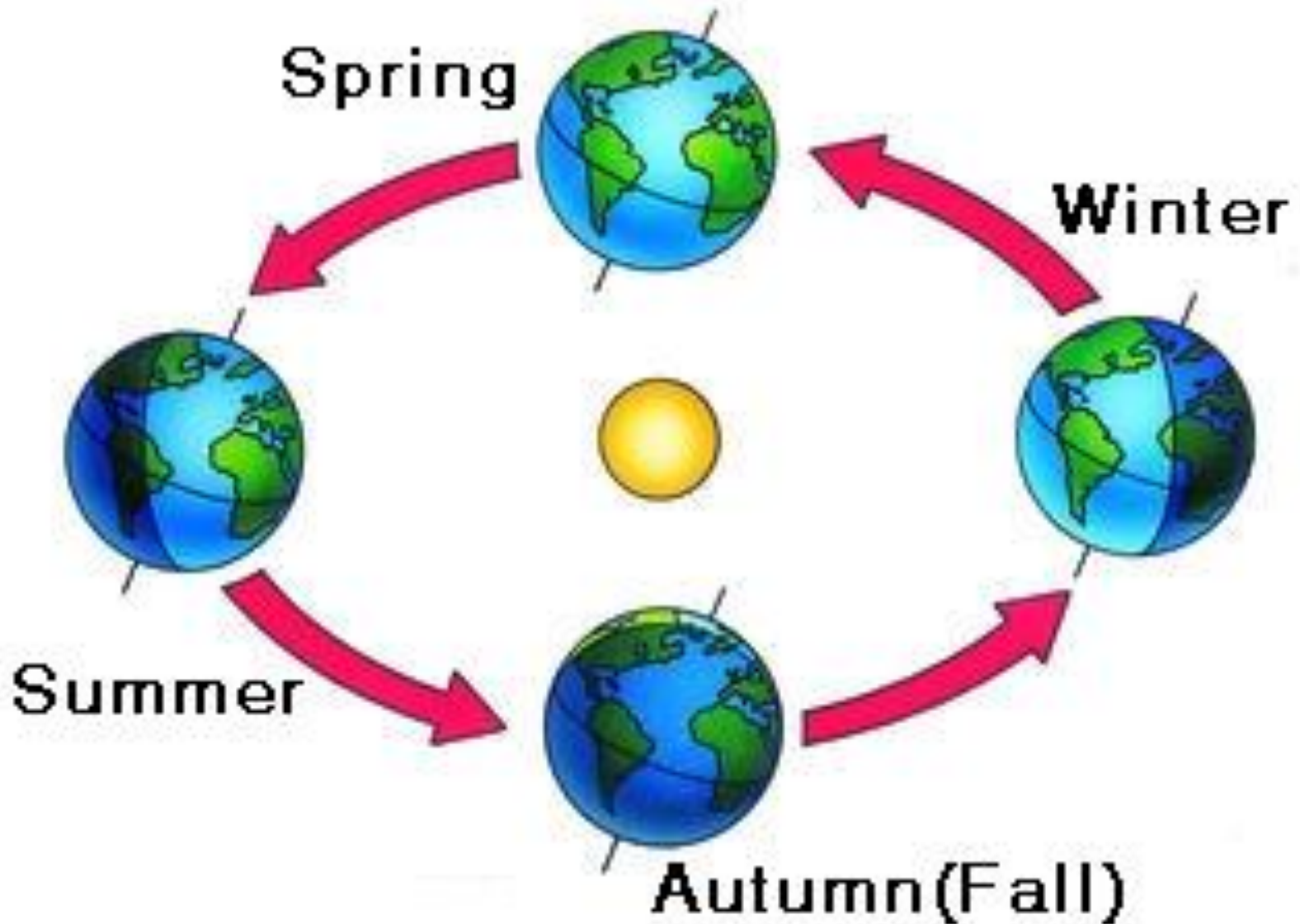
Longest Days & Most Direct Sunlight = **SUMMER**



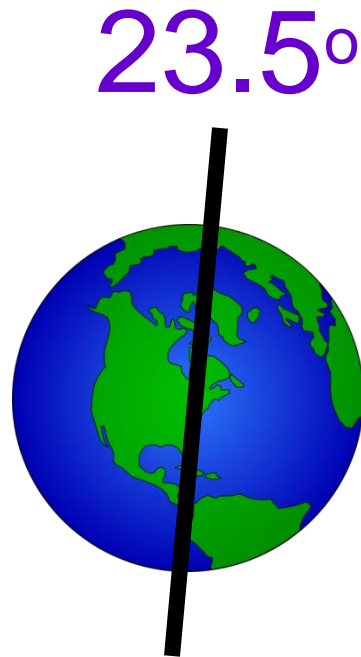
Shortest Days & Least Direct Sunlight = **WINTER**



... The SEASONS



The SEASONS are caused
by Earth's tilted axis

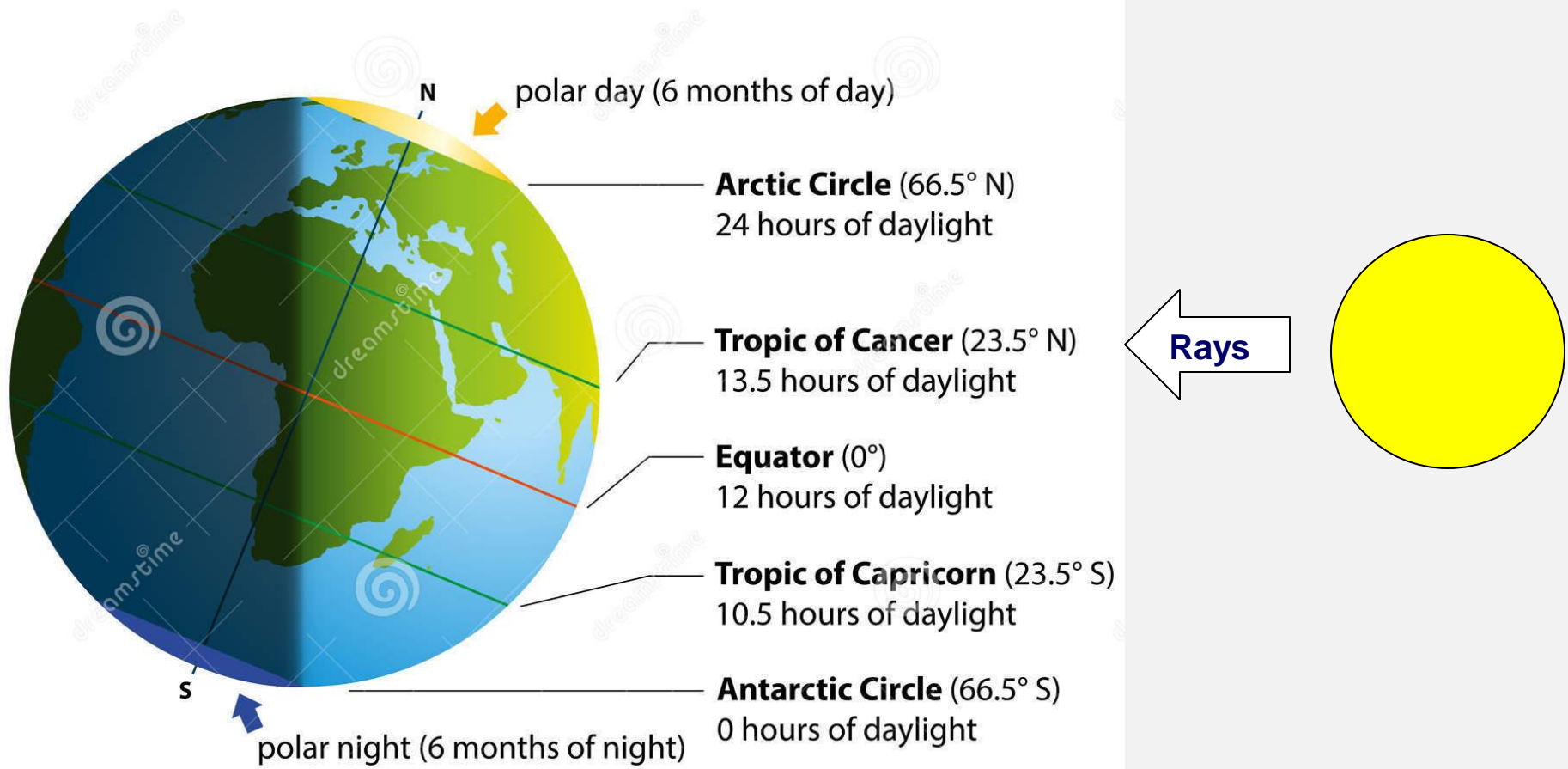


Summer Solstice

- Is the longest day of the year in Northern Hemisphere
- It occurs when the N. Pole tilts toward the sun and the sun rays hit the Tropic of Cancer at 90°
- Sun is highest in sky
- Occurs on June 21-22

Arctic Circle has 24 hrs of daylight!

summer solstice (June 21)

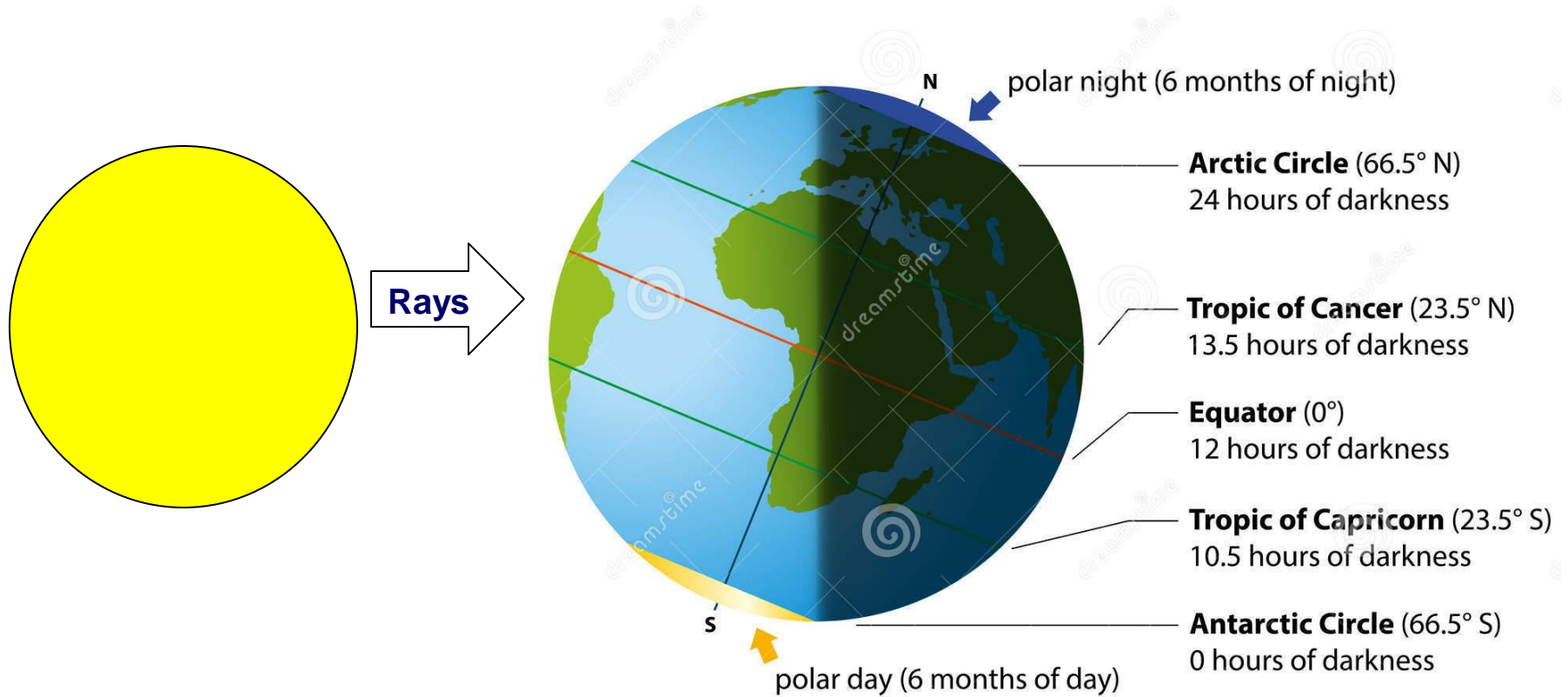


Antarctic Circle has 24 hrs of night!

Winter Solstice

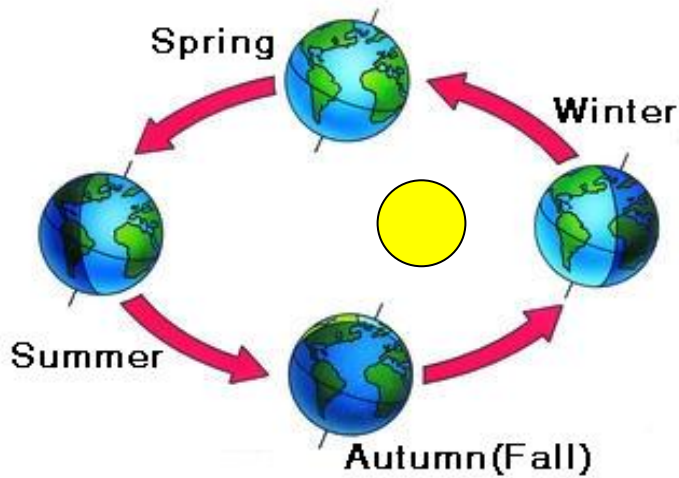
- Is the shortest day of the year in Northern Hemisphere
- Occurs when N. Pole tilts away from the sun and sunrays hit the Tropic of Capricorn at 90° angle
- Sun is the lowest in sky
- Occurs on December 21-22

winter solstice (December 21)

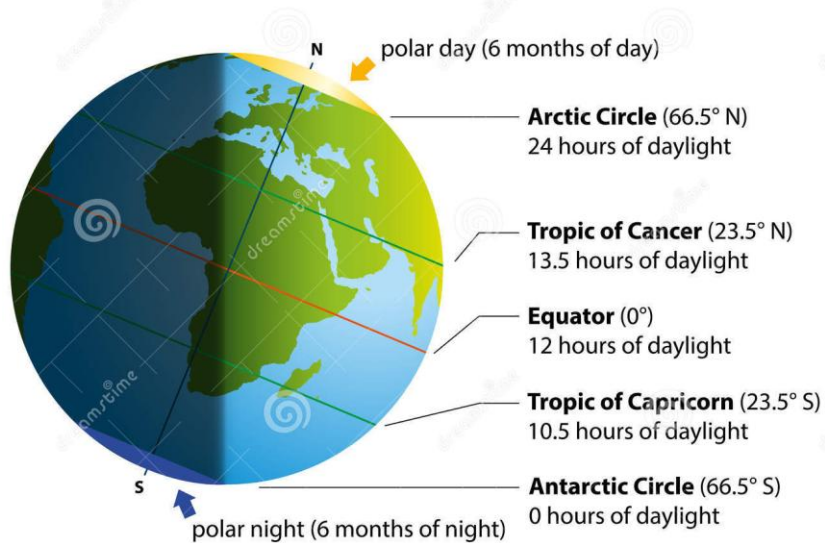


Arctic Circle has 24 hrs of night!

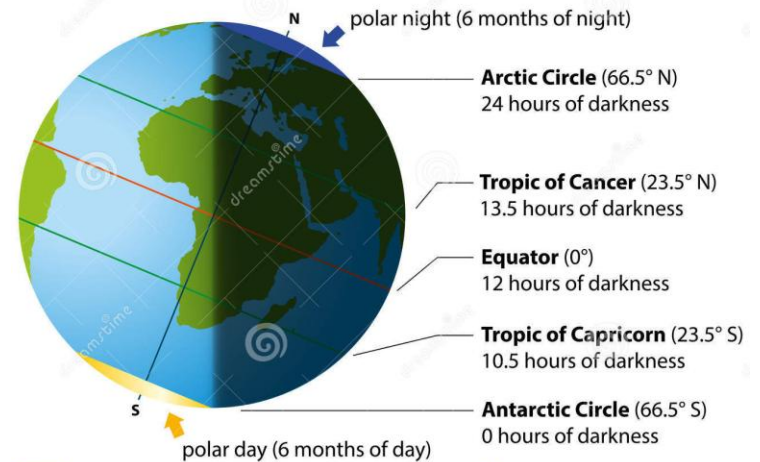
Antarctic Circle has 24 hrs of day!



summer solstice (June 21)



winter solstice (December 21)



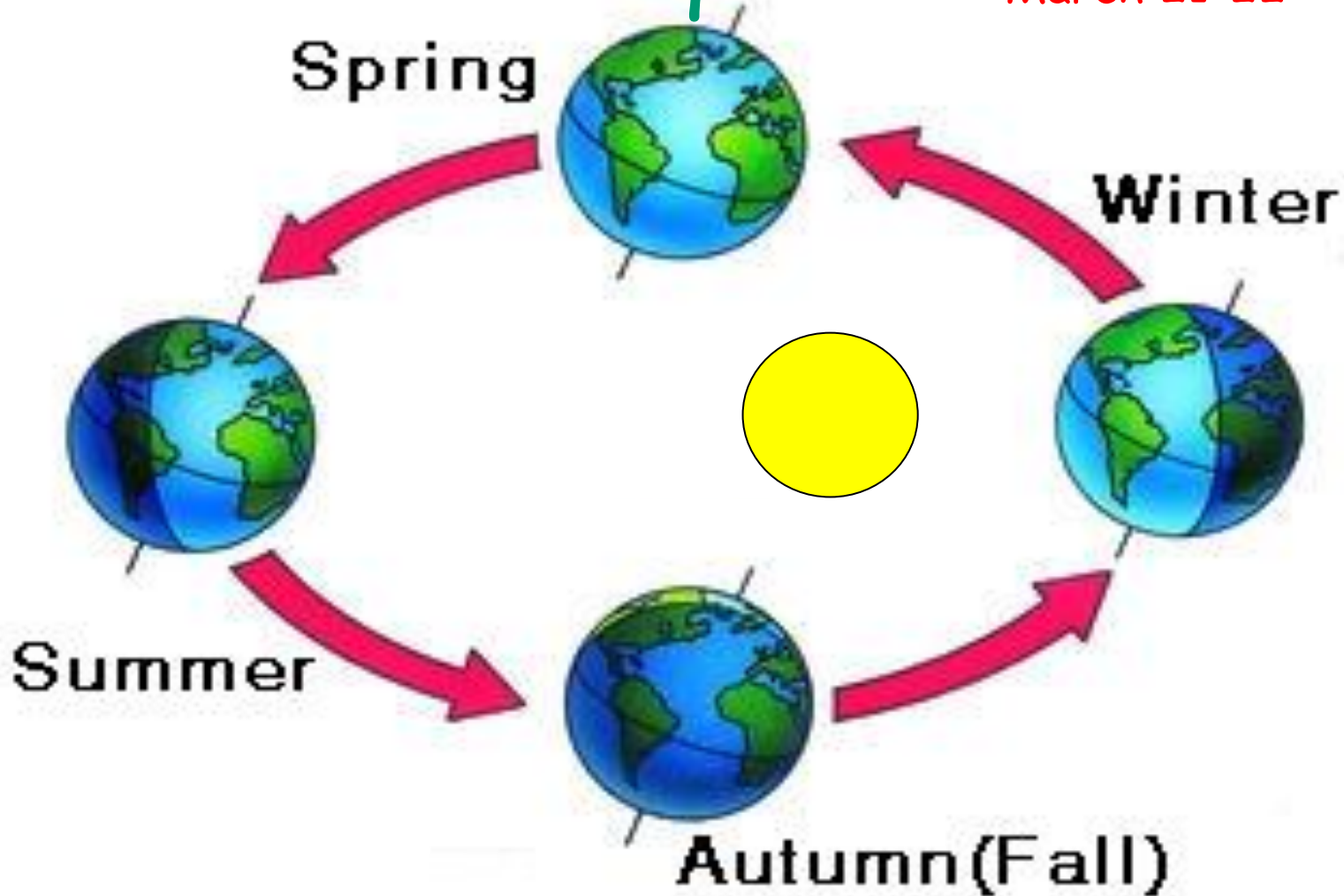
Antarctic Circle has 24 hrs of daylight!

Autumnal (Fall) Equinox

- Equal hours of day and night (12 and 12)
- Sunrays hit the equator at 90° angle
- North Pole does NOT tilt to or away from Sun
- Occurs on September 22-23

Vernal Equinox

March 21-22



September 22-23

Autumn Equinox

Vernal (Spring)Equinox

- Same info as autumnal equinox except it occurs on March 21-22
- Sunrays strike equator at 90° angle
- North Pole does NOT tilt to or away from Sun
- Equal hours of day and night