

Earth & The Seasons

Let's Review





- How does the Earth *rotate*?
 - Spins on its axis, tilt of 23.5°
 - Takes 23 hours and 56 minutes

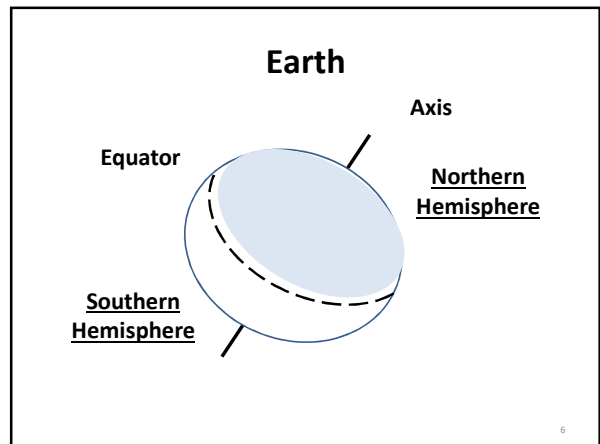
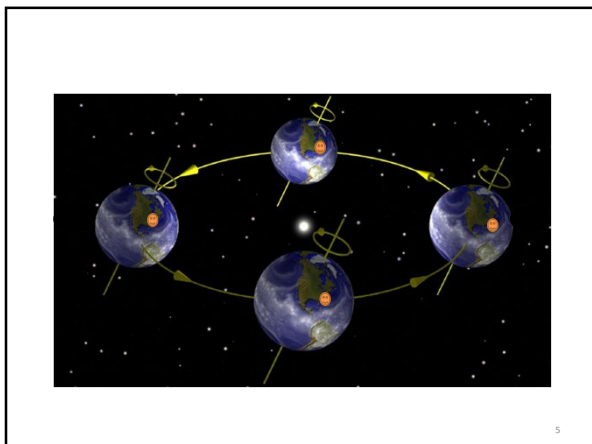
Let's Review

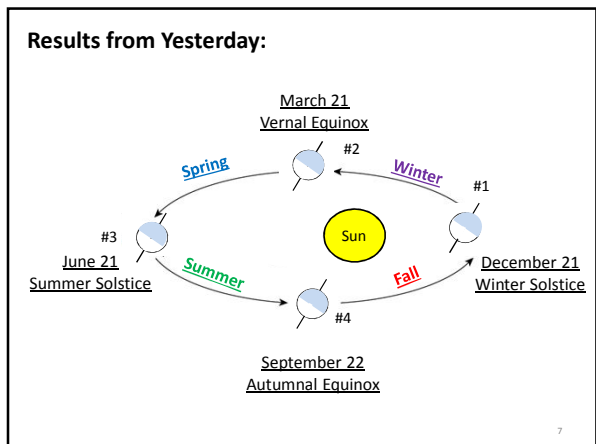
- How long does it take the Earth to *revolve*?
 - 365.25 days

Let's Review

- How many seasons are there?
 - 4! Summer, Fall, Winter & Spring

| | |
|--|---|
|  Winter |  Spring |
|  Summer |  Autumn |





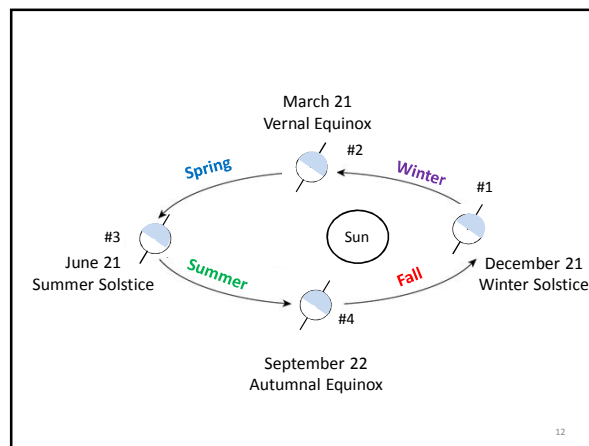
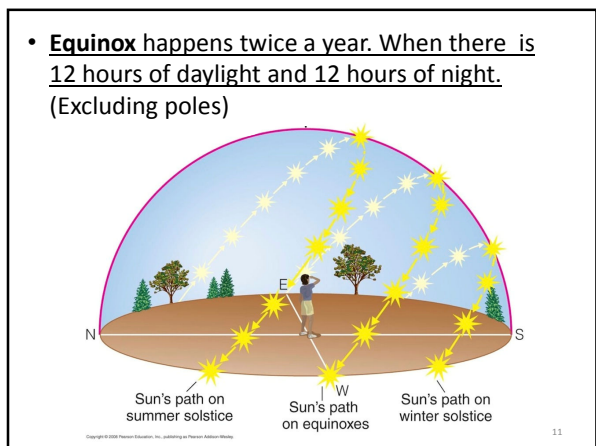
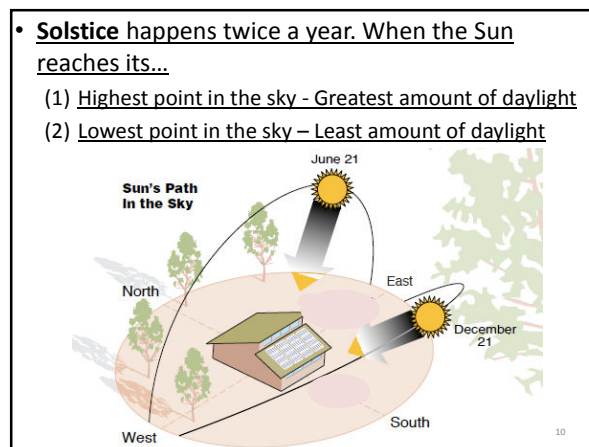
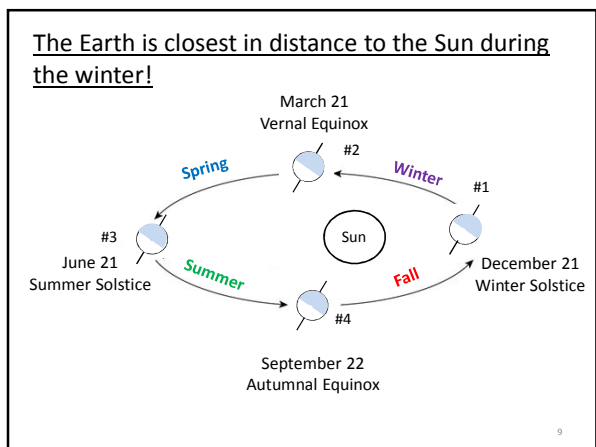
Show Me on Your White Boards!

- Which is the major contributor to our season on Earth?

A or B?

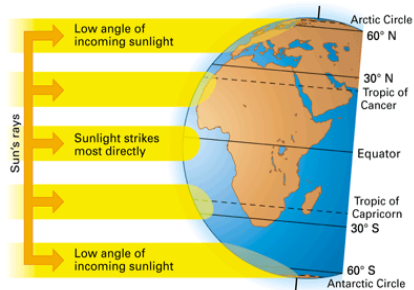
A) Distance of the Earth to the Sun
 -Closer to the Sun is Summer
 -Farther from the Sun is Winter

B) Axis tilt of the Earth
 -Tilt towards the Sun is Summer
 -Tilt away from the Sun is Winter



Results From Yesterday:

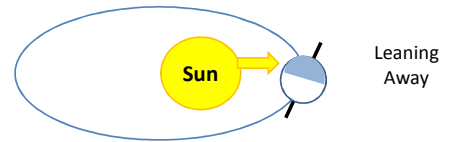
Low angle of incoming sunlight at the poles = cold
Most direct angle at the equator = warmer



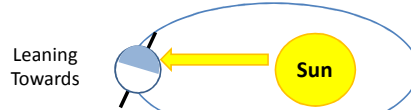
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Winter vs. Summer: Northern Hemisphere

- Winter = Least Direct Angle of Sunlight

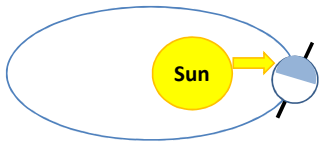


- Summer = Most Direct Angle of Sunlight



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Northern & Southern Hemispheres



Northern Hemisphere = Leaning Away **Winter!**
 Southern Hemisphere = Leaning Towards **Summer!**

Northern and Southern Hemispheres experience **opposite** climates/seasons!

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Review Last Night's Homework

- What would our seasons be like if Earth's axis were not tilted?

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Video Review

<https://www.youtube.com/watch?v=NydSuHoQZgk>

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Today's Main Idea

The **seasons** are related to Earth's tilt on its axis and its revolution around the sun.

No homework sheet!
Your homework tonight is to study for the quiz!

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Quiz Topics for Tomorrow

1. Earth's Tilt: What is it? Why is it important?
2. Rotation vs Revolution: What's the difference?
3. What marks the beginning of the four seasons?
4. Can you identify them on a diagram?
5. How does the angle of light determine the seasons?
6. How does the length of daylight change with the seasons?

Helpful Textbook Pages for Quiz: 758 - 762

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Quiz Topics for Tomorrow

1. Earth's Tilt
2. Rotation vs Revolution
3. Start of the four seasons
4. Drawing solstices and equinox
5. Angle of light in relation to the seasons
6. Amount of daylight with the seasons

Helpful Textbook Pages for Quiz: 758 - 762

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