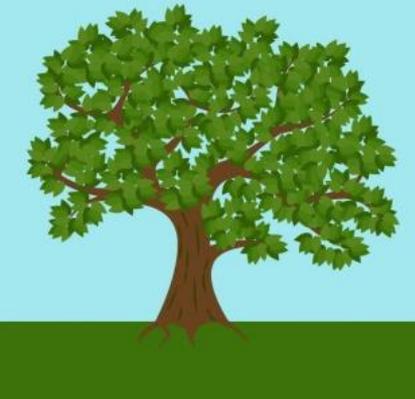


Middle School Physical Science

The Seasons and Earth's Tilt Grade 6-7



- Minds-on
- Earth's
 - Rotation
 - Tilt
 - Revolution
- Inquiry Activity
- Direct vs. Indirect Sunlight
- The Seasons



TeachWithFergy

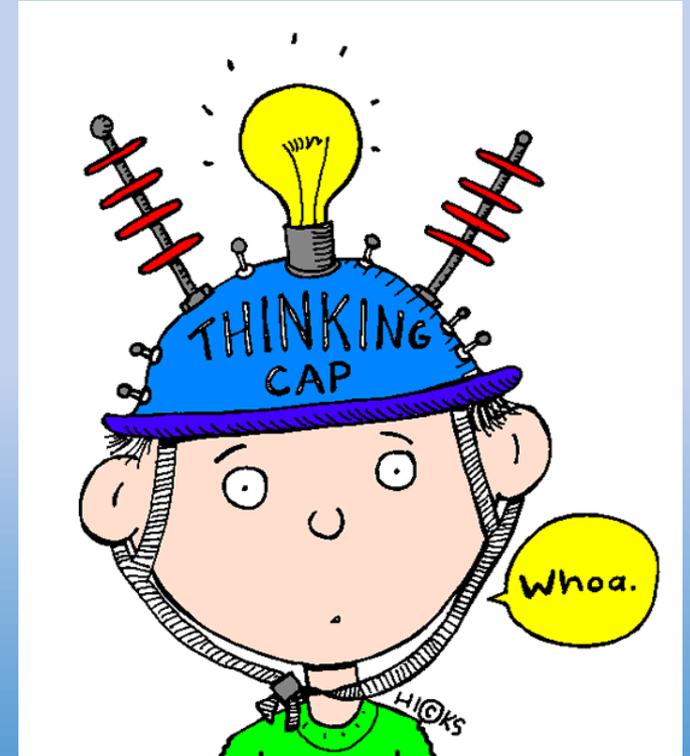
Preview File

Please enjoy this preview of your Student Version of the lesson. I've created this PDF for ease of viewing and to decrease the file size but of course, your lesson will be in PowerPoint format.

- Some slides appear blank because they have been removed.
- Student versions have portions of the text removed which is given in the teacher version and appear as _____
- Other slides may have on them, this represents writing that has been removed.

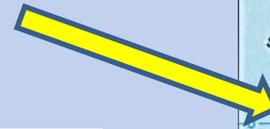
Minds-on Seasons

1. Why is it cold in the winter and hot in the summer?
2.
3. What about places near the equator? Why is their temperature pretty much constant throughout the year?

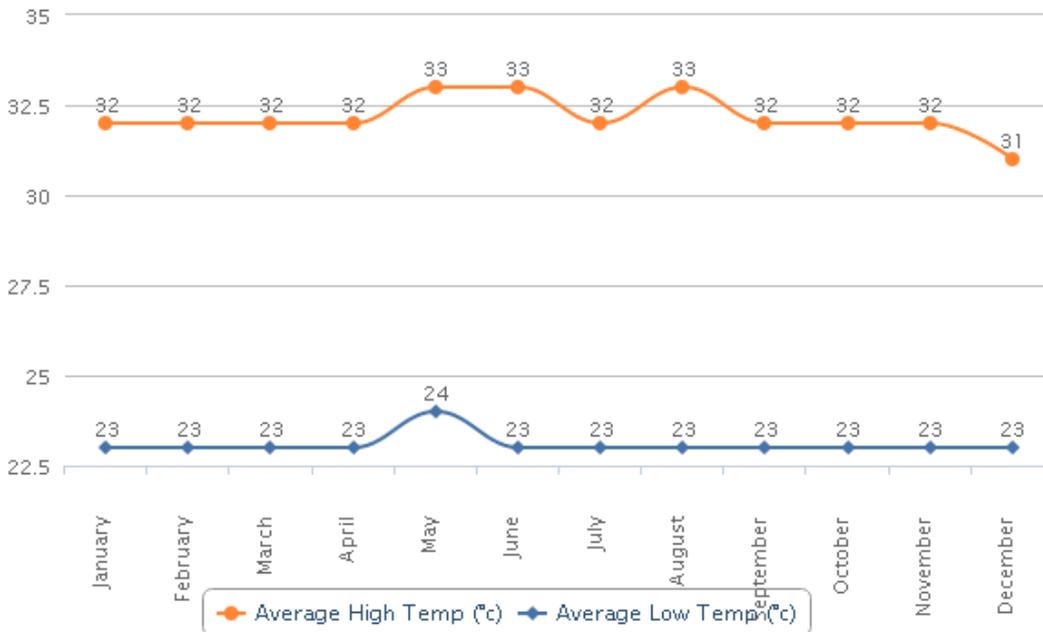


Average Temperature for Pontianak, Indonesia

Equator



Average Temperature (°c) Graph for Pontianak



What do you notice?



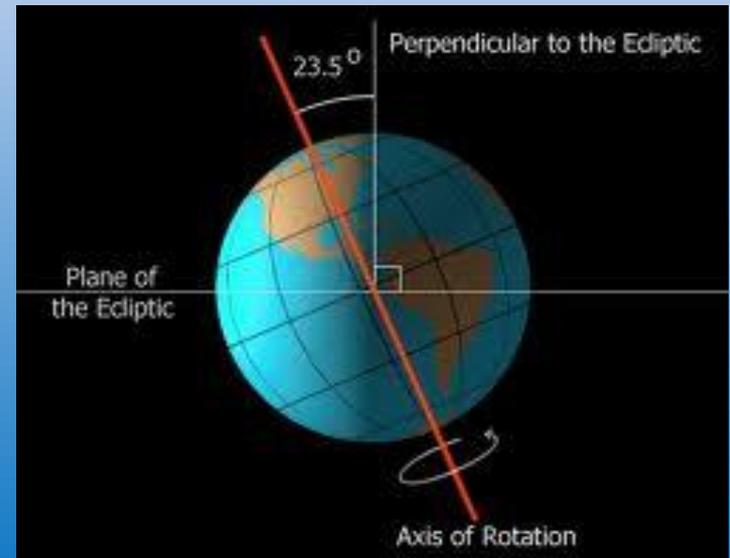
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Effects of Earth's Rotation:

Earth's rotation causes half the planet to face towards the sun (day) and the other half away (night) at all times



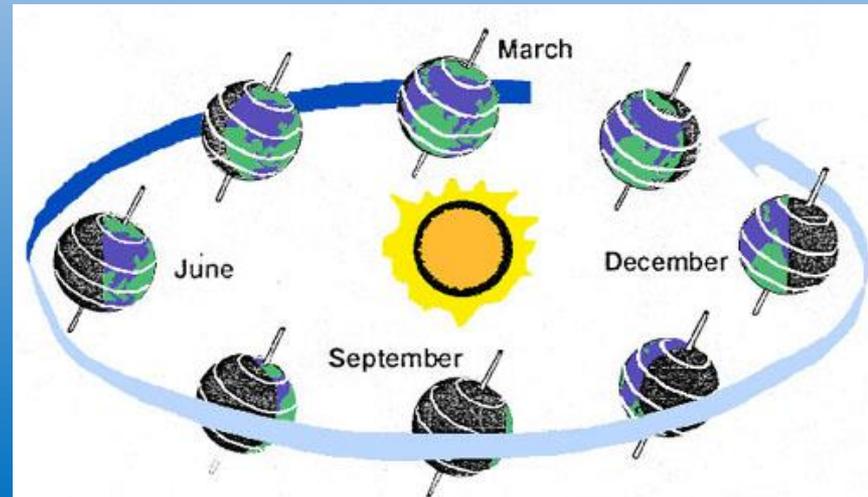
Earth's Tilt



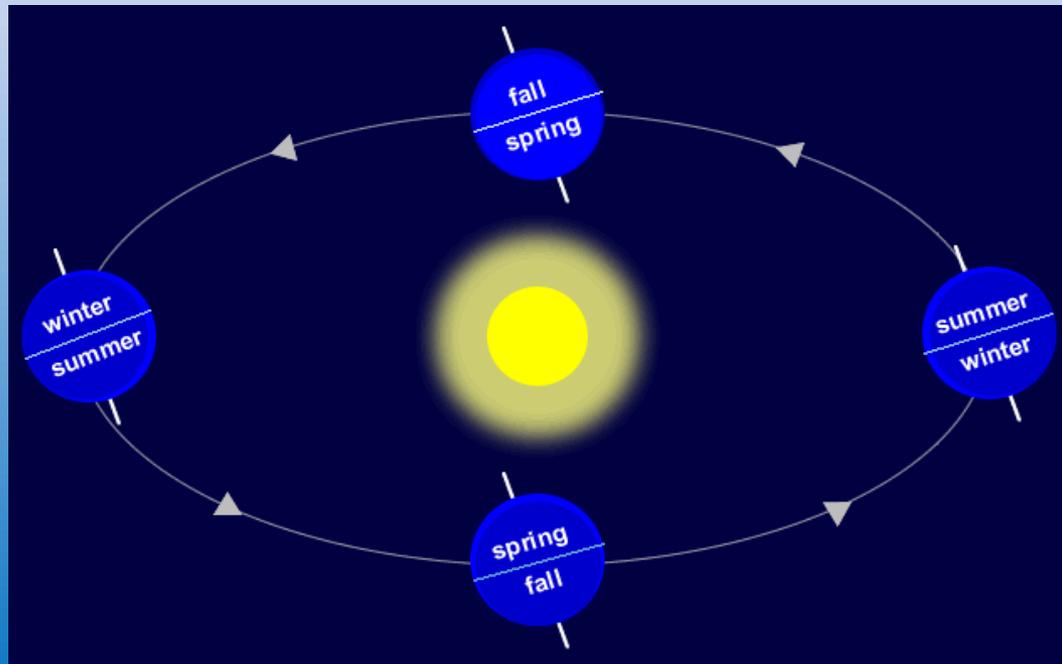
Effect of Earth's Revolution:

- _____

- Takes Earth one year to travel in a circle around the Sun



Tilt + Revolution = Seasons



Minds-on Revisit

1. Why is it cold in the winter and hot in the summer?
2.
3. What about places near the equator? Why is their temperature pretty much constant throughout the year?

THINKING...



(PLEASE BE PATIENT)

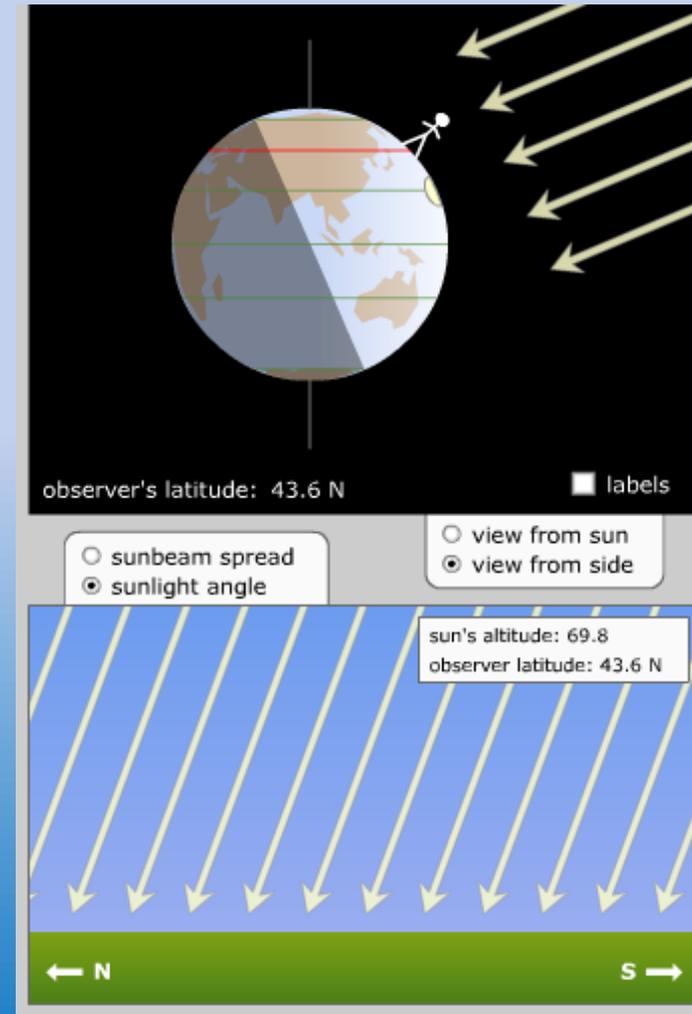
This slide has been removed

Computer Activity

Seasons: What is your current latitude?

Open the simulation below by clicking the picture

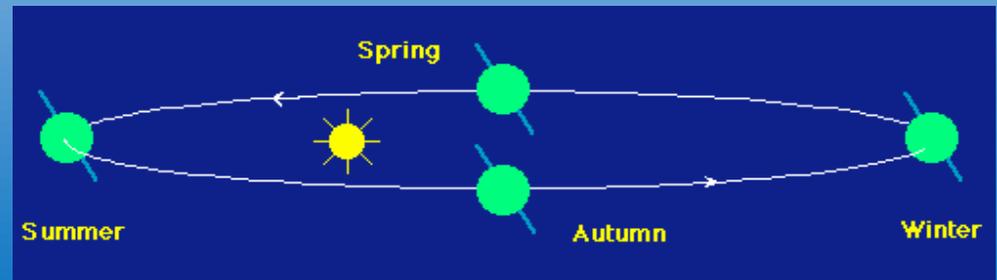
Place your person at the proper latitude (vertical)



The Seasons

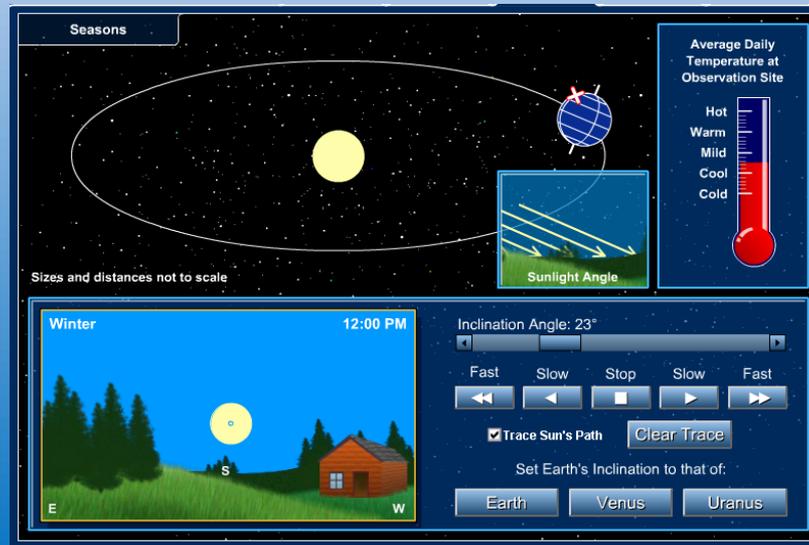
In North America it is summer in June, July and August and winter in South America because

- _____



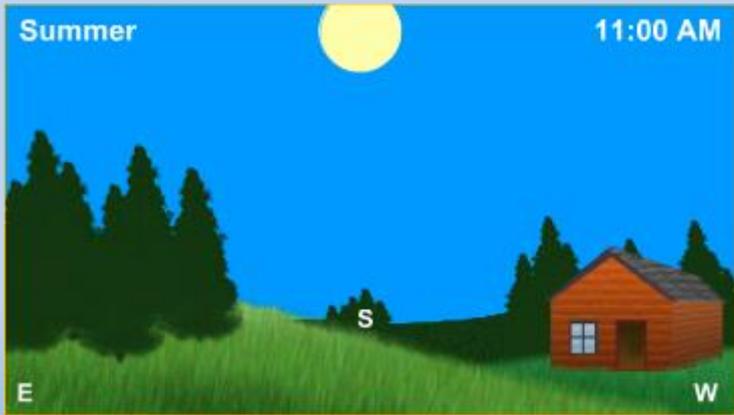
Inquiry Activity

1. Open the animation by clicking the image
2.
3. Record your observations of the Average Daily Temperature and the Sun's path (sketch) for both winter and summer on the following slide.

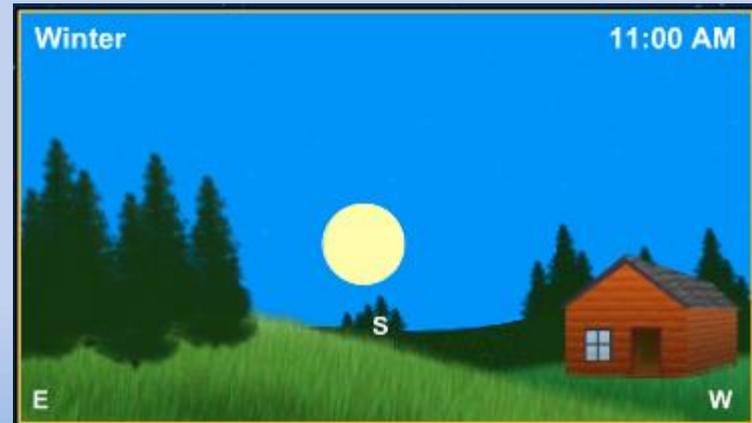


Summer vs. Winter

Summer



Winter



What do you notice?

What does the Sun's path effect? (.....)

This slide has been removed