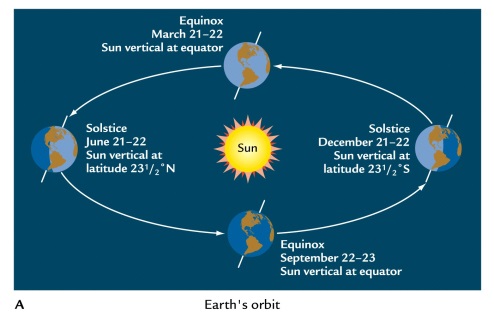
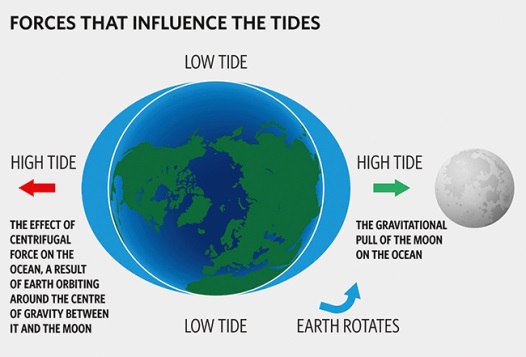
***6.E.1.1 - I can explain how the relative motion and relative position of the sun, Earth and moon causes day, night and seasons, affects tides, affects the phases of the moon and affects eclipses.***

a) I will determine the cause of day, night, year, and seasons.

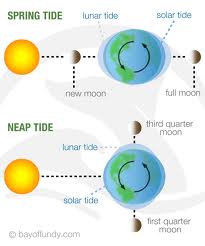




b.) I will give examples how the moon affects tides on Earth.

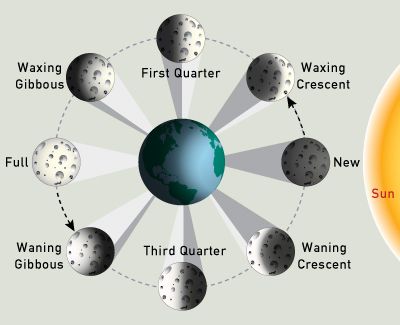


c) I will demonstrate the alignment of Sun, Earth, and moon to model tides.

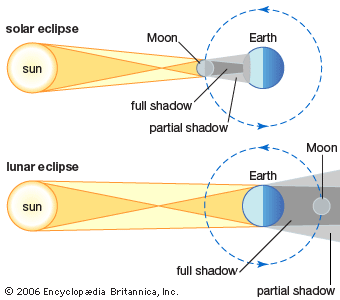


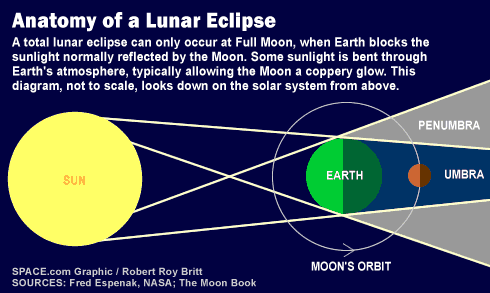
**Student Notes:**

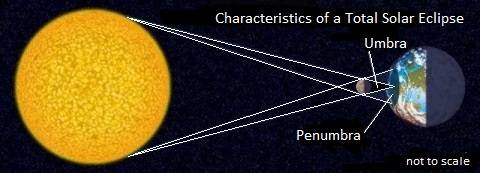
d) I will sort and interpret the phases of the moon.



e) I will compare and contrast solar and lunar eclipses.

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**Student Notes:**

Waxing =

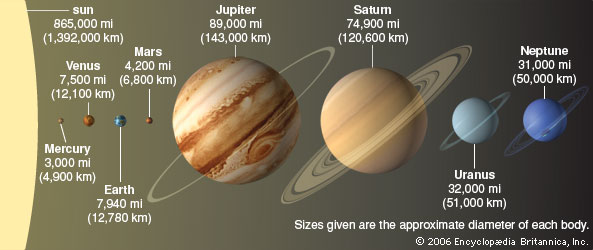
Waning =

Crescent =

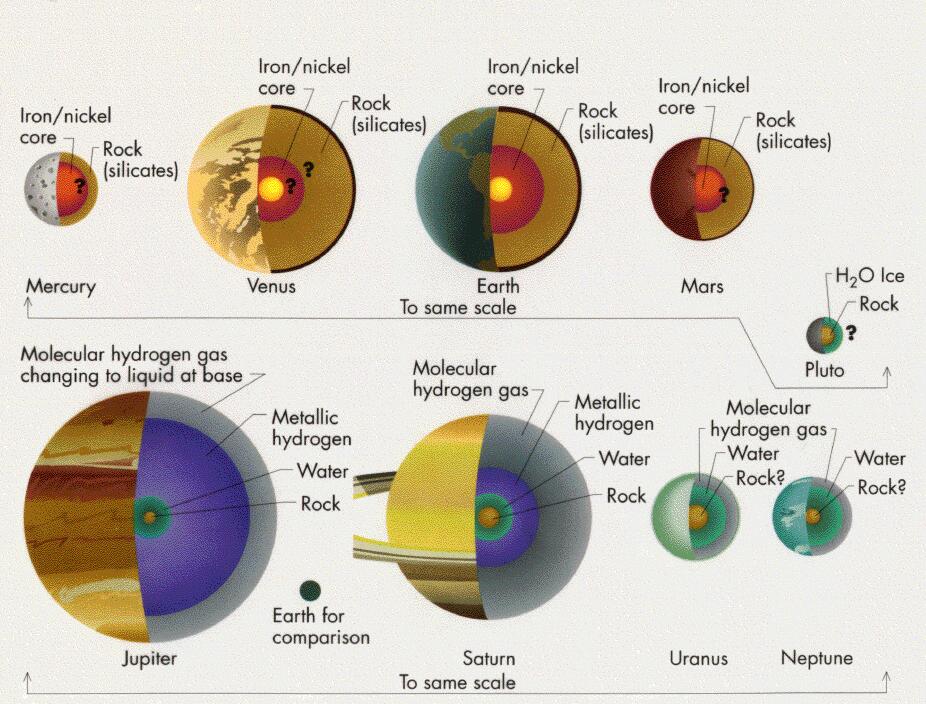
Gibbous =

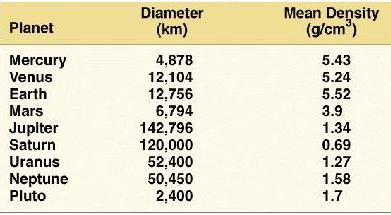
***6.E.1.2 - I can explain why Earth sustains life while other planets do not.***

a.) I will compare and contrast the Earth to the other planets in terms of size.



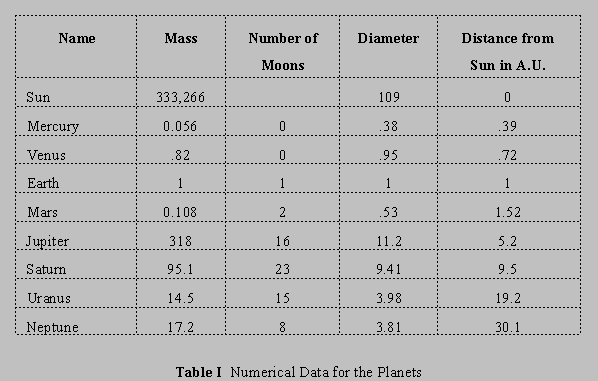
b.) I will compare and contrast the Earth to the other planets in terms of composition.



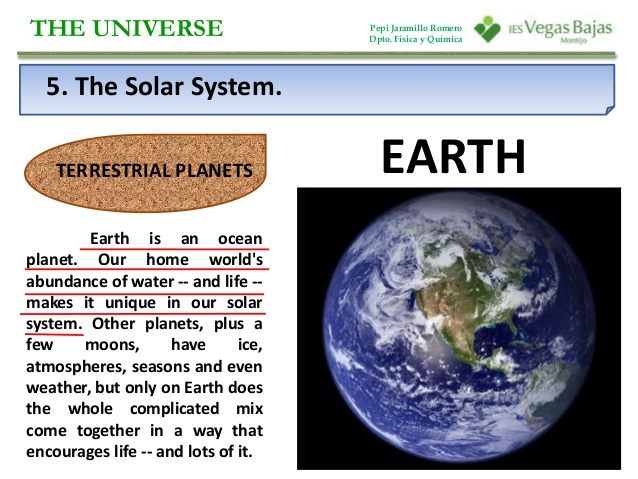
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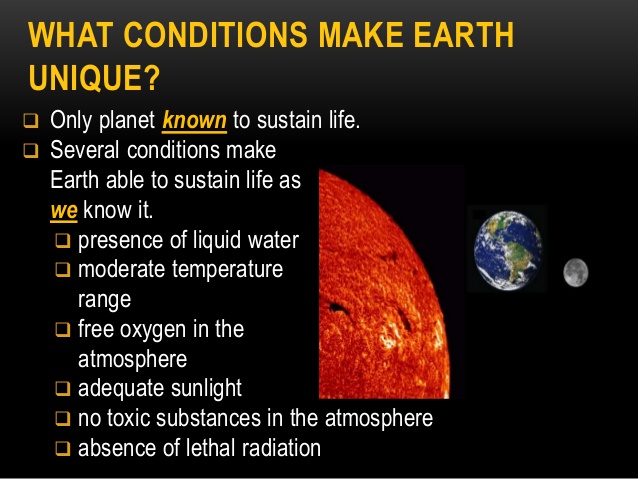
**Student Notes:**

c.) I will compare and contrast the Earth to the other planets in terms of relative distance from the Sun.



d.) I will compare and contrast the Earth to the other planets in terms of ability to support life.

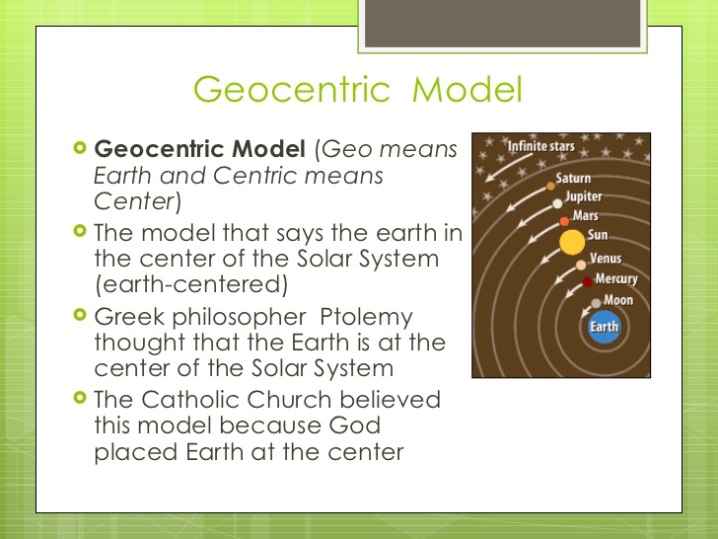
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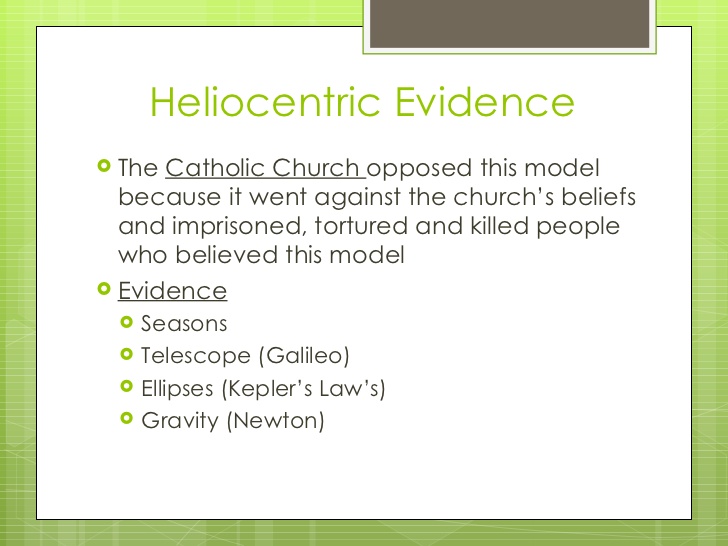
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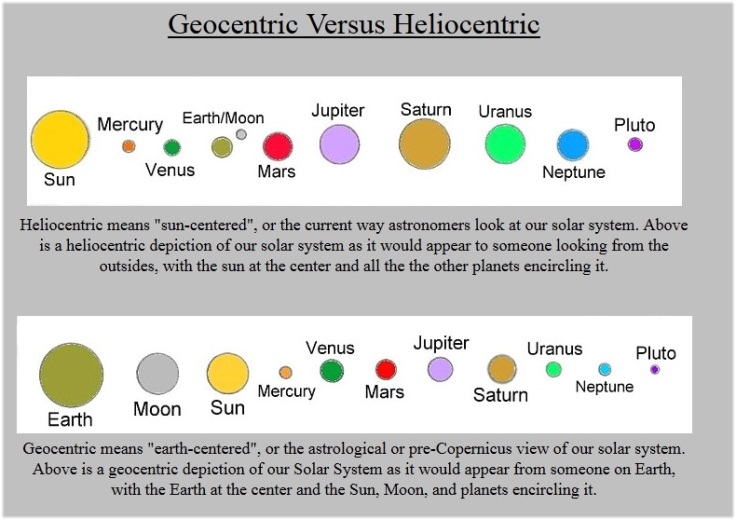
**Student Notes:**

***6.E.1.3 - I can summarize space exploration and the understandings gained from them.***

a) I will evaluate tools, products, and technology related to space exploration







**Student Notes:**

Mercury Program Goals:

* To orbit a manned spacecraft around Earth
* To investigate man's ability to function in space
* To recover both man and spacecraft safely

Gemini Program Goals:

* To subject man and equipment to space flight up to two weeks in duration.
* To rendezvous and dock with orbiting vehicles and to maneuver the docked combination by using the target vehicle's propulsion system;
* To perfect methods of entering the atmosphere and landing at a preselected point on land. Its goals were also met, with the exception of a land landing, which was cancelled in 1964.

Apollo Program Goals:

* To establish the technology to meet other national interests in space.
* To achieve preeminence in space for the United States.
* To carry out a program of scientific exploration of the Moon.
* To develop man's capability to work in the lunar environment.

Skylab Goals (America’s 1st Experimental Space Station)

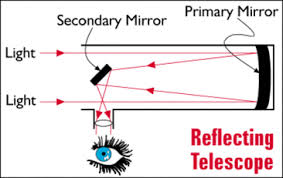
* To prove that humans could live and work in space for extended periods
* Expand our knowledge of solar astronomy well beyond Earth-based observations.

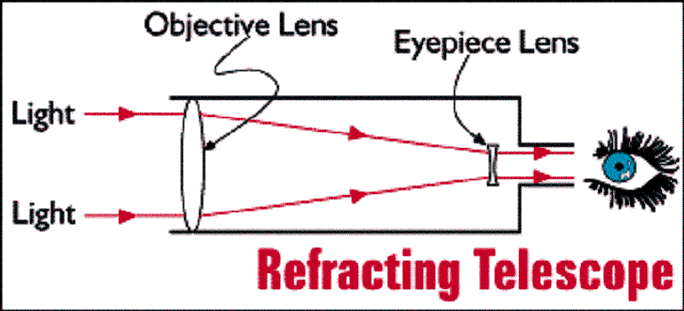
International Space Station (ISS) Goals:

* Demonstrate leadership in space
* Forge international cooperation with Cold War allies
* Conduct human biological research to benefit biology and medicine on Earth
* Conduct materials research to benefit Earth
* Serve as a construction platform for Lunar and Mars missions
* Learn how to construct large structures in space
* Learn how to operate in space
* Provide an engineering testbed for space equipment
* Conduct human biological research to support future long-duration space missions

Tools:









**Student Notes:**

NASA Spinoffs:

For more than 40 years, NASA has transferred some of its technology to the private sector. The resulting commercialization contributes to the development of products and services in the fields of health and medicine, consumer goods, transportation, public safety, environment and resources management, computer technology, and industrial productivity.

* Artificial limbs
* Baby formula
* Cell-phone cameras
* Computer mouse
* Cordless tools
* Ear thermometer
* Firefighter gear
* Freeze-dried food
* Golf clubs
* Long-distance communication
* Invisible braces
* MRI and CAT scans
* Memory foam
* Safer highways
* Solar panels
* Shoe insoles
* Ski boots
* Adjustable smoke detector
* Water filters
* UV-blocking sunglasses

**Student Notes:**