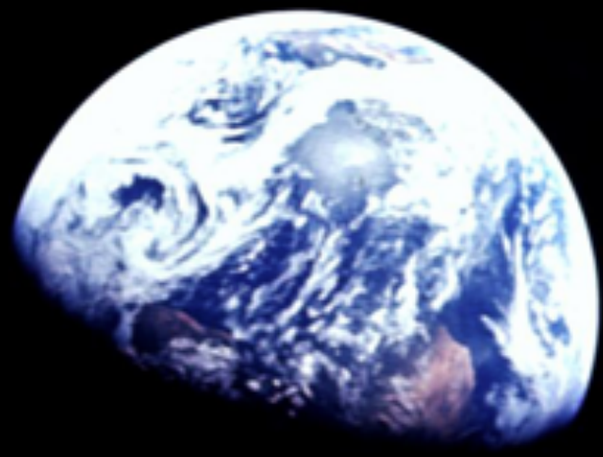


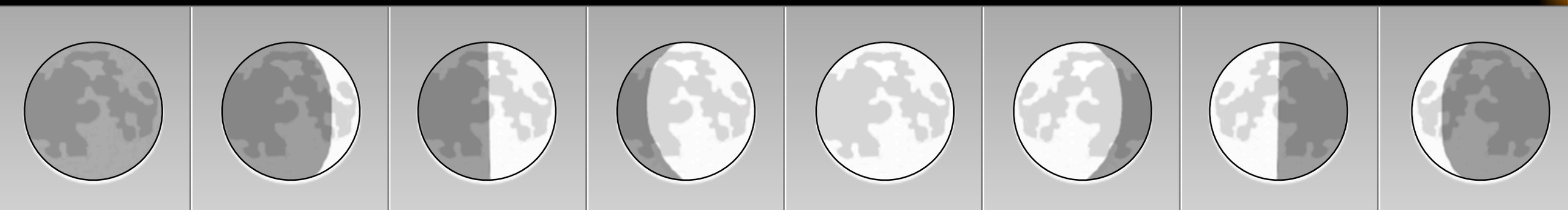
Solar System Review

(tap the Earth to begin)

#1



Tap the lunar phase that will be visible from Earth when the Moon is in this position?





Nice Job!

This position results in the new moon phase.

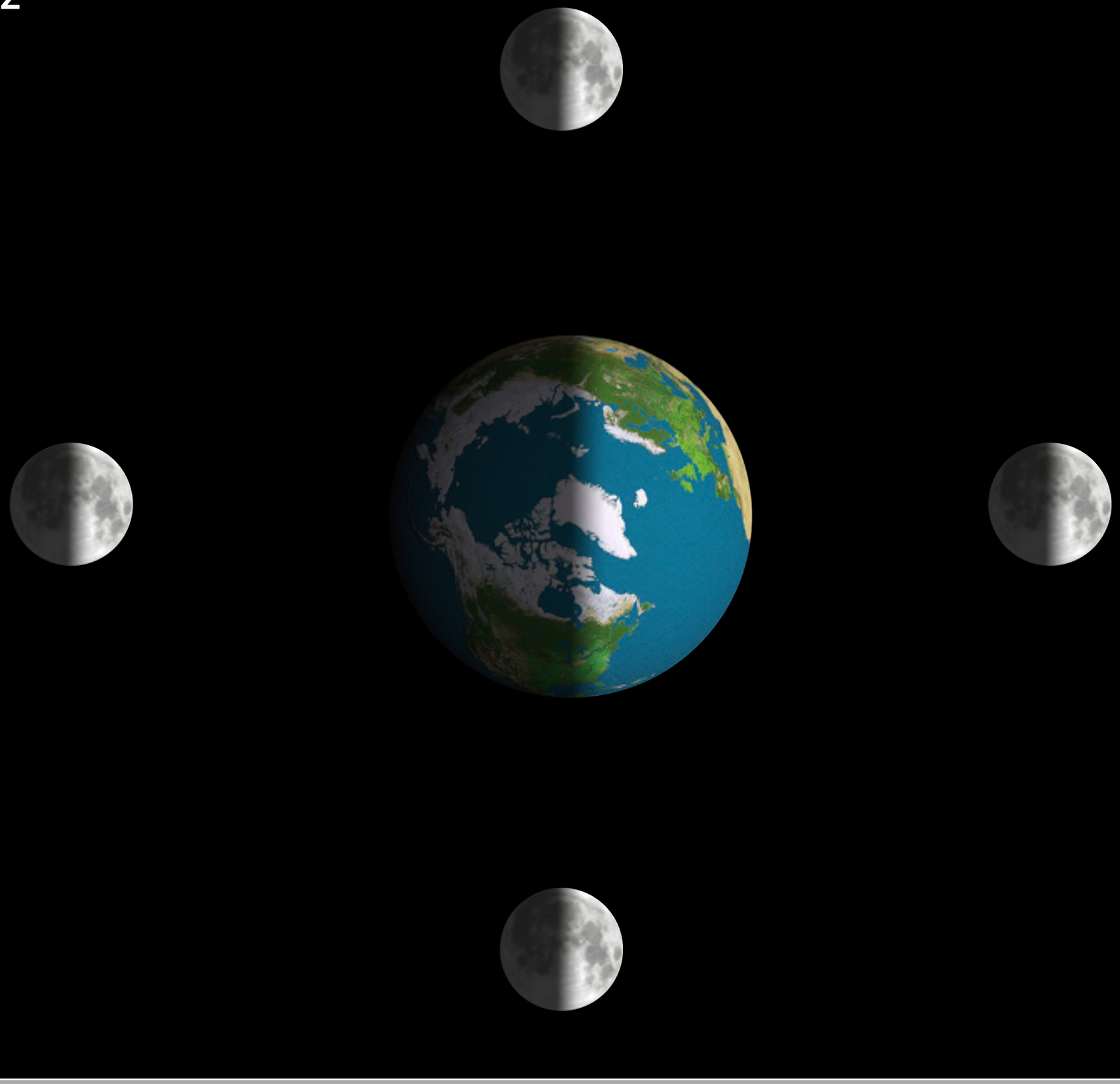
Continue on to Question #2 ➤

I'm sorry, that's incorrect.

Please go back and reconsider your answer. Feel free to review your notes or to ask for help.

◀ Go Back and Try Again

#2



Tap the moon which could potentially cause a lunar eclipse.



Nice Job!

Lunar eclipses can only occur during a full moon.

Continue on to Question #3 ➤

I'm sorry, that's incorrect.

Please go back and reconsider your answer. Feel free to review your notes or to ask for help.

◀ Go Back and Try Again

#3

Which phase could potentially cause an extremely severe low tide?





Nice Job!

Full and new moons cause severe spring tides.

Continue on to Question #4 ➤

I'm sorry, that's incorrect.

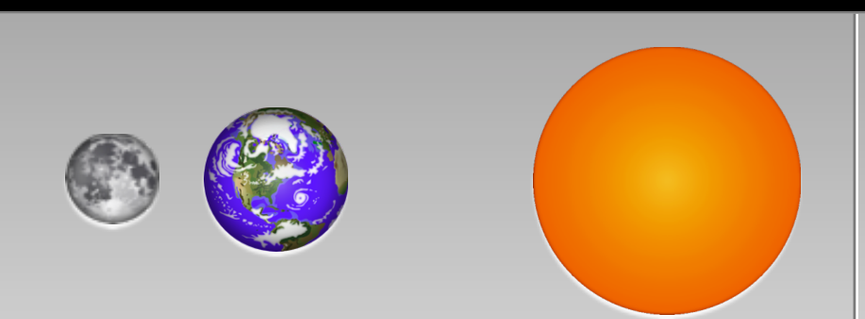
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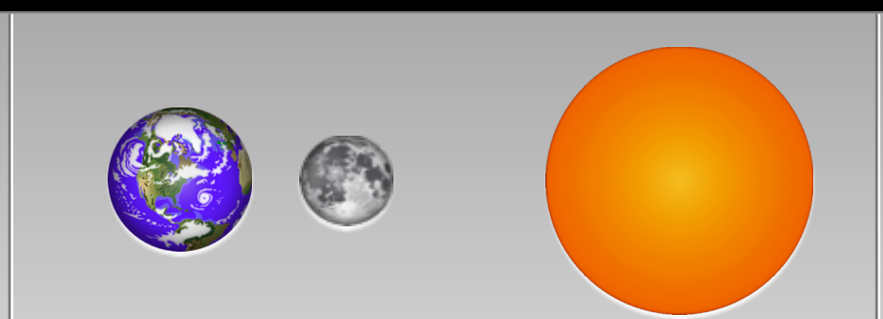
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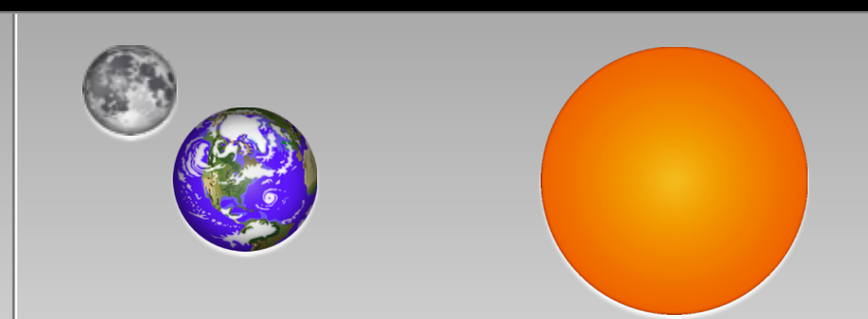
#4



In which arrangement of the Sun, Earth, and Moon could this sort of eclipse occur?









Nice Job!

Lunar eclipses occur in the full moon phase.

Continue on to Question #5 ➤

I'm sorry, that's incorrect.

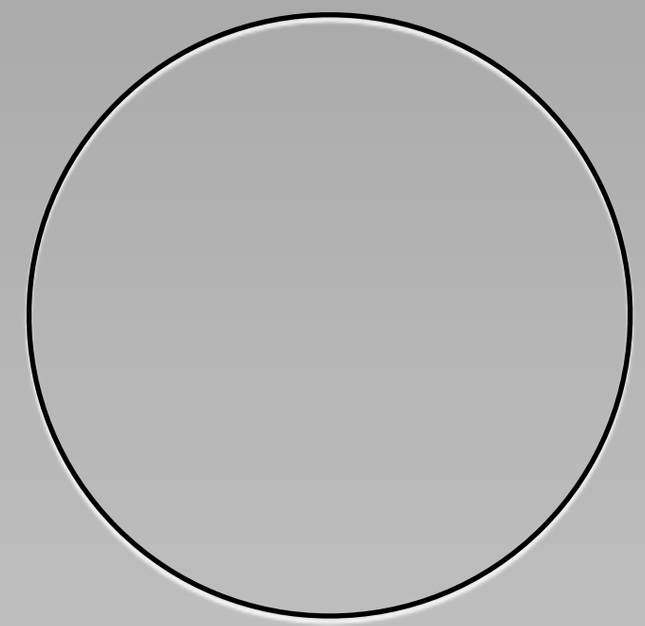
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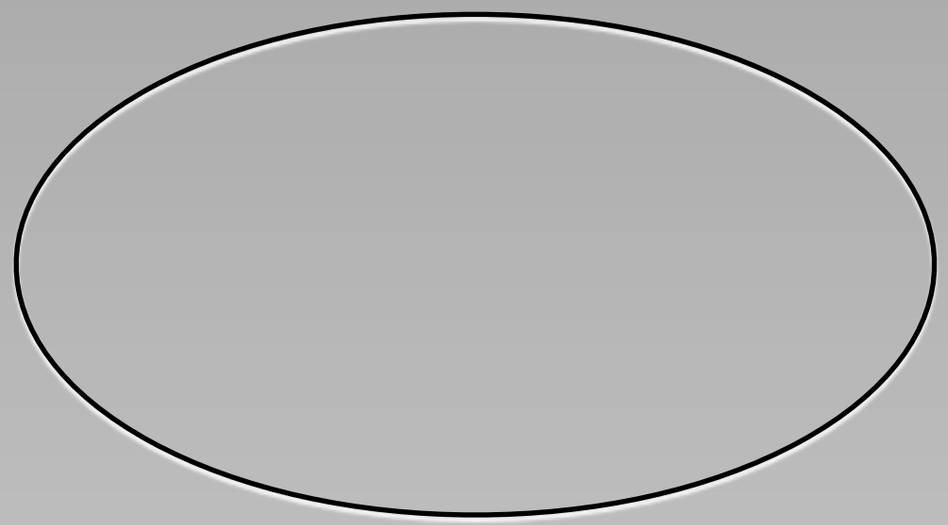
◀ Go Back and Try Again

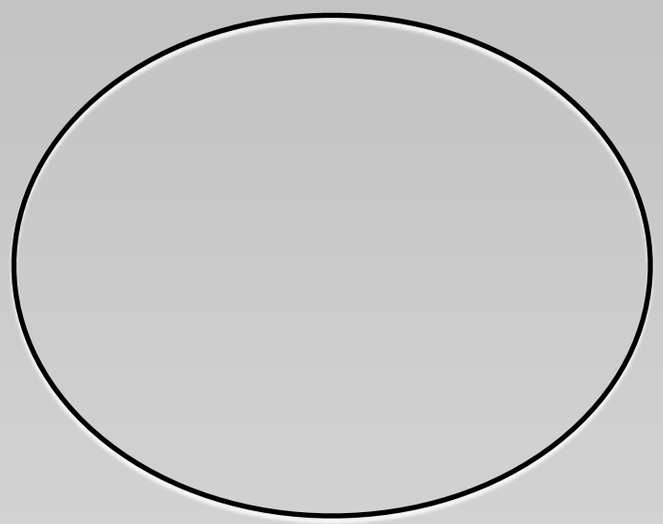
#5

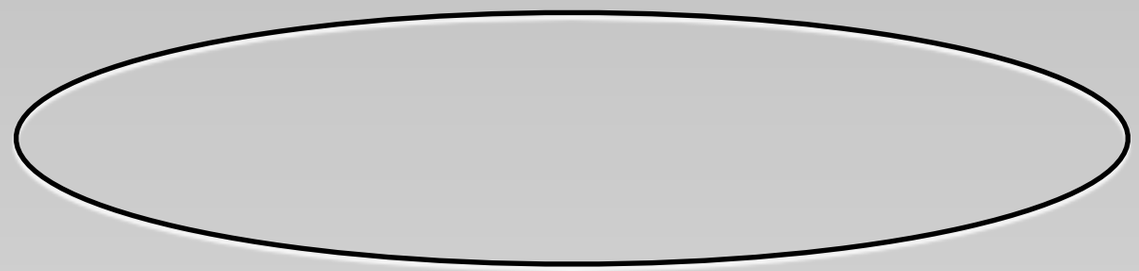


Which ellipse looks most like that of Venus' orbit?











Nice Job!

Venus' orbit is extremely circular with an eccentricity of 0.007.

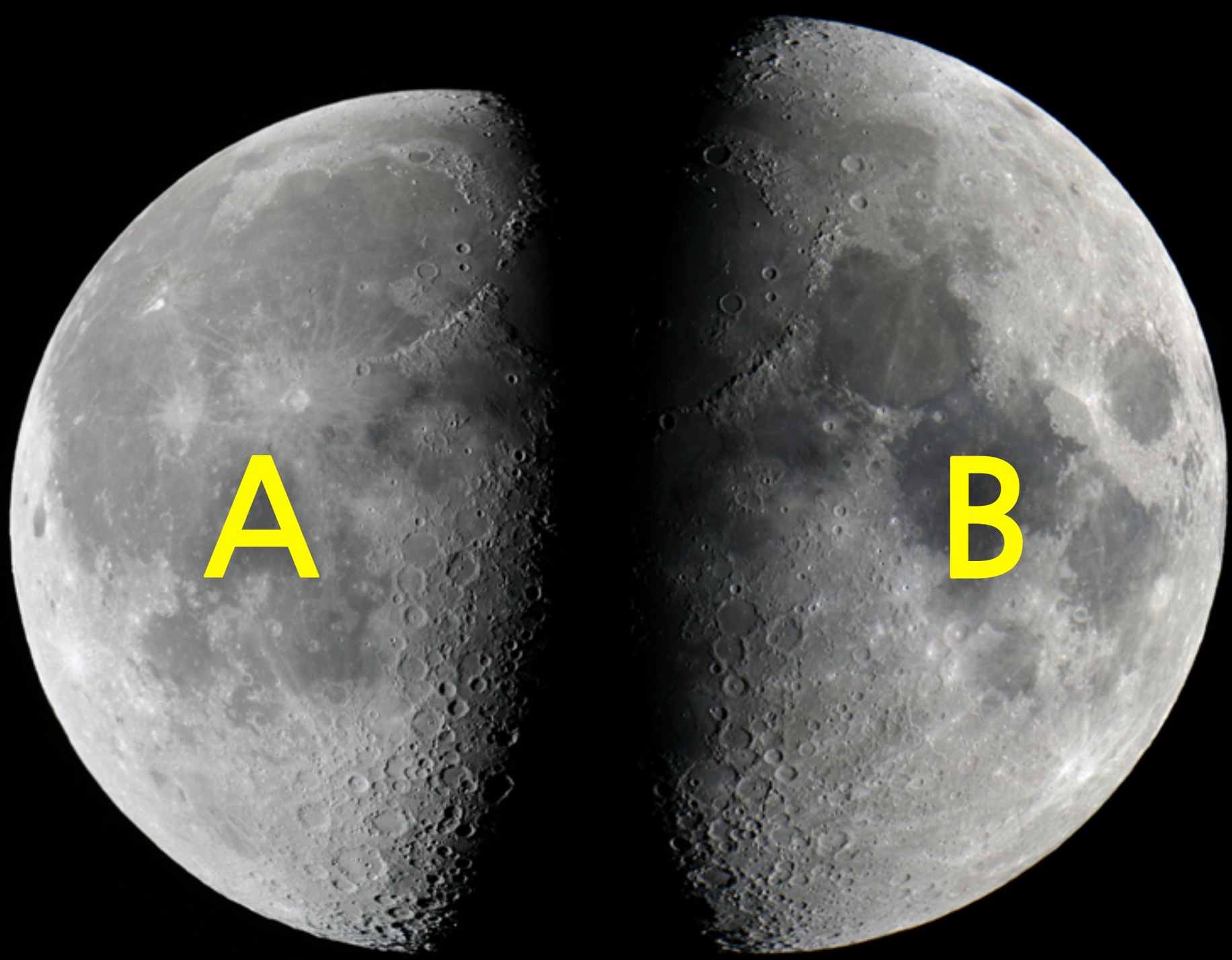
Continue on to Question #6 ➤

I'm sorry, that's incorrect.

Please go back and reconsider your answer. Feel free to review your notes or to ask for help.

◀ Go Back and Try Again

#6



Which statement below is true?

A is Apogee B is Perigee	A is Perigee B is Apogee	A is Aphelion B is Perihelion	A is Perihelion B is Aphelion



Nice Job!

The moon has a greater apparent diameter (it looks bigger) when it is closer, at perigee.

Continue on to Question #7 ➤

I'm sorry, that's incorrect.

Please go back and reconsider your answer. Feel free to review your notes or to ask for help.

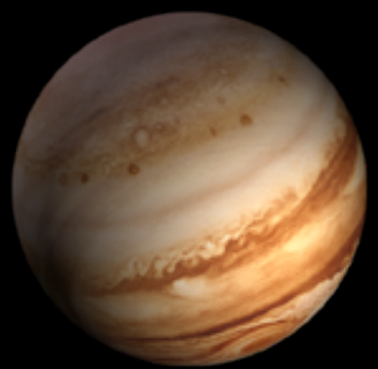
◀ Go Back and Try Again

#7



About how many times wider is Jupiter than the Earth?

19.8	9.6	11.2	10.1



Nice Job!

Jupiter's equatorial diameter is about 11.2 times greater than that of Earth.

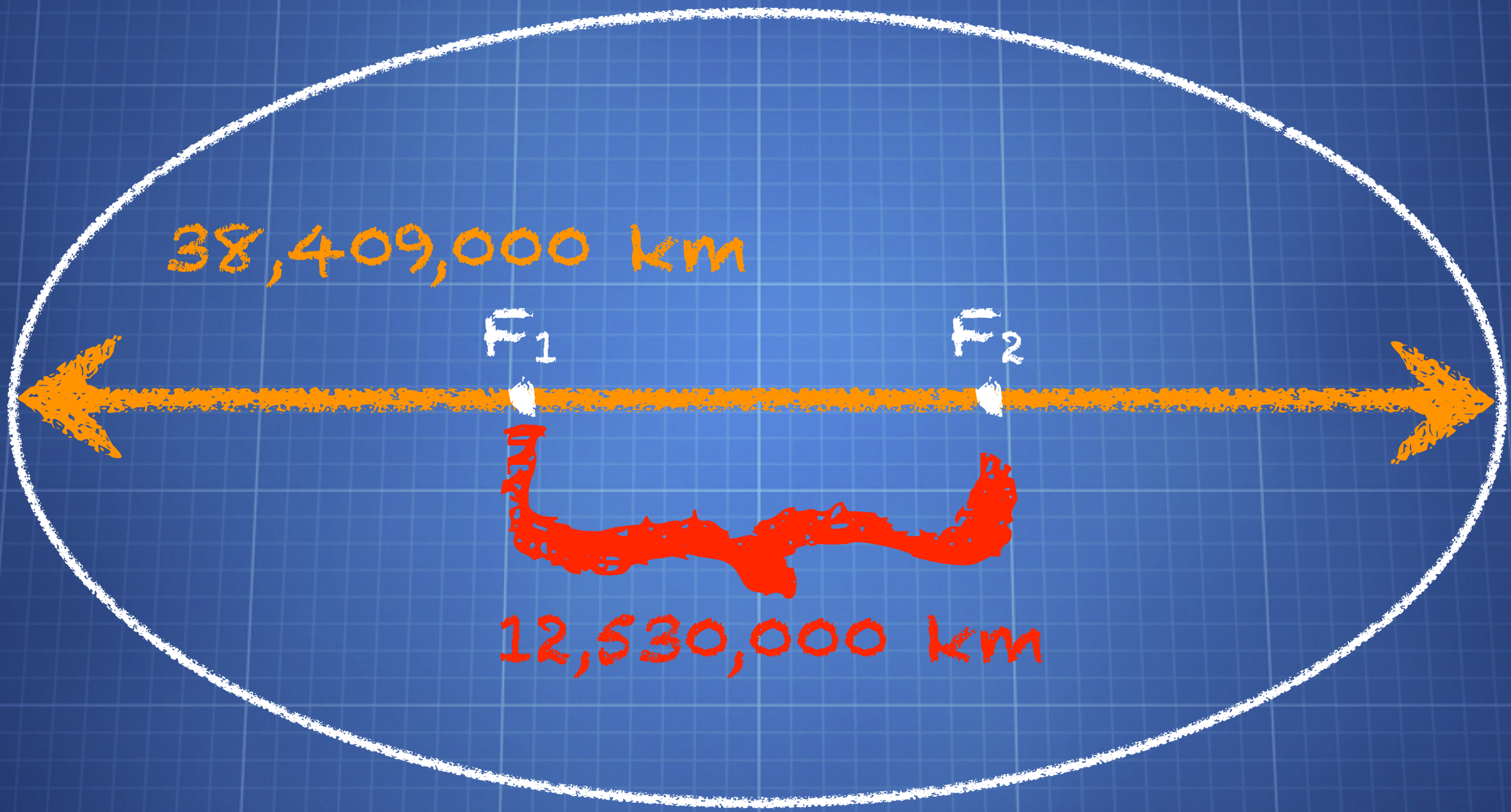
Continue on to Question #8 ➤

I'm sorry, that's incorrect.

Please go back and reconsider your answer. Feel free to review your notes or to ask for help.

◀ Go Back and Try Again

#8



What is the eccentricity of this elliptical orbit?

0.122	0.018	0.592	0.328

Nice Job!

The eccentricity of this ellipse is 0.328.

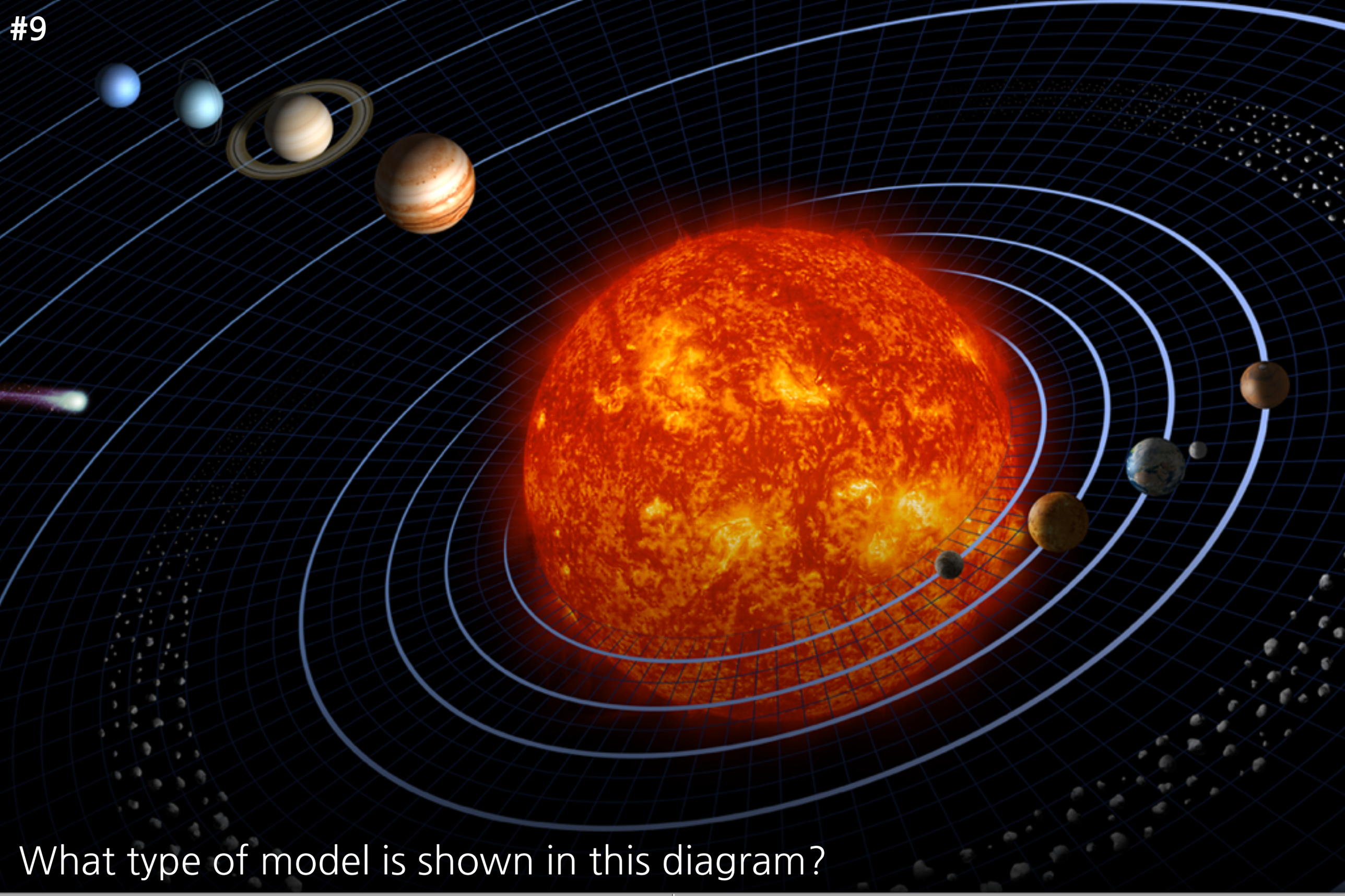
Continue on to Question #9 ➤

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Please go back and reconsider your answer. Feel free to review your notes or to ask for help.

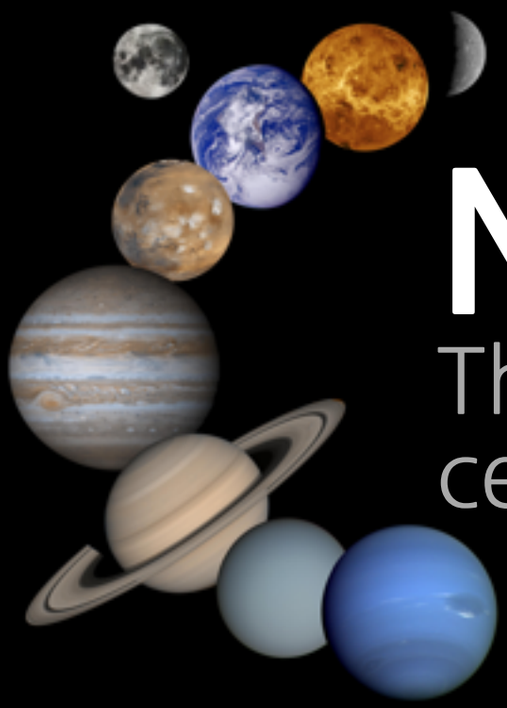
◀ Go Back and Try Again

#9



What type of model is shown in this diagram?

Geocentric	Heliocentric



Nice Job!

This demonstrates a heliocentric, or Sun-centered, model of the Universe.

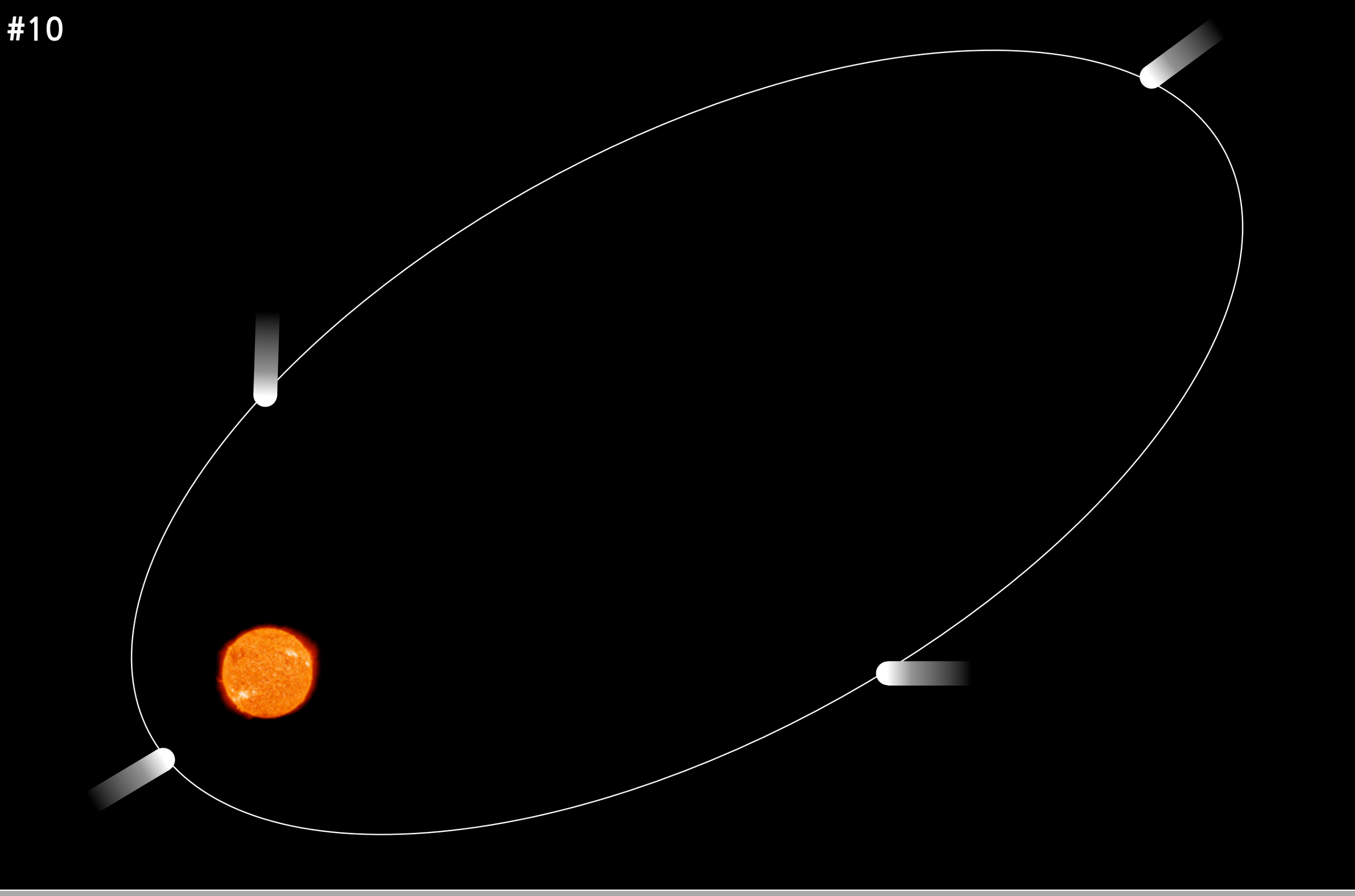
Continue on to Question #10 ➤

I'm sorry, that's incorrect.

Please go back and reconsider your answer. Feel free to review your notes or to ask for help.

◀ Go Back and Try Again

#10



Tap the comet that is traveling at the highest velocity.



Nice Job!

All objects travel fastest when they are closest to the object that they are orbiting.

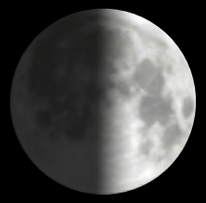
Continue on to Question #11 ➤

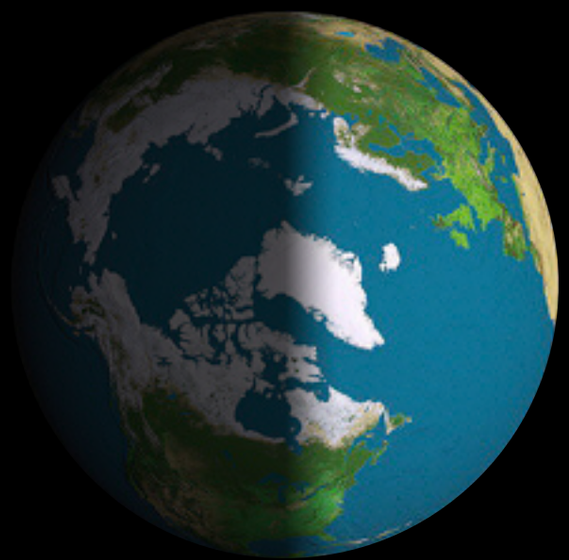
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Please go back and reconsider your answer. Feel free to review your notes or to ask for help.

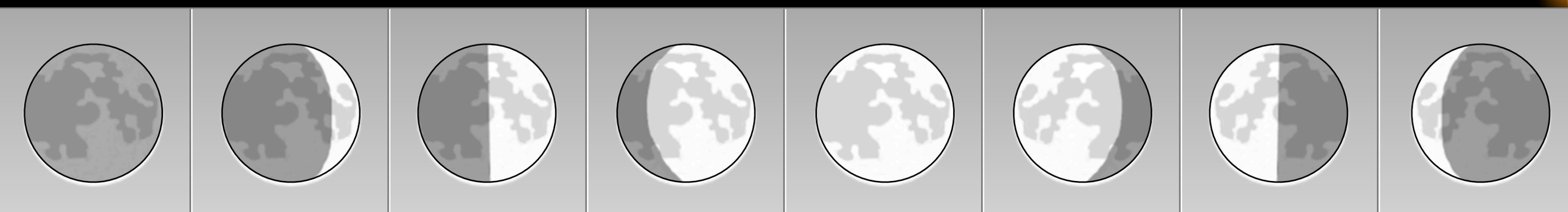
◀ Go Back and Try Again

#11





What phase will be visible from Earth when the Moon is in this position?





Nice Job!

You would see a first quarter moon.

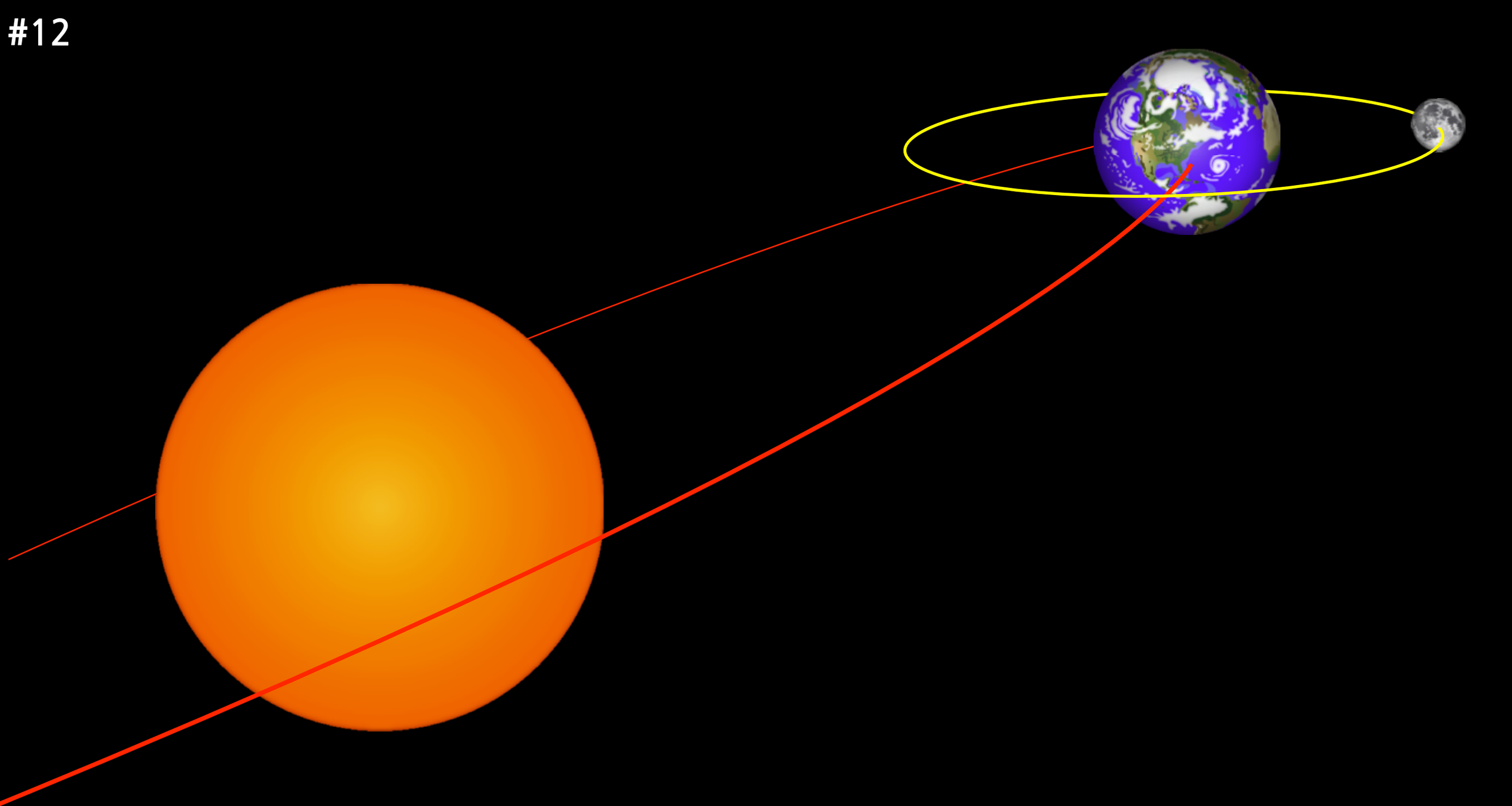
Continue on to Question #12 ➤

I'm sorry, that's incorrect.

Please go back and reconsider your answer. Feel free to review your notes or to ask for help.

◀ Go Back and Try Again

#12



Which motion causes lunar phases to be visible from Earth?

Earth's Revolution	Earth's Rotation	Moon's Revolution	Moon's Rotation



Nice Job!

The Moon’s revolution causes lunar phases to be visible from Earth.

Continue on to Question #13 ➤

I'm sorry, that's incorrect.

Please go back and reconsider your answer. Feel free to review your notes or to ask for help.

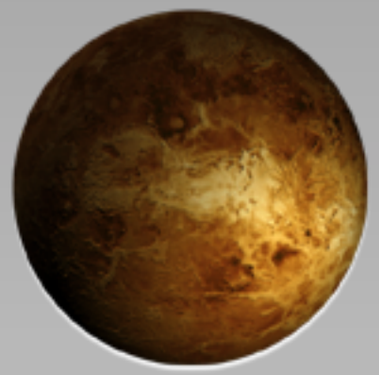
◀ Go Back and Try Again

#13

Tap the planet whose density is most similar to that of the Sun.



Mercury



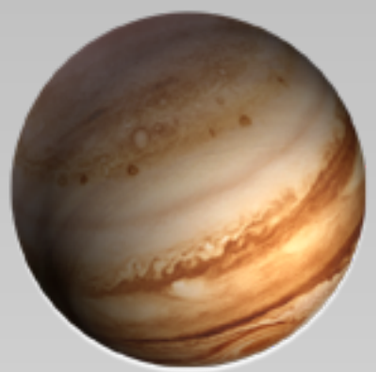
Venus



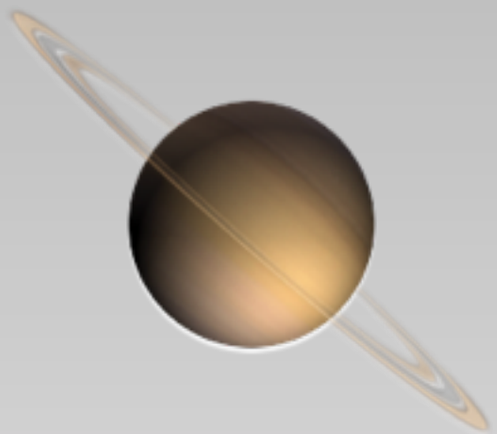
Earth



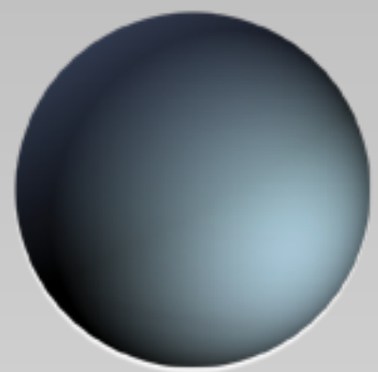
Mars



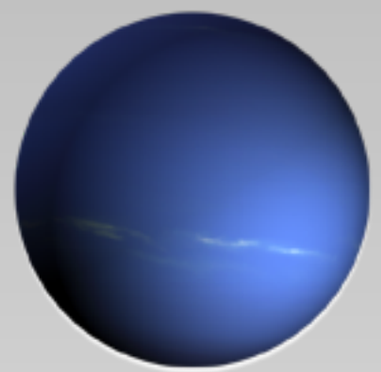
Jupiter



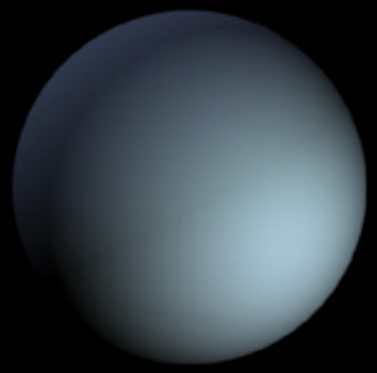
Saturn



Uranus



Neptune



Nice Job!

Uranus has a very similar density to the Sun.

Continue on to Question #14 ➤

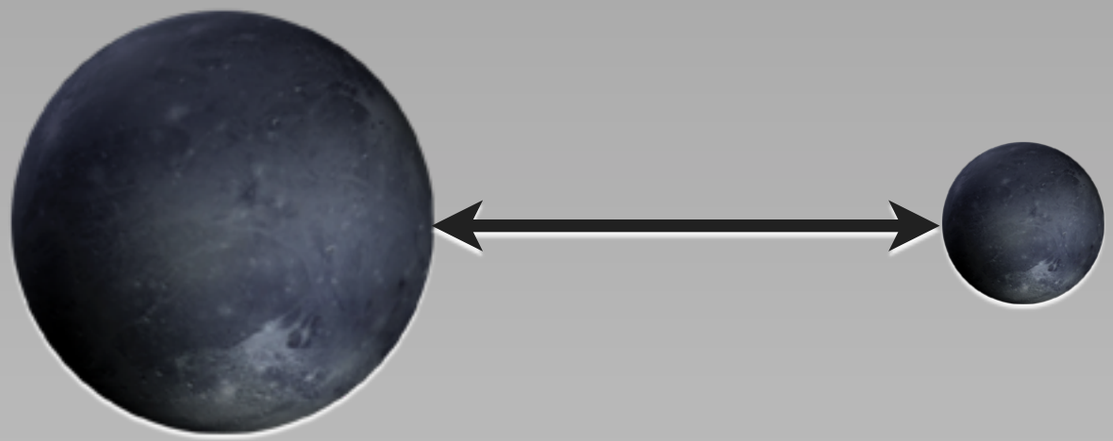
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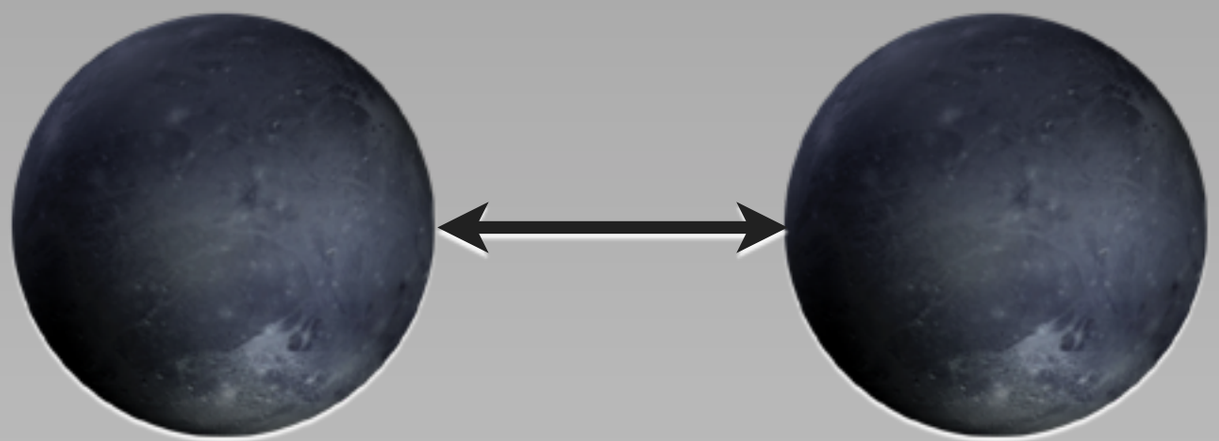
Please go back and reconsider your answer. Feel free to review your notes or to ask for help.

◀ Go Back and Try Again

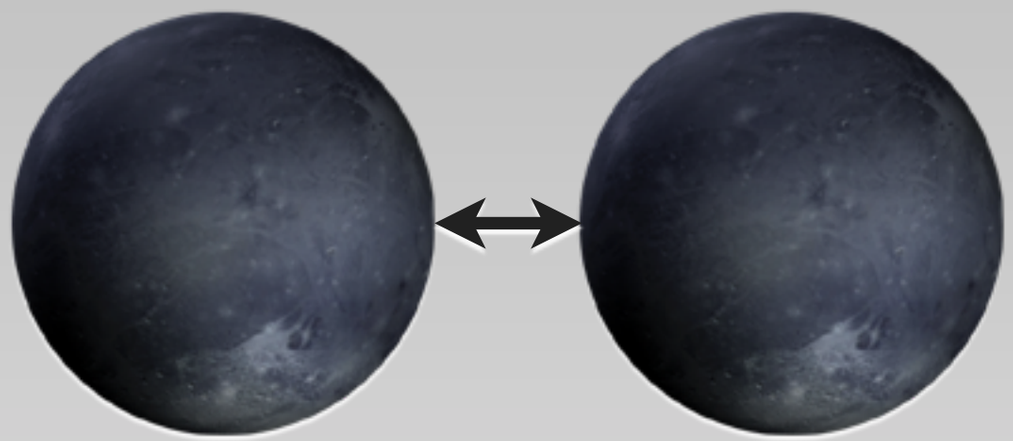
#14

Between which two planets would the gravitational attraction be the greatest?











Nice Job!

The closer together and more massive two objects are, the greater the gravitational attraction between them.

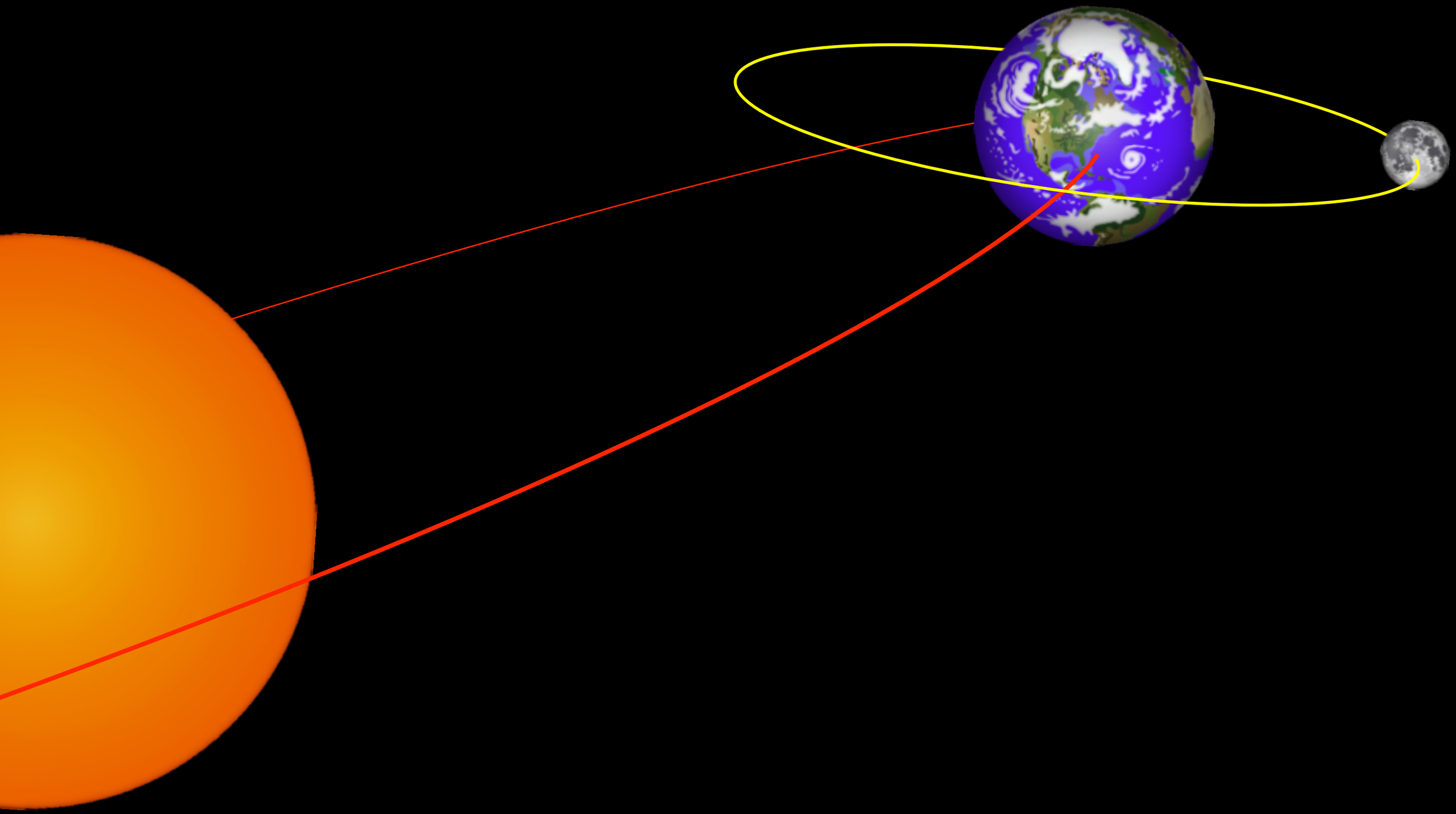
Continue on to Question #15 ➤

I'm sorry, that's incorrect.

Please go back and reconsider your answer. Feel free to review your notes or to ask for help.

◀ Go Back and Try Again

#15



Why do we not experience eclipses every month?

Moon's orbit is tilted by 5°.	Moon's axis is tilted by 5°.	Earth's orbit is tilted by 5°.	Earth's orbit is tilted by 23.5°.



Nice Job!

The Moon’s orbit is tilted by 5 degrees, which is why we don’t experience eclipses every month.

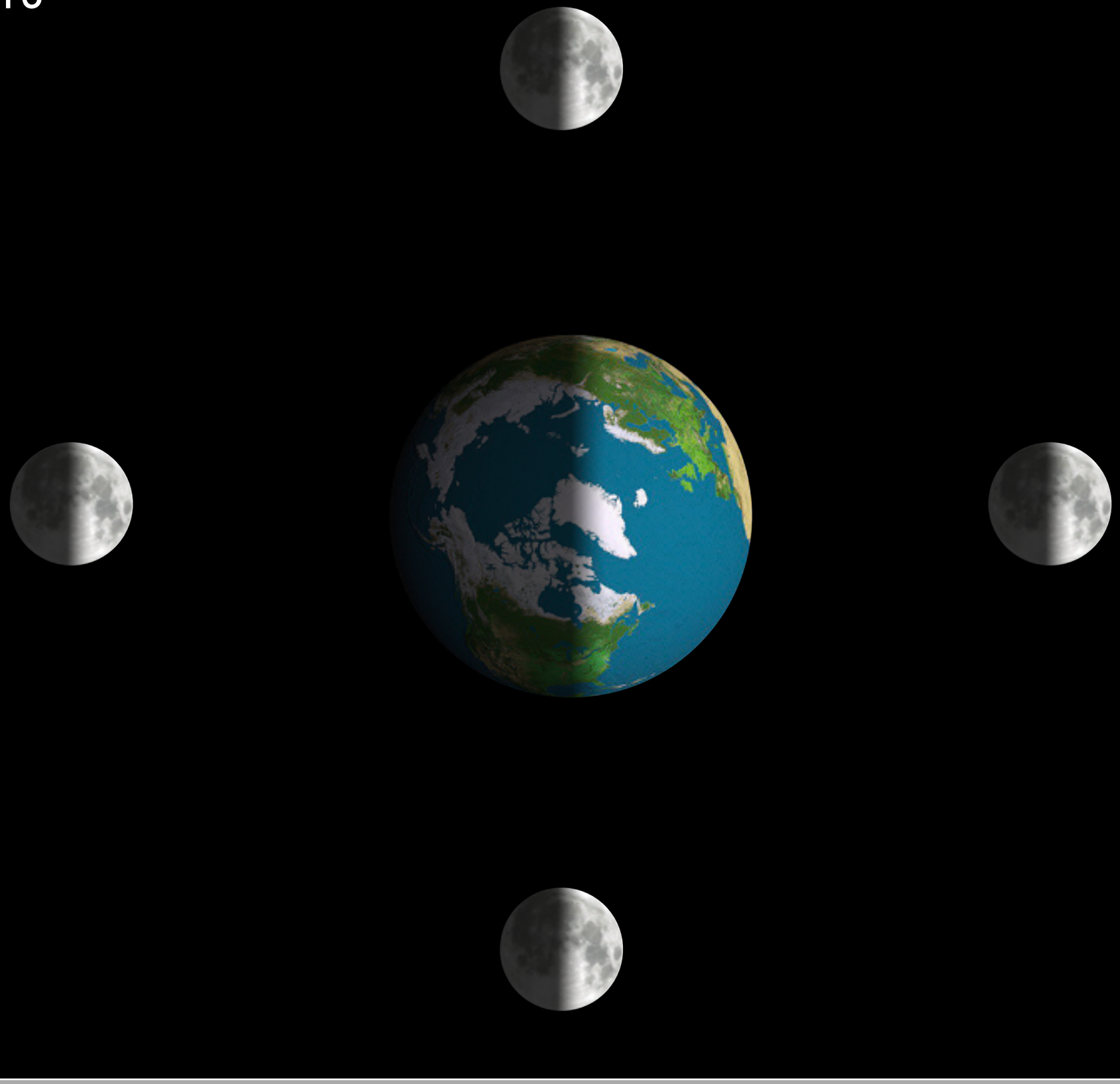
Continue on to Question #16 ➤

I'm sorry, that's incorrect.

Please go back and reconsider your answer. Feel free to review your notes or to ask for help.

◀ Go Back and Try Again

#16



Tap the moon which could potentially cause a spring tide.



Nice Job!

Spring tides occur in the new and full moon phases only.

Continue on to Question #16 ➤

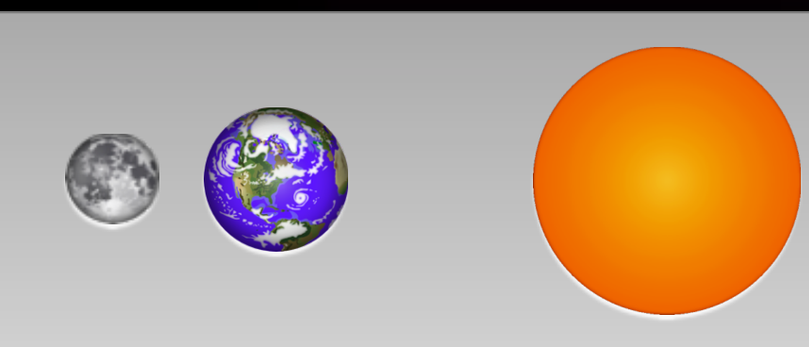
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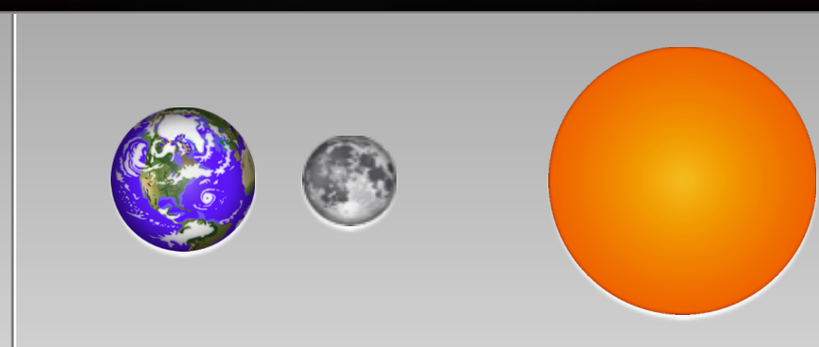
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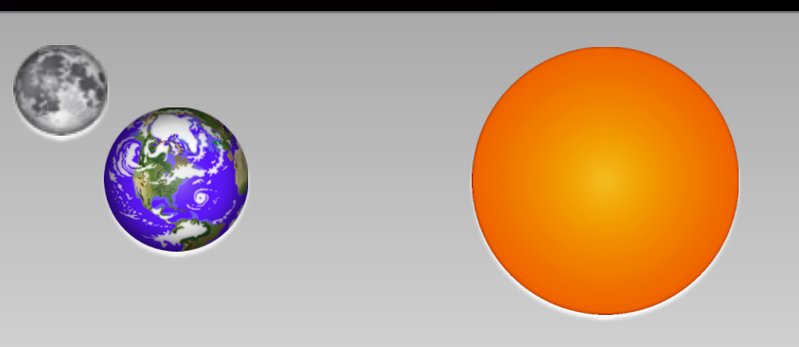
◀ Go Back and Try Again

#17

In which arrangement of the Sun, Earth, and Moon could this sort of eclipse occur?









Nice Job!

Solar eclipses only occur in the new moon phase.

Continue on to Question #18 ➤

I'm sorry, that's incorrect.

Please go back and reconsider your answer. Feel free to review your notes or to ask for help.

◀ Go Back and Try Again

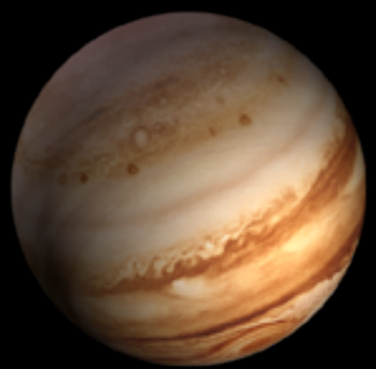
#18



Which of the following models is supported by this observation?

Geocentric

Heliocentric



Nice Job!

Since Jupiter has it's own moons orbiting it, the Earth cannot be the center of the Universe.

Continue on to Question #19 ➤

I'm sorry, that's incorrect.

Please go back and reconsider your answer. Feel free to review your notes or to ask for help.

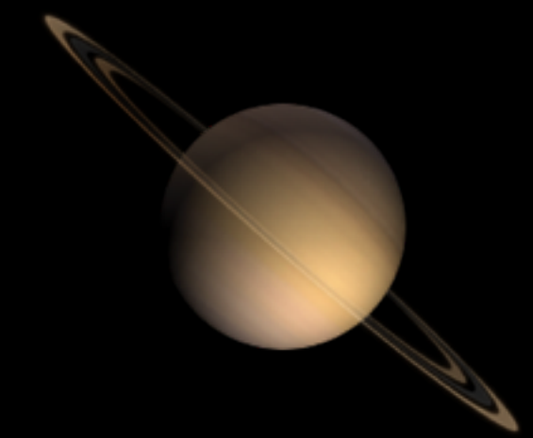
◀ Go Back and Try Again

#19



Which of the following is true of the outer four planets?

More dense	Small diameter
Longer period of revolution	Solid Surface



Nice Job!

The terrestrial planets are small, dense, and rocky while the jovian planets are large, gaseous, and not dense.

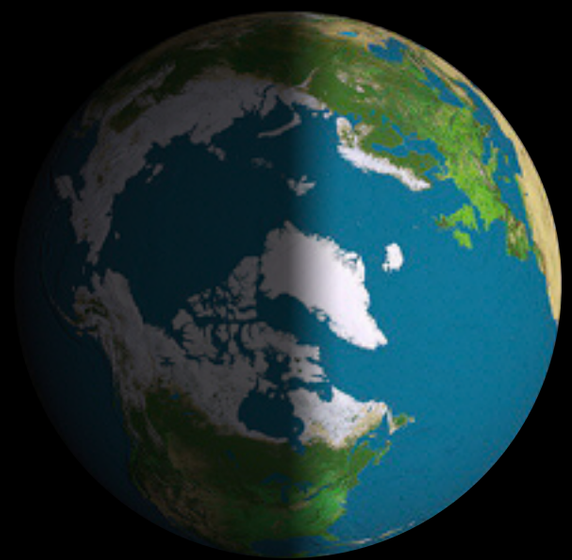
Continue on to Question #20 ➤

I'm sorry, that's incorrect.

Please go back and reconsider your answer. Feel free to review your notes or to ask for help.

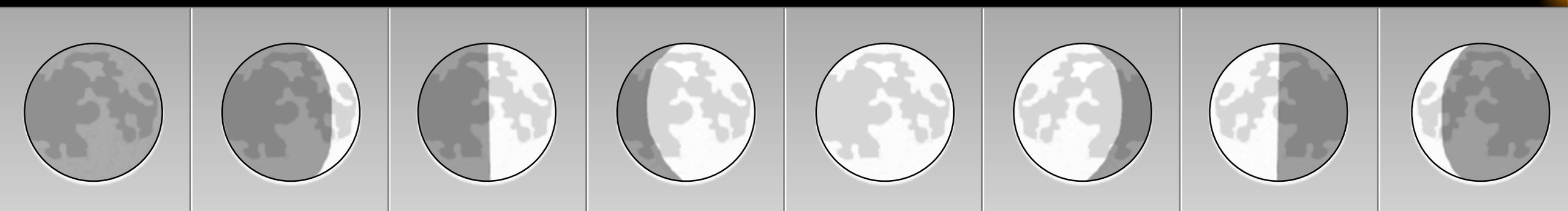
◀ Go Back and Try Again

#20





What phase will be visible from Earth when the Moon is in this position?





Nice Job!

You would see a waning gibbous.

Continue on to Question #21 ➤

I'm sorry, that's incorrect.

Please go back and reconsider your answer. Feel free to review your notes or to ask for help.

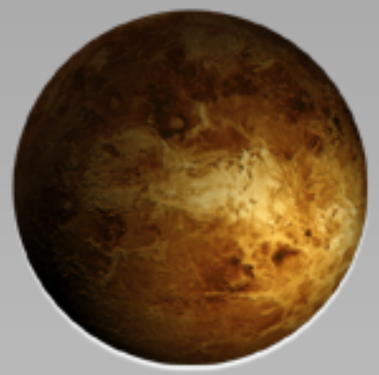
◀ Go Back and Try Again

#21

Tap the planet whose day is longer than its year.



Mercury



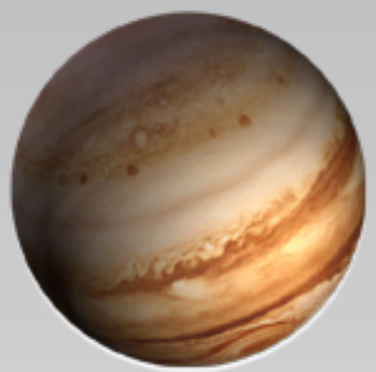
Venus



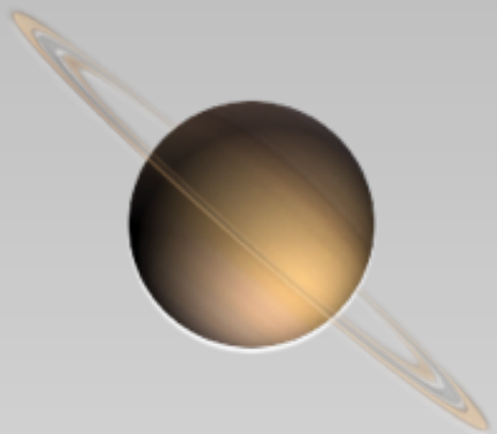
Earth



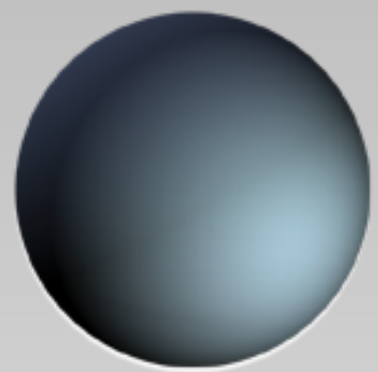
Mars



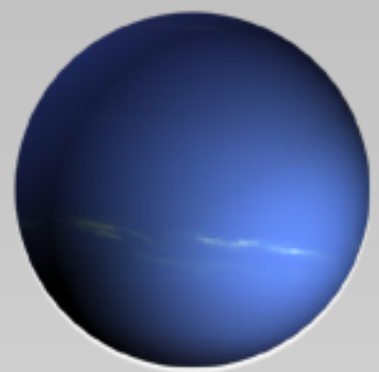
Jupiter



Saturn



Uranus



Neptune



Nice Job!

Venus has a longer period of rotation than period of revolution.

Continue on to Question #22 ➤

I'm sorry, that's incorrect.

Please go back and reconsider your answer. Feel free to review your notes or to ask for help.

◀ Go Back and Try Again

#22



Why do we only ever see one side of the lunar surface?

Moon doesn't rotate

Moon rotation = Moon revolution

Moon's orbit is tilted

Moon doesn't revolve



Nice Job!

Because the Moon's period of revolution is currently equal to its period of rotation, only one side of the Moon is ever visible from Earth.

Continue on to Question #23 ➤

I'm sorry, that's incorrect.

Please go back and reconsider your answer. Feel free to review your notes or to ask for help.

◀ Go Back and Try Again

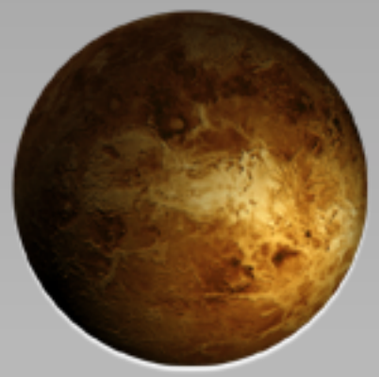
#23



Tap the planet on which you would weigh the most.



Mercury



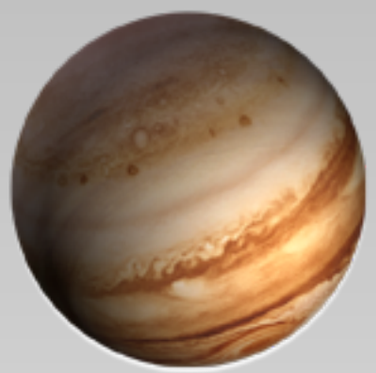
Venus



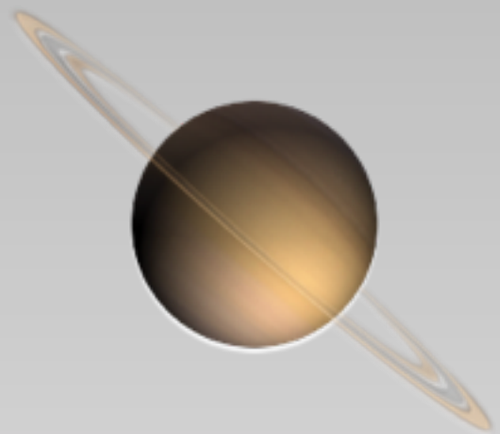
Earth



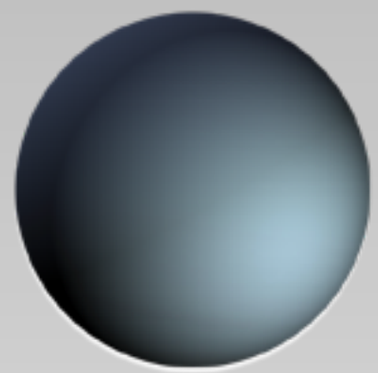
Mars



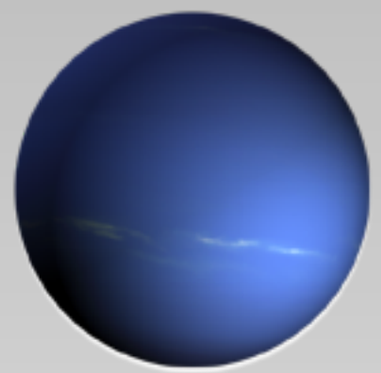
Jupiter



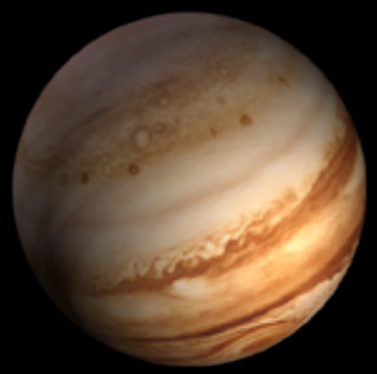
Saturn



Uranus



Neptune



Nice Job!

Jupiter is the most massive planet, therefore it would have the strongest pull of gravity making you weigh the most.

Continue on to Question #24 ➤

I'm sorry, that's incorrect.

Please go back and reconsider your answer. Feel free to review your notes or to ask for help.

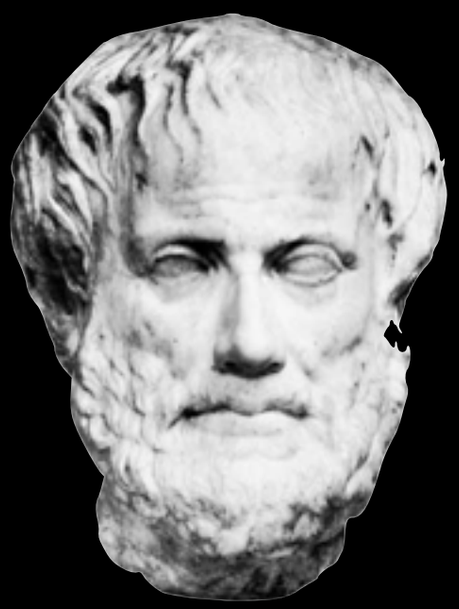
◀ Go Back and Try Again

#24



What observation was Aristotle's geocentric model of the Universe based primarily upon?

Lunar Gravity	Doppler Shift of Galaxies	Phases of Venus	Apparent Daily Motion



Nice Job!

The concept of a geocentric, or Earth-centered Universe was based largely on the observation of celestial objects rising and setting.

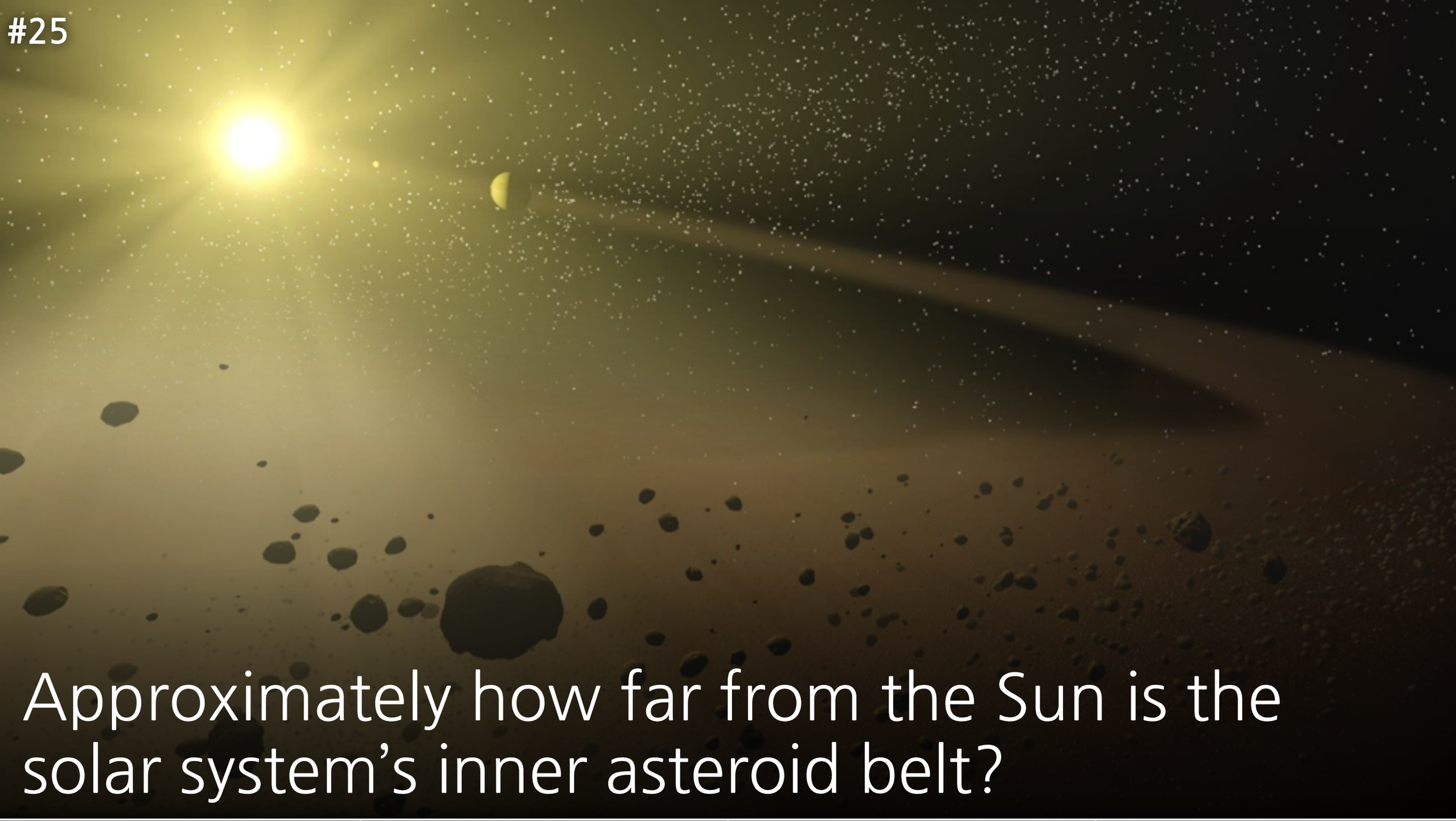
Continue on to Question #25 ➤

I'm sorry, that's incorrect.

Please go back and reconsider your answer. Feel free to review your notes or to ask for help.

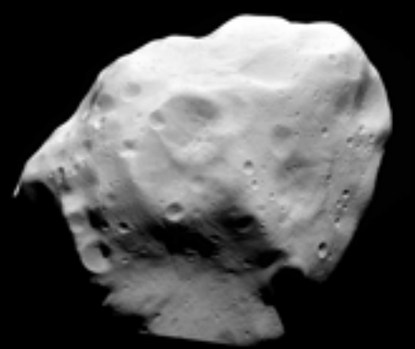
◀ Go Back and Try Again

#25



Approximately how far from the Sun is the solar system's inner asteroid belt?

4,500 million km	500 million km	50 million km	780 million km



Nice Job!

The inner asteroid belt is located between the orbits of Mars and Jupiter. There is also another asteroid belt, known as the Kuiper Belt, located beyond the orbit of Neptune.

Continue on to the next step ➤

I'm sorry, that's incorrect.

Please go back and reconsider your answer. Feel free to review your notes or to ask for help.

◀ Go Back and Try Again

High Five!

You're done, awesome job. Now head on over to iBooks and check out the four articles we have uploaded. Select one that interests you and read through it. Be prepared to discuss it.

Back to the Start

