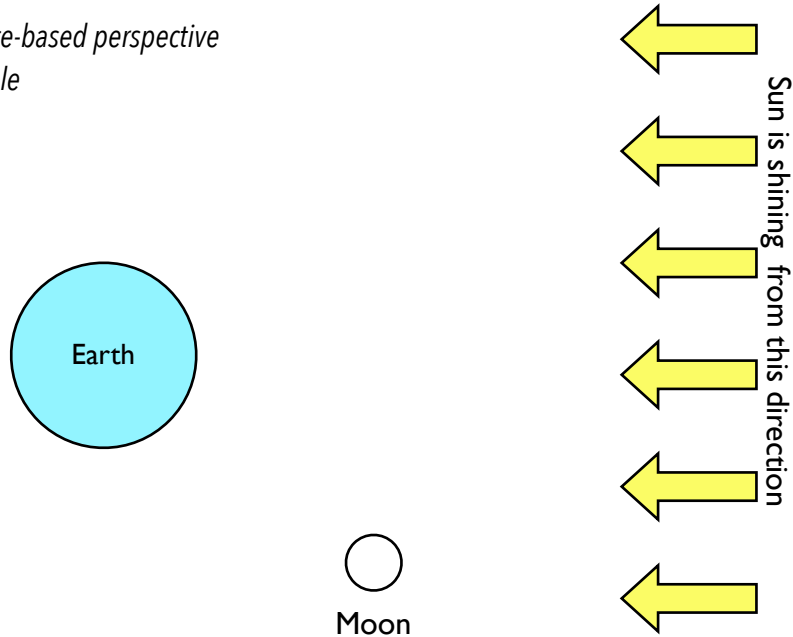


Mission 1

Figure out what this Moon looks like from Earth's Northern Hemisphere.

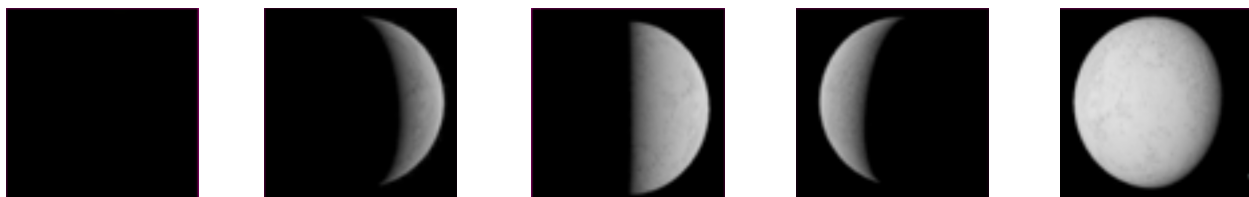
Diagram A: Overhead, space-based perspective
NOT to scale



Overhead Perspective	
Step 1:	Shade the part of the Moon (and Earth) that appears dark from overhead.
Step 2:	Draw a line that divides the Moon into the halves facing Earth and facing away from Earth. Label the two sides of the Moon (facing Earth/facing away from Earth).
Step 3:	Describe the side of the Moon facing Earth. Circle a choice below: ALL DARK MOSTLY DARK HALF/HALF MOSTLY LIT ALL LIT
Earth-based Perspective	
Step 4:	Use this overhead view to imagine what the Moon looks like from Earth. Predict if the light is on the Moon's left or right (when viewed from Earth's Northern Hemisphere). Circle a choice below: LEFT RIGHT

Mission completion - Earth-based Perspective:

Choose what you think the Moon looks like from Earth (in the Northern Hemisphere)



Mission 2

Figure out what this Moon looks like from Earth's Northern Hemisphere.

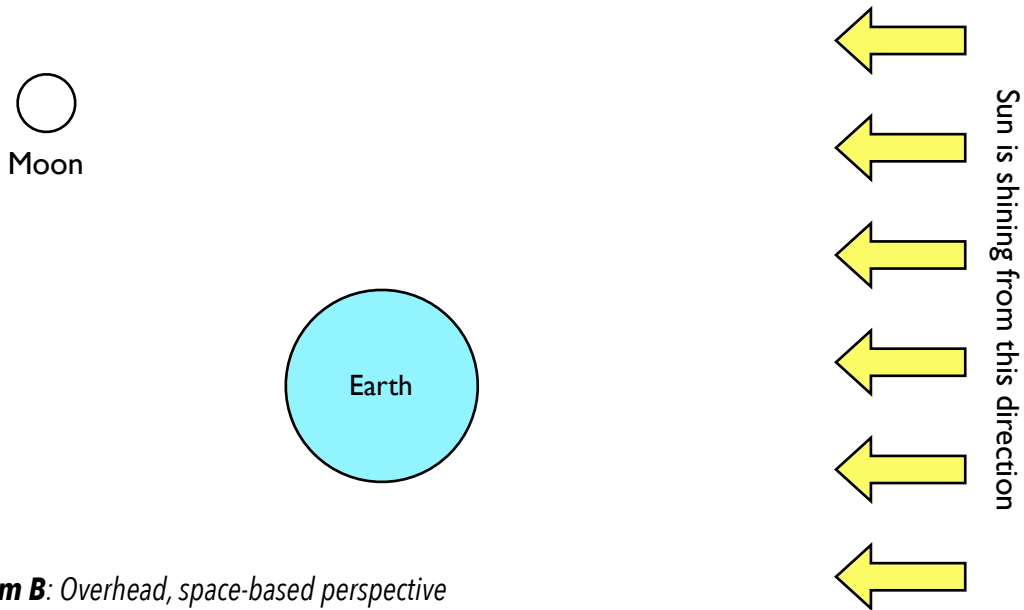


Diagram B: Overhead, space-based perspective
NOT to scale

Overhead Perspective	
Step 1:	Shade the part of the Moon (and Earth) that appears dark from overhead.
Step 2:	Draw a line that divides the Moon into the halves facing Earth and facing away from Earth. Label the two sides of the Moon (facing Earth/facing away from Earth).
Step 3:	Describe the side of the Moon facing Earth. Circle a choice below: ALL DARK MOSTLY DARK HALF/HALF MOSTLY LIT ALL LIT
Earth-based Perspective	
Step 4:	Use this overhead view to imagine what the Moon looks like from Earth. Predict if the light is on the Moon's left or right (when viewed from Earth's Northern Hemisphere). Circle a choice below: LEFT RIGHT

Mission completion - Earth-based Perspective:

Choose what you think the Moon looks like from Earth (in the Northern Hemisphere)



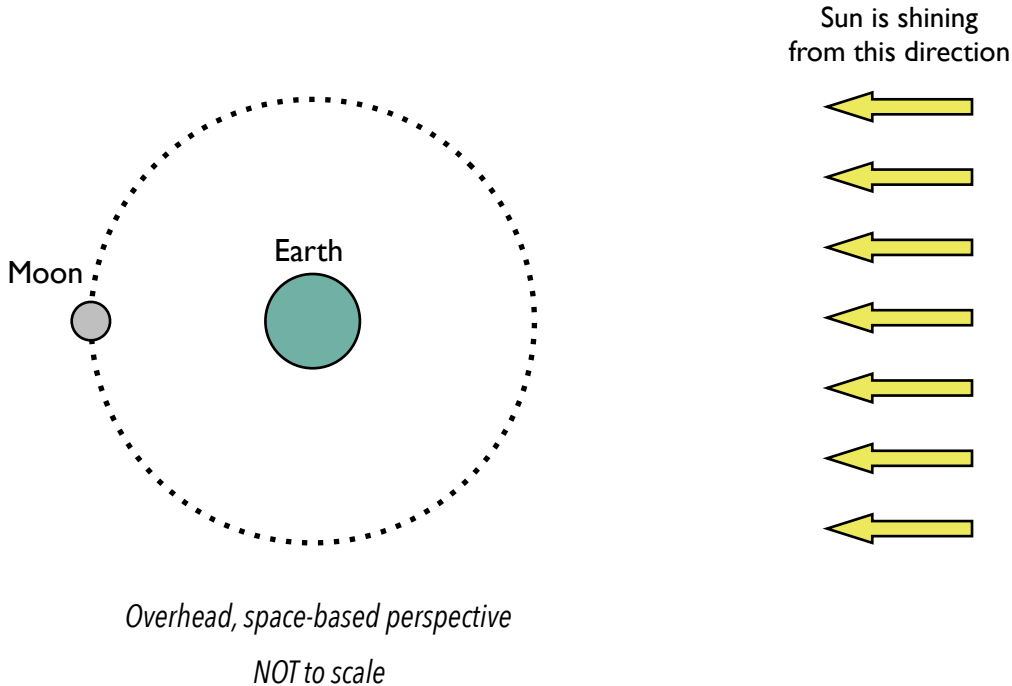
Question 3

Explain how we experience a New Moon. How is it that a half-lit Moon could appear completely dark to someone on Earth?

Sketch and label a diagram to demonstrate your reasoning.

Question 4

Predict: How will the Moon appear to a viewer on Earth when it is in this position?



In this position, a viewer on Earth will see the Moon as _____.
<All dark/Mostly dark/Half lit-half dark/Mostly lit/All lit>

This is known as a _____ moon.
<new/crescent/half/gibbous/full>