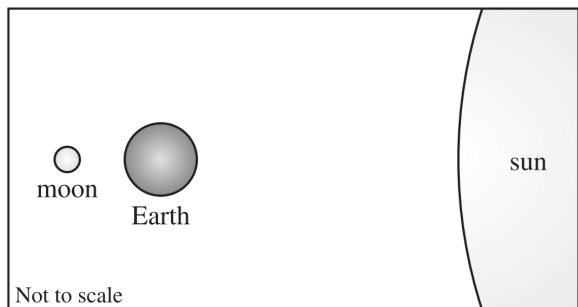


Name: \_\_\_\_\_

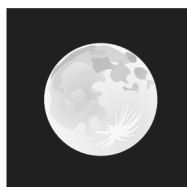
Date: \_\_\_\_\_

1. The diagram below shows the relative positions of Earth, the moon, and the sun.


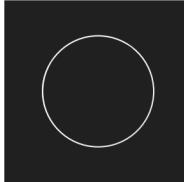




Which phase of the moon can be observed from Earth when these bodies are positioned in this way?

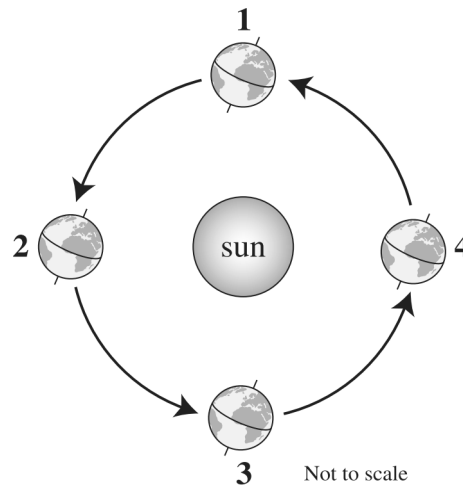
- A. full moon                      B. new moon  
C. first quarter                  D. waxing gibbous
2. The picture below shows the appearance of the moon that a student observed on a clear night.



Which phase of the moon could the student observe three nights later?

- A.                   B. 
- C.                   D. 

3. The diagram below shows four different positions of Earth during the year as it orbits the sun.

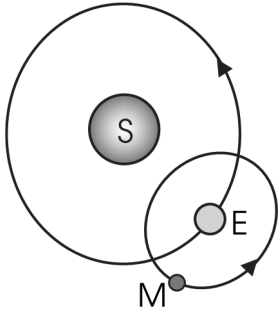


In which position is the northern hemisphere experiencing winter?

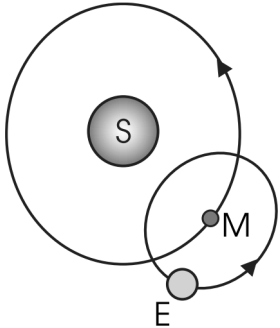
- A. position 1                      B. position 2  
C. position 3                      D. position 4
4. Which statement *best* explains Earth's day and night cycle?
- A. Earth rotates once each day on its axis.  
B. Earth revolves around the Sun each year.  
C. The Sun is closest to Earth during the day.  
D. The tilt of Earth changes throughout the year.
5. Which example requires one Earth year to complete?
- A. Earth rotating once on its axis  
B. Earth revolving once around the Sun  
C. the Sun rotating once on its axis  
D. the Sun revolving once around Earth

6. Which diagram correctly shows the orbits of Earth (E) and the moon (M) around the sun (S)?

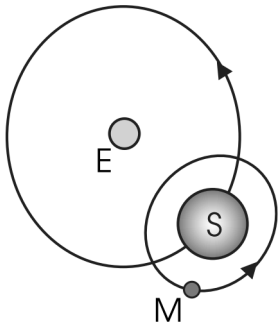
A.



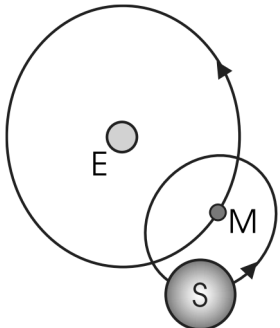
B.



C.



D.



7. Earth has seasons because of

- A. Earth's tilt on its axis.
- B. Earth's distance from the sun.
- C. the moon's gravitational pull.
- D. the sun's temperature changes.

8. Which motion causes the pattern of day and night on Earth?

- A. Earth rotates on its axis
- B. Earth orbits around the sun
- C. the moon rotates on its axis
- D. the moon orbits around Earth

9. Which phenomena occur as a result of the gravitational attraction between the moon and Earth?

- A. eclipses
- B. ocean tides
- C. seasonal changes
- D. phases of the moon

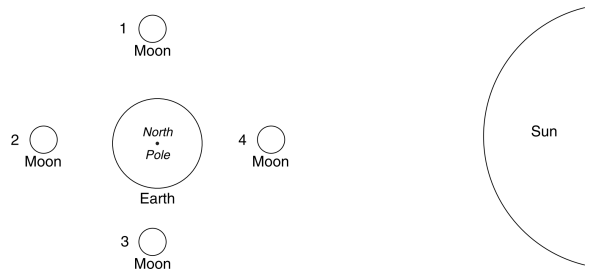
10. Which *best* explains why the moon has phases?

- A. The moon's position changes in relation to the sun and Earth.
- B. The sun's position changes in relation to the moon and Earth.
- C. The Earth casts a shadow on the moon as it rotates.
- D. The moon rotates along its axis.

11. How does a straight alignment between Earth, the sun, and the moon impact the tides on Earth?

- A. It produces the greatest change in high and low tides.
- B. It produces the least change in high and low tides.
- C. It produces semidiurnal tides.
- D. It produces diurnal tides.

12. The diagram below shows a polar projection of Earth, the Sun, and four positions of the Moon.



Which position of the Moon could cause a solar eclipse?

- A. 1
- B. 2
- C. 3
- D. 4