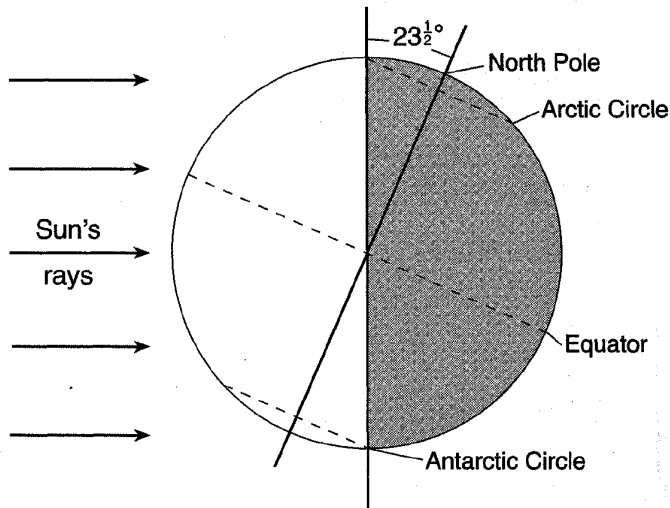


EARTH MOON SUN REVIEW

1. A student read in a newspaper that the maximum length of the daylight period for the year in Pittsburgh, Pennsylvania, had just been reached. What was the date of this newspaper?

A) March 22 B) June 22
C) September 22 D) December 22

2. The diagram below shows Earth as viewed from space.



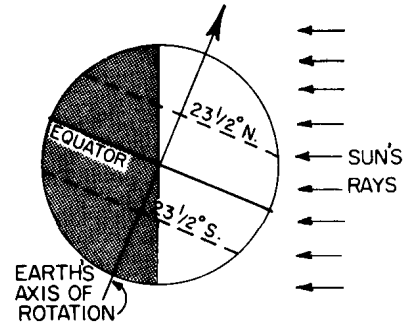
Which season is beginning in the Northern Hemisphere?

A) spring B) summer
C) fall D) winter

3. On which day of the year does Connecticut have the fewest hours of daylight?

A) April 21 B) June 21
C) October 21 D) December 21

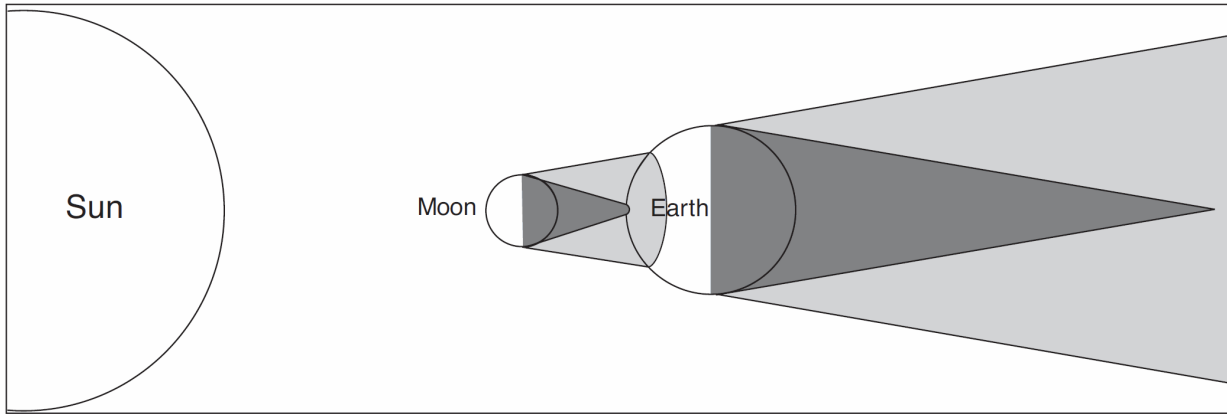
4. In the diagram below, the direct rays of the Sun are striking the Earth's surface at $23\frac{1}{2}^\circ$ N. What is the date shown in the diagram?





A) March 21 B) June 21
C) September 23 D) December 21

EARTH MOON SUN REVIEW

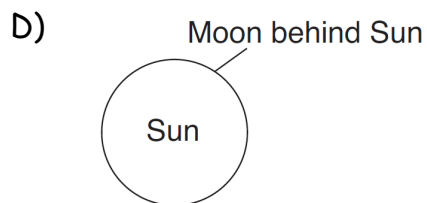
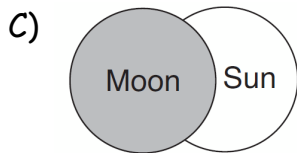
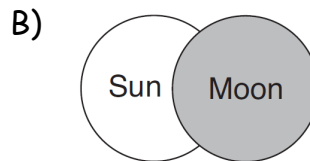
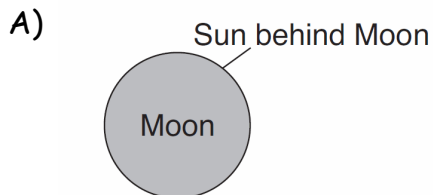
5. The diagram below shows the position of the Sun, the Moon, and Earth during a solar eclipse. The full shadow (umbra) and partial shadow (penumbra) of the Moon and Earth are shown.



(Not drawn to scale)

Key	
	Umbra
	Penumbra

Which diagram best represents the appearance of the Sun and the Moon to an observer located within the umbra of the Moon's shadow on Earth's surface?



6. The passage of the Moon into Earth's shadow causes a

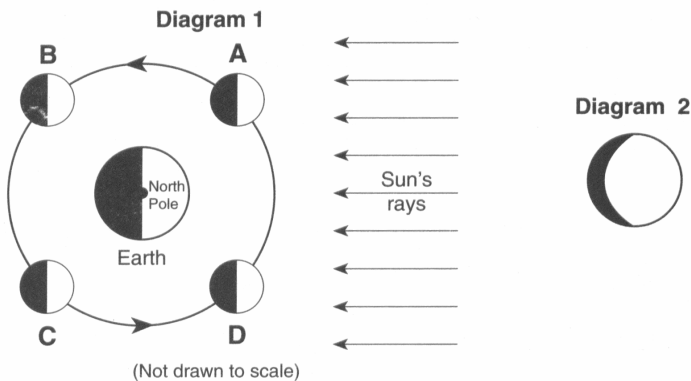
- A) lunar eclipse B) solar eclipse
C) new Moon D) full Moon

EARTH MOON SUN REVIEW

7. The same side of the Moon always faces Earth because the

- A) Moon's period of rotation is longer than its period of revolution around Earth
- B) Moon's period of rotation is shorter than its period of revolution around Earth
- C) Moon rotates once as it completes one revolution around Earth
- D) Moon does not rotate as it completes one revolution around Earth

8. Diagram 1 shows the Moon in its orbit at four positions labeled A, B, C, and D. Diagram 2 shows a phase of the Moon as viewed from New York State.

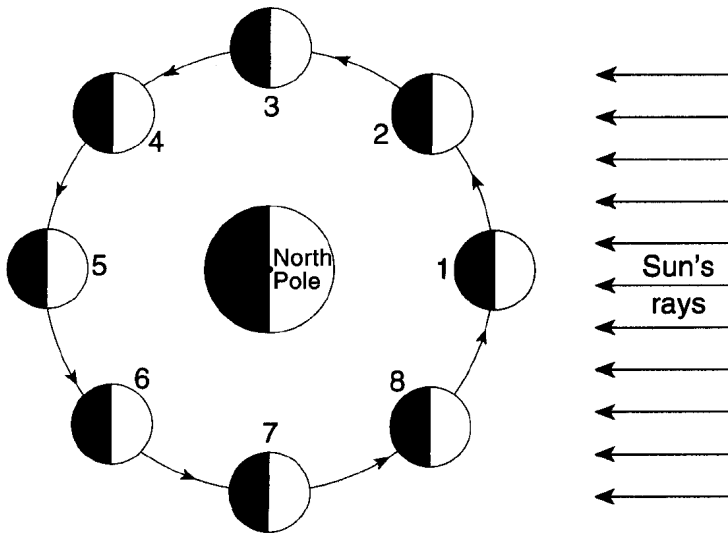


At which labeled Moon position would the phase of the Moon shown in diagram 2 be observed from New York State?

- A) A B) B C) C D) D

EARTH MOON SUN REVIEW

9. The diagram below shows the Moon as it revolves around Earth. The numbered locations represent different positions of the Moon in its orbit.

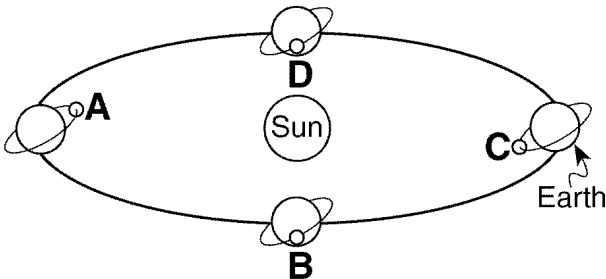


(Not drawn to scale)

Which Moon phase would be seen by an observer in New York State when the Moon is at position 2?

- A) B) C) D)

10. The diagram below shows Earth's orbit around the Sun and different positions of the Moon as it travels around Earth. Letters A through D represent four different positions of the Moon.



(Not drawn to scale)

An eclipse of the Moon is most likely to occur when the Moon is at position

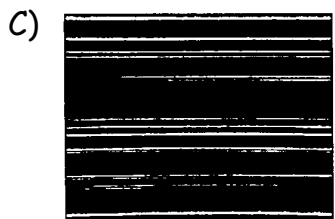
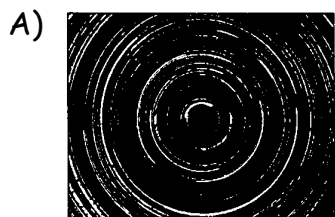
- A) A B) B C) C D) D

11. The spinning of Earth on its axis causes the apparent rising and setting of the

- A) Sun, only
B) Sun and the Moon, only
C) Moon and some stars, only
D) Sun, the Moon, and some stars

EARTH MOON SUN REVIEW

12. Which photograph of star trails was taken by an observer facing directly north in New Jersey?



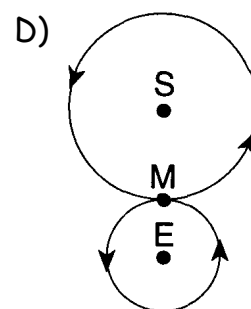
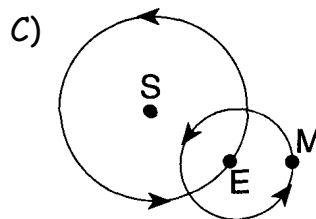
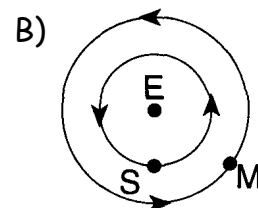
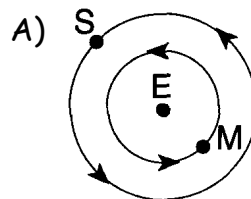
13. If the axis of Earth were not tilted relative to the plane of its orbit around the Sun, the result would be

- A) a greater number of hours in a day
- B) a greater number of days in a year
- C) a reversal of polar and equatorial climates
- D) an equal number of hours of daylight at most locations

14. The time required for one Earth rotation is about

- A) one hour
- B) one day
- C) one month
- D) one year

15. Which diagram best represents a portion of the heliocentric model of the solar system? [S = Sun, E = Earth, and M = Moon]

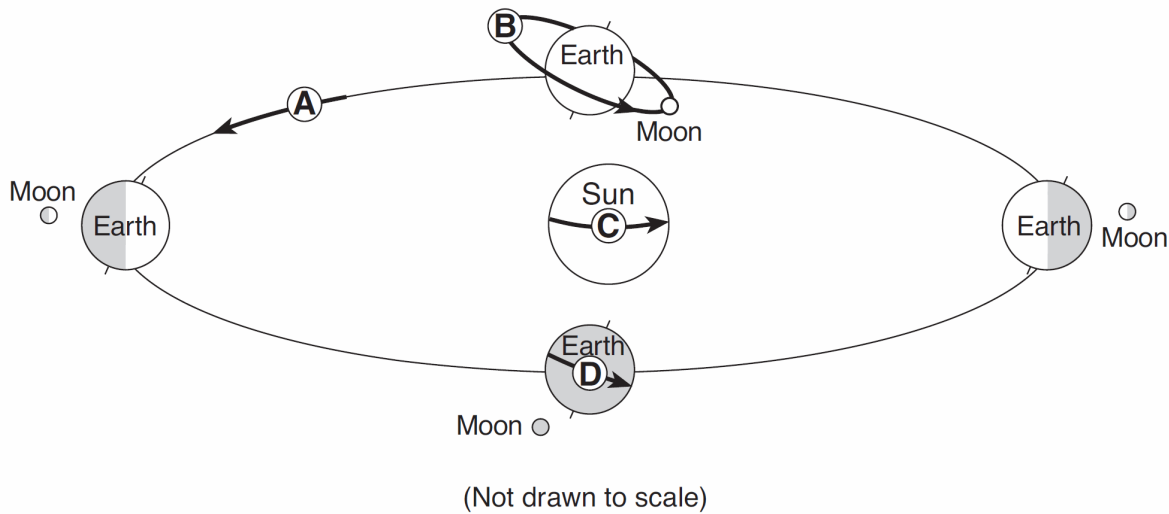


16. Which statement provides the best evidence that Earth revolves around the Sun?

- A) The Sun follows an apparent daily path, rising in the east and setting in the west.
- B) A Foucault pendulum appears to shift its direction of swing in a predictable manner.
- C) The stars appear to follow circular paths around the North Star (Polaris).
- D) The seasons of spring, summer, fall, and winter repeat in a pattern.

EARTH MOON SUN REVIEW

17. The diagram below shows Earth and the Moon in four locations during their orbits. Arrows A through D represent different motions of Earth, the Moon, and the Sun.



Which arrow represents a rate of movement of approximately 1° per day?

- A) A B) B C) C D) D

18. In which list are celestial features correctly shown in order of increasing size?

- A) galaxy → solar system → universe → planet
B) solar system → galaxy → planet → universe
C) planet → solar system → galaxy → universe
D) universe → galaxy → solar system → planet

19. Billions of stars in the same region of the universe are called

- A) solar systems B) asteroid belts
C) constellations D) galaxies

20. The time required for the Moon to show a complete cycle of phases when viewed from Earth is approximately

- A) 1 day B) 1 week
C) 1 month D) 1 year