

MCAS Questions: Measuring Time**Reporting Category: Earth and Space Science**

Standard: 13 - Recognize that the earth is part of a system called the "solar system" that includes the sun (a star), planets, and many moons. The earth is the third planet from the sun in our solar system.

Standard: 14 - Recognize that the earth revolves around (orbits) the sun in a year's time and that the earth rotates on its axis once approximately every 24 hours. Make connections between the rotation of the earth and day/night, and the apparent movement of the sun, moon, and stars across the sky.

Standard: 15 - Describe the changes that occur in the observable shape of the moon over the course of a month.

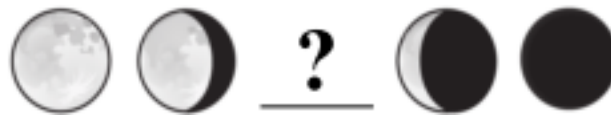
1. (2013) Which of the following sets of pictures shows the phases of the Moon in the order they would be observed?
 - A.
 - B.
 - C.
 - D.

2. (2012) The Sun appears to move across the sky each day, rising in the east and setting in the west. What causes this apparent motion?
 - A. the rotation of Earth on its axis
 - B. the revolution of the Sun around Earth
 - C. the Earth's distance from the Sun
 - D. the properties of Earth's atmosphere

3. (2011) The Sun is the largest body in the solar system. The Sun is a

- A. moon.
- B. planet.
- C. satellite.
- D. star.

4. (2011) A student made the drawing below to show the order of several phases of the Moon. One of the phases is missing.



Which of the following pictures shows the phase of the Moon that is missing from the drawing?

A.

B.

C.

D.

5. (2010) A student observed the Moon on a Tuesday. She drew a picture of its shape in her journal, as shown below.



Approximately how long will the student have to wait before she can see the Moon with this same shape and position again?

- A. 7 days
 - B. 14 days
 - C. 28 days
 - D. 365 days
6. (2009) Approximately how long does Earth take to complete its orbit around the Sun?
- A. one day
 - B. one month
 - C. one year
 - D. one century

7. (2008) Which of the following drawings best represents the motion of a planet and its moon around the Sun?

A.

B.

C.

D.

8. (2008) Which of the following statements best explains why stars appear to move across Earth's sky each night?

A. Earth rotates on its axis.

- B.** The stars orbit each other.
- C.** Earth revolves around the Sun.
- D.** The stars rotate with the Moon.
9. (2008) A student observed the shape of the Moon once every 7 days during the month of June. Which of the following sets of drawings shows how the Moon's shape could have changed during the month of June?

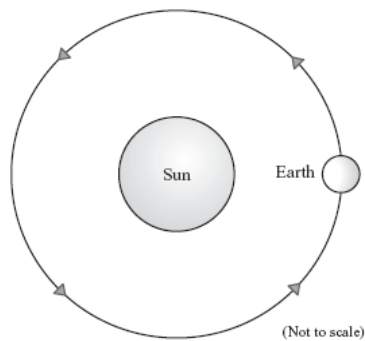
A.

B.

C.

D.

10. (2007) The diagram below represents Earth's orbit around the Sun.



About how long does it take Earth to make one complete orbit around the Sun?

- A.** 24 hours
- B.** 7 days
- C.** 1 month

D. 1 year

MCAS Questions: Measuring Time
Multiple Choice Answers

1. B
2. A
3. D
4. A
5. C
6. C
7. C
8. A
9. A
- 10.D