SOL 4.7 SOLAR SYSTEM
Key concepts include
a) the planets in the solar system;
b) the order of the planets in the solar system; and
c) the relative sizes of the planets.

IMPORTANT:
SOL 4.7 has recently changed from a focus on the Earth-Moon relationship to a focus on our Solar System.

The released questions below tested the old standards. Only the first questions on planets apply to the new content.

PLANETS
1. If the Earth moved farther away from the sun, which of these would probably happen?
   (2005 test – question 1)
   a. There would be no moon.
   b. There would be more solar eclipses.
   c. There would be colder weather.
   d. There would be more seasons.
2. How is the Earth different from all of the other planets?
   (2005 test – question 15)
   a. It has a breathable atmosphere.
   b. It has a rocky surface.
   c. It is warmed by the sun.
   d. It rotates on its axis.
3. The Earth is very different from other planets in the solar system because it has the most —
   (2003 test – question 39)
   a. solid rock
   b. volcanoes
   c. liquid water
   d. high winds
MOON CHARACTERISTICS

7. The surface of the Moon is made up of —  
(a) craters, highlands, and flat areas  
(b) swirling gases  
(c) large bodies of water  
(d) a mixture of gases and water

8. Which of these best describes the Moon?  
(a) Older than Earth  
(b) Smaller than Earth  
(c) Having the same climate as Earth  
(d) Having the same atmosphere as Earth

9. About 400 years ago, Galileo became the first person to record what the moon looked like through a telescope. He was able to tell that the moon had —  
(a) many craters  
(b) plants but no animals  
(c) active volcanoes  
(d) polar ice caps

10. Sometimes you can see the moon during the daytime. The moon looks the same size as the sun, but the moon is 1/400 the size of the sun. Which of these best shows the size of the moon relative to the sun? ©

12. The Apollo 11 mission was able to retrieve samples of the Moon’s surface because it was the first mission to have astronauts —  
(a) land on the Moon  
(b) orbit a planet  
(c) return to Earth  
(d) walk in space

13. The moon revolves around —  
(a) itself  
(b) the Earth  
(c) the sun  
(d) the solar system

14. Which of these would fit best in area 3 of this Venn diagram?  
(a) Rocky surface  
(b) Active volcanoes  
(c) Liquid water present  
(d) Oxygen in atmosphere

15. The distance between which of these is the shortest?  
(a) Earth and sun  
(b) Moon and sun  
(c) Earth and Mars  
(d) Earth and moon

EARTH – MOON RELATIONSHIP

11. Which of these objects in the solar system has been visited by people from Earth?  
(a) Moon  
(b) Sun  
(c) Mars  
(d) Asteroid

16. Which of these is the most responsible for the changes of the seasons on Earth?  
(a) Position of the Moon  
(b) Tilt of Earth on its axis  
(c) Temperature of the Sun  
(d) Distance to Mars
17. Which of these takes about one year to complete?
   (2010 test – question 32)
   a. Earth to orbit the Sun
   b. The Sun to orbit Earth
   c. Earth to rotate on its axis
   d. The Moon to orbit Earth

18. Earth makes a complete revolution around the Sun about once every —
   (2008 test – question 9)
   a. day
   b. year
   c. season
   d. minute

19. Which of these describes rotation?
   (2009 test – question 22)
   a. Mercury goes around the Sun every 88 days.
   b. The Moon goes around Earth every 28 days.
   c. Earth orbits the Sun about every 365 days.
   d. Earth makes one turn on its axis every 24 hours.

20. The motion of Earth around the Sun most affects the —
   (2007 test – question 14)
   a. timing of tides
   b. length of a month
   c. cycle of the seasons
   d. phases of the Moon

21. The time between today’s sunrise and tomorrow’s sunrise would be about —
   (2003 test – question 4)
   a. 12 hours
   b. 24 hours
   c. 36 hours
   d. 48 hours

22. Which of these best shows that the Earth revolves around the Sun as the Moon revolves around the Earth?
   (2004 test – question 30)

23. The rotation of the Earth on its axis causes —
   (2002 test – question 21)
   a. seasons
   b. years
   c. months
   d. days