Multiple Choice
Identify the choice that best completes the statement or answers the question.

1. Dark-colored, relatively flat regions of the Moon's surface that were formed when interior lava filled large basins are called ____.  
   a. craters  
   b. volcanoes  
   c. maria  
   d. sedimentary rocks

2. A ____ occurs when the Moon moves directly between the Sun and Earth and throws a shadow on Earth.  
   a. solar eclipse  
   b. lunar eclipse  
   c. waning gibbous  
   d. waxing gibbous

3. The yearly orbit of Earth around the Sun is called its ____.  
   a. rotation  
   b. ellipse  
   c. revolution  
   d. tilt

4. Summer occurs on the hemisphere of Earth that is ____.  
   a. turned away from the Sun  
   b. tilted toward the Sun  
   c. tilted away from the Sun  
   d. turned toward the Sun

5. The line on which an object rotates is defined as ______________.  
   a. revolution axis  
   b. rotation axis  
   c. tilt axis  
   d. spin axis

6. When the north end of Earth’s rotation axis is pointing toward the Sun, which statement is true?  
   a. The southern hemisphere receives more energy from the Sun.  
   b. Temperatures decrease in the northern hemisphere.  
   c. The northern hemisphere receives more energy from the Sun.  
   d. Temperatures increase in the southern hemisphere.

7. A solstice is a day when ______________.  
   a. Earth’s rotation axis is most toward the Sun.  
   b. Earth’s rotation axis is most away from the Sun.  
   c. Earth’s rotation axis is neither leaning toward or away from the Sun.  
   d. Both a and b are correct.

8. Not only is the summer solstice the longest day of the year, it is also the day on which _____________.  
   a. the Sun is lowest in the sky  
   b. sunset comes earliest  
   c. the Sun appears to be highest in the sky  
   d. sunrise comes latest

9. The seasons are caused by ______________.  
   a. the direction Earth’s rotational axis is pointed with respect to the Sun  
   b. the distance Earth is from the Sun  
   c. the shape of Earth’s orbit  
   d. the tides of the ocean

10. During __________ phases, more of the Moon is visible each night.  
    a. waxing  
    b. waning  
    c. new  
    d. full

11. The time for one rotation of the Moon is 27.3 days. What is the time revolution?  
    a. 24 hours  
    b. 24 days  
    c. 27.3 days  
    d. 365 days

12. What formed the craters on the Moon?  
    a. volcanoes  
    b. lava flowing up through the Moon’s crust  
    c. impacts from objects in space  
    d. tectonic plate movement

13. A wide light source creates a shadow with two parts. From which part can the light source be partially seen?  
    a. The light source can be seen from the umbra.  
    b. The light source can be seen from the penumbra.  
    c. The light source can be seen from both parts of the shadow.  
    d. The light source can be seen from neither part of the shadow.
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14. When the shadow of the Moon appears on Earth’s surface a _________ is occurring.
   a. solar eclipse    b. new moon    c. lunar eclipse    d. astral eclipse

15. Why do solar eclipses happen only during a new moon?
   a. A new moon occurs when the Sun, the Moon and Earth are all aligned. This allows the Moon to appear to cover the Sun.
   b. A new moon occurs when the Sun, the Moon and Earth are all in a 90 degree angle. This allows the Moon to appear to cover the Sun.
   c. A new moon occurs when the Sun, the Moon and Earth are all aligned. This allows the Sun to appear to cover the Moon.
   d. A new moon occurs when the Sun, the Moon and Earth are all in a 90 degree angle. This allows the Sun to appear to cover the Moon.

16. A lunar eclipse can only occur during which type of moon phase?
   a. first quarter moon    c. new moon
   b. full moon             d. third quarter moon

17. A tide is a _________ rise and fall of sea level.
   a. daily    b. monthly    c. yearly    d. rare

18. What force is mostly responsible for tides?
   a. the gravity of the Sun    c. the gravity of the Moon
   b. the gravity of Earth    d. wind

19. Spring tides--
   a. occur at new and full moons, and have the highest high tides and lowest low tides.
   b. occur at first- and third-quarter moons, and have the lowest high tides and highest low tides.
   c. occur at new and full moons, and have the lowest high tides and highest low tides.
   d. occur at first- and third-quarter moons, and have the highest high tides and lowest low tides.

20. When do neap tides occur?
   a. at new and full moons, and have the highest high tides and lowest low tides
   b. at first- and third-quarter moons, and have the lowest high tides and highest low tides
   c. at new and full moons, and have the lowest high tides and highest low tides
   d. at first- and third-quarter moons, and have the highest high tides and lowest low tides

Completion

Complete each statement.

21. Hours of daylight and nighttime are equal during a(n) ____________________.

22. Earth is ____________________ the Sun in January.

23. The Moon revolves around ____________________.

24. The spinning of Earth on its axis is called ____________________.

25. Earth ____________________ on its axis and ____________________ around the Sun.

26. The Sun’s apparent path through the sky in the southern hemisphere is highest during the ____________.

27. Since the Moon revolves once around Earth in the same amount of time that it takes to rotate on its axis the ____________________ faces Earth.

28. In order to see the total solar eclipse, you would have to be in the ____________.
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Matching

*Match each term with the correct description below.*

a. waxing  
   b. axis  
   c. rotation  
   d. revolution

e. new Moon  
f. equinox  
g. December solstice  
h. Moon phases

___ 29. Earth's yearly orbit around the Sun
___ 30. changing appearances of the Moon from Earth
___ 31. Moon phase in which none of the lighted surface of the Moon can be seen from Earth
___ 32. when the Sun's rays strike Earth directly at the equator
___ 33. turning of Earth on its axis
___ 34. Moon phases in which the amount of lighted surface seen on Earth increases
___ 35. December 21 or 22
___ 36. imaginary line extending between the poles around which Earth spins

*Match each description with the correct term below.*

a. first quarter  
b. full moon  
c. new moon  
d. third quarter  
e. solar eclipse

f. lunar eclipse  
g. maria  
h. craters  
i. 27.3 days

___ 37. occurrence caused by Earth's coming between the Sun and the Moon and casting its shadow on the Moon
___ 38. Moon phase in which none of the lighted surface of the Moon can be seen from Earth
___ 39. amount of time of the Moon's revolution and rotation
___ 40. depressions on the Moon caused by the impact of meteorites
___ 41. waxing Moon phase in which one half of the Moon's lighted surface can be seen from Earth
___ 42. occurrence caused by the Moon's being between the Sun and Earth and casting its shadow on Earth
___ 43. dark-colored, relatively flat regions of the Moon formed from lava filling large basins
___ 44. phase in which all of the lighted side of the Moon can be seen from Earth
___ 45. waning Moon phase in which one half of the lighted side of the Moon can be seen from Earth
46. Draw and label each phase of the moon. Shade the part of the moon that we DO NOT SEE.