Name: _____

Date: _____ Grade: _____

Basic Science Mysteries

CHAPTER 2 TEST

Congratulations on completing this chapter! ***Answer the following questions to test your understanding of the material. When you finish, hand in your test to your teacher for a final grade. Each answer is worth 2.27 points.***

Matching:

1. _____ carnivores (a) eat only plants
2. _____ herbivores (b) eat both meat and plants
3. _____ omnivores (c) eat only meat

Multiple Choice: Choose the correct answer.

4. _____ live in saltwater but spawn in freshwater.
   (a) Salmon (b) American eels (c) both of these
5. Piranhas, crappie and catfish live in: _____.
   (a) saltwater (b) freshwater (c) both of these
6. An example of a lever is: _____.
   (a) a dolly handle (b) a lead brick (c) a screwdriver
7. On a hammer, the fulcrum is the: _____.
   (a) handle (b) claw (c) head
8. A long lever: _____.
   (a) increases the amount of effort needed
   (b) decreases the amount of effort needed
   (c) makes the resistance lighter
9. Which simple machine would help you to move from the ground onto the porch a dolly loaded with heavy boxes? _____
   (a) a lever (b) a ramp (c) a wheel and axle
10. A screwdriver is a wheel and axle machine because: _____
    _____.
    (a) a wheel (the round, rubber handle) is attached to an axle (the long, metal shaft); when effort is applied to the handle, the shaft turns, reducing the effort
    (b) an inclined plane reduces the force necessary to move upward an object
    (c) it decreases the amount of effort needed and makes the resistance tighter
11. A _____ allows electricity to pass easily; a _____ inhibits the passage of electricity.
    (a) conductor; insulator (b) ramp; lever (c) rubber handle; metal shaft

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12. Turtles: _____.
    (a) are reptilian vertebrates covered by shells
    (b) breath through gills and have fins
    (c) hatch from eggs
    (d) eat plants and animals
    (e) only a, c and d
    (f) only a, b and c

13. Three diseases contracted through food improperly canned, cooked or stored are: _____.
    (a) echolocation, food poisoning and salmonella
    (b) camouflage, amphibian and conductor
    (c) E-coli, trichinosis and botulism

14. An object will sink in water if: _____.
    (a) the water is too thin
    (b) the object is denser than the water
    (c) the object is less dense than the water
    (d) the object is made of Styrofoam

15. Which statement is **NOT** true of the Earth? _____
    (a) It rotates on its axis and revolves around the Sun.
    (b) It has an axis from the North Pole to the South Pole.
    (c) It has an equator that separates the Northern and Southern Hemispheres.
    (d) It rotates on its axis every 12 hours.

16. If a salamander is nocturnal, the salamander will: _____.
    (a) eat only plants (b) be active at night (c) use echolocation to find prey

17. An electric motor operates on the principle of: _____.
    (a) echolocation (b) magnetism (c) combustion (d) electricity

18. A gasoline motor operates on the principle of: _____.
    (a) echolocation (b) magnetism (c) combustion (d) electricity

19. Which statement is **NOT** true of the Moon? _____
    _____
    (a) It rotates in an elliptical orbit on an axis.
    (b) It reflects light from the Sun.
    (c) It revolves around the Earth.
    (d) It can be seen in its entirety from the Earth.

20. A wasp is a(n): _____.
    (a) arthropod (b) arachnid (c) insect (d) both a and c

21. A spider is a(n): _____.
    (a) herbivore (b) arachnid (c) insect (d) both b and c

22. The Northern Hemisphere receives direct sunlight when what occurs? _____
    _____
    (a) when the hemisphere is tilted away from the Sun
    (b) when the hemisphere is tilted toward the Sun
    (c) when the Sun is hottest
    (d) when the Moon is full

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23. Metals _____ electricity.
(a) conduct (b) insulate (c) speed up (d) slow down

24. Which statement is true **NOT** about formations in caves? _____
_____
(a) Stalactites form on the ceilings of caves
(b) Bats excrete guano that builds up and hardens into lime.
(c) Stalagmites form on the floors of caves.
(d) Columns form when stalactites and stalagmites meet

25. Which statement is true about lightning and thunder? _____
_____
(a) Thunder is caused by lightning striking the ground.
(b) Thunder is caused by lightning echoing off clouds.
(c) Lightning and thunder are caused when water in a cloud separates into positively and negatively charged particles.
(d) none of these

Fill in the blank by using words from the WORD BANK.

WORD BANK			
shortest	winter	summer	longest
reflecting	rotations	explode	density
Isaac Newton	equinox	poisonous	seasons
Hans Lipperhey	shine	non-poisonous	refracting

26. The _____ of an object is the object's mass in relation to the volume.

27. Copperheads, water moccasins, coral snakes and rattlesnakes are types of _____ snakes.

28. Two times each year when the length of day and night are equal is called a(n) _____.

29. _____ and equinoxes in the Southern Hemisphere are opposite of what they are in the Northern Hemisphere.

30. Most snakes are _____.

31. Stars _____ when they emit hydrogen and helium.

32. _____ invented the reflecting telescope.

33. A _____ telescope brings light rays to a focus by reflecting the light rays off a curved mirror.

34. The _____ day of the year is on or about December 21st.

35. The _____ day of the year is on or about June 21st.

36. The _____ solstice begins on or about December 21st.

37. The _____ solstice begins on or about June 21st.

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Write the letter of the statement which gives the best meaning of each Life Principle.

38. *"Sometimes success depends not on how hard you work, but how smart you work."* _____
    (a) Brawn without brains is effective.
    (b) Working hard physically can make you successful, but using your problem solving skills can make you even more successful.
    (c) Smart people are the only people who will be successful.

39. *"Wise people take time to be cautious."* _____
    (a) Speaking or acting without thinking is wise.
    (b) Wisdom comes from being cautious.
    (c) A wise person will think before he acts or speaks.

40. *"The night is darkest just before dawn."* _____
    (a) Often, situations or circumstances may seem "dark," but better times are just ahead.
    (b) Darkness always precedes light.
    (c) If situations seem difficult, just wait a few hours, and the situation will become worse.

41. *"Treat the unknown with caution."* _____
    (a) If you meet someone you do not know, immediately bully him or her to discover if he or she is tough enough to be your friend.
    (b) In a situation in which the factors are unknown, you can act without cautiously weighing the possible effects.
    (c) If you do not know about something or someone, carefully investigate and wait to act or to form an opinion.

42. *"Truth will be revealed in due season."* _____
    (a) In time, the truth about all situations is revealed—nothing stays hidden forever.
    (b) In the Dew Season, flowers named Truth bloom.
    (c) If a person commits an act that is wrong, and the person is careful to hide his or her actions, they will stay hidden.

43. *"All that glitters is not gold."* _____
    (a) The promise of riches usually comes true.
    (b) If something sounds too good to be true, it usually is.
    (c) Just because something looks attractive does not always mean it is a good thing.

44. *"Knowing what is right is good; doing what is right is better."* _____
    (a) Just thinking about what is right is a step in the correct direction; however, actually doing what is right is the best choice.
    (b) The choice between knowing and doing what is right is relative—one is just as good as the other.
    (c) No one can really know for sure what is right; so, just doing something is better than doing nothing.

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