Name: _____

Date: _____ Grade: _____

SECTION QUIZ 2-1



Remember:
Score an 85% or higher on all three quizzes and you may be exempt from the chapter test!



Congratulations! You have completed this section!
Answer the following questions to test your understanding of the material. When you are finished, hand in your quiz to your teacher. Each answer is worth 2.43 points.

Fill in the blank or circle True or False.

1. Physics is the study of matter and energy and their interaction.
   (a) True or (b) False

2. An essential step in science is to _____ information so it is easier to understand.

3. Gutenberg's printing press helped revive learning.
   (a) True or (b) False

4. Aristotle instructed his students to observe and to think.
   (a) True or (b) False

5. Galileo: _____.
   (a) invented the telescope
   (b) used the telescope to study the heavens
   (c) gave a telescope to his brother as a gift
   (d) used a telescope to build roads

6. Galileo discovered the Principle of the Pendulum.
   (a) True or (b) False

7. Experiments seldom reveal new scientific discoveries.
   (a) True or (b) False

8. Two objects of different weight are dropped from the top of a tall building. They hit the ground at the same time. We can conclude that the speed of falling bodies and their weight are: _____.
   (a) related to one another
   (b) independent of one another
   (c) faster than the speed of light
   (d) inversely proportional to each other

9. The period of a pendulum and the amount of weight at the end of the pendulum are: _____.
   (a) inversely proportional to each other
   (b) all you need to know to build a pendulum clock
   (c) independent of one another
   (d) related to one another

10. Galileo believed an object in motion came to a stop because: _____.
    (a) a force such as friction acted upon it
    (b) being at rest was its natural state
    (c) it was the thing to do
    (d) gravity always makes objects stop

11. The quantity of distance/time is a measure of a body's: _____.
    (a) speed (b) mass (c) acceleration (d) stamina

12. To measure the speed, Galileo needed to measure distance and _____.

13. The expression "miles per hour" is an example of: _____.
    (a) a unit of speed
    (b) a meaningless quantity
    (c) a unit of weight
    (d) the scientific method

14. A radar gun can measure: _____.
    (a) full range of motion
    (b) instantaneous speed
    (c) average
    (d) distance

15. Speed = change in distance/change in _____.

16. Velocity includes speed and _____of motion.

17. The force of _____ acts upon an object in free fall.

18. For acceleration to occur, velocity must change.
    (a) True or (b) False

19. The two quantities that must be known to calculate acceleration are change in velocity and: _____.
    (a) mass of the object
    (b) distance from the Earth's center
    (c) change in time
    (d) distance in a straight line

20. The acceleration due to gravity is: _____-
    (a) 32 ft/sec^2 (b) 3.14 ft/sec^2 (c) 9.8 ft/sec^2 (d) 32 ft/sec

21. Which of the following objects will fall faster in a vacuum?

    _____
    (a) a feather
    (b) a bowling ball
    (c) a concrete block
    (d) all objects fall at the same rate

22. Which of the following cannons has the greatest range? _____
    (a) a cannon level with the ground pointing left
    (b) a cannon pointing straight up
    (c) a cannon level with the ground pointing right
    (d) a cannon pointing up at 45°

23. The speed of light is faster than the speed of sound.
    (a) True or (b) False

24. When a cannon fires, the first to reach a distant observer is the: _____.
(a) light (b) sound (c) cannonball (d) gunpowder

25. Galileo decided the speed of light was: _____.
(a) "extraordinarily rapid"
(b) infinite
(c) immeasurable
(d) exceptionally slow

26. Christiaan Huygens invented the: _____.
(a) pendulum
(b) balance spring
(c) first accurate clock
(d) smokeless gunpowder

27. Roemer's value for the speed of light was incorrect because: _____
_____.
(a) light changes speed as Jupiter goes around the Sun
(b) the distance across Earth's orbit was not known
(c) the speed of light was slower then
(d) he made an educated guess

28. Stated in miles per second, the speed of light is _____.

29. The speed of light stated in meters per second is _____.

30. Astronomers of Tycho Brahe's day based the orbits of the planets on: _____
_____.
(a) circles or combinations of circles
(b) parabolas
(c) hyperbolas
(d) ellipses

31. John Kepler used the sun-centered planetary system because: _____.
(a) he wanted a better tan
(b) Aristotle recommended it
(c) Galileo suggested it
(d) it made his calculations easier

32. Copernicus used the sun-centered planetary system because: _____.
(a) he wanted a better tan
(b) Aristotle recommended it
(c) Galileo recommended it
(d) it made his calculations easier

33. Evidence that both Earth and Mars orbit the Sun is the fact that: _____
_____.
(a) Mars changes in brightness
(b) Mars is obstructed from Earth's view
(c) Mars is a planet
(d) Mars is eclipsed by Earth's rays

34. Tycho Brahe's great treasure was his: _____.
(a) collection of scientific instruments
(b) years of data
(c) observatory
(d) journal

35. The orbit of Mars is: _____.
(a) a perfect circle
(b) a combination of circles
(c) an ellipse
(d) shorter than Earth's orbit

36. The First Law of Planetary Motion states that the planets travel in _____ orbits around the Sun.

37. *"Life is too short to waste. _____ are fulfilled only through action, not through endless planning to take action."*

38. *"Nothing happens unless first a _____."*

39. "_____ *is the language with which God wrote the universe*."

40. *"If you want to achieve _____, you can get there today. As of this very second, quit doing less-than-excellent work."*

41. *"Know what you best; do best what you know, and know when to let _____ do what they do best."*