Name: _____

SECTION QUIZ 9-2



Remember:
Score an average of 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 2.5 points.

1. A cycle is a complete repetition.
   (a) True or (b) False

2. To calculate the period, divide the time by the number of _____.

3. To divide the cycles per second, calculate the: _____.
   (a) frequency (b) period (c) velocity (d) time

4. The frequency of alternating current in the United States would be written as _____.

5. The scientific study of sound is: _____.
   (a) physics (b) acoustics (c) botany (d) seismology

6. Pythagoras believed that the natural world is _____ in nature and applied mathematics to music.

7. The one that makes music by vibrating strings is a: _____.
   (a) drum (b) clarinet (c) music synthesizer (d) violin

8. Pitch of sound is its: _____.
   (a) frequency (b) period (c) cycle (d) wavelength

9. Loudness can be represented by the energy of a sound wave, and is measured by: _____.
   (a) amplitude (b) tone (c) frequency (d) pitch

10. The loudest sound that the ear can tolerate is about _____ times louder than the softest sound the ear can hear.
    (a) ten (b) one hundred (c) one trillion (d) five hundred

11. The Environmental Protection Agency is charged with protecting the environment for future generations through reducing and controlling _____ pollution.

12. The human ear can tell if a trumpet or piano is making the same note by the quality of the sound.
    (a) True or (b) False

13. The number and loudness of the overtones is caused by quality.
    (a) True or (b) False

14. The three properties of a sound are its quality, loudness and _____.

15. Edison received an education: _____.
    (a) at Menlo Park school (c) in a public school
    (b) at a private school (d) primarily at home

16. Edison invested the money from his first invention, the stock ticker, in books about travel to distant and exciting places.
    (a) True or (b) False

17. The reason that most people could see the pictures of a motion picture move was due to: _____.
    (a) Bernoulli's principle (c) liquid crystal displays
    (b) liquivision (d) the persistence of vision

18. The word phonograph comes from the Greek word *phono-*, meaning sound or speech and -*graph*, meaning to write. A phonograph is a _____ _____.

19. The filament of the first light bulb was: _____.
    (a) thread (b) carbon (c) tungsten (d) neon

20. The one that records information in audio digital format is a: _____.
    (a) compact disk (b) vinyl record (c) VCR (d) DVD player

21. The one that is easiest to copy and retain the sound quality is a: _____.
    (a) compact disk (b) vinyl record (c) carbon copy (d) tape recorder

22. The apparent change in the pitch of sound because of motion is: _____.
    (a) acoustical imperialism (c) Huygen's principle
    (b) Doppler effect (d) distance

23. Sound waves in front of a moving source of sound have _____ pitch.
    (a) higher (b) lower (c) louder (d) more piercing

24. Doppler radar can measure the speed of an object.
    (a) True or (b) False

25. The Doppler effect is also known as the Doppler _____.

26. If a horn sounds as it approaches, its frequency will seem to be _____ than when standing still.
    (a) louder (b) higher (c) lower (d) the same

27. The Doppler effect applies to all wave motion including light.
    (a) True or (b) False

28. When measuring the speed of a star by the Doppler shift, astronomers take into account the: _____.
    (a) circumrotation (c) speed of the Earth
    (b) speed of police cars (d) time it takes for light to reach the Sun

SECTION QUIZ 9-2

29. An earthquake pressure wave (P wave) causes rocks in the Earth to: _____ _____.
    (a) bobble like a cork on water
    (b) compress and expand
    (c) move at right angles to the direction of the wave
    (d) explode

30. Information about earthquakes is recorded by a: _____.
    (a) chronometer
    (c) seismograph
    (b) video camera
    (d) spectroscope

31. The ones that arrives first is _____ waves.
    (a) P (b) shock (c) A (d) S

32. The _____ of an earthquake is on the surface directly above the origin of the earthquake.

33. An earthquake scientist is better known as a _____.

34. The more powerful earthquake is one that has a _____ value on the Richter scale.

35. A _____ is a wave caused by an earthquake.

36. *"Out of difficulties grow _____."*

37. *"The person who does not make a _____ does not do anything."*

38. *"Genius is one-percent inspiration and ninety-nine percent _____."*

39. *"Provision for others is a fundamental _____ of human life."*

40. *"If you have something you cannot live without, you do not own it, it _____ you."*