Quiz Question Bank

1. Maximum distance a wave varies from its rest position
   a. Integer
   b. Amplitude
   c. Wave length
   d. Friction

2. The highest point of a transverse wave
   a. Compression
   b. Amplitude
   c. Crest
   d. Refraction

3. A form of energy that can travel through empty space as well as through matter, includes visible light, radio waves, X-rays, and many other wavelengths.
   a. Seismic wave
   b. Amplitude wave
   c. Electromagnetic wave
   d. Crest wave

4. How many waves can pass a given point per second, measured in Hertz (Hz)
   a. Amplitude
   b. Crest
   c. Frequency
   d. Friction

5. Unit of measurement for frequency
   a. Joule
   b. Hertz
   c. Amplitude
   d. Watt

6. A wave that moves back and forth parallel to the direction that it is travelling
   a. Transverse wave
   b. Seismic wave
   c. Longitudinal wave
   d. Mechanical wave

7. Energy that travels through matter (medium); examples include sound waves, ocean waves, and earthquake waves
    a. Mechanical wave
    b. Longitudinal wave
    c. Rarefaction wave
    d. Diffraction wave

8. Material through which a wave travels
    a. Medium
    b. Monolopy
    c. Amplitude
    d. Frequency

9. The bouncing back of a ray of light, sound, or heat when the ray hits a surface that it does not go through
    a. Rarefaction
    b. Reflection
    c. Diffraction
    d. Confusion

10. The bending of a wave as it enters a new medium at an angle
    a. Diffraction
    b. Resemblance
    c. Reflection
    d. Refraction

11. A wave that moves at right angles or perpendicular to the direction that it travels
    a. Transverse wave
    b. Mechanical wave
    c. Longitudinal wave
    d. Wave of feeling

12. Lowest point of a wave
    a. Crest
    b. Trough
    c. Amplitude
    d. Wave length

13. A back and forth motion that travels from one place to another
    a. Wavelength
    b. Amplitude
    c. Wave
    d. Crest

14. Distance between one point on a wave and the nearest point just like it
    a. Wavelength
    b. Amplitude
    c. Frequency
    d. Trough

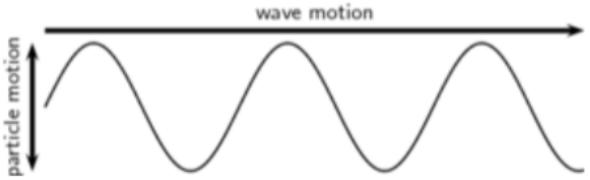
15. The speed at which a wave travels; measured in Hertz (Hz)
    a. Frequency
    b. Vibration
    c. Wave speed
    d. Warp speed

16. Through which of these mediums can sound waves NOT travel through?
    a. Wood
    b. Water
    c. Vacuum
    d. Air

17. As a wave travels between two points in a material/medium, it transfers:
    a. Energy only
    b. Matter only
    c. Both energy and matter
    d. Neither energy or matter

18. Waves that do not require a medium are called
    a. Electromagnetic waves
    b. Mechanical waves
    c. Surface waves
    d. Longitudinal waves

19. _____ move the particles of the medium perpendicular to the direction of the wave.
    a. Surface waves
    b. Mechanical waves
    c. Transverse waves
    d. Longitudinal waves



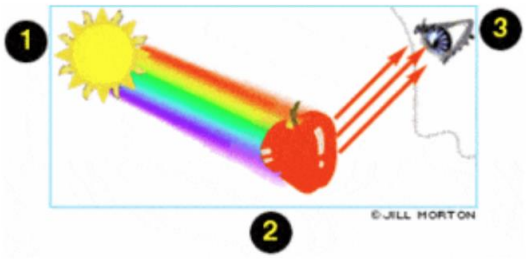
20. _____ move the particles of the medium parallel to the direction of the wave
    a. Electromagnetic waves
    b. Surface waves
    c. Transverse waves
    d. Longitudinal waves

21. As the wavelength of a wave gets longer, the frequency
    a. Increases
    b. Decreases
    c. Stays the same
    d. Has no reaction

22. A material that reflects or absorbs all the light that strikes it is
    a. Opaque
    b. Transparent
    c. Translucent
    d. Concave

23. You can see your image in a shiny, flat surface because light waves bounce directly back at you and your eyes. This is an example of _____.
    a. Diffraction
    b. Reflection
    c. Refraction
    d. Transparency

24. Which of the following is true about an apple that appears red?
    a. It absorbs red light and reflects all other colors
    b. It reflects red light and absorbs all other colors
    c. It transmits red light and reflects all other colors
    d. It reflects back all the colors

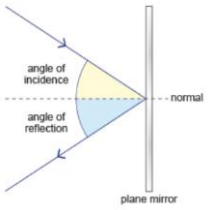


25. Why is it that you can hear around a corner, but you cannot see around a corner?
    a. Sound waves are able to diffract
    b. Sound waves are able to refract
    c. Light waves are able to diffract
    d. Light waves are able to refract

26. In the diagram, what causes the pencil to appear this way?
    a. Reflection
    b. Refraction
    c. Interference
    d. Diffraction

27. In the same diagram above, the pencil appears broken at the surface of the water. This is because
    a. Light waves speed up when they move from air to water
    b. Light waves slow down when they move from air to water
    c. Light waves stop when they hit water
    d. There is no change in light wave speed

28. The figure below represents which form of light travel
    a. Reflection
    b. Refraction
    c. Diffraction
    d. Interference



29. Which of the following lists of the Electromagnetic spectrum is the correct order from LOWEST to HIGHEST frequency?
    a. Gamma Rays, Microwaves, Infrared, Ultraviolet, Visible Light, X-Rays, Radio Waves
    b. X-Rays, Infrared, Ultraviolet, Visible Light, Gamma Rays, Microwaves, Radio
    c. Radio Waves, Microwaves, Infrared, Visible Light, Ultraviolet, X-Rays, Gamma Rays
    d. Microwaves, X-Rays, Gamma Rays, Ultraviolet, Infrared, Radio Waves, Visible Light

30. Through which medium does a light wave travel the fastest?
    a. Solid
    b. Liquid
    c. Gas
    d. Medium does not affect the speed of light

31. The loudness of a sound that you hear is generated by the wave's
    a. Frequency
    b. Wavelength
    c. Amplitude
    d. Rest position

32. Which of the following Electromagnetic waves carries the most energy?
    a. Visible light
    b. Radio waves
    c. Infrared waves
    d. Ultraviolet rays