

20 Multiple choice questions

1. a wave in which the particles vibrate at right angles to the direction of energy transfer
 - a. transverse wave
 - b. wave
 - c. wavelength
 - d. reflection

2. the combination of two or more waves by adding their displacements to produce a resultant wave
 - a. reflection
 - b. superposition
 - c. rarefaction
 - d. refraction

3. the bouncing back of a wave or particle from a boundary
 - a. velocity
 - b. refraction
 - c. reflection
 - d. rarefaction

4. the degree of loudness of a sound
 - a. volume
 - b. pulse
 - c. trough
 - d. wave

5. high frequency electromagnetic waves of high penetration
 - a. pulse
 - b. x-ray
 - c. wave
 - d. ray

6. the bending of a wave as it passes from one medium into another, resulting from a change in speed of the wave in the two media
 - a. rarefaction
 - b. refractive index
 - c. refraction
 - d. reflection

7. the region in a longitudinal wave where the particles are spread out further than their equilibrium positions
 - a. wavefront
 - b. rarefaction
 - c. reflection
 - d. refraction

8. the ratio of the sine of the angle of incidence to the sine of the angle of refraction, for a wave travelling from one medium into another
 - a. rarefaction
 - b. refractive index
 - c. refraction
 - d. reflection

9. a line joining points in phase on a wave
 - a. wave
 - b. wavefront
 - c. velocity
 - d. wavelength

10. a line drawn at right angles to a wave front
 - a. pulse
 - b. x-ray
 - c. ray
 - d. wave

11. a law relating the angle of incidence to the angle of refraction; $n = \sin i / \sin r$
 - a. Snell's law
 - b. pulse
 - c. velocity
 - d. ultraviolet

12. the reflection of all the light falling on a boundary when the angle of incidence exceeds the critical angle
 - a. refraction
 - b. total internal reflection
 - c. reflection
 - d. rarefaction

13. the speed of a wave in the direction of energy transfer
 - a. reflection
 - b. volume
 - c. wavelength
 - d. velocity

14. a single disturbance
 - a. pulse
 - b. wave
 - c. volume
 - d. x-ray

15. to travel through a medium or space
 - a. volume
 - b. ray
 - c. trough
 - d. propagate

16. electromagnetic waves with wavelengths shorter than violet light
 - a. ultraviolet
 - b. refraction
 - c. trough
 - d. wave

17. a region of downwards displacement in a transverse wave
 - a. ray
 - b. pulse
 - c. trough
 - d. volume

18. a carrier of energy; does not transfer matter
 - a. pulse
 - b. ray
 - c. wave
 - d. x-ray

19. a flat mirror
 - a. plane mirror
 - b. wavefront
 - c. rarefaction
 - d. reflection

20. the distance between two corresponding successive points on a wave
 - a. velocity
 - b. wave
 - c. wavelength
 - d. wavefront