Quizlet

NAME _____

20 Multiple choice questions

A+
100%

1. the range of electromagnetic waves from high frequency gamma waves to low frequency radio wave
   a. electromagnetic radiation
   b. **CORRECT:** electromagnetic spectrum
   c. periodic motion
   d. microwaves

2. electromagnetic waves with wavelengths ranging from 1 mm to 0.1 mm
   a. laser
   b. ionosphere
   c. phase
   d. **CORRECT:** microwaves

3. a system that uses satellites to determine position on the Earth
   a. longitudinal wave
   b. **CORRECT:** global positioning system (GPS)
   c. optical fibre
   d. nodal lines

4. a point at which light rays meet or appear to diverge from
   a. **CORRECT:** focus
   b. normal
   c. pitch
   d. phase

5. an acronym for Light Amplification by the Stimulated Emission of Radiation; a source of intense coherent light
   a. focus
   b. pitch
   c. phase
   d. **CORRECT:** laser

6. a spherical shell of ionised gas surrounding the Earth; can be used to reflect long-wave radio waves
   a. laser
   b. microwaves
   c. **CORRECT:** ionosphere
   d. phase

7. the alteration of some electronic or acoustic parameter by another
   a. medium
   b. **CORRECT:** modulation
   c. focus
   d. nodal lines

8. a wave in which the particles vibrate parallel to the direction of energy transfer
   a. microwaves
   b. nodal lines
   c. optical fibre
   d. **CORRECT:** longitudinal wave

9. number of waves to pass a point per second; the number of oscillations of a particle per second
   a. phase
   b. focus
   c. **CORRECT:** frequency
   d. period

10. lines joining points of destructive interference
    a. modulation
    b. **CORRECT:** nodal lines
    c. normal
    d. medium

11. traverse waves composed of alternating electric and magnetic fields, the components of which are perpendicular to each other and to the direction of the energy flow
    a. **CORRECT:** electromagnetic radiation
    b. electromagnetic spectrum
    c. periodic motion
    d. frequency modulation

12. a region through which a wave propagates
    a. **CORRECT:** medium
    b. phase
    c. period
    d. focus

13. a type of modulation where the frequency of the carrier wave is altered by an imposed signal
    a. modulation
    b. frequency
    c. **CORRECT:** frequency modulation
    d. periodic motion

14. a relationship in which one quantity is directly proportional to the inverse of another quantity squared
    a. frequency
    b. ionosphere
    c. normal
    d. **CORRECT:** inverse square law

15. the time for one wave to pass a point; the time for a particle executing simple harmonic motion to complete one oscillation
    a. normal
    b. pitch
    c. **CORRECT:** period
    d. medium

16. motion which repeats itself at regular intervals of time
    a. **CORRECT:** periodic motion
    b. period
    c. modulation
    d. medium

17. a quantity which tells us what a particle undergoing periodic motion is doing
    a. laser
    b. **CORRECT:** phase
    c. period
    d. pitch

18. a line drawn at right angles to another line or surface
    a. focus
    b. medium
    c. period
    d. **CORRECT:** normal

19. a subjective quantity related to the frequency of sound; the higher the pitch, the higher the frequency
    a. **CORRECT:** pitch
    b. phase
    c. period
    d. focus

20. a glass fibre consisting of two layers, the outer layer has a lower refractive index than the inner layer; used to transmit light over long distances
    a. ionosphere
    b. nodal lines
    c. **CORRECT:** optical fibre
    d. phase