

1. What causes mechanical waves?
2. What are the three main types of mechanical waves?
3. For each type of wave, compare the vibration of the medium to the direction of the wave.
4. Name one example of each type of wave.
5. How is the vibration of the source related to a wave's frequency?
6. How is wavelength related to frequency for waves moving at a constant speed?
7. How is the energy of a wave related to its amplitude?
8. Describe two ways you could measure the wavelength of a longitudinal wave.
9. Describe how you could measure the amplitude of a transverse wave.
10. How is a wave changed by reflection?

11. What causes refraction when a wave enters a medium at an angle?
12. What determines how much a wave diffracts when it encounters an opening or an obstacle?
13. List the types of interference.
14. Draw and label a standing wave.
15. Describe the properties used to explain the behavior of sound waves?
  - speed-
  - intensity-
  - loudness-
  - frequency-
  - pitch-
16. Name two uses for ultrasound.
17. What is the Doppler effect?
18. What are the ear's three main regions? Describe the function of each region.