

Principles of Ultrasound Imaging

1. Acoustic waves with frequencies between 16 Hz and _____ can be sensed by the human ear.
 - a. 18 kHz
 - b. 20 kHz
 - c. 22 kHz
 - d. 24 kHz
2. If greater than _____ you are talking about ultrasound.
 - a. 20 kHz
 - b. 24 kHz
 - c. 26 kHz
 - d. 28 kHz
3. What year was the first ultrasound device in clinical use?
 - a. 1949
 - b. 1952
 - c. 1955
 - d. 1958
4. Sound waves are mainly characterized by which of the following?
 - a. Frequency
 - b. Velocity
 - c. Wavelength and intensity
 - d. All the above
5. True or false. Frequency is measured in Hertz (Hz).
 - a. True
 - b. False
6. The _____ states that the angle of incidence equals the angle of reflection.
 - a. Law of reflection
 - b. Law of refraction
 - c. Law of relationship
 - d. Law of reduction
7. What involves a change in direction of the sound waves?
 - a. Dissolvement
 - b. Diffraction
 - c. Differentiation
 - d. Distinction
8. An ultrasound transducer functions as both a _____ and a detector of ultrasonic waves.
 - a. Transformer
 - b. Transferer
 - c. Generator
 - d. Energizer
9. Which of the following is the most common ultrasound imaging mode?
 - a. A-mode
 - b. B-mode
 - c. M- mode
 - d. All the above