

## Unit 1 Test 3 Study Guide ANSWERS

**Directions:** Write each definition below.

**Waves:** are energy traveling through a medium in a regular pattern.

**Amplitude:** is the measure of the height of a wave.

**Wavelength:** is a measure of the distance from one crest of trough to the next.

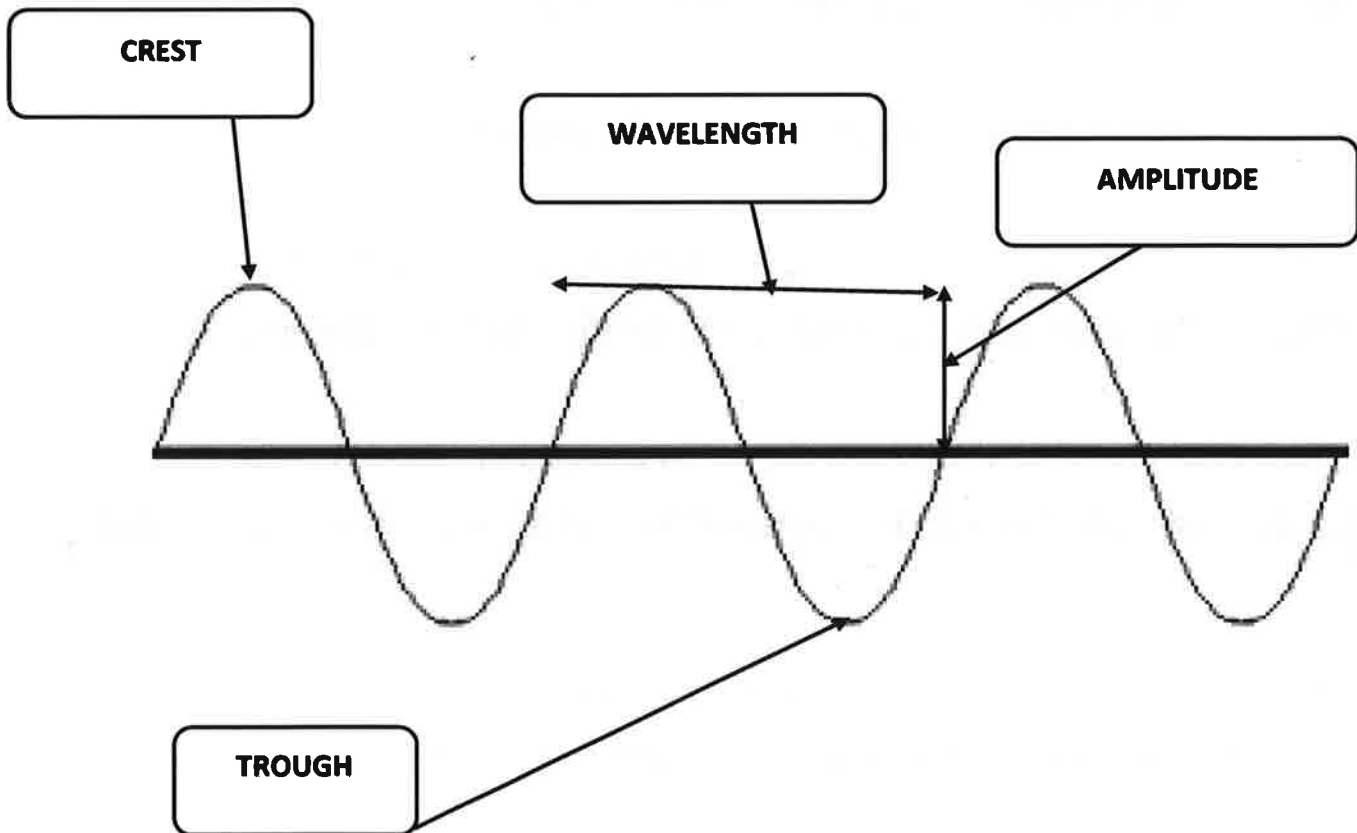
**Frequency:** is the number of waves that pass by a given point in 1 second.

**Digitized:** is information put into digital code.

**Radio Waves:** are waves with long wavelengths used to send information.

**Global Positioning System:** is a system for transmitting information over long distances using satellites and radio signals.

**Directions:** You should know each part of a wave. Label the different parts of the wave.



**Directions:** Answer each statement or question below.

This determines how high or low of a sound wave is. Wavelength

This determines the loudness of a wave. Amplitude

The following photo shows waves that formed when a small rock was dropped into the water. The waves are short and close together. Describe the properties of these waves.

Low amplitude and short wavelength



What are some examples of digitized information? Some examples could be 1010, 0101, 1100, or 0011. All digitized information is in patterns of 0 and 1.

Please describe all waves. Energy that moves in a regular pattern.

Explain what your phone is doing so you can hear someone you are on the phone with.

It is receiving digital information and converting it to the sounds of the caller's voice.

The alarm in a house is very loud. Describe the sound waves and their amplitude.

The crests and troughs would be very high and shallow, and the wave would have a large amplitude.

Explain why a surfer does not move forward until she is atop of a tall wave.

The energy in the water moves, but the water stays in the same place.