

Vocabulary for Unit 3

acoustics: the study of sound

amplitude: in a wave, the distance from the resting position to either the crest or the trough.

ARGOS: a satellite system used solely for environmental monitoring. It monitors approximately 3,000 buoys, moorings and floating arrays worldwide.

autonomous: independent

blast trauma: the reaction or effect on an organism to an explosion with a strong shock wave quickly carrying much energy through the water, followed by a rarefaction wave with pressure below the ambient level

buoy: an anchored float used as a marker or as a mooring

Carnivora: class of meat or flesh eating animals

Cetacea: an order of aquatic animals that chiefly contains marine mammals, including the whales and dolphins

compressional wave: a wave that vibrates in the same direction in which the wave is traveling

cognition: the act or process of knowing, perception

crest: in waves, the highest point of a wave

CTD: an instrument commonly used to measure the conductivity, temperature and depth of the ocean

echolocation: a method of locating objects by determining the time for an echo to return and the direction from which it returns, as by radar or sonar.

frequency: the number of waves that pass a point during one second, expressed as hertz

hertz: the unit of measure for frequency, abbreviated Hz and the units are 1/sec

hydrophone: a device for detecting sounds transmitted through water, as for locating submarines or measuring the flow of water through a pipe

idiophone: something that naturally makes sounds when it is rubbed, struck, shaken or scraped

larynx: a muscular and cartilaginous structure at the upper part of the trachea, in which the vocal cords are located

litter: rubbish, objects strewn or scattered about

loudness related hearing loss: loss of hearing as a result of noise being constant, or too loud for the human ear to handle over a period of time. Also, degeneration of hearing as a result of age

mammal: a warm blooded vertebrate of the class Mammalia, characterized by a covering of hair on some or most of the body, having a four-chambered heart, bearing live young and nourishing the newborn with milk from maternal mammary glands.

masking: obscuring or blocking a sensory process by another sensory process

maxillary: one of a pair of bones constituting the upper jaw

medium : a material (liquid, gas, or solid) through which a mechanical wave can transfer energy



- navigation:** to move on or through the water on a due or known course with knowledge of the items and materials ahead
- neural impulses:** messages relayed to the brain in the form of electrical energy that causes the brain to make a physical response
- nasal system:** the sinus cavity and areas surrounding the nose
- noise pollution:** sound that is loud annoying, or harmful to the ear
- noise trauma:** a result of a sudden or prolonged noise of broad bandwidth usually resulting in permanent hearing loss
- oil melon:** the structure at the front of the head of a dolphin. When clicks or other sounds are emitted, sounds are compressed through this area of the head for better transmission through the water. It has about the same density as seawater
- order:** a kind, person or animal that is separated from others by distinctive characteristics
- pelagic:** of or pertaining to the open ocean or seas
- pharynx:** the portion of the alimentary canal that connects the mouth and nasal passage with the larynx
- phonating:** producing a sound, chirp or whistle
- pinnae:** the visible portions of the ear that project from the head
- pod:** a small herd of seals, dolphins or whales
- pollution:** items and materials that are left by the wayside and out of place; garbage, trash in the environment
- rarefaction:** in compressional waves, the less dense area of the wave
- resonator:** an instrument for detecting the presence of a particular frequency by means of sound or reverberation
- rest position:** the level of the medium when the wave is not in motion.
- rostrum:** a beaklike anatomical process or extension of the head
- satellite:** a device launched into orbit around the earth, another planet, the sun, or a moon
- sensory cells:** a physiological structure used for receiving or conveying an external stimulus
- Sirenia:** a classification for specialized aquatic herbivorous mammals, including the manatee and the dugong
- sinusoidal:** a curve that has equal distances to straight parallels spaced at regular intervals
- social structure:** of or pertaining to life and how the animals are organized within family structure
- sound:** a noise, a song, a vocal utterance, or the like
- SONAR:** an acronym for SOund Navigation And Ranging, a method for detecting and locating objects submerged in water by echolocation
- SOSUS:** a SOund SUrveillance System used by the United States military that became useful to researchers because it recorded marine mammal sounds
- tether:** a rope, chain, or the like, by which an instrument is fastened to a fixed object to limit its range of movement
- topography:** detailed mapping or charting of the features of an area or district

transverse waves: waves that vibrate at right angles to the direction the wave is traveling

trough: in waves, the lowest point of the wave

vocal cords: membranes stretched across the larynx that produce sound or voice as they are made to vibrate by the passage of air from the lungs.

vocalization: to make into a sound

wavelength: the distance between a point on one wave and the identical point on the next wave; for example, the distance between two crests or two troughs.