

Which of the following is
necessary for sound to
travel?

- A. A receiver
- B. An amplifier
- C. Water or air
- D. Molecules
- E. A vibrating object



Which of the following is related to a sound wave's frequency?

- A. Pitch
- B. Loudness
- C. Speed of sound
- D. Amplitude
- E. Sound pressure



How can you tell the difference between male and female snapping shrimp?



- A. The females always carry eggs externally
- B. Only the males have an enlarged snapping claw
- C. Females are significantly smaller
- D. The smaller claw is different
- E. Males have brighter coloration



Which of these is an example
of a GOOD scientific
hypothesis?



- A. If a shrimp snaps, then it is protecting its territory.
- B. If a shrimp is presented with a crab, then the snapping rate will increase.
- C. Shrimps snap when they are presented with another shrimp because they are communicating.
- D. Both A and B.
- E. A, B, and C.

If you want to test if a crab will change the snapping behavior of a shrimp, which of these could be your CONTROL experiment?

- A. Record what the shrimp does when it is presented with another shrimp.
- B. Record what the shrimp does when it is presented with a crab.
- C. Record what the shrimp does when it is presented with nothing.
- D. ALL of the above
- E. NONE of the above



Ecological acoustic recorders (EARs) are a type of scientific instrument placed on coral reefs to monitor sound. Which of the following purposes are EARs NOT used for?

- A. To estimate fish abundance
- B. To gauge reef health
- C. To stimulate communication
- D. To identify species prevalence
- E. To research behavior



Which of the following is NOT true about snapping shrimp?

- A. They use sound to catch prey and communicate
- B. They produce one of the most pervasive sources of biological noise in shallow tropical waters.
- C. Kāneʻohe Bay has some of the loudest snapping shrimp noise in the world.
- D. As the air bubble created by a snap collapses, the temperature inside it greatly increases.
- E. When the large claw breaks off snapping shrimp will die of starvation.





According to new research findings, how do coral larvae use sound as part of their behavior?

- A. To communicate and swim together
- B. To avoid predators by echolocation
- C. To locate food by echolocation
- D. To orient themselves towards a reef
- E. To mark territory once settled on a reef

