

Name: _____

Exercise 1: Bats use sound signals to know the location of their preys. A bat sends a sound signal that reaches the prey and comes back after 2 seconds.

1. Knowing that sound travels 340 m in 1 second in air, Calculate the distance travelled by the sound signal.

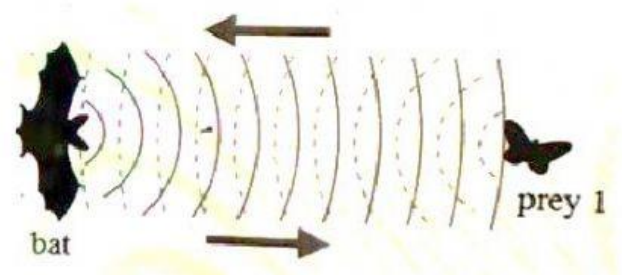
- a. $340 \times 1 = 340 \text{ m}$
- b. $340 \times 2 = 680 \text{ m}$
- c. $340 \div 2 = 170 \text{ m}$

2. How far is the prey?

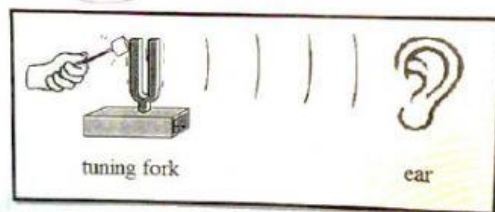
- a. 340 m
- b. 680 m
- c. 85 m

3. Another prey is located 1020 m away from the bat, how much time would it take the sound signal to reach that prey?

- a. 3 seconds
- b. 4 seconds
- c. 2 seconds



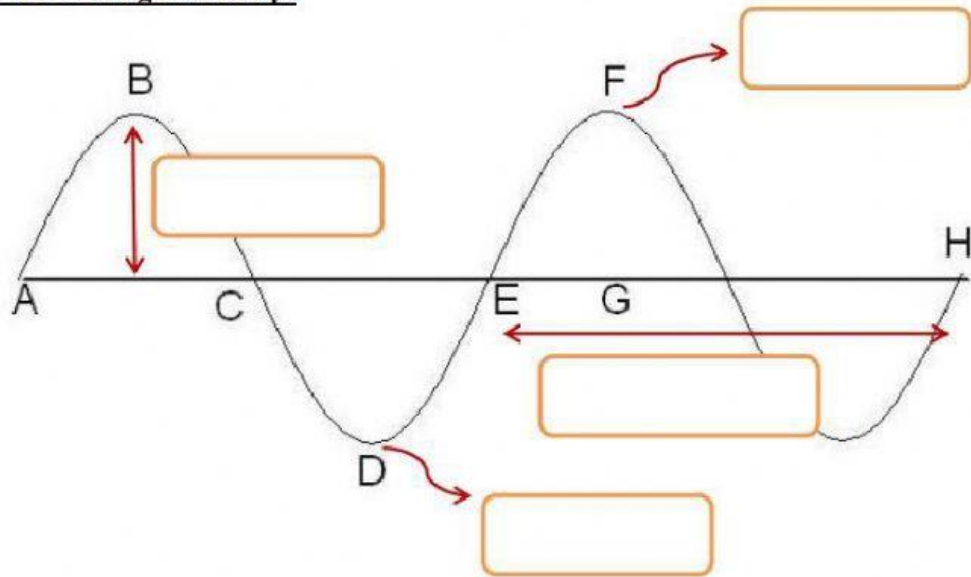
Exercise 2: Use the following document, to order the steps of hearing the sound of the tuning fork.



- _____ The brain interprets the vibrations as sound.
- _____ Vibrations reach your ear causing eardrum to vibrate.
- _____ Tuning fork vibrate releasing sound waves.
- _____ Sound waves cause the particles in the air to vibrate and spread apart.

Exercise3:

Part 1. Drag and Drop.



Crest

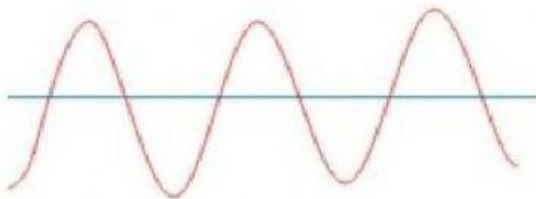
Amplitude

Trough

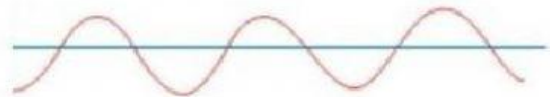
Wavelength

Part 2: Choose the best answer:

Identify the sound wave which refers to the louder sound with greater volume.



Wave A



Wave B

- a. Wave A refers to louder volume since it has larger amplitude.
- b. Wave B refers to a louder volume since it has a smaller amplitude.