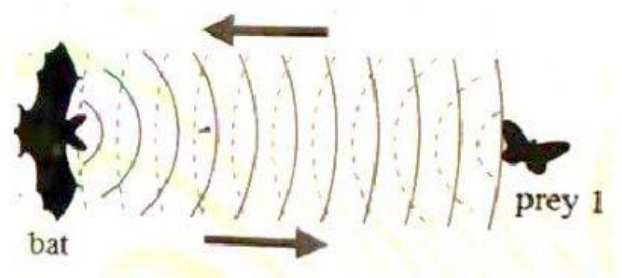


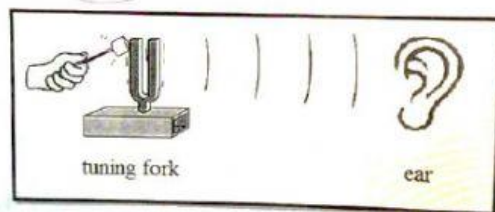
Name: \_\_\_\_\_

**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.  $340 \times 1 = 340$  m
  - b.  $340 \times 2 = 680$  m
  - c.  $340 \div 2 = 170$  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



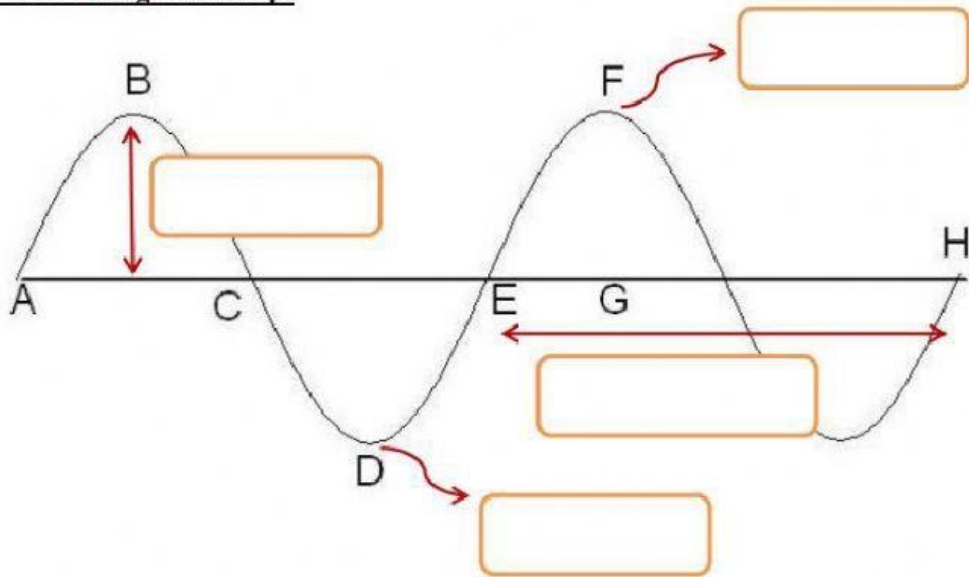
**Exercise 2:** Use the following document, to order the steps of hearing the sound of the tuning fork.



- \_\_\_\_\_ 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

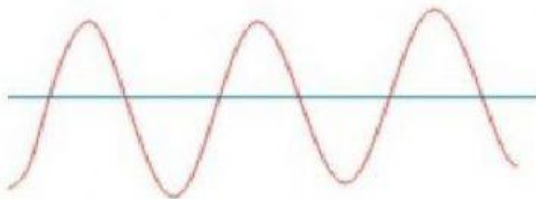
Amplitude

Trough

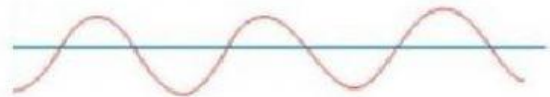
Wavelength

#### 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.