

Sound

Introduction of Sound

INTRODUCTION

Throughout the day, we listen the various types of sounds like our father's voice, our mother's voice, our teacher's voice, chirping of birds, ringing of a school bell, a telephone ringing, a guitar being played, a siren, a jet engine roaring in the sky, buzzing of a mosquito, a gunshot etc. These sounds stimulate the auditory nerve in the human ear and the brain interprets the sound. Now let us define sound.

Sound is a form of energy which produces the sensation of hearing in our ears.

PRODUCTION OF SOUND

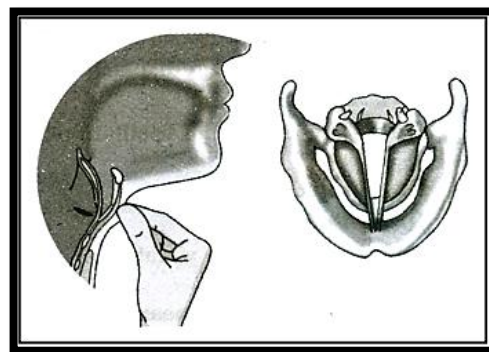
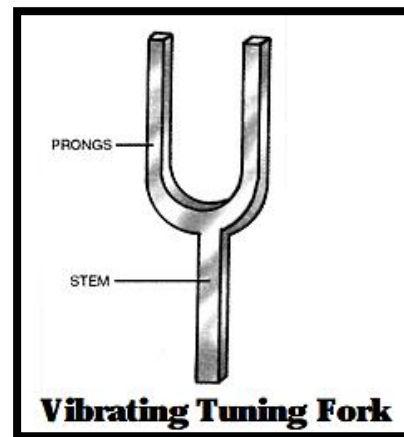
Perform the following activities to produce sound.

ACTIVITY

1. Take a plastic scale or ruler from your geometry box. Hold it flat on your desk or table with about half its length protruding (stick out from the surface) over the edge. Now bend it down and release it. It will move up and down rapidly (i.e. it will vibrate) and produce the sound at the same time. The sound will last as long as the vibration (i.e. rapid up and down motion) of the scale continues.

2. Take a tuning fork. Hold it from its stem and strike it with a rubber pad or hammer. You will observe that the prongs of the tuning fork vibrate and at the same time sound is produced (Figure).

3. Place your finger lightly on your throat near the vocal cords as shown in figure. Now say "Ah" for few seconds. You will feel the vibration in your finger as long as you say "Ah".



4. Tie a thin metallic string rigidly at the two ends of a table as shown in figure. Now, pluck the string from the middle and release it. The string begins to vibrate up and down and at the same time, sound is heard.

Conclusion: From these activities, we come to the conclusion that the sound is produced by the vibrating objects or bodies.

