

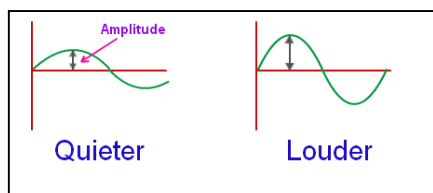
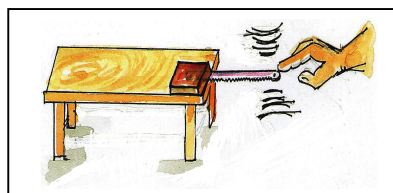
EXPERIMENT – 1

INTENSITY OF SOUND

Aim : To find the relation between the intensity of the sound produced by a body and the vibrations of the body. (amplitude also)

Required : Wooden table, 30 cm metal scale or hack-saw blade, a brick or stone.

Description : Due to vibrations of less amplitude feeble sound produced. If amplitude is more then loud sound can be produced by the vibrations.



Procedure:

1. Place the blade or scale on the table with 10cm of the blade on the surface of the table and rest of it in air.
2. Keep a heavy brick on one end of the scale on the table such that it would not be fall.
3. Vibrate the scale gently in vertical direction.
4. Observe the vibrations and simultaneously listen to the sound produced.
5. Repeat the same 2 or 3 times and record your observations.
6. Vibrate the scale with greater force and observe the vibrations and sound.
7. Repeat the same 2 or 3 times and record your observations.
8. Note down the observations in each and every case.

Observations :

Sl No	Force applied	Vibrations in the scale (Less / More)	Amplitude (Less / More)	Intensity of Sound (Soft / Loud)
1.	Small force			
2.	Large force			

If number of vibrations increase, the intensity of sound produced is

If the amplitude of the vibration increases, the intensity of sound produced is

Precautions :

- Vibrate the scale slowly with less force, otherwise it may bend.
- Careful observation of vibrations and amplitude is needed.

Result : Observed the relation between the intensity of the sound produced by a body and the vibrations of the body. (amplitude also)