

Sound reflection experiment

Investigate the reflection of sounds.

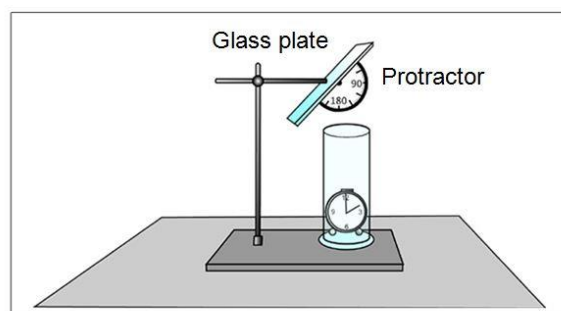
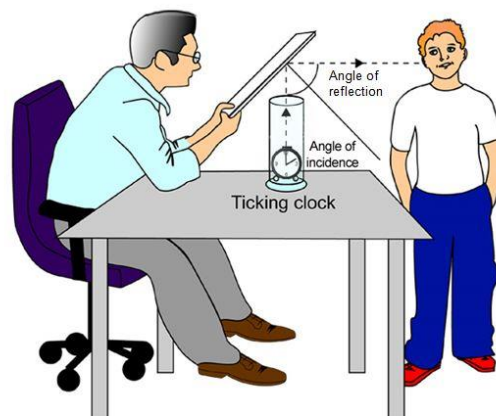
1 Apparatus and materials

- Subtle sound source, e.g., a ticking clock
- Container
- Metal or glass plate
- Protractor (optional)

2 Conducting the experiment

Place the quiet sound source, for example, the clock, in a container that channels the sound. Stand in front of the container and move a short distance away until you can no longer perceive the sound.

Now ask a student to hold a metal or glass plate so that you can hear the sound, as shown in the drawing below. When the plate is positioned correctly, you can perceive this sound very clearly.



Explanation: The sound waves are partially reflected when they impinge on a barrier. The following applies: angle of incidence = angle of reflection. You can check this with a protractor.