

CHAPTER: 12 SOUND

Experiential Content:

SOUND NEEDS A MEDIUM TO TRAVEL:

- Take a bell jar and place it over a mobile phone (playing a music) on a flat surface such that no air passes through it.
- Evacuate the air inside the bell jar using a vacuum pump.
- When vacuum is created in the bell jar, then the music played in the mobile phone cannot be heard.
- Students understand that sound cannot travel through vacuum.

Suggested Questions:

1. What happens to the sound as the air is evacuated from the bell jar?
2. Why is the music not heard ?

Curiosity Questions:

Two astronauts on the surface of the moon cannot talk to each other? Why?

Answer Guide:

Think About:

- ❖ Why sound cannot travel through vacuum?
- ❖ Can sound travel through iron and water?
- ❖ In which medium does the sound travel fastest: air, water or steel?