## WHAT IS SOUND?

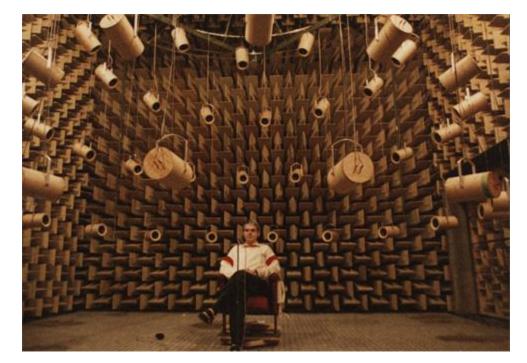
Sound is a travelling wave which is an oscillation of pressure transmitted through a solid, liquid, or gas, composed of frequencies within the range of hearing and of a level sufficiently strong to be heard, or the sensation stimulated in organs of hearing by such vibrations.

Huh??? Again, just as the official definition of light was no use, this does not help us either. If we rephrase it, it might make a little more sense:

## Sound is vibrations that our ears hear.

To help us we need to look a little closer at some of the properties of sound.

- 1. Sound travels
- 2. Sound can be reflected (it can bounce off things)
- 3. Sound can be absorbed (it does not bounce off some things)
- 4. Sound can be modified (e.g., pitch and loudness)
- 5. Sound is caused by vibrations



When you're inside one of these chambers there is almost no sound echo or bounce, it's unlike anything you've experienced. When you speak, only a tiny amount of the sound leaving your mouth actually hits your ears. In everyday life, we are used to listening to a lot of echo. Think about what you have learned. Answer the questions below based on what you have just read.

1. Why can you hear someone who is in another room? 2. Why do we hear echoes? 3. In a recording studio the walls are covered in bumpy foam. Why would they do this? 4. Name multiple objects we have that allow us to increase the volume of a sound. 5. Explain why we can hear sounds better in air than we can underwater.