|  |
| --- |
| **What? (Key Knowledge)** |
| Sound and the Ear |
| What is Sound? | Sound is vibrations that travel through the air or another medium and can be heard when they reach a person's or animal's ear |
| How is sound produced? | a) by continuous and regular vibrations b) created when something vibrates (shakes back and forth), sending waves of vibrations into the ears of the listener. |
| How does sound travel? | Sounds travel in a wave. The vibrations make air particles closes to the object vibrate, which then passes the vibrations to the particle next to it and so on.Sound vibrations can travel through different materials: a) solids - metals, stone, wood b) liquids – water c) gases – air d) sound travels better through some materials than others. It travels very well through metal pipes for example. |
| What is volume? | a) loudness from the intensity of a sound wave b) the louder the sound, the stronger the vibrationsc) sound gets fainter as the distance increases away from it |
| How do we hear sounds? | When an object vibrates, the air around it vibrates too. This vibrating air can also be known as sound waves. The sound waves travel to the ear and make the eardrums vibrate. Messages are sent to the brain which recognises the vibrations as sounds. |
| **Possible Experiences** |
| * Set up investigations about vibrations.
* Create own musical instruments.
* Listen to different musical pieces/genres that have different volume or pitch.
* Listen to sounds in the local area.
 |
| **What? (Key Vocabulary)** |
| **Vocabulary** | **Definition/ Sentence** |
| Amplitude | A measure of the strength of a sound |
| Frequency | A measure of how many times per second the sound wave cycles  |
| Medium | Something that makes possible the transfer of energy from one location to another |
| Pitch | How high or low a sound is |
| Source | Where something comes from |
| Soundwaves | Invisible waves that travel through air, water and solid objects as vibrations |
| Transmit | To pass from one place to another |
| Vibrations | A fast, Up and down movement, which creates an invisible wave that move quickly. Creating a sound wave |
| Volume | How loud or quiet a sound is |
| **Diagrams and Symbols** |
|  |