# SCIENCE COLLECTABLE YEAR 3 2021-22

St Margaret's Academy


**Key information**

Sound is a type of energy created by **vibrations**. The louder the sound, the bigger the vibration. Pitch is a measure of how high or low a sound is. Sounds can travel through solids, liquids and gases and travels as a wave.

We need light to be able to see things. Light travels in a straight line and when light hits an object, it is reflected (bounces off). If the reflected light hits out eyes, we can see the object. The surfaces that reflect light best are smooth, shiny and flat.

**Learning outcomes**

For Sound, we will learn how sounds are made through vibrations and how a sound travels to the ear. We will investigate patterns in pitch and volume and also how sounds get fainter as the distance from the sound source increases.

For Light, we will learn about why light is needed in order to see things and that dark is the absence of light. We will investigate how light reflects from different surfaces and how shadows are formed.

# Key Vocabulary

## Sound

| Key Vocabulary | |
|---|---|
| vibration | A quick movement back and forth. |
| sound wave | Vibrations travelling from a sound source. |
| volume | The loudness of a sound. |
| amplitude | The size of a vibration.<br>A larger amplitude = a louder sound. |
| pitch | How low or high a sound is. |

## Light

| Key Vocabulary | |
|---|---|
| light | A form of energy that travels in a wave from a source. |
| light source | An object that makes its own light. |
| dark | Dark is the absence of light. |
| reflection | The process where light hits the surface of an object and bounces back into our eyes. |
| reflect | To bounce off. |
| reflective | A word to describe something which reflects light well. |
| ray | Waves of light are called light rays. They can also be called beams. |