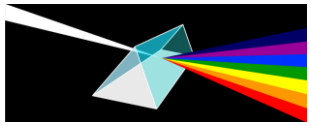
What we already know: KS2 light and Sound		What's next: Year 8/9 light and Sound – Waves

Golden Concepts				
Asking scientific questions and making observations	Planning an investigation	Collecting, presenting and interpreting data	Errors and uncertainty	Science in our world

Light and Sound Stage 7 - Knowledge Organiser

Key Vocabulary	
Luminous	An object that gives out light, like the sun
Non-luminous	An object that does not give out light, like your chair
Energy	Light and Sound are both examples of energy
Reflection	The way light and sound can be thrown back by a flat surface.
Refraction	The way light and sound changes speed and direction when moving from one medium to another
Diffraction	The way waves spread out when moving through a gap or around an object
Pitch	How high or low a sound is
Volume	How loud or quiet a sound is
Frequency	The number of waves per second
Amplitude	The height of a wave from equilibrium
Medium	A substance that transmits energy e.g. air, water, glass



Light:

- Describe how light travels and the concept of a light source.
- Define light as a form of energy
- Explore reflection and refraction, diffraction through practical activities.
- Investigate the colour spectrum and how colours are formed.
- Understand the practical applications of light in technologies.

Sound:

- Define sound as a form of energy and describe its properties.
- Explain how sound travels through different mediums.
- Explore pitch and volume, understanding the factors affecting them
- Understand the application of sound waves in technologies such as ultrasound.
- Explore the concept of sound waves and their characteristics.
- Investigate the relationship between frequency and pitch.
- Understand how amplitude affects the volume of sound.
- Use speed calculations