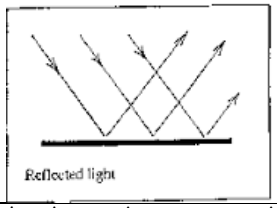
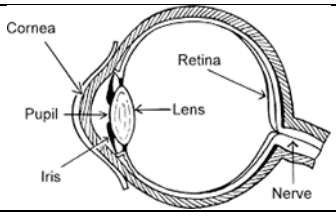
Powick CE Primary Knowledge Organiser for Science.

Topic	Light	Term	Autumn	Year Group	6

Vocabulary	
light source	From where light originates (sun, light bulbs).
reflective	When light bounces off a surface and is not absorbed.
direction of light rays	The way light rays are travelling in straight lines: 
spectrum	Light split into colours.
shadow	Created when light is blocked by an opaque object.
transparent	Light travels straight through (see-through).
translucent	Some light can travel through (you cannot see through very clearly).
opaque	Light cannot travel through (not see-through).
refract	when light is bent
concave	curving inwards
convex	curving or bending outwards
parts of the eye	

Concepts and Knowledge	
What we will learn and prove about light through our investigations.	**There are natural sources of light** – sun, fire, fireflies **There are man-made sources of light** – electronics, torch, bulbs. **Light travels** from a source. **Light is reflected** off objects. **Light travels** into our eyes. **Light appears to travel** in straight lines. **Shadows** can be formed and change size. **How light** can be refracted.
Spectrum 	Using a prism, we can split white light into the colours of the rainbow, known as the spectrum. Sir Isaac Newton discovered this. 
	When carrying out a scientific investigation, we need: **an independent variable** (the thing we are changing) **control variables** (the things we are keeping the same) **observations and measurements when the independent variable changes** **dependent variable** (what happens as a result of the independent variable changing)
	Draw conclusions from data and observations, use evidence to justify ideas, use scientific knowledge and understanding to explain findings. Use scientific ideas when describing simple processes.