When there is no light, we can't see anything. We “see” when sufficient light is reflected off surfaces and enters the eye. Our brain interprets what our eyes “see”. We see colours when the eye’s retina sends “messages” to the brain.

Surfaces and materials can transmit, reflect, or absorb light; some can do two or all of these things.

when light reflects off objects, enters our eyes, is converted to electrical energy at the retina, and is then interpreted as “vision” by the brain.

The colours of objects come from their reflection and absorption of different parts of the spectrum of colours in light.

Surfaces that reflect a lot of light are very light coloured or shiny; surfaces that absorb a lot of light are very dark coloured or dull.

Coloured light can be produced by selectively blocking some parts of the spectrum.

Some light sources produce light of different colours (for example, lasers, glow-worms, sodium lights).

Light is a form of energy that can be obtained by various energy conversions.

The Sun and plain electric light bulbs are sources of the full spectrum of visible light.

Light comes from definite sources, such as the Sun or electric light bulbs.

Achievement Aim One: Gain an understanding of the nature of physical phenomena from practical investigation and the consideration of scientific models.

Achievement Aim Two: Establish scientific concepts of energy and investigate ways in which energy changes can be put to use.

Achievement Aim Three: Explore and establish trends, relationships, and patterns involving physical phenomena.