St White's Primary School – Science

Year 3/4	Topic: Light	Spring

What should I already know?

- Light comes from the sun
- Light comes from artificial sources such as light bulbs and torches
- We see more shadows on sunny days

Scientists

We are scientists. We ask questions about our world and technology and then explore and discover the answers with the aim of making the world a better place.

Technical vocabulary

Light	A form of energy that travels from a source
Light source	An object that makes its own light
Dark	An absence of light
Reflect	To bounce off
Reflection	The process where light hits the surface of an object and bounces back into our eyes
Reflective	A word to describe something which reflects light well
Sun	A natural source of light
Shadow	An area of darkness where light has been blocked
Opaque	Describes objects that do not let any light pass through them

Light and Dark

-Light sources produce light.
-Darkness is the absence of light
- Light is produced due to a reaction taking place.
Examples of light sources are lamps, fires, torches.

Light reflects

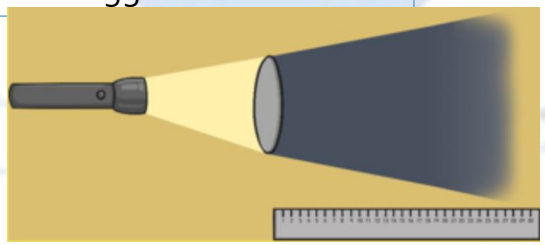
Light travels in straight lines.
When light hits an object, it is reflected.
Smooth, shiny surfaces are more reflective light best.
We see objects due to the light reflecting into our eyes

Transparency

Opaque objects do not allow any light though them, thus blocking the light
Transparent objects let light travel through them
Translucent objects let some light through. The light is scattered.
A translucent object has a lighter shadow than an opaque shadow

Shadows

Light travels in straight lines, meaning when it hits an object, it cannot go round.
Shadows are not reflections.
The closer an object is to a light source, the more light it blocks out. This means the shadow will be bigger.



Sun is helpful and harmful

The sun produces UV rays.
Too much light into your eye can damage your retina, damaging your sight
It is a good idea to look after your eyes using sunglasses on a sunny day to stop too much UV light getting in.