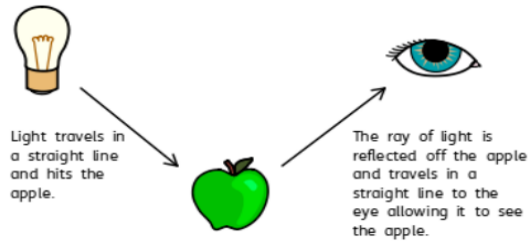
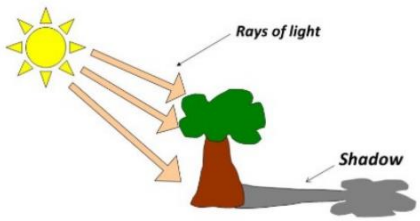
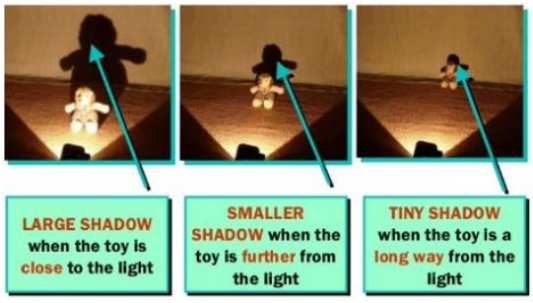
River View Primary School		
Topic: Light	**Year: 6**	**Strand: Physics**

What should I already know?

- A light source is something that produces light. We need a light source to see things.
- Shadows are formed when light is blocked.
- The further away a light source is, the smaller the shadow.
- Shiny surfaces are not light sources. They reflect light and therefore look like they are bright.

What will I know by the end of the unit?

How does light travel?	• Light travels in a straight line. • When you place a torch on a table in a dark line, the beam travels in a straight line. • Reflection happens when light bounces off a surface – this changes the direction the light travels.
How do we see?	• Light travels from the source to our eyes or from light sources to objects and then to our eyes. 
What is the relationship between light sources and shadows?	• When there is an opaque object blocking the light, a shadow is formed. • These shadows have the same shapes as the objects that cast them because light travels in straight lines.  • The size of a shadow changes as the light source moves closer or further away. 

Vocabulary

angle	the direction from which you look at something
dark	when there is no light
dim	light that is not bright
electricity	a form of energy that can be carried by wires
emits	to emit a sound or light means to produce it
light	a brightness that lets you see things
mirror	a flat piece of glass that reflects light
opaque	you cannot see through it
reflects	sent back from the surface and not pass through it
shadows	a dark shape on a surface that is made when something stands between light and a surface
source	where something comes from
surface	the flat top part of something or the outside of it
torch	a small electric light which is powered by batteries
translucent	if a surface is translucent, some light can pass through
transparent	if a surface is transparent, you can see through it e.g. a window

Data Handling

- Use diagrams to demonstrate how the position of a light source affects the shape of a shadow. The experiment should be carried out as a fair test and pupils need to design their own experiment.