

Light	Key learning	Possible evidence	Knowledge at the end of the unit	Vocabulary at the end of unit
Year 3	1. recognise that they need light in order to see things and that dark is the absence of light 2. notice that light is reflected from surfaces 3. recognise that light from the sun can be dangerous and that there are ways to protect their eyes 4. recognise that shadows are formed when the light from a light source is blocked by an opaque object find patterns in the way that the size of shadows change	Can describe how we see objects in light and can describe dark as the absence of light Can classify everyday objects depending on how reflective they are. Can state that it is dangerous to view the sun directly and state precautions used to view the sun, for example in eclipses Can define transparent, translucent and opaque Can describe how shadows are formed by objects blocking light.	We see objects because our eyes can sense light. Dark is the absence of light. We cannot see anything in complete darkness. Some objects, for example the sun, light bulbs and candles are sources of light. Objects are easier to see if there is more light. Some surfaces reflect light. Be able to state what happens and how light behaves when light reflects off a reflective surface. The light from the sun can damage our eyes and therefore we should not look directly at the Sun and can protect our eyes by wearing sunglasses or sunhats in bright light. Shadows are formed on a surface when an opaque or translucent object is between a light source and the surface and blocks some of the light. The size of the shadow depends on the position of the source, object and surface.	Light light source dark transparent translucent opaque shiny surface shadow reflect/reflection mirror sunlight Pupil and retina
Year 6	1. recognise that light appears to travel in straight lines 2. use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye 3. explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes 4. use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them	Can use investigation of refractions to 'bend' light and understand how this can change the direction of light. Can describe with diagrams or models as appropriate how light travels in straight lines either from sources or reflected from other objects into our eyes. Can state how light enables us to see colours and how lack of light makes colours dull. Chn can state the effect of black light on seeing colours. Can describe with diagrams or models as appropriate how light travels in straight lines past translucent or opaque objects to form a shadow of the same shape	Light appears to travel in straight lines and we see objects when light from them goes into our eyes. The light may come directly from light sources but for other objects some light must be reflected from the object into our eyes for the object to be seen. Following investigation, chn know that without light or with different coloured light, colours appear dull or different. Objects that block light (are not fully transparent) will cause shadows. Because light travels in straight lines the shape of the shadow will be the same as the outline shape of the object.	As year 3 + straight lines light rays reflection refraction spectrum prism