



Year Three and Four		Topic – Light and shadow	Term: Autumn 1
Building on Prior Knowledge		Future learning	Key vocabulary
Explore how things work. (Nursery - Light) Talk about the differences in materials and changes they notice. (Nursery - Light) Describe what they see, hear and feel whilst outside. (Reception - Light) Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense. (Y1 - Animals, including humans) Describe the simple physical properties of a variety of everyday materials. (Y1 - Materials)		Recognise that light appears to travel in straight lines. (Y6 - Light) 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. (Y6 - Light) 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. (Y6 - Light) Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them. (Y6 - Light)	Light, light source, dark, absence of light, transparent, translucent, opaque, shiny, matt, surface, shadow, reflect, mirror, sunlight, dangerous
Knowledge		Working Scientifically	
Notice that light is reflected from surfaces. Recognise that shadows are formed when the light from a light source is blocked by a solid object. Find patterns in the way that the size of shadows can change.		Looking for patterns in what happens to shadows when the light source moves or the distance between the light source and the object changes.	
Key Learning 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. Objects are easier to see when there is less light if they are reflective. 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.			