Working Scientifically							
Ask relevant questions S	Set up simple	Make careful	Gather, record and classify	Record & report	Use results to draw simple	Identify differences	Use scientific evidence to
e	enquiries	observations	data	findings	conclusions	and similarities or	answer questions & support

Strand: Physics

What I should already know

- Some things produce light
- The sun gives us light

Topic: Light

Key Vocabulary	
angle	Direction from which you look at something
bright	Colour that is strong and noticeable, not dark
dark	The absence of light
dim	Light that is not bright
emits	To produce a sound or light
light	Brightness that lets you see things
light source	Something that emits light
matte	A dull or flat surface
mirror	Piece of glass that reflects light
opaque	An object or substance that you cannot see through
reflect	When light is sent back from a surface and doesn't pass through it
shadow	A dark shape on a surface when something stands between the light and the surface

Key Vocabulary				
shiny	A glossy or smooth surface			
sunglasses	Glasses with dark lenses to protect your eyes from the bright sunlight			
sunlight	Natural source of light . You must never look directly at the sun without protecting your eyes			
surface	The flat top part or the outside of an object			
torches	Small electric light source powered by batteries			
translucent	Translucent materials let some light pass through			
transparent	Transparent materials let all light through			

Useful links
https://www.bbc.co.uk/bitesize/topics/zbssqk7

Investigate How do shadows get smaller and larger? What is light? What is transparent, opaque and translucent?

blocked

What I will know by the end of the unit					
What I will know We need light to be able to see things What a light source is	We are able to see things because our eyes sense light. We need light so that we are able to see in the dark, this is because dark is the absence of light. The sun and stars give us light. We must never look directly at the sun as it is dangerous and can damage our eyes. A light source is something that emits light by burning, electricity or a chemical reaction. There are many light sources. The sun, stars and flames are examples of burning light sources. Electric light sources include lamps, car headlights and torches. Glow sticks are lights caused by chemical				
	reactions. The moon is not a light source . It simply reflects light from the sun .				
Light is reflected from different surfaces	Light travels in straight lines and some surfaces reflect light. Shiny surfaces reflect more light than matte surfaces.				
That shadows are formed when the light from a light source is	Shadows are formed when an opaque or translucent object has blocked the light from the light source. The size of shadow depends on the position of the light source, the size of				

the object and the surface

findings

Year 3

changes