




Learning Organiser for Year 5 Light

National Curriculum Summary Key Subject Concept		Key Questions
<ul style="list-style-type: none"> Recognise that light appears to travel in straight lines 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 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 Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them. 		<ul style="list-style-type: none"> How can we see round corners? What happens to colours in the dark? How many reflections can you make using mirrors? Which materials are the best for reflecting light?
Key Vocabulary	Definition	Key Facts
Refraction	When light passes through an object and its direction changes	<ul style="list-style-type: none"> When light passes from air to water, the speed is different, and this causes the beam to appear to bend.  <ul style="list-style-type: none"> Light travels in a straight line Light travels at 186,282 miles per second If an object is moved closer to the light source, the shadow gets bigger. If an object is moved further away from the light source, the shadow gets smaller.
Spectrum	A range of colours formed when white light is refracted. A rainbow shows a spectrum of colours.	
Filter	Removes something from whatever passes through it	
Absorption	Taking in	
Lens	A transparent object that changes the way things look by bending the light that goes through it.	
Optics	The science of light	
Rainbow	An arc of colour in the sky that can be seen when light from the sun shines through falling rain.	
Working Scientifically Skills		
Use test results to make predictions to set up further comparative and fair tests		<p>A rainbow is created when white light is refracted when entering a droplet of water, split into separate colours and reflected back.</p> 
Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary		

Possible Experiences	Biographical Information
<ul style="list-style-type: none">• Read Periscope by Michael Rosen, then create a periscope and explain how it works.• Find your blind spot• Create a pin hole camera• Look at and through lenses and prisms and try to explain what happens to light shone through them.• Explorerdome• Visit from optician• Look at a range of phenomena including rainbows, colours on soap bubbles, objects looking bent in water and coloured filters	<p data-bbox="810 241 1353 275">Edme Hippolyte Marie-Davy (1820 - 1893)</p>  <p data-bbox="810 745 1337 779">Invented the first naval periscope in 1854</p>