

St Paul's C of E Primary School – Knowledge Organiser				
Name of Topic	Lights and shadows	Year Group	3	

Key Vocabulary and Spellings			
1	light	Light is a form of energy that moves in straight lines.	
2	dark	Dark is the absence of light.	
3	reflection	The return of light from a surface.	
4	shadow	A shadow is the dark shape made when something blocks light.	
5	spectrum	When light hits an object some wavelengths are absorbed by that object and some are reflected. Light of different wavelengths looks like different colours.	
6	refraction	Refraction happens when light changes direction, or bends, when it moves from one material to another.	
7	concave	A shape that curves inwards.	
8	convex	A shape that curves outwards.	
9	transparent	Light can go through.	
10	opaque	Light cannot go through/is blocked.	

	Top 5 Topic Facts		
1	Dark is the absence of light.		
2	Light travels in a straight line. When light hits an object, it is reflected (bounces off). If the reflected light hits our eyes, we can see the object.		
3	The speed of light is <b>299,792,458 meters per</b> second.		
4	The moon is not a light source because it does not make its own light. We can see the moon because light from the sun reflects off it (bounces off it) back to the earth.		
5	Shadows are formed by the blockage of light by an opaque object.		



Key Investigations/Questions		
1	What is light? What is darkness?	
2	How are shadows formed?	
3	What is a reflection? How are reflections created?	