St John's Primary School: Science knowledge organisers

Year group: Year 3 Science focus: Light



Key knowledge:

	Light sources		
What is light?	A way of seeing our surroundings		
	when it is dark.		
What is	The absence of light when the area		
darkness?	surrounding you is difficult to see.		
What is a light	A light source is something that		
source?	makes its own light.		
Common light	The Sun		
sources	The stars		
	Flames		
	 Electric lights 		
	 Some animals e.g. fireflies 		
	and glow worms		
Reflection	Light bounces off some materials		
	better than others.		
	Shiny objects reflect light well.		
	The Moon, a mirror and shiny objects reflect light from a separate light source. They are not a light source		
themselves.			
The sun			
WARNING: It is not safe to look directly at the sun,			
even when wearing sun glasses.			
Ways to keep	Sun glasses		
our eyes	Sun hat		
protected	 Umbrella 		
from sunlight	 Tinted lenses 		
	Sun visor		
Light			
Light travals in straight lines			

Light travels in straight lines.

Light travels very, very fast - 186,282 miles per second (that's like travelling around the world over 7 times in a second).

If something gets in the way of light, a shadow is formed.

Key concepts:

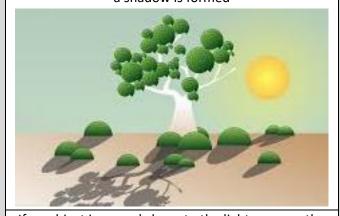
Recognising	Finding patterns
Noticing	

Key vocabulary:

Tinted	When glass is a darker colour to dull	
	down the brightness of the sun	
Opaque	An object you are not able to see	
	through	
Reflection	When light bounces off a surface	

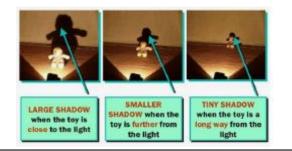
Diagrams:

When a light source is blocked by an opaque object, a shadow is formed



If an object is moved closer to the light sources, the shadow gets bigger

If an object is moved further away from the light source, the shadow gets smaller



Possible experiences:

Experiment to find out how the length of shadows can change with the seasons. (Caused by the earth's tilt).

Shadow puppets theatres with size of shadow changes for bigger characters.