

Science Knowledge Organiser



Topic: Light

Year 3: Spring Term

Strand: Physics

What I should already know

- Materials can have different properties
- Some objects and materials are shiny
- The sun is a source of light
- Daylight changes during a day and between seasons
- Be able to name other sources of light e.g. a light bulb, torch, candle.

Reflecting light

Shiny surfaces reflect light very well.



Matt surfaces don't reflect light very well.



Shadows



Shadows are formed when an opaque object blocks the light.




The child is blocking the sun's light.

We can change the size of the shadow by changing the position of the:

- light source
- object
- surface where the shadow is being made.



Key vocabulary

light	We can see objects because our eyes can sense light.
dark	Darkness is the absence of light.
light source	Some objects emit their own light and are sources of light. the sun lightbulbs candles
	  
transparent	A material that is completely see through so all the light can pass through.
translucent	A material that lets some light through but not all of it.
opaque	A material that light cannot pass through. You cannot see through it.
shadow	These are formed when an object blocks light.
reflect	When light bounces off a surface.
mirror	A sheet of glass or metal that reflects light.

Sunlight

- The light from the sun can be dangerous.
- It can damage our eyes.
- We must never look directly at the sun.
- We can protect our eyes by wearing sunglasses or sunhats in bright sunlight.



Why do we need light?



We need light to see things.

If it's completely dark then there is no light.

The more light there is, the easier it is to see objects.

