
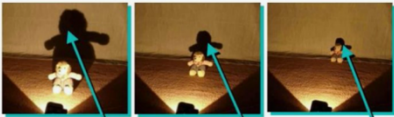


What? (Key Knowledge)	
Light Sources	
We need light in order to see things. When there is no light we say it is dark.	
What is a light source?	<ul style="list-style-type: none"> A light source is something that makes its own light.
Common sources of light	<ul style="list-style-type: none"> The Sun The stars Flames Electric lights Some animals (fireflies and glow worms make their own light)
Things you may think are light sources but aren't.	<ul style="list-style-type: none"> The Moon A mirror Shiny objects <p>These basically reflect light from a light source but aren't light sources themselves.</p>
Reflection	<ul style="list-style-type: none"> Light bounces off some materials better than others. Shiny objects reflect light well.
The Sun	
WARNING	IT IS NOT SAFE TO EVER LOOK DIRECTLY AT THE SUN, EVEN WHEN WEARING SUN GLASSES.
More about light	
Things you need to know about light	<ul style="list-style-type: none"> Light travels in straight lines
	<ul style="list-style-type: none"> Light travels very, very fast - 186,282 miles per second. (that's like travelling around the world over 7 times in a second)
	<ul style="list-style-type: none"> If something gets in the way of light, a shadow is formed.
More about light	
Things you need to know about light	<ul style="list-style-type: none"> Light travels in straight lines
	<ul style="list-style-type: none"> Light travels very, very fast - 186,282 miles per second. (that's like travelling around the world over 7 times in a second)
	<ul style="list-style-type: none"> If something gets in the way of light, a shadow is formed.
Shadows	
How is a shadow formed?	<ul style="list-style-type: none"> When light from a source is blocked by an opaque object, you get a shadow.
	
How does the size of the shadow change?	<ul style="list-style-type: none"> 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.
	
<div> <div>LARGE SHADOW when the toy is close to the light</div> <div>SMALLER SHADOW when the toy is further from the light</div> <div>TINY SHADOW when the toy is a long way from the light</div> </div>	

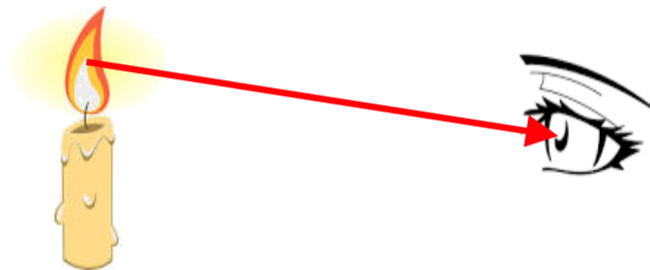
What? (Key Vocabulary)	
Spelling	Definition/Sentence
light source	light comes from different sources called light sources; our main natural light source is the sun.
dark	with little or no light
transparent	a material that allows light to pass through so that objects behind can be distinctly seen.
translucent	a material that allows light but not details through
opaque	not able to be seen through
shadow	a dark area or shape produced by a body coming between rays of light and a surface

Take it further at home...

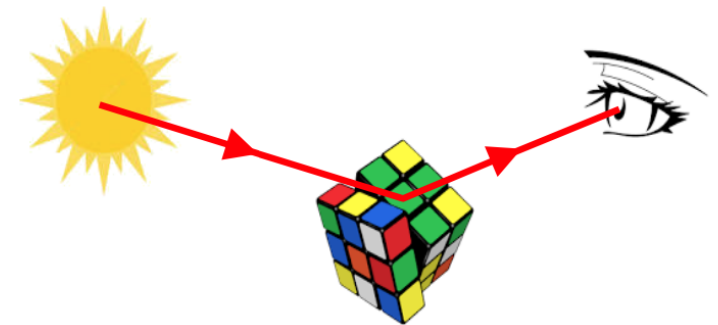
- Experiment to find out how the length of shadows can change with the seasons. (Caused by the earth's tilt).
- Can we make a light ray pass from 3H to 3T using mirrors?
- Shadow puppets theatres with size of shadow changes for bigger characters.
- Fill in the vocabulary chart – try and do this from memory with them!

Diagram and symbols

We see things when light from a source enters our eyes.

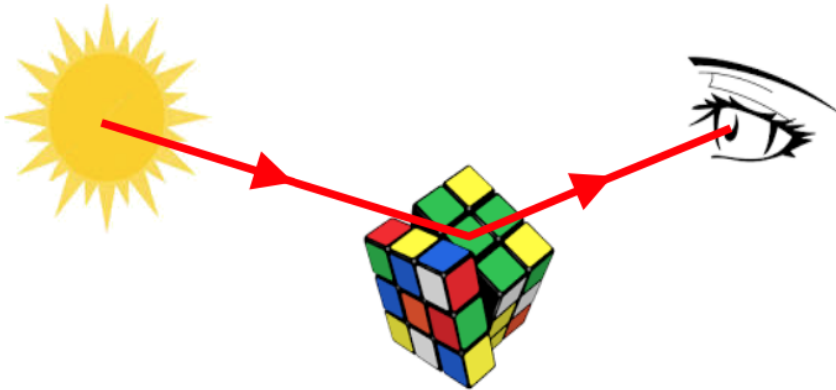
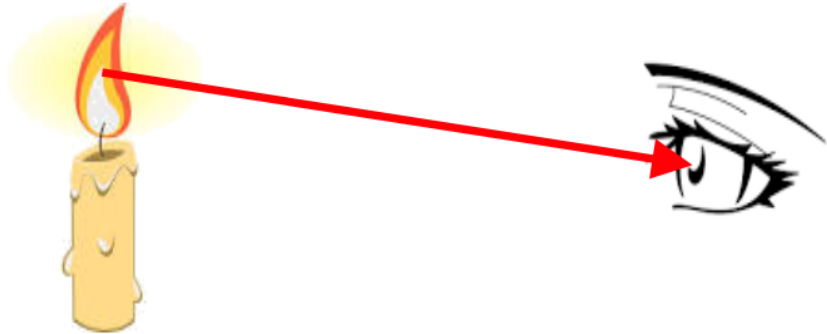


Above: Light travels directly from the light source (candle flame) to the eye.



Here the light goes from the light source, bounces off the object and into your eyes, so that you see the object.

We see things when light from a source enters our eyes.



What? (Key Vocabulary)

Spelling	Definition/Sentence
	light comes from different sources called light sources; our main natural light source is the sun.
dark	
	a material that allows light to pass through so that objects behind can be distinctly seen.
translucent	
	not able to be seen through
shadow	

