

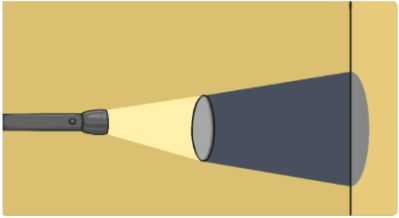


Year 3 - Light and Shadows

Physics

Key vocabulary	
absorb	Take in or soak up.
dark	The absence of light.
energy	A supply of power. The ability to do work.
light	A type of energy. We can see objects because our eyes can sense light.
light source	Where light comes from, e.g. a candle/the Sun. Sources can be either natural or artificial.
mirror	A shiny surface that reflects light in a regular way.
opaque	A material that blocks light so that no light can get through at all.
reflect	To throw back or bounce light from a surface.
shadow	A dark shape/outline of something that is made when light is blocked.
transparent	Clear/see-through. A material that lets all light pass through.
translucent	Almost see-through. A material that lets some light pass through.

Shadows

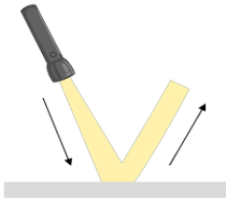
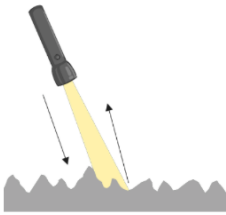


Shadows are formed when an object blocks light from a light source. The shadow appears on the side of the object that is furthest away from the light source.

Opaque objects make dark shadows.
Translucent objects make faint shadows.

The closer the light source is to the object, the larger the shadow that it creates.

Reflections

Smooth surface	 <p>When light rays hit a smooth surface, they all bounce off at the same angle, creating a clear reflection.</p>
Rough surface	 <p>When light rays hit a rough surface they scatter in all different directions and so the reflection is not clear.</p>

Sources of light


Natural Sources of Light	Artificial Sources of Light
The Sun	Light bulbs
Stars	Lamps
Fire	Torches
Fireflies	Television
Glow-worms	Phone
Lightning	Computer

Remember - the Moon and mirrors are NOT sources of light. They do not create their own light, they reflect light from other sources.

What is light?


Light is a type of energy that allows us to see things.

If there is no light, we cannot see anything.



Sunlight

The light from the sun can be dangerous and it can damage our eyes. We must never look directly at the sun and we can protect our eyes by wearing sunglasses with UV protection or sunhat in bright sunlight.



Reflections

Shiny surfaces reflect the light well.



Matte surfaces do not reflect light well.



