

Science Knowledge Organiser

Southwold Primary School



Topic: Light

Year: 3

Strand: Physics

What should I already know?

- The sun shines light
- Some devices can shine light, like lamps and torches

What will I know by the end of this unit?

- Never look directly into the sun. This light can damage our eyes. People wear sunglasses to protect their eyes
- We need light to see. We see when lights goes into our eyes
- Light goes in a straight line, it cannot go round a corner. Light can reflect (bounce off) smooth surfaces like a mirror
- Dark is when there is no light.
- The Stars and Sun shine light, the moon doesn't. It reflects light from the Sun
- When light is blocked by an opaque object, a shadow is formed

Light sources (old and new)



Reflection

Mirror, mirror on the wall...



Vocabulary

bright	Giving out, or reflecting a lot of light .
dark	Absence of light .
dim	Light that is not bright .
electrical	A form of energy which can create light e.g. in a lamp.
emits	To send out (light or a sound).
light	A brightness that makes you able to see.
mirror	Material that reflects lights so you can see a clear reflection.
opaque	An object that does not let light through.
reflect	A beam of light is send back .
shadows	Absence of light because of an opaque object.
torch	A portable light source, often run on batteries or charged.
translucent	Can be seen through, allows some light to shine through.
transparent	Material you can see through.

Working Scientifically

- Pattern seeking through observations.
- Drawing representations.
- Performing simple tests, taking measurements with tools, recording results, representing these in tables and graphs.
- Drawing conclusions.

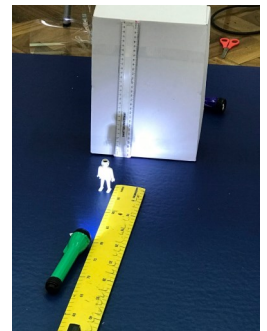
Shadows



When light cannot go through an object, a shadow is created. This shadow looks like the object. Is it always *precisely* the same?

Explore how the distance of the light source to the objects changes the size of the shadow.

Explore how the shadow changes when the light sources moves up and down (like the Sun in the sky).



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