

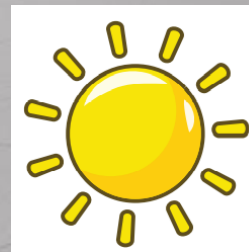
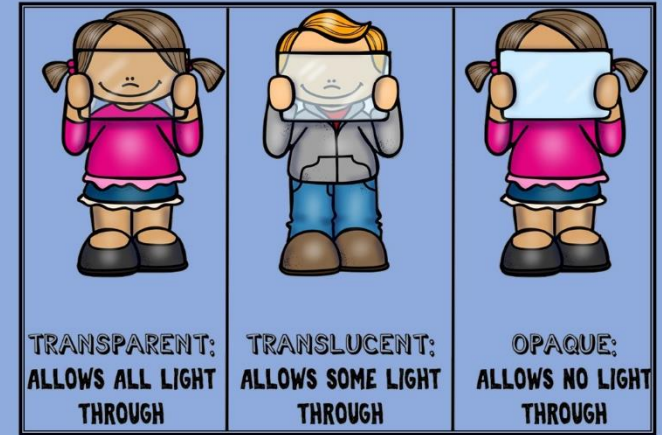
Beneath the Shadows

Our Key Concept:
Fairness

	Term	Definition
1	Light source	An object that produces its own light (e.g. sun, fire).
2	Reflection	When a light hits a surface and 'bounces' off.
3	Refraction	When light passes through a different object and its direction changes.
4	Opaque	An object which does not allow light to pass through it (e.g. wood).
5	Translucent	An object which allows some light to pass through it. It may be possible to see some unclear images through The object (e.g. tissue paper).
6	Transparent	An object which allows light to pass through it so that objects behind it can be easily seen (e.g. glass).
7	Spectrum	A range of colours caused when white light is refracted. A rainbow shows a spectrum of colours.
8	Rainbow	An arch of colour caused by the refraction of light on water droplets in the air, usually rain (Red, Orange, Yellow, Green, Blue, Indigo, Violet).
9	Prism	A solid 3D shape where two end faces are similar and parallel.
10	Shadow	A dark area or shape caused by the blockage of light.

Our big question: Is segregation ever a good thing

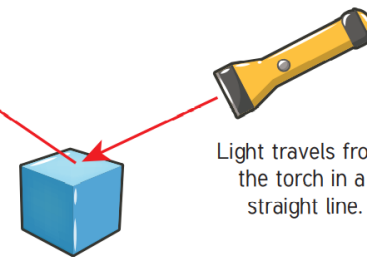
LIGHT



Remember!

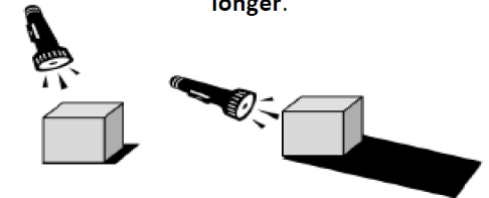
You must never look directly at the Sun. It is such a bright light source that it can damage your eyes very quickly.

When the light hits an object, it is reflected.



Light travels from the torch in a straight line.

As the **light source** moves **higher** in relation to the **object**, the **shadow** gets **shorter**. As the **light source** moves **lower**, the **shadow** gets **longer**.



LARGE SHADOW
when the toy is **close** to the light

SMALLER SHADOW
when the toy is **further** from the light

TINY SHADOW
when the toy is a **long way** from the light

Key facts

- 1 Light travels in a straight line.
- 2 Light travels faster than sound.
- 3 A light year is a unit of measurement for distance. It is the distance light can travel in a year.
- 4 The size and shape of a shadow changes based on the distance and angle compared to the light source.
- 5 Darkness is caused by the absence of light.
- 6 The moon does **not** emit its own light – it reflects the sun.
- 7 Ultraviolet (UV) light is a type of radiation which you can't see but can be dangerous. UV rays can come from the sun.