Science	Light	Year 2/3

Key Vocabulary

WORD	DEFINITION
Beam	A ray of light.
Mirror	A surface, typically of glass coated with a metal which reflects a clear image.
Opaque	Not able to be seen through.
reflect	The process that describes light bouncing off a surface.
Shadow	A dark image that is formed when an object blocks the light.
Light source	An object from which light is made. E.g. sun, torch, flame.
Transparent	Able to be seen through.
Translucent	Some light can pass through the material.
Vitamin D	A vitamin that come from sunlight or food and important for bone strength.

Key Knowledge

- o We need light to be able to see things. Light travels in a **straight line**.
- o When light hits an object, it is reflected (**bounces off**).
- o If the reflected light hits our eyes, we can see the object. Some surfaces and materials reflect light well. Other materials do not reflect light well.
- o **Reflective surfaces** and materials can be very useful.
- o Remember the Sun can be dangerous.
- o **Mirrors** reflect light very well, so they create a clear image.
- o An image in a mirror appears to be reversed. For example, if you look in a mirror and raise your right hand, the mirror image appears to raise its left hand.
- o A **shadow** is caused when light is blocked by an opaque object.
- o A **shadow** is larger when an object is closer to the light source. This is because it blocks more of the light.

Light and materials

TRANSPARENT
ALL light passes through
WINDOW

TRANSLUCENT
SOME light passes through
SUNGLASSES

OPAQUE
NO light passes through
BACKPACK

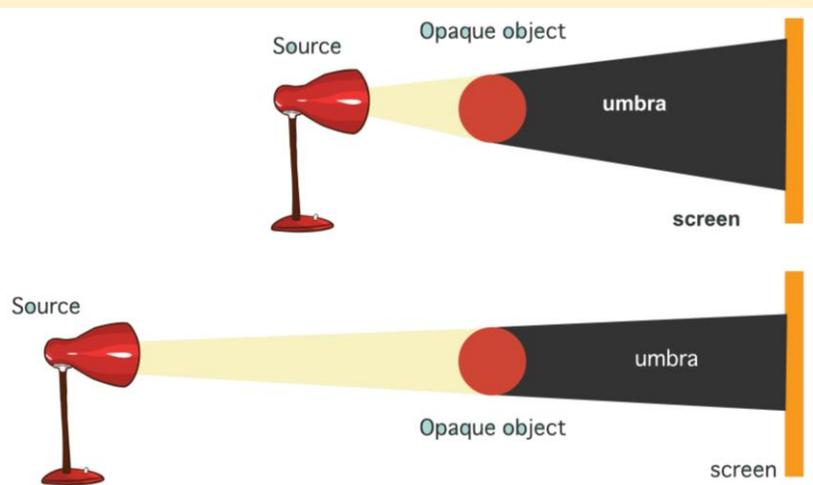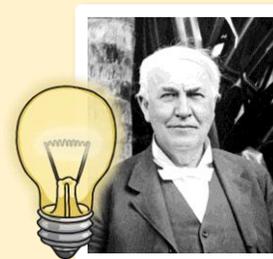## Shadows

Source — Opaque object — umbra — screen

Source — umbra — Opaque object — screen

Key Scientist/inventor

Thomas Edison was a very careful worker, who is now known as one of the most important inventors in history.
In 1879, Edison created a lightbulb that would stay lit using electricity
for 13 ½ hours!

Reflection

Light from the torch hits the object.

The light is reflected from the object.