

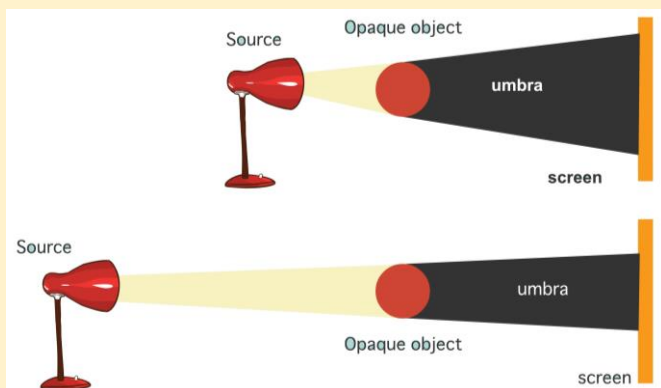
## Science

### Key Vocabulary

WORD	DEFINITION
Beam	A ray of light
Image	An optical appearance or counterpart produced by light from an object reflected in a mirror or refracted through a lens.
Incident Ray	The ray of light from the light source which falls on the reflected surface
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
source	A person, place or thing from which light originates from
Transparent	Able to be seen through

### Shadows

A **shadow** is caused when light is blocked by an opaque object. A shadow is larger when an object is closer to the light source. This is because it blocks more of the light



## Light

### Key Knowledge



- We need light to be able to see things. Light travels in a **straight line**.
- When light hits an object, it is reflected (**bounces off**).
- 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.
- **Reflective surfaces** and materials can be very useful.
- Remember the Sun can be dangerous.
- **Mirrors** reflect light very well, so they create a clear image.
- 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.

### Light and materials

#### TRANSPARENT

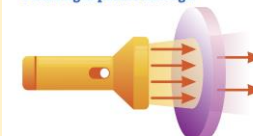
ALL light passes through



WINDOW

#### TRANSLUCENT

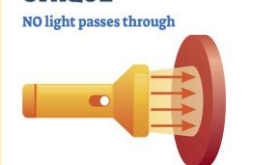
SOME light passes through



SUNGLASSES

#### OPAQUE

NO light passes through

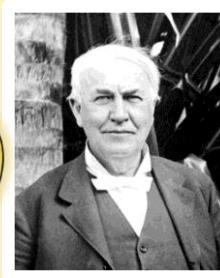


BACKPACK

### 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  $\frac{1}{2}$  hours!



### Reflection

Light from the torch hits the object.

The light is reflected from the object.

