

# Science • Light

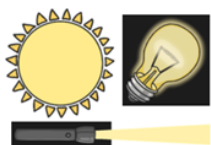


## Crucial Knowledge

- Dark is the absence of light.
- Light is needed to see and is reflected from a surface.
- Light is produced from light sources such as a lamp or the sun.
- When something blocks the light travelling from the light source, a shadow is made.
- Shadows can change shape. As light moves closer, the shadow becomes longer and wider. As light moves away, the shadow becomes shorter and thinner.



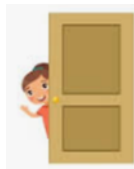
## Key Vocabulary



**Light source:** anything that makes light; may be natural or artificial



**Absence of light:** darkness; this is what occurs when there is no light at all.



**Opaque:** not able to be seen through



**Transparent:** allowing light to pass through so objects behind can be clearly seen



**Translucent:** allowing light, but not detailed shapes, to pass through.



**Shiny:** reflecting light, often if very clean or polished



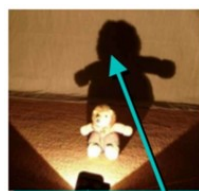
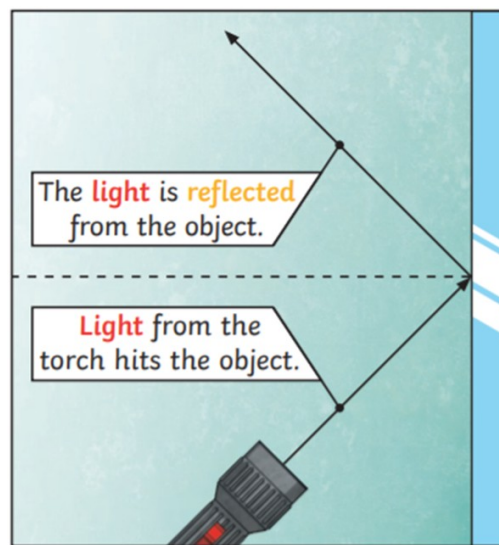
**Matte:** dull and flat, without a shine



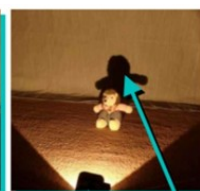
**Reflect:** throw back (light) without absorbing it



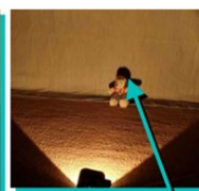
## Diagrams / Images



**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



## Important People



**Alison Sweeney** is a biophysicist who has studied how sea creatures bend a reflect light and how this could help people generate energy.



**Euclid** was an ancient Greek Mathematician who described the law of reflection in 300BC

## We Are Building Our Knowledge From

- Uses of Everyday Materials (Y2)

## This will help when we learn about

- Light (Y6)