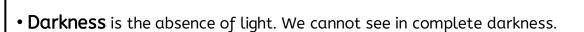
# Light

#### 1 How do we see?

- We need light to see.
- Light travels in **straight lines**.
- We see an object when light is **reflected** (bounced) off an object and enters our eye.



### Light sources

- A source of light is something that emits (produces)
  its own light. We can describe light sources as
  luminous objects.
- Natural light sources include the Sun, fire and fireflies.
- Artificial (man-made) light sources include torches, lamps and televisions.
- **Shiny** objects are not light sources. They appear shiny because they reflect lots of light from light sources.

## 3 Light and materials

Light can travel through some materials.



**transparent** materials let nearly all light through



**translucent** materials let some light through



**opaque** materials let no light pass through – we cannot see through opaque materials

#### Shadows

- A shadow is formed on a surface behind an object,
   when the object does not allow light to pass through it.
- The closer the object is to the light source, the larger the shadow will be (see diagrams, right).
- We can also change the position and length of shadows by changing the position of the light source.

