# Light Knowledge Organiser

#### **Light sources**

A light source makes light. The Sun and other stars, fires, torches and lamps all make their own light, so they are examples of sources of light.



#### Dark

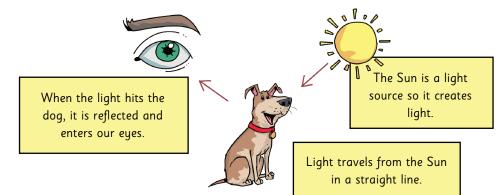
Darkness is what happens when there is an absence of light. When there is no light, it is dark.

## **Reflective light**

We can see things because light is reflected. Some materials reflect light better than others.

Light travels in straight lines. When light from an object is reflected by a surface, it changes direction.

Smooth, shiny surfaces such as mirrors and polished metals reflect light well. Dull and dark surfaces such as dark fabrics do not reflect light well.





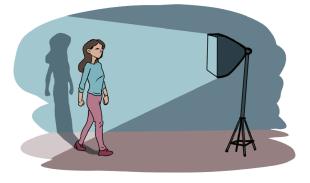
## The Sun

The Sun is the biggest light source we use. It is a giant ball of hot, burning gas. It can damage our eyes if we look directly at it. We should protect our eyes from the Sun by wearing sunglasses and a hat.



#### Shadows

A shadow is made when an object blocks light. A shadow is a dark area or shape caused by a solid object blocking the rays of light from a light source.



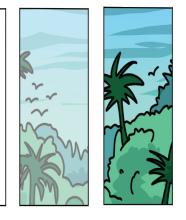
### Types of objects

Objects are either opaque, translucent or transparent.

Opaque objects let no light pass through.

Translucent objects let some light pass through.

Transparent objects let light pass through.



## **Key Vocabulary**

dark - the absence of light

direction - the way that something is moving
light - a source of energy that allows you to see
light ray - an imaginary line that represents the line of light
light beam - a group of light rays

light source - something that makes light

**opaque** - cannot be seen through

reflect - bounces off or changes direction

**reflective** - something that reflects well

**refraction** - when light changes direction when going through the boundary of a state of matter

see - to perceive with the eyes

**shadow** - a dark area or shape produced by an object coming between rays of light and a surface

transparent - can be seen through

translucent - can be seen through, but not clearly

