# Year 3: Light

#### Natural sources of Light:



The greatest source of light in the Solar System is the sun. The sun creates light and this light creates the daytime on Earth. Light appears naturally in fire, lightning and even in some animals such as fireflies and deep sea creatures.

#### Artificial sources of light:





Light can be made using artificial sources. Most of these sources use electricity to create light. Some artificial sources include torches, lightbulbs and even screens such as televisions and mobile phones.

### **Reflected light:**



Light is reflected on shiny surfaces, Mirrors will reflect light which is why we see reflections in them. The Moon gives off no light, It shines because it reflects the light of the sun.

#### Shadows:



When light is blocked it forms a shadow. A shadow forms when an opaque, or non-transparent, object blocks light from passing through and reaching a surface on the other side. The brighter the light, the darker the shadow.

### **Opaque, translucent & transparent**

TRANSPARENT ALL light passes through

TRANSLUCENT OME light passes thro



#### OPAQUE











## **KEY VOCABULARY**



LIGHT SOURCE Where light comes from. This can be natural or artificial..



**OPAQUE:** An object that no light can pass through.



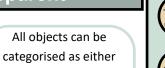
TRANSLUCENT An object that lets some but not all light, pass through.



**TRANSPARENT** An object such as glass that lets all light pass through.



SHADOW: When light is blocked it will cast a shadow.



opaque, translucent or

transparent.

Transparent objects let

all light pass through

such as glass.

Translucent objects let some light pass through. Such as sunglasses.

Opaque objects are solid

and let no light pass

through. Objects such as

walls, metal and wood.

**REFLECTION:** When light hits a shiny or smooth surface and bounces off it in a different direction.



REFRACTION: When light is split into it's spectrum of colours.

#### **Refraction:**



Light appears white but when light is refracted it is split into it's spectrum of colours. These are all the colours of the rainbow: red, orange, yellow, green, blue, indigo and violet.



