## Year 3:

## Light

## Key Learning

## Light sources:

Light travels in straight lines. It travels from the light source either directly into our eyes, or reflecting off objects at 670 mph.

A mirror is not a light source. It reflects light but does not create it.

Rainbows are formed when the sun shines through water particles, which are transparent. When white light passes through, it 'bends' and splits into the range of colours which make white light







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

Light travelling and reflecting from a smooth surface.



Light travelling and reflecting from a rough surface.

UV rays from sunlight can be harmful which is why you must protect yourself appropriately with sunglasses and sun screen.

As the **light source** moves **higher** in relation to the **object**, the **shadow** gets **shorter**. As the **light source** moves **lower**, the **shadow** gets **longer**.





| Key Vocabulary |  |
|----------------|--|
| Opaque         | Describes objects that to not let any light pass through them.   |
| Translucent    | Describes objects that let some light through, but scatter the light so we can't see through them clearly. |
| Transparent    | Describes objects that let light travel through them easily, meaning you can see through the object.       |
| Light source   | An object that can emit (make) its own light e.g. the sun or a torch.                                      |
| Reflect        | To bounce off.   |
| Reflection     | The process where light hits the surface of an object and bounces back into our eyes.                      |
| Shadow         | An area of darkness where light has been blocked.  |
| Dim            | Something that does not shine brightly or give out a lot of light.   |