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| **Key Vocabulary** | |
| **Spelling** | **Definition** |
| Opaque | You cannot see through it e.g. wood, stone and metal. |
| Translucent | Some light can pass through it but you cannot see clearly through it. e.g., some glass, some plastic, tissue paper. |
| Transparent | You can see through it clearly, e.g. glass, plastic, cling film. |
| Light source | An object that can emit (make) its own light e.g. the sun or a torch. |
| Reflection | When light bounces off a surface/object. |
| Shadow | When an object blocks the light, it forms a dark shape. |
| Dim | Something that does not shine brightly or emit a lot of light. |



**Science Knowledge Organiser**

**Year 3**

**Can you see me?**

**Light**

Summary Statement

This unit builds upon pupils’ prior knowledge of materials as they recognise that **shadows** are formed when an **opaque** object blocks the light from a **light source**. Pupils find patterns in the way that the size of **shadows** change. Pupils learn we need light in order to see things and that dark is the absence of light.

**By the end of the unit children can:**

* Recognise that they need light in order to see things and that dark is the absence of light.
* Notice that light is **reflected** from surfaces.
* Recognise that light from the sun can be dangerous and that there are ways to protect their eyes.
* Recognise that **shadows** are formed when the light from a **light source** is blocked by an opaque object.
* Find patterns in the way that the size of **shadows** change.

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| **Key Knowledge** |
| We need light in order to see things and dark is the absence of light. |
| Light **reflects** off surfaces/ objects and enters our eyes. This is how we see things. |
| Light travels in a straight line. |
| Light is a form of energy. |
| The natural sources of light include- sun, stars, fire and lightening. There are man-made sources of light such as light bulbs, televisions and neon lights. |
| Looking directly at the sun is dangerous, as the light is too strong. Ultraviolet (UV) light causes blindness or other long-term vision problems and the eyes should be protected by covering with sunglasses/sunhat. |
| Understand that shadows are formed when an **opaque** object blocks light from passing through. This means it blocks out the light. **Transparent** and **translucent** objects let light through, creating no clear shadows. |

