|  |
| --- |
| **Light** |
|  |
| **Overview of unit / topic** |
| In this unit, children will develop their knowledge of light and dark. They will be able to identify a range of light sources and know different ways they can protect their eyes from the sun. They will develop their knowledge on shadows and how they are formed and will look closely at a range of reflective surfaces.  |
|  |
| **Key Questions** |
| Why do we need light?What are sources of light?What is dark? How are shadows formed? How can we protect our eyes from the sun?  |
|  |
| **Key Vocabulary** |
| Light | A type of energy that makes it possible for us to see the world around us.  |
| Light sources | An object that makes its own light.  |
| Dark | The absence of light.  |
| Reflection | The process where light hits the surface of an object and bounces back into our eyes.  |
| Reflect  | To bounce off.  |
| Reflective | A word to describe something that reflects light well.  |
| Pupil | The black part of the eye which lets light in.  |
| Shadow | An area of darkness where light has been blocked.  |
| Opaque  | Describes objects which does not let any light pass through it.  |
| Translucent  | Describes objects which let some light through, but scatter the light so we can’t see things properly.  |
| Transparent  | Describes objects which let light through easily, meaning that you can see though them.  |
|  |
| **Key Knowledge and Understanding:****What will we be learning about in this unit / topic?** |
| We will know that:Light travels in a straight line. When light hits an object, it is reflected (bounces off). If the reflected light hits our eyes, we can see the object. Some surfaces and materials reflect light well. Other materials do not reflect light well. Reflective surfaces and materials can be very useful. Dark is the absence of light. A shadow is caused when light is blocked by an opaque object. A shadow is larger when an object is closer to the light source. This is because it blocks more of the light. The pupils control the amount of light entering the eyes. If too much light enters, then it can damage the retina. To help protect the eyes, you can wear a hat with a wide brim and sunglasses with a UV rating. When the light source is directly above the object, the shadow will be directly underneath. When a light source is to one side of an object, the shadow will appear on the opposite side. The shadow will also be longer.  |