|  |  |
| --- | --- |
| Light | Macintosh HD:Users:mrsgsinclair:Desktop:BL:Bishops Lydeard Logo.png |
| Year 3 – Year A Terms 1 and 2 |
| Prior LearningIn Year 1 children should have:* Observed changes across the four seasons
* Observed and describe weather associated with the seasons and how day length varies.

Children may:* have some knowledge of were light comes from.
* have seen their shadows and may know they appear when it is sunny.
* Have some understanding of a reflection.
* May understand they need light to be able to see things.
 | Year 3 Learning* There must be light for us to see. Without light it is dark.
* We need light to see things even shiny things.
* Transparent materials let light through them and opaque materials don’t let light through.
* Beams of light bounce off some materials (reflection).
* Shiny materials reflect light beams better than non-shiny materials.
* Light comes from a source
 | Key Questions* A coin is lost, what would be the best way to find it? (Turn the lights out and see it shine? Use a torch to see it reflect?)
* How does distance from a light source affect how bright it looks?
* How does being in darkness affect your sense of hearing?
* What colour would be the best to make a safety jacket from?
* How does the colour of a material affect how reflective it is?
* What would be the best material to make a blind for a baby’s room?
* How does thickness of a material affect how much light can pass through it?
* How many pieces of tracing paper are as translucent as a single piece of white paper?
* How does the shape of a mirror affect how the light reflects?
* How can we change the darkness, size and shape of a shadow?
 | Future LearningIn Year 6 children will:* Recognise that light appears to travel in straight lines.
* Use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye.
* Explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes.
* Use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.
* Know how simple optical instruments work, e.g. periscope, telescope, binoculars, mirror, magnifying glass etc.
 |

|  |
| --- |
|  |

|  |
| --- |
|  |

|  |
| --- |
|  |