



**What should I already know?**

Observe and describe changes across the four seasons.  
Observe and describe weather associated with the seasons and how day length and temperature varies. (Year 1)

**Knowledge**

-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

**Year 3 Intention: In Science I will be learning about Light and Shadows**

**Scientific Skills**

- i) asking relevant questions and using different types of scientific enquiries to answer them
- ii) setting up simple practical enquiries, comparative and fair tests
- iii) making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers
- iv) gathering, recording, classifying and presenting data in a variety of ways to help in answering questions
- v) recording findings using simple scientific language, drawings, labelled diagrams, keys, bar charts, and tables
- vi) reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions
- vii) using results to draw simple conclusions, make predictions for new values, suggest improvements and raise further questions
- viii) identifying differences, similarities or changes related to simple scientific ideas and processes using straightforward scientific evidence to answer questions or to support their findings

**Vocabulary**

Light, white light, visible light, colour, spectrum, refraction, light source, energy, reflector, reflect, predict, investigate, reflective materials, mirror, reflection, image, concave, convex, transparent, translucent, opaque, shadow