Science Year 2/3 Autumn Term: Knowledge Organiser – Light and shadows



Key Learning (Skills)

By the end of this learning I will be able to…

- Use straightforward scientific evidence to answer questions [or to support their findings].
- Make systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including [thermometers and] data loggers.
- Report on findings from enquiries, including oral and written explanations, [displays or presentations of results and conclusions].
- Identify differences, similarities or changes related to simple scientific ideas [and processes].
- Use results to draw simple conclusions, [make predictions for new values, suggest improvements and raise further questions].

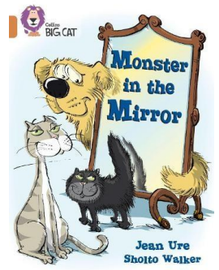


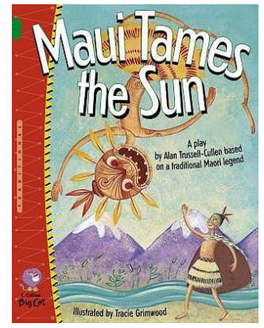
Key Learning (Knowledge)

By the end of this learning I will be able to…

- 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.

Good Books







Key Vocabulary

Light source	Something, natural or artificial, that produces its own light
Opaque	The property of blocking light by absorbing or reflecting all of the light that falls on it
Reflect	To send back light
Transparent	The property of allowing almost all light that falls on it to pass through, enabling a clear view of what lies behind
Translucent	The property of blocking or scattering some light so that not all of it passes through and there is no clear view of what lies behind it

What I already know (prior learning)

- that light is seen by the eyes.
- that materials can be transparent (see-through) or opaque.

What I will learn next:

- using observations of shadows to track the apparent movement of the Sun across the sky.
- how light travels, including the properties of shadows, and how we see objects.