

Key Learning

Reception:

- Learn new vocabulary
- Use new vocabulary
- Describe what they see, hear and feel whilst outside.

Year 1:

- Observe closely, using simple equipment
- Perform simple tests
- Gather and record data

Investigation Questions

Comparative testing

- Compare the shape of shadows made by different objects.

Classification

- Which objects/materials make dark shadows?

Observing over time

- How do the Sun and shade change during the day?
- How does a toy's shadow change during the day?

Researching using secondary sources

- Find out about shadows.
- Find out about rainbows

Year Reception / 1 Science: Light and dark



Sources of light

Torch
Candles
Fireworks
Light bulbs
Technology (laptops / phones)
Car lights
Sun

Common Misconceptions

Some children may think:

- shadows are only caused by the Sun
- all shadows are black

Key Scientific Vocabulary

Light	The brightness that comes from the sun or other light sources such as a torch etc.
Darkness	The absence of light. (There is no light)
Light sources	Sources of light are things that give off light. There are lots of different sources of light some are natural and some are man made. Such as torches, sun, fire etc.
Shadows	A dark shape that appears when light is blocked.
Sun	The Earth depends on the Sun for heat and light. It is a star at the centre of the solar system.
Sun safety	Taking steps to make sure we stay safe when exposed to sun.
Transparent	Clear. Light passes through a material that is transparent.
Opaque	Doesn't allow light to pass through. You cannot see through it.
Material	What an object is made from.
Reflective	Something that can be seen easily.
Bright	Full of light/shining.

