

Starters for Science: Y3 Light

Starters for Science are 4 activities that parents can use at home to help children develop their science alongside the key learning and vocabulary children are using at school. The activities are easy to resource and provide children with the stimulus to learn and talk about their science topic. Encourage children to use the correct vocabulary as they talk about what they are doing and finding out. Don't forget to share your work on social media

#ScienceFromHome

Key Learning:

We need light in order to see things. Dark is the absence of light. We can't see anything when there is no light (completely dark).

Light, from a light source, is reflected from surfaces. Some surfaces reflect light better than others e.g. a shiny surface reflects light better than a matt surface.

The Sun is a light source. The light from it can be dangerous so we need to protect our eyes.

Opaque objects block all light from passing through them. Light can pass through transparent objects so objects behind can be seen. Translucent objects allow some light to pass through them so objects behind them cannot be seen clearly.

Shadows are formed because an opaque object blocks light from a light source.

There are patterns in the way the size of shadows change. The position of the light source, object and surface the shadow forms on affect the size of the shadow.

Vocabulary:

light
light source
dark
absence of light
reflect
mirror
matt
shiny
surface
shadow
opaque
transparent
translucent
sunlight
dangerous

Shoe box test

Use a pencil to put a hole in the end of an old shoe box and one on the top of the box at the opposite end to your first hole. Place an object inside the box, under the hole on the top. Cover that hole with your finger. Now look through the hole at the end of the box. Can you see the object? How about if you uncover the hole on the top? Try other objects. Does the same thing happen?

Translucent, transparent, opaque

How many objects can you find in your house that are translucent, transparent and opaque. How do you know?

Mirror writing

Put a piece of paper in front of a mirror. Without looking at the paper, look into the mirror and try to write your name on the paper. Is it difficult? Why do you think this is?

Changing shadows

Use an old cardboard box to cut out a shape of an animal or anything you choose. Hold it in front of a light, like your bedside light or a torch. Is the shadow bigger or smaller than the cardboard animal? Try and make the biggest and smallest shadows that you can. How did you do this?