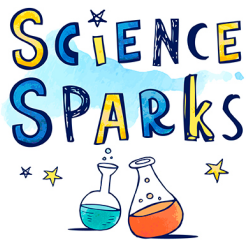


SCIENCE FUN AT HOME



Have some fun at home with these science activities from **Science Sparks** and the **Primary Science Teaching Trust**



BEFORE YOU START! Please read through this with an adult:

- * Make sure you have read the 'IMPORTANT NOTICE' on the back of this page.
- * If you have a space outside that you can use safely, then you can do the 'Try this outdoors' activity outside. Don't worry if not as you could still do it indoors.
- * Talk to your adult about sharing the science you have done and if they want to share on social media, please tag [@ScienceSparks](#) and [@pstt_whyhow](#) and use [#ScienceFromHome](#)

SCIENCE IN STORIES

1 TRY THIS INDOORS Mirror writing

In the story of Alice Through the Looking Glass, Alice climbs through a mirror and finds everything happens backwards, including writing! Have a go at some backwards writing: start by writing your name as usual and then look at it in a mirror where it will appear to be backwards. Then have a go at writing your name *backwards* and check in the mirror to see if it now appears to be the right way round. Try writing some other words.

You will need

- * Paper
- * Pencil
- * Mirror
- * Felt tip pens
- * Bucket or large bowl of water
- * Recycled or junk materials
- * Sticky tape or string
- * Small toy

WHAT DO YOU NOTICE?

Things to talk about ...

Is it easier to write some letters than others? What happens if you try to use the hand that isn't the one you usually write with? As an extra challenge, can you write backwards with one hand and forwards with the other?!



2

TRY THIS OUTDOORS ... Make a raft for The Gingerbread Man

In the story of The Gingerbread Man, he is eaten by a fox as he tries to cross a river. Can you help the Gingerbread Man cross the river safely by making him a raft out of junk or recycled materials? Test your raft in a bucket or large bowl of water. Can it carry a small toy without sinking?

WHAT DO YOU NOTICE?

Things to talk about ...

Which materials make the best raft? Why do you think they are better at floating? Can you add anything to the raft to help it float? What happens if you put a heavier toy on the raft?



3

WHAT IS THE SCIENCE?

When we look in the mirror, we see objects because light is reflected from them to the mirror and back to our eyes. The light will be reflected at the same angle as it hits the mirror which means that the object will appear to be flipped horizontally. If you write a word on a piece of paper and hold it up to a mirror the letters are backwards, but they are still the right way up. We call this a mirror image. Only mirrors that are perfectly smooth and flat give a mirror image.

Objects float on water if they are less dense than water. Just because something is heavy doesn't mean it is dense. For example, ships are heavy but not dense. Density refers to how tightly packed the materials inside an object are. Bubble wrap is not dense, but a potato is dense. A potato dropped in water will sink, but if you reduce its density by wrapping in bubble wrap it will float.

4

MORE ACTIVITIES YOU COULD TRY

GROW A BEAN FOR JACK www.science-sparks.com/bean-in-a-jar

SCIENCE THROUGH STORIES www.wowscience.co.uk/teaching-science-through-stories/

EXPLORE MIRRORS AND LIGHT www.pstt.org.uk/resources/curriculum-materials/Starters-for-Science

TAKE A SCIENCE SELFIE! Maybe you could show other people what you have been doing?

IMPORTANT NOTICE: Science Sparks and The Primary Science Teaching Trust are not liable for the actions or activity of any person who uses the information in this resource or in any of the suggested further resources. Science Sparks and The Primary Science Teaching Trust assume no liability with regard to injuries or damage to property that may occur as a result of using the information and carrying out the practical activities contained in this resource or in any of the suggested further resources.

These activities are designed to be carried out by children working with a parent, guardian or other appropriate adult. The adult involved is fully responsible for ensuring that the activities are carried out safely.