

The Big Exploration Week Two: Science

Hello! My name is Emily and I look after Year 5 to Year 9 outreach at Oxford Brookes University.

Hi guys! my name is Will and I work for Oxford Brookes University.

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And this is The Big Exploration - Week Two: Science.

Hi everyone! Welcome back. This week we're going to talk all about science. So, you already should know about science from school, but maybe you've never had a chance to think about how much science there actually is out there.

So, hopefully you've already completed the worksheet. If you haven't, don't worry, pause the video now and go onto our website and find the worksheet.

If you have completed the worksheet, brilliant, well done! We hope you enjoyed it. We hope you enjoyed finding out all about the different types of science you can do. If you want to, you can find science wherever you look. All around your house, every single object will probably have had a scientist involved with it at some point. Scientists will have tested the perfect shampoo, they will have tested the perfect temperature to toast your toast at; there will be scientists involved all the way through this process and that's really cool! But there's also going to be lots of science out there in the world which you won't have even thought of.

And that brings us to the second activity on your worksheet: is that really research? Have your answers ready, and let's start with number one.

Which can jump higher - the dog flea or the cat flea?

This is a real science question that real scientists at the National Veterinary School of Toulouse tried to answer in their lab. So in their laboratory, they took different fleas from cats and from dogs and tested them to see how high they could jump, and how far they could jump!

Do woodpeckers get headaches?

This is another real one! Scientists at the University of California, Davis did research to find out how woodpeckers can stand knocking their beaks against wood all day every day. If we did that we'd get a really bad headache, but woodpeckers can seem to do it just fine. Woodpeckers have developed lots of traits to help avoid brain damage. They've got really wide, spongey skulls and really strong jaw muscles, and these, combined with the fact that they have really small brains, mean that they can knock on wood all day and not get hurt.

Why do we get belly button fluff?

Researchers at Vienna University of Technology really wanted to find out why we get belly button fluff. It's something we can all get, and it turns out it's because of the tiny little hairs that we have got on our tummies. When we wear clothes, these hairs trap really small pieces of the clothes and channel them down into your belly button.

Why is banana peel slippery?

So we've probably all heard before that banana peel is really slippery, and it's probably shown up in all our favourite cartoons too. But it turns out that it's not just a myth! Researchers at Kitasato University in Japan have discovered that banana skin has really special molecules called polysaccharides, and this makes the skin really, really slippery; more so than any other fruit. These properties are also found in the membranes where our bones meet, which means that we might be able to use bananas to help us develop prosthetic (fake) limbs.

Can rubber ducks help track ocean currents?

So this one is probably the most far-fetched, and actually only happened by accident. In 1992 a cargo ship container fell into the Pacific ocean and let loose over 28 thousand rubber ducks and other different types of bath toys. People started reporting that they were finding these toys on the beach and at the coast. Scientists saw an amazing opportunity here, and started tracking where these ducks were turning up. This means that they could track the different ocean currents and where the ocean travelled to from a certain point in the Pacific. These ducks have been found all over the world; they've been found in Alaska, in Australia, in Japan, and even some of them have made their way over to the Atlantic and to Scotland!

If you've enjoyed learning all about science research this week, there's one last activity that you can do on your worksheet. If you were a scientist, what sort of science do you think you'd be interested in and what would your question be?

That's it for this week - thank you for joining us! Come again next week to find out all about the different types of research you could do around English.