Slime - What makes slime slimy?

Fact
- When you’re making slime with soap flakes and water the soap gets slimy when you add the water.
- Solid substances that easily dissolve in water have a slippery surface like soap.
- If you add too much water the slime is too runny and if you don’t add enough water the slime is more solid and not very slippery.
- Slimy surfaces reduce friction and make them slippery.

Do you know
- A liquid like slime is called a viscose (vis-cus) liquid. Viscosity is the measure of resistance to flow.
- Viscose liquids have particles that cling together tightly – the tighter they cling the less freely they flow.
- Water flows really easily so it has no resistance.
- Chocolate sauce has more resistance to flow (it’s pretty runny but it doesn’t flow as fast as water) so it is a viscose liquid.
- Toothpaste has a lot of resistance to flow so it has a high viscosity.

Experiments you can do
Make your own slime with the help of an adult.

What you need:
- A large bowl
- ½ cup of soap flakes (like Lux flakes)
- ½ cup boiling water
- wooden spoon

What you do:
Put the soap flakes in the bowl and pour the boiling water over it. Mix the soap flakes and water with the wooden spoon until the soap flakes have dissolved. Leave it to cool then get stuck in and see how slimy your slime is. It will keep for a couple of days – just keep it in a container with a lid.

Experiment with half a cup of your slime adding more water to it – how does it compare with the original slime? Add more soap flakes to another half cup of slime and stir it until the flakes are dissolved. Do the flakes dissolve as easily as they did in the hot water? What does it do to the slime?

You can also beat your slime with an eggbeater until it’s frothy. How does it compare to the original slime? How long does it stay frothy for? Is it just as slimy?

Other Investigations
What other household liquids are viscose. Next time you have a bubble bath, shampoo your hair or are helping get a meal ready look at the liquids you are using. Do they have more or less viscosity than the others?