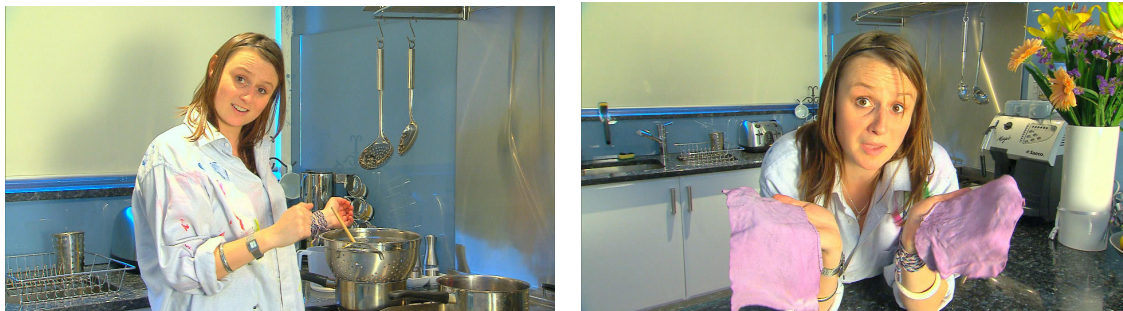


## Activity: Natural Dyes

On SCOPE's Things that... we wear episode, you saw Julia dye a t-shirt using blueberries. Here's how she did it:



**\*\*Young scientists should get an adult to help with this one because we're heating things up!\*\***

### What you need:

An old top to wear to keep your clothes clean

½ cup of salt

Test pieces of fabric

Clothes to dye (white/light colours work best)

2 saucepans

Cup measure

Wooden spoon

Strainer

Tongs

Blueberries to make the dye (can be frozen or fresh)

### What to do:

1. Before you start, put on an old t-shirt or smock to protect your clothes from the dye.
2. To make the dye, place 1 cup of blueberries into a saucepan and add about 4 cups of water.
3. Bring the dye mixture to the boil and simmer on medium heat for about an hour. Remember to ask an adult to help!
4. Turn off the stove and leave the mixture to cool.
5. Strain out the blueberries by pouring the mixture into a strainer that is sitting on top of another saucepan. Be careful not to spill!
6. To make the mordant (which is going to help the dye bind to the fabric), add to the empty saucepan half a cup of salt, 6 cups of water and a piece of test fabric.
7. Once again, bring to the boil and allow to simmer for about an hour.
8. Turn off the stove and leave the mixture to cool.
9. Using the tongs, take out the test fabric and squeeze out the excess water. You can keep the left over mordant and use it again!
10. Place the test fabric into the pot with the dye and return to the heat, simmering for another hour.
11. Turn off the stove and leave the mixture to cool.
12. Using the tongs, take out the piece of fabric and hang it up to dry.
13. If you are happy with the colour, repeat the process with the clothes you want to dye!

### What's happening?

Without all the dyes and pigments that are used these days, our lives would not be very colourful! Luckily for us though, that is not the case. Natural dyes have been around for thousands of years

and there are so many to choose from! For more information about what natural dyes to use other than blueberries, you can go to <http://www.pioneerthinking.com/naturaldyes.html>.

The mordant is an important part of the dyeing process because it is basically the link between the dye and the fabric. It combines with the dye to make a chemical compound which will bind to the fabric and make our clothes colourful. Without it, the colour of your clothes would be a much lighter, or the dye might completely wash out!