



## Equipment and ingredients

### On your table, you should have:

- 3 strawberries (no stalk or leaves)
- A sandwich bag
- Small clear glasses
- A sieve
- A jug
- A spoon
- Sheet of kitchen roll
- Cocktail sticks

### Separate plastic cups containing:

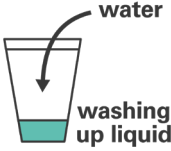


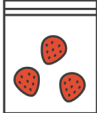

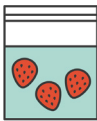

- 90ml of water
- 1 tablespoon of washing up liquid
- ½ teaspoon of table salt

### Your teacher will also have:

- 10ml cold alcohol (your teacher will keep this cold until you need it at the end of the experiment)



# Instructions

	<p>1 Pour the water into the plastic cup containing washing up liquid.</p>
	<p>2 Add the salt to the mixture.</p>
	<p>3 Using the spoon, gently mix everything together until all the salt has disappeared. Don't mix it too hard otherwise you'll get lots of bubbles in your mixture.</p>
 <p>strawberries</p>	<p>4 Put the 3 strawberries into the sandwich bag.</p>
	<p>5 Add the water, washing up liquid and salt mixture to the bag.</p>
	<p>6 Carefully squeeze out the air from the bag, and seal it or tie a knot in the top. Let your teacher know if you'd like help to do this.</p>
	<p>7 Use your fingers to squash the strawberries for about 5 minutes until the fruit is mashed up like a smoothie drink. Don't squeeze too hard as the bag may burst!</p>



- 8 Place the kitchen roll in the sieve and then place the sieve over the jug.
- 9 Pour the strawberry mixture into the sieve and kitchen roll to remove any lumps of strawberries. All the juices should pass through the sieve and collect in the jug underneath.
- 10 Leave the sieve over the jug for 10 minutes to allow all the liquid to pass through and into the jug.
- 11 With the help of your teacher, half fill the small glasses with the strawberry mixture.
- 12 Your teacher will give you a cup of cold alcohol. Slowly pour the cold alcohol down the side of the glass so that it forms a clear layer on top of the coloured strawberry mix. Can you see a clear layer of liquid at the top?
- 13 If you look carefully you should see white lumps forming in the clear layer just above the coloured layer. It looks a bit like cotton wool! Can you see it? This is DNA!
- 14 Carefully use a cocktail stick to scoop out some of the DNA from the clear liquid at the top. Well done! You have successfully got the DNA out of a strawberry!