Strawberry DNA Extraction

What you will need

2 strawberries Measuring cup Measuring spoons 1 Plastic bag Salt Dish soap Water

1 Turkey baster/pipet/wooden stirrer/chopstick 2 clear cups/containers Rubbing alcohol/nail polish

Coffee filter/cheese cloth

Step 1 Place your rubbing alcohol/nail polish in the fridge or on ice for about 30 min prior to starting.

Step 2 Take 2 strawberries and cut off the leaves. Place them in the plastic bag and close it making sure to get all the air out. Smash the strawberries to a pulp!

Step 3 In one of your clear containers, add 2 tsp of your dish soap and ½ tsp salt. Then add ½ cup of water and stir the mixture.

- What do you think each ingredient does? Check out the video linked below to find out!

Step 4 Add about 2 tbs of the solution from Step 2 to your plastic bag with the strawberries. Make sure to get all the air out of the bag when you zip it closed. Mix the solution and strawberries together.

Step 5 Grab your other clear container and place your coffee filter/cheese cloth on top of it. Pour the strawberry solution over the filter into the container. The filter should catch all the big chunks and you should just have a liquid in the container.

Step 6 Take the rubbing alcohol/nail polish from the fridge and pour about 2 tbs into the filtered strawberry solution.

- What is the role of the alcohol in the solution? Check out the video linked below to find out!

Step 7 You should be able to see the DNA separate out. It will look like a white cloudy substance on the top of the solution. You can take your turkey baster/pipet/wooden stirrer/chopstick to grab the DNA from the solution.

Congratulations you have successfully extracted DNA from a strawberry! If you enjoyed this experiment then you may be interested in learning more about genetics and a career in the genetics field.

QR code to YouTube video instructions

Document created by Annmarie Fearing