

# WJEC England Biology

## A-level

### SP CC 05 - DNA Extraction

#### Flashcards

This work by [PMT Education](https://www.pmt.education) is licensed under [CC BY-NC-ND 4.0](https://creativecommons.org/licenses/by-nc-nd/4.0/)



# Why are strawberries selected for this practical?



Why are strawberries selected for this practical?

They have a large genome.

They are soft and hence can be broken down easily.



What is the purpose of adding washing-up liquid?



What is the purpose of adding washing-up liquid?

To break down the phospholipid membranes.



# Why is pineapple juice added?



## Why is pineapple juice added?

Pineapple juice contains proteases to digest proteins in cells.



# Why is salt added?





## Why is salt added?

To neutralise the negative charge of the phosphates in DNA, hence lowering its solubility to be precipitated out.



# Why is the mixture heated at 60°C?



Why is the mixture heated at 60°C?

To speed up the rate of reaction of the proteases in pineapple, so cell proteins are digested at a faster rate.



# Why is iced ethanol added?



## Why is iced ethanol added?

The solubility of DNA is lower in ethanol and in cold temperatures, hence this allows DNA to be precipitated out.

