

WJEC Wales Biology

A-level

SP Unit 1 05 - DNA Extraction

Flashcards



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.

