

3. What was the purpose of filtering the banana mixture?

4. Why was alcohol added?

5. What test could be performed to prove that the white substance is in fact DNA?

6. Describe the DNA you extracted.

References: _____

Conclusion Answers:

The **detergent** causes the cell membrane to break down by dissolving the lipids and proteins of the cell and disrupting the bonds that hold the cell membrane together which releases the DNA into the solution. The detergent then forms complexes with these lipids and proteins, causing them to precipitate out of solution.

Heat incubation helps to break up the cells further and starts to degrade some of the cell's proteins.

The **salt** enables the DNA strands to come together. The salt allows the DNA to precipitate out of a cold alcohol solution

DNA is not soluble in alcohol. When **alcohol** is added to the mixture, the components of the mixture, except for DNA, stay in solution while the DNA precipitates out into the alcohol layer.