



## Banana DNA Extraction Answer Page

These are suggested responses to the questions in **BLM M4: Banana DNA Extraction**.

**1. What is the role of the detergent?**

Detergent acts to pull apart the phospholipids and proteins that make up the membranes surrounding the cell and nucleus. Once these membranes are broken apart, the DNA is released from the cell.

**2. What is the role of the salt?**

The salt causes the proteins and other cellular debris to clump together.

**3. What is the role of the alcohol?**

The DNA released from the cell nucleus is dissolved in the water/detergent/salt/banana solution and cannot be seen. DNA precipitates out of solution in alcohol, where it can be seen.

**4. Do you think that you could extract DNA if you were to use a fruit or vegetable other than bananas? Explain.**

Since DNA is in the cells of every living organism, this technique could be used to extract DNA from any fruit or vegetable.