

# DNA Extraction

## Virtual Lab

To complete this lab, go to:

<http://learn.genetics.utah.edu/content/labs/extraction/>

Read the instructions on what to do in each slide. Use the “next” and “back” button to get from slide to slide.

In this experiment you will collect cheek cells from a person in order to isolate (separate) DNA from the cheek cells. Follow along and answer these questions:

1. Slide 2: Why do scientists isolate DNA? List some reasons:
  - a. .
  - b. .
  - c. .
2. Slide 3: What is DNA Extraction?
  - a. .
3. Step 1 – Collect Cheek Cells
  - a. What does “Lysis solution” do?
4. Step 2 – Bust cells open to release DNA
  - a. What does the detergent do?
  - b. What is the protein called DNA is wrapped around?
5. Step 3 – Separate DNA from protein and debris
  - a. “The salt causes the \_\_\_\_\_ and other cellular debris to \_\_\_\_\_ together
  - b. After being spun in the micro centrifuge, the \_\_\_\_\_ remains distributed through the liquid.
6. Step 4 – Isolate Concentrated DNA
  - a. Because the DNA is not \_\_\_\_\_ in isopropyl alcohol, it comes out of the solution
  - b. You can see \_\_\_\_\_ clumped with your naked eye!