

LOCATING DNA

STUDENT BOOK Chapter 5, page 128

TOOLBOX Pages 23, 25

Goal

Determine the location of DNA in a cell.

Observation criteria

1. What structures of a cell can be observed under a light microscope?

2. Methyl-green dye colours DNA green. What structure of a cell would be coloured green by this product?

Materials

- toothpicks
- slide
- dropper bottle of methyl-green dye
- cover slip
- light microscope
- white paper
- pencil
- eraser

Procedure



1. Scrape the inside of your cheek with a toothpick to collect a cell sample.
2. Place the sample on the slide.
3. Add a drop of methyl-green dye.
4. Place the cover slip on the slide.
5. Observe the sample under the microscope at a magnification of 400x or 500x.
6. Illustrate one of the cells observed.
7. Clean up and put away materials.

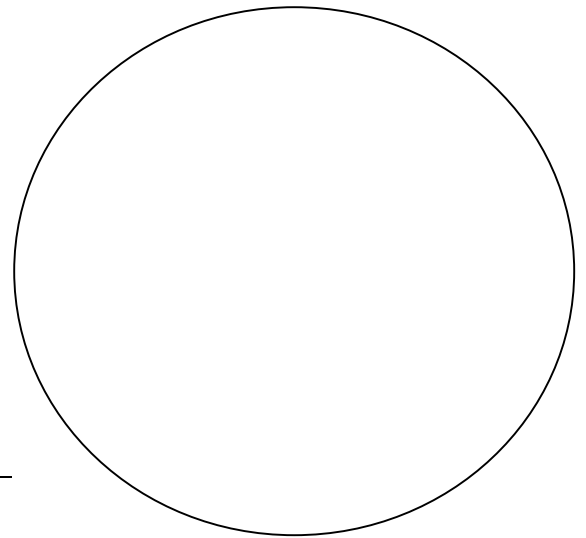


Name: _____ Group: _____ Date: _____

Observations

Illustrate your observations in the circle below.
Identify the cell structures observed and indicate the degree of magnification. Give the circle a title.

Title: _____



Magnification: _____

Reflecting on your observations

1. Identify the cell structures observed under the microscope.

2. Identify a function for each cell structure observed.

Structure	Function

3. Where is DNA located in the structure of a cell? Explain your answer.

4. What is the shape of DNA?

5. Can the shape of DNA be observed under the microscope you used?

6. How could you improve the protocol for this lab?
