

# Viewing Mitosis Under the Microscope

## **Purpose:**

1. Practice viewing objects under the microscope
2. Practice making scientific observations/drawings
3. Observe the different stages of mitosis in animal cells and plant cells

## **Materials:**

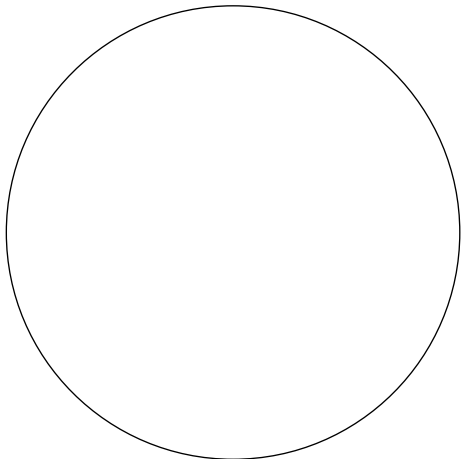
- Compound Light Microscope
- Prepared slides of plant and animal cells

## **Procedure:**

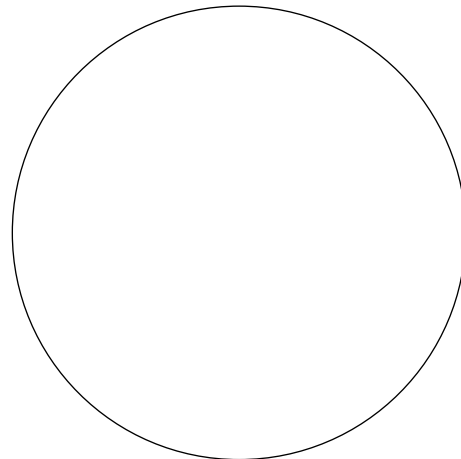
1. Observe the 4 different stages of mitosis; Prophase, Metaphase, Anaphase, and Telophase; showing Allium root tips on high power.
2. FOR EACH phase, you must make a drawing of at least ONE cell in the given mitosis stage, labelling the chromosomes and/or nucleus.

## **Data & Observations:**

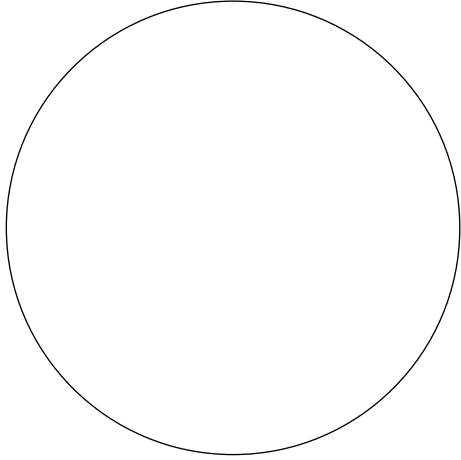
1. Prophase



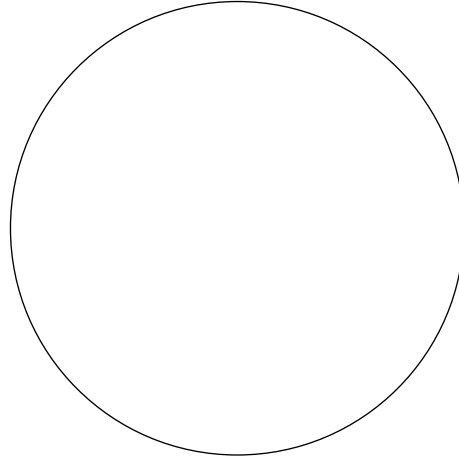
2. Metaphase



3. Anaphase



4. Telophase



**Analysis/Questions:**

1. For each phase of mitosis, what observation allowed you to identify which cell was doing it?
  - a. P
  - b. M
  - c. A
  - d. T
  
2. What was special about an onion (*Allium*) root tip that made mitosis especially visible there (hint: it has to do with one of the reasons cells divide)?