

Chapter 10 Mitosis Onion Root Tips Computer Lab

Directions: Log on the Internet and go to the website

http://www.biology.arizona.edu/cell_bio/activities/cell_cycle/cell_cycle.html

Read the introduction and follow the menu.

Questions:

1. The life cycle of a cell is typically divided into how many phases? _____
2. Place the names of each phase in the chart below and list events that are characteristic for that phase.

Phase of Cell Cycle	Events characteristic of the phase	Diagram/Drawing of phase
	3 event characteristics are:	
	5 event characteristics are:	
	1 event characteristic is: Why is this important?	
	2 event characteristics are:	
	3 event characteristics are:	

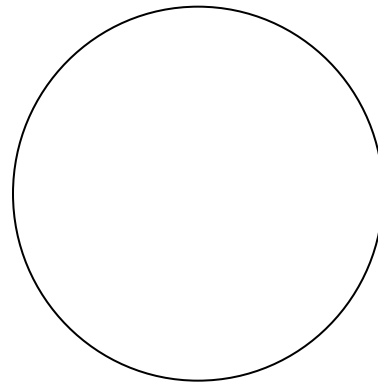
Determining time spent in different phases of the cell cycle

In this activity, you will be presented with cells from the tip of an onion root. You will classify each cell based on what phase it is in. At the end, you will count up the cells found in each phase and use those numbers to predict how much time a dividing cell spends in each phase.

	Interphase	Prophase	Metaphase	Anaphase	Telophase	Total
Number Of cells						36
Percent Of cells						100 %

Analysis and Questions:

1. Create a pie chart displaying the percent of time spent in each stage of the cell cycle from the table above.



2. From the data, in which phase of the cell cycle does the cell spend most of the time?

3. Give at least two reasons why you think this phase takes the longest.

4. The object below represents a replicated chromosome. Each half of the chromosome is called a _____. Where the two halves are joined is referred to as the _____.

In which phase of the cell cycle does the replication take place? _____

REPLICATED CHROMOSOME

