Name: _____ Date:_____ Period:_____

Mitosis - Internet Lesson

In this internet lesson, you will review the steps of mitosis and view video simulations of cell division. You will also view an onion root tip and calculate the percentage of cells at each of the stages of cell division.

Mitosis Tutorial at http://www.cellsalive.com/

On the left side of the screen is a navigation bar, click on the link to "MITOSIS" Read the text on this page and view the animation, you can slow down the video by clicking step by step through the phases.

1. Which stage does the following occur:

Chromatin condenses into chromosomes _____

Chromosomes align in center of cell. _____

Longest part of the cell cycle. _____

Nuclear envelope breaks down. _____

Cell is cleaved into two new daughter cells. _____

Daughter chromosomes arrive at the poles. _____

Chromatids are pulled apart _____

Watch the video carefully.

2. The colored chromosomes represent chromatids. There are two of each color because one is an exact duplicate of the other.

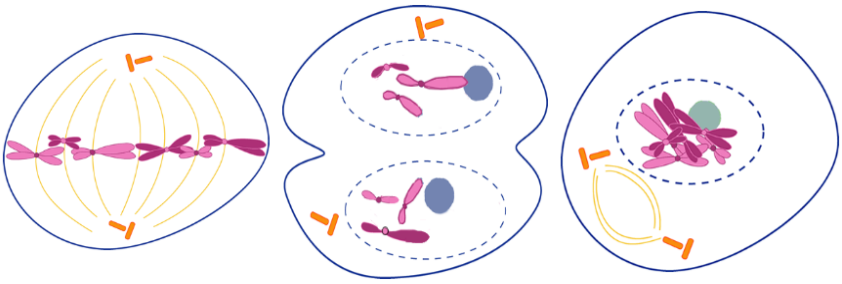
--How many chromosomes are visible at the beginning of mitosis?

-- How many are in each daughter cell at the end of mitosis?

--The little green T shaped things on the cell are:

-- What happens to the centrioles during mitosis?

3. Identify the stages of these cells:



_____ _____ _____

Another Mitosis Animation

Go to http://www.johnkyrk.com/mitosis.html .

Draw a cell in each of the following phases.

Prophase	Metaphase	Telophase

Onion Root Tip

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

Read the introduction, then click the "next" button.

You will have 36 cells to classify. When you're finished, record your data in the chart below. Round to whole numbers.

	Interphase	Prophase	Metaphase	Anaphase	Telophase	Total
Number of Cells						
Percent of Cells (calculate: number of cells divided by total cells x 100)						

Mitosis in Whitefish & Onion Roots

http://www.biologycorner.com/projects/mitosis.html . Click on the Whitefish embryo and the onion root tip.

For each organism, identify the stage of mitosis.

	View 1	View 2	View 3	View 4	View 5
Whitefish					
Onion					

You Draw It!

Use the space below to draw the four stages of mitosis your own way, be sure to represent the major events of each phase