

Name _____

Mitosis -- Internet Lesson

In this internet lesson, you will review the steps of mitosis and meiosis 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

<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

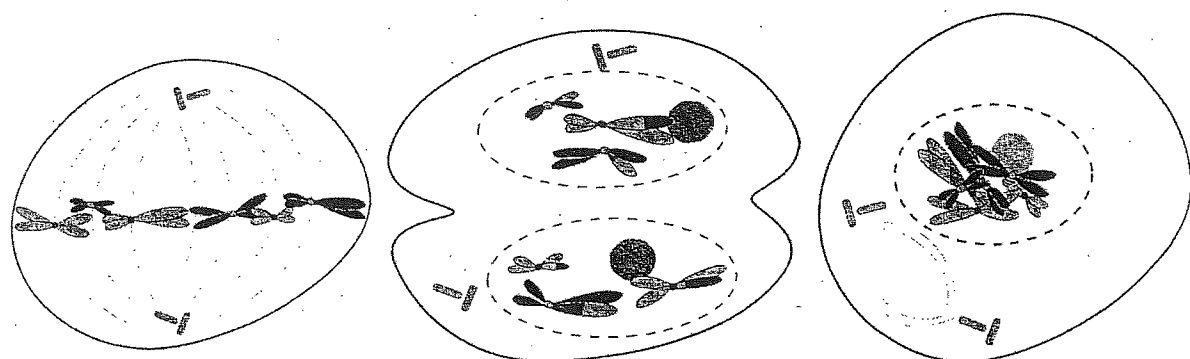
- Chromatin condenses into chromosomes _____
- Chromosomes align in center of cell. _____
- Longest part of the cell cycle. _____
- Nuclear envelope breaks down. _____
- Cell is cleaved into two new daughter cells. _____
- Daughter chromosomes arrive at the poles. _____

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 www.johnkyrk.com/mitosis.html

View the animation and sketch the cell in:

Prophase	Metaphase	Telophase
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Onion Root Tip - Online Activity

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.

	Interphase	Prophase	Metaphase	Anaphase	Telophase	Total
Number of cells						36
Percent of cells <small>(calculate: number of cells divided by total cells x 100)</small>						100 %

Did you forget a calculator -- no problem. Go to www.calculator.com and click on the "fractions" calculator. A window with a virtual calculator will open and you can do the math from there.