

Name _____

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-<http://www.cellsalive.com/> 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:

a-Chromatin condenses
into chromosomes _____

b-Chromosomes align in
center of cell. _____

c-Longest part of the cell
cycle. _____

d-Nuclear envelope breaks
down. _____

e-Cell is cleaved into two
new daughter cells. _____

f-Daughter chromosomes
arrive at the poles. _____

g-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.

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

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

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

d- What happens to the centrioles during mitosis? _____

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 <small>(calculate: number of cells divided by total cells x 100)</small>						

Based on your data, cells spend most of their time in which phase?

Mitosis in Whitefish & Onion Roots

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

For each view, identify the stage of mitosis.

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