Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**Mitosis Internet Activity**

Please go the following website [www.biology.arizona.edu](http://www.biology.arizona.edu) . Click on the blue words “Cell Biology”. Click on the blue words “Onion Root Tip Activity” in the sidebar on the left of this page. Read through the information on the web pages and answer the following questions.

1. Why are root tips a good type of cell to use when studying the cell cycle? (click “next” when done)
2. What is the cell doing during interphase?
3. Describe the 4 phases of mitosis?

1.

2.

3.

4.

1. In which phase do new nuclear membranes form around the daughter nuclei?
2. In which phase do spindle fibers align the chromosomes along the middle of the cell nucleus?
3. In which phase does the chromatin condense and become visible in the light microscope as chromosomes?
4. In which phase do the paired chromosome move to the opposite sides of the cell?
5. In which phase does cytokinesis usually begin?
6. Scientists generally recognize a phase of mitosis between prophase and metaphase. What is the name of this phase?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ What event marks the beginning of this phase?\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_? What happens during this phase?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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1. Click “Next” to bring you to the page with the table. Please copy this table onto the top of your graph paper. Use only about the top 1/3 of the paper. Use a ruler, and make the table neat.
2. Click “next” again. On this page you will be determining which phase each cell you see is in. You may enlarge the cell if needed. Determine which phase the cell is in, than click on the name of the phase below the cell. Go through all cells until they are all sorted into the correct phase.
3. Count the number of cells in each phase and write the number in the table on your paper. Determine the percent of cells in each phase and write the percent in the table on your paper.
4. On the grid line side of the graph paper, make a bar graph showing the **NUMBER** of cells in each phase. On the back of the graph paper, make a pie chart showing the **PERCENT** of cells in each phase. Include a title, labels on the axes of the bar graph, and a legend for the pie chart.