

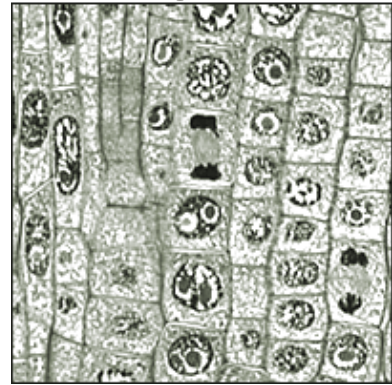
## Online: Onion Root Tips

In plant roots, the tips grow faster than the rest of the root, which makes them a good place to find cells that are reproducing or dividing (mitosis). The root is growing out so it has a better chance to get water.

### Determining time spent in different phases of the cell cycle (mitosis).

#### The assignment:

Cells in the tip of an onion root



\_\_ 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 of mitosis. (This activity is based on cells for a 24 hour period.)

\_\_1. Follow the online directions.

\_\_2. You can enter data in this table as you go along, or at the end of the activity.

	Interphase	Prophase	Metaphase	Anaphase	Telophase	Total
Number of cells (n)						
Percent of cells						100%

\_\_3. A normal cell spends most of its time in \_\_\_\_ phase, doing regular cell activities such as

Changing food into energy.

Getting rid of wastes.

\_\_4. Fill in the Percent of Cells row of the above Table.

To find the percent of cells in each phase:

**Number** divided by **Total** multiplied by 100 = **Percentage**

$$n / \text{Total} \times 100 = \text{Percentage}$$