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

**Onion Root Tip Mitosis**

1. Why onion root tips?

|  |  |  |
| --- | --- | --- |
| Prophase | Metaphase | Anaphsae |
| Number seen: | Number seen: | Number seen: |
| Telophase | Cytokinesis | Interphase |
| Number seen: | Number seen: | Number seen: |

1. Did the phases under the microscope look like what you have been learning about and drawing in your notes? Why or why not?
2. Which was the most frequently observed phase? Least frequent? What does this mean?

3. What important changes are occurring in the nucleus during the longest phase?

**Questions from website:**

1. What happens during interphase?
2. What is main event that happens during metaphase?
3. What is the main event that happens during telophase?
4. What phase do cells spend most of their time in? Why?

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Interphase | Prophase | Metaphase | Anaphase | Telophase | Total |
| Number of cells |  |  |  |  |  | 36 |
| Percent of cells |  |  |  |  |  | 100 |

If you assume a cell cycle of 16 hours, what are your estimates of the duration of the following stages, in minutes?

|  |  |
| --- | --- |
| Stage | Duration in minutes |
| Interphase |  |
| Prophase |  |
| Metaphase |  |
| Anaphase |  |
| Telophase |  |

Use this data to draw a cell cycle pie chart.