Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Hour\_\_\_

Analyzing the Phases of the Cell Cycle

1. Describe what is happening in a cell during each phase of the Cell Cycle:
* Interphase:
* Prophase:
* Metaphase:
* Anaphase:
* Telophase:
* Cytokinesis:
1. In which stage are each of these cells:

1. Observe the microscope slide below of a growing root tip.
* Identify each cell with the stage of the cell cycle that you think it is in,

labeling each with I, P, M, A, T or C.

* Using the data table, count how many of each there are.

|  |  |  |
| --- | --- | --- |
| **Phase of Cell Cycle** | **Number of Cells** | **% of Cells in Stage** |
| Interphase |  |  |
| Prophase |  |  |
| Metaphase |  |  |
| Anaphase |  |  |
| Telophase  |  |  |
| Cytokinesis  |  |  |

1. Analysis Questions:
* Which phase had the most cells?
* Does it make sense that the phase you indicated above had the most cells? WHY?
* What evidence shows that the cell cycle happens as a continuous process and not a series of separate events?