**SCIENCE 9 – ANIMAL VS PLANT CELL CYCLE – October 17, 2016 Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**PART A -** Below are pictorial representations of the phases of an animal cell cycle including *interphase* and *cell division (mitosis* and *cytokinesis)*.

**INSTRUCTIONS:**

1. Name the ***phases of mitosis*** - Prophase (early/late), Metaphase, Anaphase, Telophase (early/late) and ***cytokinesis*** below. (NOTE: THEY ARE NOT IN THE PROPER ORDER).
2. Provide ***a******summary*** for each of the phases in the spaces provided.

|  |  |
| --- | --- |
| **ANIMAL CELL CYCLE** | |
| **STAGE NAME AND PICTORIAL REPRESENTATION** | **SUMMARY** |
| **Interphase** | -G1 phase: The cell increases in size (period of growth) and synthesizes new proteins and organelles.  -S phase - As the cell prepares for mitosis, the chromosomes replicates during this phase of interphase during the cell cycle.  -G2 phase - Organelles and molecules required for cell division are produced and ready to start mitosis (then cytokinesis). |
| **PHASE NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |  |
| **PHASE NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |  |
| **PHASE NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |  |
| **PHASE NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |  |
| **PHASE NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |  |

**PART B -** Below are pictorial representations of the phases of a plant cell cycle including *interphase* and *cell division (mitosis* and *cytokinesis)*.

**INSTRUCTIONS:**

1. Name the ***phases of mitosis*** - Prophase (early/late), Metaphase, Anaphase, Telophase (early/late) and ***cytokinesis*** below. (NOTE: THEY ARE NOT IN THE PROPER ORDER).
2. Provide ***a******summary*** for each of the phases in the spaces provided.

|  |  |
| --- | --- |
| **PLANT CELL CYCLE** | |
| **STAGE NAME AND PICTORIAL REPRESENTATION** | **SUMMARY** |
| **INTERPHASE** | -G1 phase: The cell increases in size (period of growth) and synthesizes new proteins and organelles.  -S phase - As the cell prepares for mitosis, the chromosomes replicates during this phase of interphase during the cell cycle.  -G2 phase - Organelles and molecules required for cell division are produced and ready to start mitosis (then cytokinesis). |
| **PHASE NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |  |
| **PHASE NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |  |
| **PHASE NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |  |
| **PHASE NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |  |
| **PHASE NAME: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |  |