Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Period\_\_\_\_Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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| **AMOEBA SISTERS: VIDEO RECAP** | **MITOSIS: THE AMAZING CELL PROCESS THAT USES DIVISION TOMULTIPLY** |
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**Amoeba Sisters Video Recap of *Mitosis: The Amazing Cell Process That Uses Division to Multiply***

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| 1. Mitosis is done by your body cells. This cartoon illustrates an exception. What types of cells do not undergo mitosis? | 2. Describe how mitosis is important for your body.  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 3. This illustration is trying to demonstrate something that mitosis is not. In mitosis, the cells that are created  are  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 4. Mitosis is just one small part of the cell cycle! Describe what would occur if cells were in mitosis more than they were in interphase.  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 5. When cells are dividing, it is important to understand that they have to move **chromosomes** equally to both cells. Based on this illustration, describe what a **chromosome** is made of.  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | 6. Mitosis starts and ends with **diploid** cells. That means they have two sets of chromosomes (both parents each contribute a set). In humans, how many chromosomes should be in each of these **diploid** cells after mitosis?  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

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| **AMOEBA SISTERS: VIDEO RECAP** | **MITOSIS: THE AMAZING CELL PROCESS THAT USES DIVISION TO**  **MULTIPLY** |
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**Sketch the Mitotic Stages**

**Directions:** We encourage you to be creative with a cartoon illustration of your own for each phase. Label the **chromosomes**, **spindles**, and **nucleus** (if applicable).

**CELL CYCLE**

INTERPHASE

**MITOSIS**

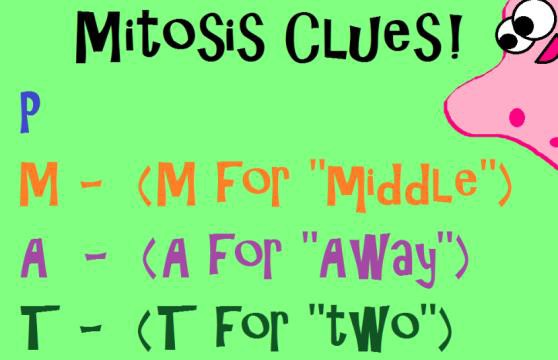
**prophase**

**metaphase**

**anaphase**

**telophase**

CYTOKINESIS



|  |  |
| --- | --- |
| **Prophase** | **Metaphase** |
| **Anaphase** | **Telophase** |



BECKY NOTES:

In this video:

* Prophase is described as still having a nuclear membrane –and that it disappears during metaphase. I teach the steps that during Prophase the nuclear membrane disappears.
* Telephase is described as the step in which the two identical cells split in two. I teach that the cell pinches inward (plant cells –cell plate) and that when the cytoplasm splits in two—it is called cytopkinesis.