

Name _____

Date _____

Mitosis Song Paired Activity Sheet

Fill in the blanks based on what you learn from the Mitosis Song.

1. _____ is the division of one parent cell into two identical daughter cells.
2. Mitosis happens when body cells get _____ and _____.
3. _____ is the first step of mitosis.
4. In interphase, _____ replicates, and _____ are copied.
5. The second step of mitosis is _____, when chromosome pairs form Xs, and the nuclear membrane disappears.
6. In _____, the chromosomes line up in the middle of the cell.
7. _____ is the fourth step of mitosis, where the sister chromatids are pulled apart by _____.
8. During _____, the mitotic spindles disappear and nuclei form.
9. When the cytoplasm splits into two separate cells it is called _____.
10. At the end of mitosis, there are _____, _____ daughter cells.

Answer each question in a complete sentence.

1. What are all the steps of mitosis?
2. What happens during metaphase?
3. How do the centrosomes work to separate the chromosome pairs?
4. What does diploid mean?

Name **ANSWER KEY**

Date _____

Fill in the blanks based on what you learn from the Mitosis Song.

1. **Mitosis** is the division of one parent cell into two identical daughter cells.
2. Mitosis happens when body cells get **old** and **worn out/need to be replaced**.
3. **Interphase** is the first step of mitosis.
4. In interphase, **DNA** replicates, and **centrosomes** are copied.
5. The second step of mitosis is **prophase**, when chromosome pairs form Xs, and the nuclear membrane disappears.
6. In **metaphase**, the chromosomes line up in the middle of the cell.
7. **Anaphase** is the fourth step of mitosis, where the sister chromatids are pulled apart by **motor proteins**.
8. During **telophase**, the mitotic spindles disappear and nuclei form.
9. When the cytoplasm splits into two separate cells it is called **cytokinesis**.
10. At the end of mitosis, there are **two, identical** daughter cells.

Answer each question in a complete sentence.

1. What are all the steps of mitosis?
Interphase, Prophase, Metaphase, Anaphase, Telophase
2. What happens during metaphase?
The chromosome pairs line up in the middle of the cell and the microtubules attach to opposite spindle poles.
3. How do the centrosomes work to separate the chromosome pairs?
The microtubules attach to the centrosomes and the chromosomes. Motor proteins help pull the pairs apart and toward their new centrosome.
4. What does diploid mean?
Diploid cells are cells that are identical after mitosis. The parent and daughter cells.
5. Why does mitosis need to happen to cells?
Mitosis happens when body cells get old, worn out, and need to be replaced. It helps cells stay strong, grow, and do what is needed for a living organism.