**Mitosis and Meiosis Review**

**Part A. Complete the table below to compare mitosis and meiosis.**

|  |  |  |
| --- | --- | --- |
|  | **Mitosis** | **Meiosis** |
| Number of Cells Produced |  |  |
| Type of Cells Produced(gamete or somatic) |  |  |
| Number of Chromosomes(diploid or haploid) |  |  |

**Part B. Fill in the blanks:**

1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the cell division process that includes Anaphase II.
2. If a cell is observed to have a cell wall, it cannot be a(n) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ cell.
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ results in two diploid cells with identical genetic material.
4. Reproduction that involves two parents is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ reproduction.
5. The general name for a reproductive cell, male or female, is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
6. Sister chromatids attach at the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
7. In the process of meiosis, there is no further duplication of genetic material after \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
8. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the cell division process that consists of 2 cell divisions.
9. Polar bodies are formed during \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in the process of meiosis.

**Answer KEY**

**Mitosis and Meiosis Review**

**Part A. Complete the table below to compare mitosis and meiosis.**

|  |  |  |
| --- | --- | --- |
|  | **Mitosis** | **Meiosis** |
| Number of Cells Produced | *2* | *4* |
| Type of Cells Produced(gamete or somatic) | *somatic* | *gamete* |
| Number of Chromosomes(diploid or haploid) | *diploid* | *haploid* |

**Part B. Fill in the blanks:**

1. *Meiosis* is the cell division process that includes Anaphase II.
2. If a cell has a cell wall, it cannot be a(n) *animal* cell.
3. *Mitosis* results in two diploid cells with identical genetic material.
4. Reproduction that involves two parents is *sexual* reproduction.
5. The general name for a reproductive cell, male or female, is *gamete*.
6. Sister chromatids attach at the *centromere*.
7. In the process of meiosis, there is no further duplication of genetic material after *Telophase I*.
8. *Meiosis* is the process that results in haploid cells.
9. Polar bodies are formed during *Telophase I or II* in the process of meiosis.