

Name _____

The Magical Dance of Meiosis: Creating Life in a Unique Way

Short Answer Key

1. In meiosis, the chromosome number is reduced by half, resulting in haploid cells with half the number of chromosomes, while in mitosis, the chromosome number remains the same, resulting in diploid cells.
2. Genetic diversity from meiosis allows species to adapt to changing environments, making them more resilient to challenges.
3. Gametes are specialized reproductive cells (sperm and egg) created through meiosis. They contain half the normal number of chromosomes.
4. Meiosis can help repair damaged DNA through the exchange of genetic material between homologous chromosomes.
5. Without meiosis, the chromosome number would double with each generation, leading to an unsustainable increase in chromosomes.

