Name _____

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

Multiple Choice Questions

1. What is the main purpose of meiosis?

a) To increase the number of chromosomes

b) To create genetically diverse gametes

c) To repair damaged DNA

d) To produce identical offspring

2. Which stage of meiosis involves the separation of homologous chromosomes into different cells?

a) Meiosis II

b) Fertilization

c) Mitosis

d) Meiosis I

3. Why is genetic diversity important in sexual reproduction?

a) It ensures offspring have the same traits as their parents.

b) It helps species adapt to changing environments.

c) It prevents the formation of gametes.

d) It leads to an increase in the number of chromosomes.

4. What is the result of meiosis?

a) Four identical cells

b) Two diploid cells

c) Four haploid cells with unique genetic material

d) Four diploid cells with identical genetic material

5. How does meiosis contribute to maintaining a constant chromosome number in a species?

a) By doubling the number of chromosomes in each generation

b) By randomly shuffling genetic material

c) By producing only one type of gamete

d) By creating identical offspring