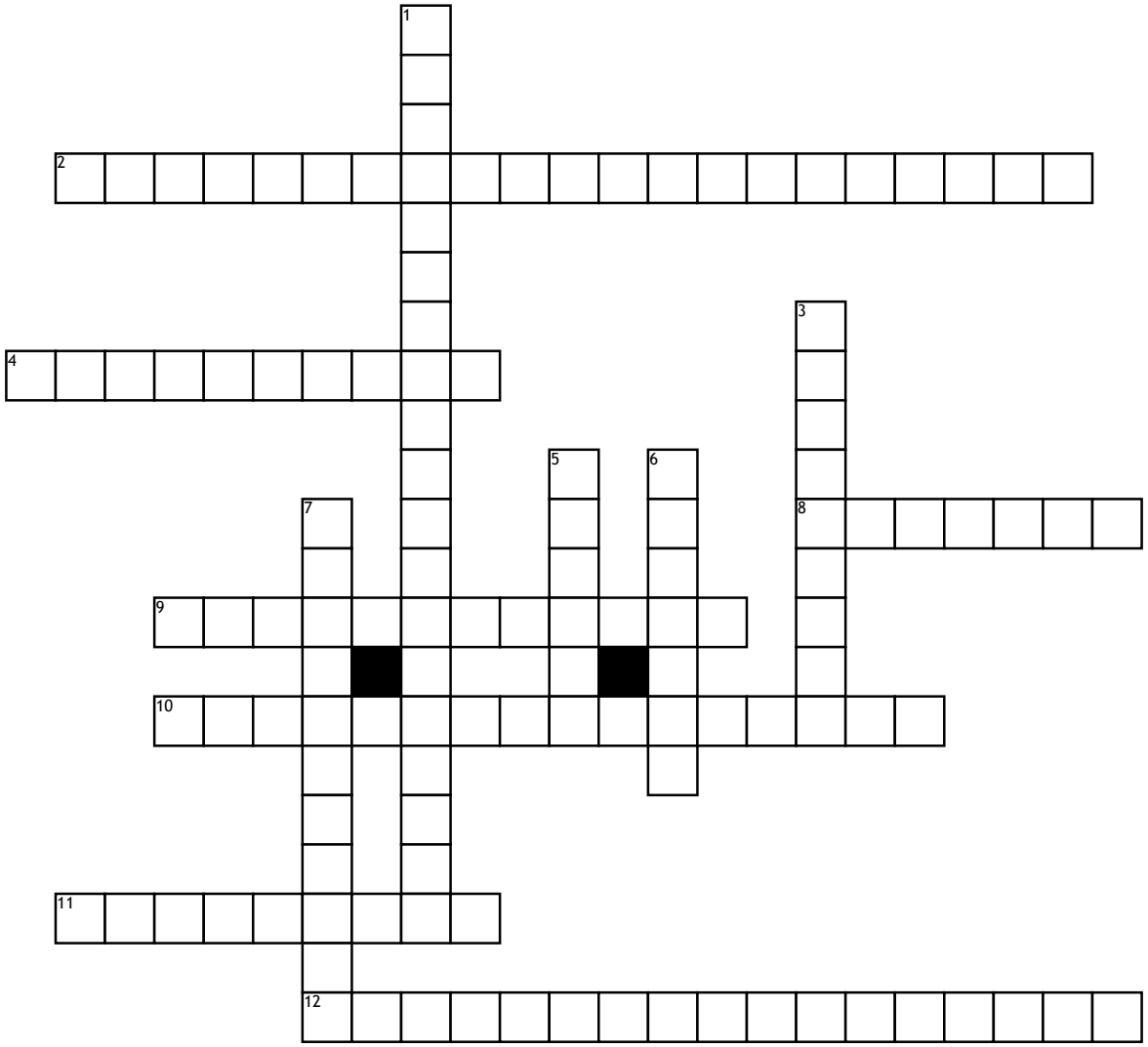
How the Process of Meiosis Creates Genetic Diversity



Across

2. In __ __, each pair of chromosomes sorts maternal and paternal homologues into daughter cells independently of the other pairs

4. Homologous pairs of chromosomes orient randomly at ____ _ of meiosis

8. "n" is the ____ number

9. Produces recombinant chromosomes, which combine genes inherited from each parent

10. Results in the accumulation of genetic variations favored by the environment

11. Genetic variation in a population originates from _____.

12. Crossing over contributes to ____ ____ by combining DNA from two parents into a single chromosome

Down

1. Adds to genetic variation because any sperm can fuse with any ovum (unfertilized egg)

3. Crossing over begins very early in _____ _, as homologous chromosomes pair up gene by gene

5. The fusion of two gametes forms a ___.

6. Different versions of genes

7. ____ of alleles during sexual reproduction produces genetic variation