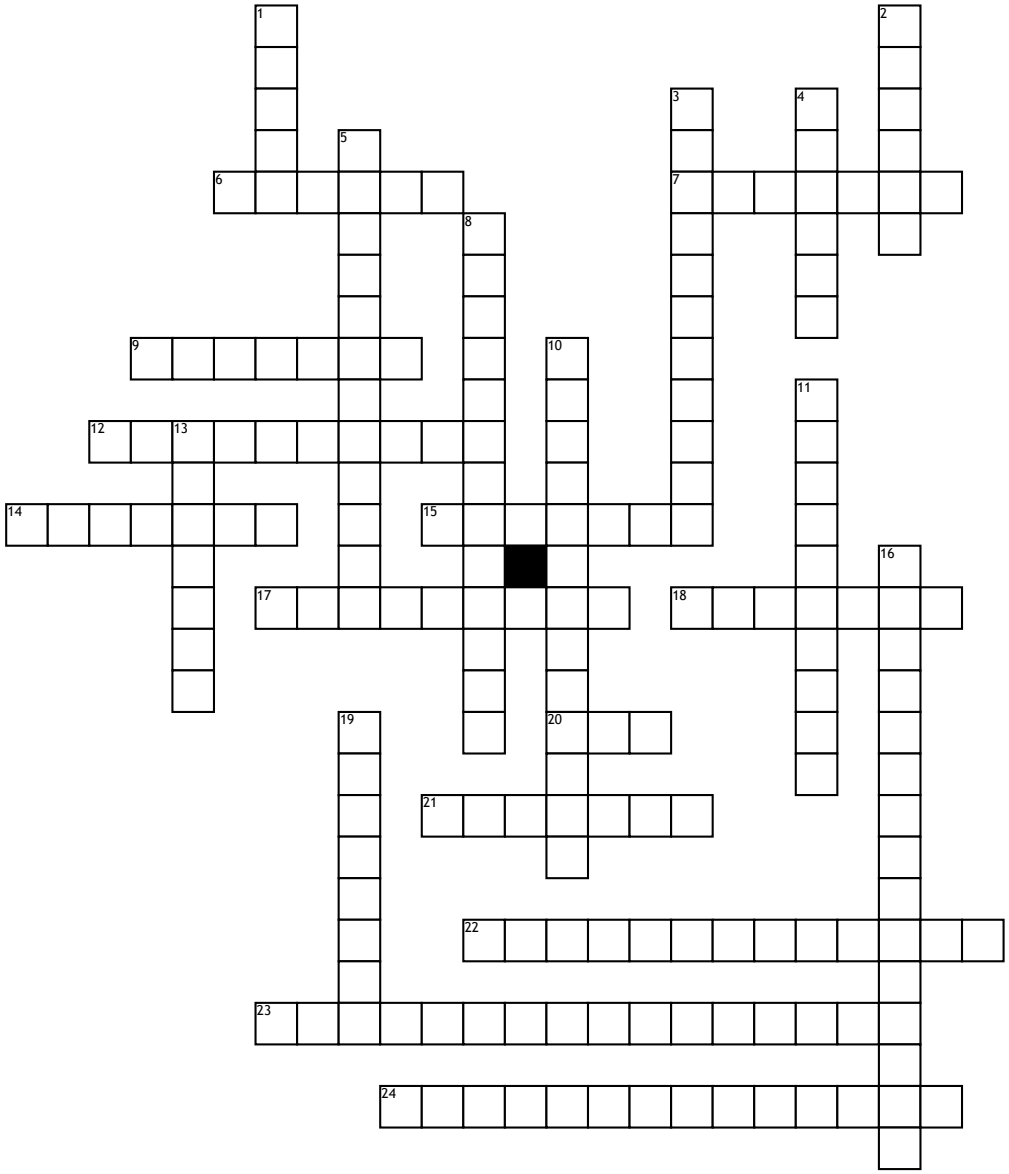
Name: _____ Date: _____

Meiosis & Differentiation



Across

6. multicellular diploid develops from a zygote, the single cell resulting from the fertilization

7. found in the epidermis of leaves, stems, and other organs

9. having a single set of unpaired chromosomes

12. pairing at meiosis and having the same structural features and pattern of genes

14. cells of the body in contrast to the germ line cells

15. typically a single rounded structure bounded by a double membrane, containing the genetic material.

17. difference between cells, individual organisms, or groups of organisms

18. This process occurs in all sexually reproducing single-celled and multicellular eukaryotes, including animals, plants, and fungi

20. the zygote, resulting from fertilization

21. containing two complete sets of chromosomes, one from each parent.

22. process of fertilizing an egg

23. chromosomes refers to the way chromosomes get organized into daughter cells during gamete (sperm and egg) formation. It means that each sperm and each egg will have different combinations of chromosomes

24. adaptation of an organism or organ to a special function

Down

1. a marked difference in the size of the gametes with the smaller one being termed the "male"

2. a diploid cell resulting from the fusion of two haploid gametes; a fertilized ovum.

3. the type of cell found in muscle tissue

4. A mature haploid

5. the exchange of genes between two chromosomes, resulting in non-identical chromatids that comprise the genetic material of gametes

8. failure of one or more pairs of homologous chromosomes or sister chromatids to separate normally during nuclear division

10. Hemoglobin is the protein inside these types of cells

11. threadlike structure of nucleic acids and protein found in the nucleus of most living cells, carrying genetic information in the form of genes.

13. cell cycle in which chromosomes in a cell nucleus are separated into two identical sets of chromosomes, and each set ends up in its own nucleus

16. process of a cell changing from one cell type to another

19. permanent change of the nucleotide sequence