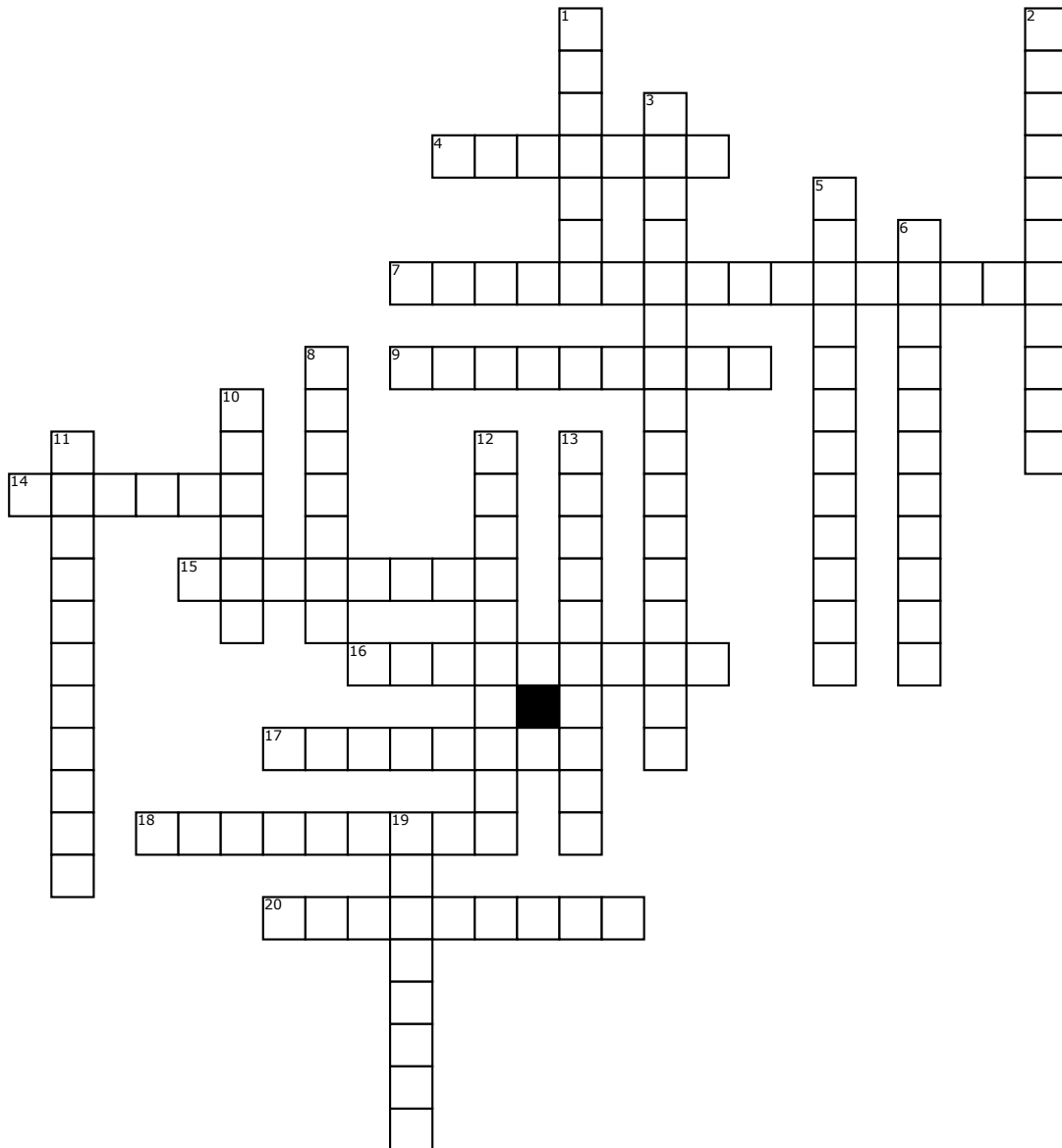# Science

Across

4. reproduce by mitosis making daughter cells that are exact replicas.

7. A structure containing spindle fibers, aster fibers, and centrioles.

9. the cycle of growth and asexual reproduction of a cell

14. A protein that binds to cyclin-dependent kinases.

15. Unzips DNA to prepare for DNA replication.

16. Programmed cell death

17. the chromatin condenses into discrete chromosomes. The nuclear envelope breaks down and spindles form at opposite poles of the cell(1st phase of mitosis)

18. the chromosomes are cordoned off into distinct new nuclei in the emerging daughter cells (4th phase of mitosis)

20. the chromatin condenses into discrete chromosomes. The nuclear envelope breaks down and spindles form at opposite poles of the cell (2nd phase of mitosis)

Down

1. a result of the process of meiosis, a type of cell division in which diploid cells divide to give rise to haploid germ cells

2. Condensed structures that contain the DNA that are visable during mitosis.

3. Structures that contain identical copies of DNA

5. enzymes that create DNA molecules by assembling nucleotides

6. Substances or agents known to cause cancer.

8. a process of cell duplication, or reproduction, during which one cell gives rise to two genetically identical daughter cells

10. Uncontrollable growth and multiplication of cells

11. the division of the cell's cytoplasm, It begins prior to the end of mitosis in anaphase and completes shortly after telophase/mitosis. At the end two genetically identical daughter cells are produced. These are diploid cells, with each cell containing a full complement of chromosomes.

12. First stage of cell division in which the cell undergoes growth (the cell is in this phase about 90% of its life)

13. Structure at the center where chromatids attach

19. the paired chromosomes (sister chromatids) separate and begin moving to opposite ends (poles) of the cell. Spindle fibers not connected to chromatids lengthen and elongate the cell (3rd phase of mitosis)