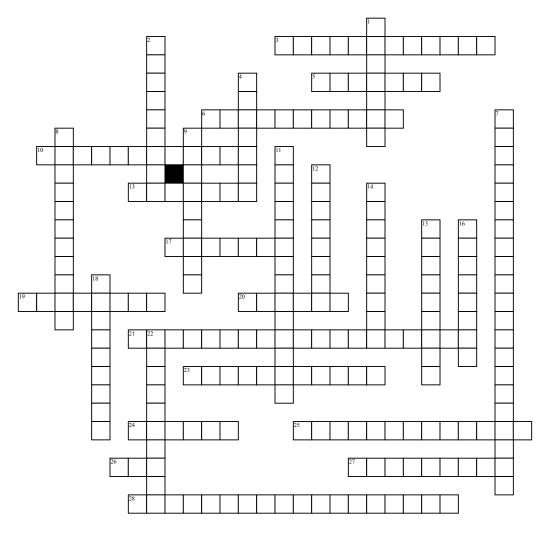
Cell Reproduction



Across

- **3.** Process where homologous chromosomes pair up with each other and exchange different segments of their genetic material.
- **5.** Having a single set of unpaired chromosomes.
- **6.** During the phase the cytoplasm splits in 2 and the cell divides.
- **10.** Any cell of a living organism other then the reproductive cells.
- 13. A process where one diploid eukaryotic cell divides to generate four haploid cells.
- 17. A mature haploid germ cell that is able to unite with another of opposite sex.
- **19.** During this phase chromatids condense into chromosomes and the nuclear envolope, or membrane, breaks down.
- **20.** Mutation or change in a cell that cause abnormal activities.
- 21. Process of a cell changing from 2 cell types to another.
- 23. Coiled structure made of DNA or proteins

- 24. The phase that is compromised of mitosis and cytokinesis
- cytokinesis.

 25. A form of asexual reproduction which is used by all prokaryotic organisms, and some eukaryotic.
- 26. A type of macromolecule known as a nucleic acid.
 27. During this stage Spindle fibers attach to the centromere of each pair of sister chromatids.
- 28. A technique for seperating protein molecules by moving them through a block of gel.

Down

- 1. 2 complete sets of chromosomes.
- 2. The life cycle of a dividing cell
- **4.** Division of parent cell producing 2 identical daughter cells.
- 7. A set of one maternal and paternal chromosomes that pair up with each other inside a cell during meiosis.
- 8. The direct transfer of DNA from one bacterial cell to another bacterial cell.
- 9. During this phase the chromosomes begin to uncoil and form chromatin

- 11. Failure of one or more pairs of homogous chromosomes or sister chromatids to seperate normally during nuclear division.
- **12.** The number and visual appearance of the chromosomes in the cell nuclei of an organism or species.
- 14. A complex of macromolecule found in cells, consisting of DNA, protein and RNA.
- **15.** A unidifferented cell of a multicellular organism that can give rise to indefinitely more cells of the same type.
- **16.** During this phase sister chromatids seperate at the centromeres divide.
- ${\bf 18.}$ A complex of macromolecule found in DNA, protein and RNA.
- **22.** During this phase, the cell copies its DNA in preparation for mitosis.

Word Bank

Homologous Chromosomes	Cell Cycle	Crossing Over	Cancer	Haploid
Somatic Cells	Chromatid	Telophase	Gel Electrophoresis	Chromatin
Prophase	DNA	conjugation	Stem Cells	Mitosis
Cytokinesis	Karotype	Gametes	Nondisjunction	Chromosomes
Meiosis	Metaphase	Differentiated Cells	Diploid	Binary Fission
Anaphase	Interphase	M Phase		