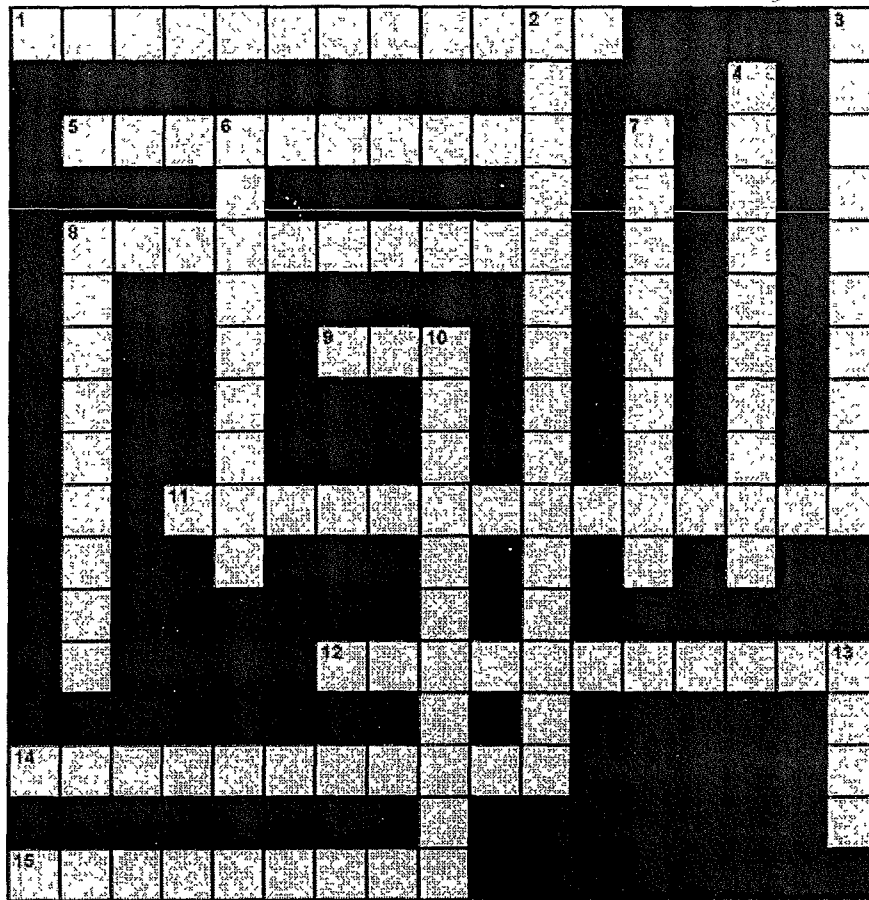


Crossword Puzzle for Biological Basis of Heredity

Topic 1: Basic Cell Structures



Across

1. The selectively permeable membrane enclosing a cell.
5. A term for the kind of cell that has a true nucleus and that divides by mitosis.
8. A constriction in a chromosome where two or more chromatids come together.
9. A gene on the Y chromosome which, if present and functioning, causes the undifferentiated sex organs of an animal embryo to become testes.
11. The X and Y chromosomes which are responsible for determining whether an individual is a male or a female.
12. A term for the kind of cell that lacks a true nucleus and divides by simple fission rather than mitosis.
14. A sex chromosome that is found in both males and females.
15. A standardized arrangement of pictures of an individual's chromosomes.

Down

2. The selectively permeable membrane enclosing the nucleus of a cell.
3. Chromosomes that are paired during meiosis. They are alike in size, and they also have the same genes, but not necessarily the same alleles, at the same locus or location.
4. A kind of thread-like, gene-carrying body in the cell nucleus.
6. All chromosomes other than sex chromosomes.
7. The term for all of the material within a cell between the nuclear and cell membranes. This material consists of water-rich viscous gel that contains numerous structures involved with cell function.
8. One of two or more strands or arms of a chromosome.
10. A chromosome that is normally found only in males.
13. The smallest organic unit capable of carrying out all of the functions normally attributed to life. It is a complex unit of protoplasm, usually with a nucleus, cytoplasm, and an enclosing membrane.