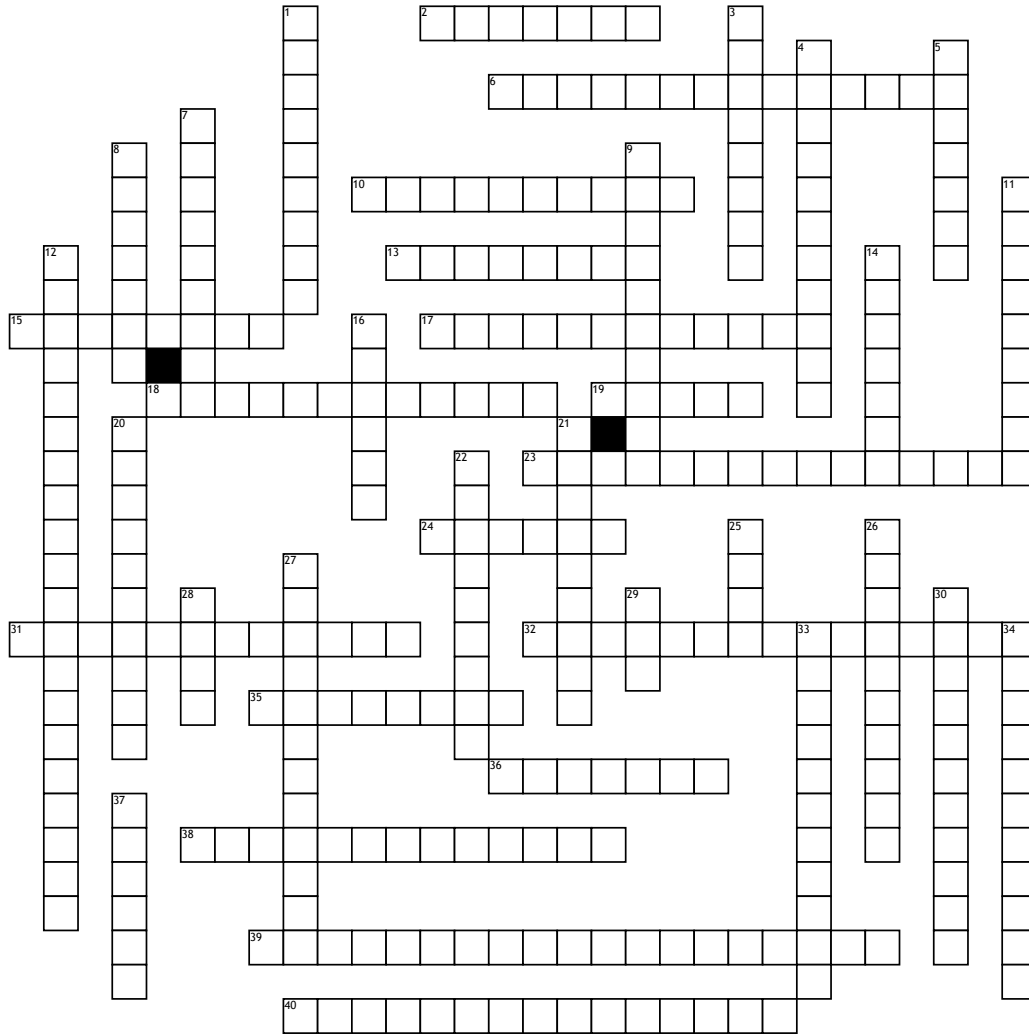


Name: _____ Date: _____ Period: _____

Biology Vocabulary



- Across**
2. A process of nuclear division in eukaryotic cells conventionally divided into five stages: prophase, prometaphase, metaphase, anaphase, and telophase. Mitosis conserves chromosome number by equally allocating replicated chromosomes to each of the daughter nuclei.
6. Conversion of light energy from the sun into chemical energy: $6\text{CO}_2 + 6\text{H}_2\text{O} + \text{light} \rightarrow \text{C}_6\text{H}_{12}\text{O}_6 + 6\text{O}_2$. It has two stages: light-independent and light-dependent. A process used by plants and other autotrophs to capture light and energy and use it to power chemical reactions that convert carbon dioxide and water into oxygen and energy-rich carbohydrates, such as sugars and starches.
10. An organism that has two identical alleles for a trait.
13. An organism's genetic makeup, or allele combinations.
15. An antigen-binding immunoglobulin produced by B cells, that function as the effector in an immune response.
17. An organelle in eukaryotic cells that serves as the site of cellular respiration; uses oxygen to break down organic molecules and synthesize ATP.
18. An organism that has two different alleles for a trait.
19. A group of organic compounds composed mostly of carbon and hydrogen including a proportionately smaller amount of oxygen; are insoluble in water (hydrophobic), serve as a source of stored energy, and are in a component of cell membranes. Made of the monomer fatty acid.
23. Frontal, parietal, occipital, temporal. Frontal lobe: A region of the cerebral cortex that has specialized areas for movement, abstract thinking, planning, memory, and judgment. Parietal lobe: A region of the cerebral cortex whose functions include processing information about touch. Occipital: A region of the cerebral cortex that processes visual information. Temporal: An area on each hemisphere of the cerebral cortex near the temples that is the primary receiving area for auditory information.
24. As endocrine glands, testes produce testosterone in males; ovaries produce estrogen in females.
31. A cell structure that controls which substances can enter or leave the cell.
32. Cerebellum (balance and coordination), hypothalamus/brain stem (controls body's involuntary actions: breathing, chewing, thinking), cerebrum (area of responsible for all voluntary actions).
35. An organism that obtains energy from feeding on other organisms.

36. Scientific study of interactions among organisms and between organisms and their environment (the abiotic and biotic factors).
38. Summarizes interactions of matter and energy at each trophic level.
39. A complex set of chemical reactions involving an energy transformation where potential energy in the bonds of "food" molecules is released and partially captured in the bonds of ATP molecules.
40. An organism that eats producers (herbivore).
- Down**
1. An organism's physical appearance, or visible traits.
3. The study of genes and heredity.
4. (In green plant cells) a plastid that contains chlorophyll and in which photosynthesis takes place. An organelle found in plant and algae cells where photosynthesis occurs.
5. Diffusion of molecules through a semipermeable membrane from a place of higher concentration (hypertonic) to a place of lower concentration (hypotonic) until the concentration on both sides is equal.
7. A type of organism composed of one or more cells containing a membrane-bound nucleus, specialized organelles in the cytoplasm, and mitotic nuclear division cycle.
8. Cell division that produces reproductive cells in sexually reproducing organisms. A type of cell division that results in four daughter (sperm and egg) cells each with half the number of chromosomes of the parent cells, as in the production of gametes and plant spores.
9. Monomer of nucleic acid made up of a 5-carbon sugar, a phosphate group, and nitrogenous base.
11. A change in a species over time.
12. A system for giving each organism a two-word scientific name that consists of the genus name followed by the species name.
14. A diagram that shows the feeding relationships between organisms in an ecosystem.
16. A protein that increases the rate of chemical reactions without being changed by the reaction; an organic catalyst.

20. All of the chemical reactions that occur within an organism.
21. A series of steps in which organisms transfer energy by eating and being eaten.
22. A community of organisms and their abiotic environment.
25. The major sites of photosynthesis in most plants. The stomata small openings on the underside of the leaf through which oxygen, carbon dioxide, and water vapor can move. Transpiration is the evaporation of water from the leaves of a plant. These gases move during photosynthesis and cellular respiration.
26. Second stage of cellular respiration, in which pyruvic acid is broken down into carbon dioxide in a series of energy-extracting reactions.
27. Compound containing carbon, hydrogen, and oxygen in the approximate ratio of C:2H:O (e.g. sugars, starches, and cellulose). Disaccharides and polysaccharides are made of monomer monosaccharides.
28. Basic unit of life; (biology) the basic structural and function unit of all organisms.
29. Main energy source that cells use for most of their work.
30. Cycle in photosynthesis that reduces fixed carbon to carbohydrates through the addition of electrons ("dark cycle"). The second stage of photosynthesis, in which glucose is manufactured. It occurs during the light-dependent reactions. The second stage of photosynthesis (following the light reactions), involving atmospheric CO_2 fixation and the reduction of the fixed carbon into carbohydrate.
33. A tendency to maintain a balanced or constant state; the regulation of any aspect of blood chemistry, such as blood glucose, around a particular level, equilibrium.
34. A biological macromolecule (DNA or RNA) composed of the elements C, H, N, O, and P that carries genetic information.
37. An alternative form of a gene. Maybe dominant, recessive, or co-dominant.

Word Bank

Gonads
Leaf
Ecosystem
Homozygous
Enzyme
ATP
Meiosis

Parts of the Brain
Chloroplast
Consumer
Carbohydrate
Phenotype
Ecology
Cell Membrane

Genetics
Lobes of the Brain
Nucleotide
Antibody
Primary Consumer
Energy Pyramid
Food Chain

Evolution
Metabolism
Lipid
Binomial Nomenclature
Cellular Respiration
Heterozygous
Eukaryote

Cell
Osmosis
Mitosis
Homeostasis
Photosynthesis
Genotype

Krebs Cycle
Nucleic Acid
Food Web
Mitochondria
Allele
Calvin Cycle