



---

## ACROSS

1. The movement of molecules across the cell membrane with the use of ATP.
4. Bond formed between adjacent amino acids; between carboxyl group of one amino acid and amine group of other amino acid.
7. Membrane bound cell organelle that contains genetic material.
8. Structural part of some cells that can be made of cellulose, peptidoglycan, or chitin depending on what kingdom the organism belongs to.
10. The hormone that lowers blood sugar by having it stored as glycogen in the liver and increasing cellular uptake.
15. In eukaryotic cells it is the site of the Krebs cycle and electron transport chain of aerobic cellular respiration.
16. The single stranded nucleic acid with uracil instead of the thymine found in DNA.
17. The gland that releases glucagon and insulin to help control blood sugar.
18. Cells that have two copies of each kind of chromosome.
21. A set of alleles that determines the expression of a particular trait.
22. The monomer subunit that links together along the sugar phosphate backbone to form nucleic acids.
23. The condition in animals where they keep their internal environment constant for a specific characteristic often as a result of negative feedback.

diffusion

transfer RNA

active transport

centrosome

mitochondria

buffer

protista

nucleus

mitosis

insulin

restriction enzymes

centromere

meiosis

genotype

diploid

prokaryotic

## DOWN

2. The kingdom that has predominantly unicellular eukaryotic organisms including algae, protozoans, and slime molds.
3. The type of nuclear division that leads to two nuclei with the entire diploid complement of chromosomes.
5. The series of membranes inside the cell that allow for passage of materials through the cytoplasm and the synthesis of lipids.
6. Enzymes that are used to "cut" DNA into pieces that often have "sticky" ends.
8. The region of a chromosome to which the microtubules of the spindle attach, via the kinetochore, during cell division.
9. The type of nuclear division that leads to four nuclei with a haploid complement of chromosomes produced from one diploid nucleus.
11. RNA made from DNA that attaches to amino acids and delivers them to the mRNA in the ribosome.
12. An organelle near the nucleus of a cell that contains the centrioles (in animal cells) and from which the spindle fibers develop in cell division.
13. Net passive movement of particles from a region of higher concentration to region of lower concentration until the concentration of substances is uniform throughout.
14. Cells that have no nucleus or membrane bound organelles.
19. A chemical that can release or absorb hydrogen ions depending on the conditions and therefore can maintain the pH of a solution at a constant level.
20. A high energy molecule that can be split apart to release energy for many different processes in living things.

endoplasmic reticulum

peptide bond

cell wall

RNA

nucleotides

homeostasis

ATP

pancreas