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| **Word** | **Definition** | **Word Part** | **Visual/Mnemonic**  **Related Words** |
| **1. asexual reproduction** | Formation of new organisms that are genetically identical to the original organism | *a=*not | [Paramecium Reproduction](http://www.biology-resources.com/drawing-paramecium-vorticella.html) |
| **2. cell** | Basic unit of all life forms; collection of living matter enclosed by a membrane | *Cell=*chamber | ts?t=18003952504560226647&pid=23153&ppid=17 |
| **3. cell membrane** | Regulates what enters and exits the cell; thin, flexible barrier composed primarily of lipids |  | cell_membrane |
| **4. cell wall** | Strong supporting layer around the cell membrane in plants, algae, and some bacteria; composed of cellulose in plants |  | cell_wall_pic |
| **5. channel protein** | Protein that spans the lipid bilayer and assists in facilitated diffusion |  | channel |
| **6. chloroplast** | Plant cell organelle where photosynthesis light, carbon dioxide and water are converted to glucose (sugar) and oxygen | *Chlor=*green | ts?t=5115094458050687671&pid=23296&ppid=8 |
| **7. cytoplasm** | Jelly-like material inside the cell membrane that holds/cushions organelles |  | cytoplasm |
| **8. diffusion** | Process by which molecules tend to move from an area of high concentration to low; does not require energy | *Diffusus=* spread | [File:Diffusion.en.jpg](http://upload.wikimedia.org/wikipedia/commons/1/15/Diffusion.en.jpg) |
| **9. endoplasmic reticulum** | Internal membrane system in cells where proteins are modified (smooth and rough types) |  | j0282106 |
| **10. eukaryote** | Organism whose cells contain nuclei and other membrane bound organelles | *Eu =* true  *« true* *nucleus »* | cell |
| **11. excretory system** | Removes waste from the blood, tissues and body cells | *Excerne=*  discharge | j0350047 |
| **12. field of view** | The diameter of the circle of light that you see when looking into a microscope |  | ts?t=17925461103383906010&pid=23041&ppid=8 |
| **13. Golgi body** | Stack of cell membranes that modifies, sorts, and packages proteins from the E.R. |  | j0186178 |
| **14. circulatory system** | Transports nutrients and waste throughout the body in the blood | *Circulari=*to form a circle | frog-circulatory-system-thumb1028468 |
| **15. flagella** | Whip-like tail used for locomotion (movement) | Flagellare=to whip | 400px-Euglena |
| **16. hydrophilic** | Polar molecules that are attracted to other polar molecules, especially water | *Hydro=*water, *philic=*loving | j0078798 |
| **17. hydrophobic** | Non-polar molecules that are repelled by polar molecules | *Hydro=*water, *phobic=*fearing | j0239205 |
| **18. cilia** | Short hair-like projections used for locomotion (movement) | Cilium=eyelid | paramecium |
| **19. lipid bilayer** | Double layer of phospholipids that contain polar heads and non-polar tails | *Lipos=*fat, *bi=*two | lipidbilayer |
| **20. skeletal and muscular systems** | Skeletal system provides support for the body; it interacts with the muscular system to produce movement |  | achillies-tendon2 |
| **21. lysosome** | Cell organelle filled with enzymes needed to break down materials in the cell | *Lys=*cut | j0252179 |
| **22. macroscopic** | Large and visible to the naked eye | *Macr=*large, *scop=*see | j0349646 |
| **23. marker protein** | Protein stuck in the cell membrane that identifies the type of cell, like a nametag |  | j0254496 |
| **24. endocrine system** | Helps to maintain homeostasis by secreting hormones (chemical signals) that travel in the bloodstream and act on another part of the body. | *Endo=*into | hormone_2 |
| **25. microscope** | An optical instrument that uses lenses to magnify small objects | *Micro=*small*, scop=*see | j0254476 |
| **26. mitochondria** | Organelle that releases ATP energy through the process of cellular respiration | *Mito=*thread, *chondr=* cartilage | ts?t=2210951127163837324&pid=23296&ppid=6 |
| **27. mitosis** | Part of eukaryotic cell division where the cell nucleus divides to make 2 identical nuclei; used for growth and repair | *Mito=*thread | ts?t=1135860764105247197&pid=23296&ppid=8 |
| **28. pseudopodia** | A temporary cytoplasmic protrusion in amoebas and other protozoans, used for locomotion and to take up food | *Pseudo=*false  *Pod=*foot | amoebaproteus450 |
| **29. multicellular** | Consisting of more than one cell, cells have the ability to specialize | *Multi=*many | ts?t=3851634152489458450&pid=23041&ppid=10 |
| **30. nuclear membrane** | Layer of two membranes that surrounds the nucleus of a cell |  | nuclear_membrane |
| **31. nucleolus** | Small, dense region within most nuclei in which ribosomes are made | *Nuc=*center | ts?t=17213866879489562482&pid=23296&ppid=6 |
| **32. nucleus** | Center of the cell that directs cell activities and contains genetic material | *Nuc=*center | eukaryotic1 |
| **33. nervous system** | Organ system that controls all other parts of an animal’s body |  | _wsb_218x387_spineorg |
| **34. organ** | Group of tissues that work together to perform closely related functions |  | ts?t=8739045593875651094&pid=23296&ppid=6 |
| **35. organ system** | Group of organs that work together to perform a specific function |  | ts?t=13299965879037880248&pid=23169&ppid=0 |
| **36. organelle** | Specialized structure that performs important cellular functions | *« mini organ »* | Image33 |
| **37. osmosis** | Diffusion of water through a semi-permeable membrane |  | osmosis3 |
| **38. vascular tissue** | Transports water and nutrients in plants | *Vasculum=*  small vessel | j0200501 |
| **39. feedback** | Response to stimuli (water balance, pH, temperature) that assists in maintaining cellular and organismal homeostasis |  | thermostat |
| **40. prokaryote** | Unicellular organism lacking membrane-bound organelles | *Pro=*before, *kary=* nucleus | 494px-Average_prokaryote_cell-_en_svg |
| **41. sexual reproduction** | Production of offspring that are genetically similar, but not identical, to the parents |  | j0158235 |
| **42. binary fission** | Asexual reproduction in which the parent cell splits in two | *bi=*two  *Findere=*to split | porn_binary_fission |
| **43. response to stimuli** | When an organism reacts to changes in its environment |  | ts?t=10946400833199678117&pid=23296&ppid=6 |
| **44. ribosome** | Organelle where proteins are assembled (synthesized), made of RNA and protein |  | ribosome_protein |
| **45. selectively permeable** | When the cell membrane allows only some materials to enter or exit the cell |  | j0238561 |
| **46. specialized cell** | A cell that is uniquely suited to performing a particular function |  | NB_Neuron |
| **47. tissue** | Group of similar cells that perform a particular function |  | ts?t=6141857908019838185&pid=23296&ppid=6 |
| **48. unicellular** | An organism consisting of a single cell | *Uni=*one | ts?t=17002382727375506567&pid=23296&ppid=6 |
| **49. vacuole** | Organelle that stores materials such as water, salts, proteins, and carbohydrates |  | [Anatomy of the Plant Cell](http://www.molecularexpressions.com/cells/plantcell.html) |
| **50. eyepiece lens** | Where you place your eye, magnifies an object 10x |  | ts?t=7798043939391498901&pid=23296&ppid=8 |
| **51. coarse adjustment knob** | Moves body tube or stage to allow rough focusing on an object under low power | *Coarse=*rough | ts?t=7798043939391498901&pid=23296&ppid=8 |
| **52. fine adjustment knob** | Moves body tube or stage to allow precise focusing on an object under high power | *Fine=precise* | ts?t=7798043939391498901&pid=23296&ppid=8 |
| **53. body tube** | Connects the eyepiece and the objective |  | ts?t=7798043939391498901&pid=23296&ppid=8 |
| **54. low power objective** | Magnifies an image 10x |  | ts?t=7798043939391498901&pid=23296&ppid=8 |
| **55. high power objective** | Magnifies an image 40x or 43x or 45x |  | ts?t=7798043939391498901&pid=23296&ppid=8 |
| **56. diaphragm** | Controls the amount of light |  | ts?t=7798043939391498901&pid=23296&ppid=8 |
| **57. stage** | Supports a slide |  | ts?t=7798043939391498901&pid=23296&ppid=8 |
| **58. base** | Supports the microscope |  | ts?t=7798043939391498901&pid=23296&ppid=8 |
| **59. budding** | Asexual reproduction whereby a new organism developed from an outgrowth that split off of the parent |  | wheals2 |
| **60. vegetative propagation** | Asexual reproduction in which one plant produces many identical plants |  | how-to-grow-strawberries-in-containers0 |