|  |  |  |
| --- | --- | --- |
| **Word** | **Definition** | **Visual/Mnemonic**  **Related Words** |
| 1. **eukaryote** | Organism whose cells contain nuclei and other membrane bound organelles | cell |
| 1. **prokaryote** | Unicellular organism lacking membrane-bound organelles | 494px-Average_prokaryote_cell-_en_svg |
| 1. **multicellular** | Consisting of more than one cell, cells have the ability to specialize | ts?t=3851634152489458450&pid=23041&ppid=10 |
| 1. **mitosis** | Part of eukaryotic cell division where the cell nucleus divides to make 2 identical nuclei; used for growth and repair | ts?t=1135860764105247197&pid=23296&ppid=8 |
| 1. **cell** | Basic unit of all life forms; collection of living matter enclosed by a membrane | ts?t=18003952504560226647&pid=23153&ppid=17 |

|  |  |  |  |
| --- | --- | --- | --- |
| 1. **organelle** | Specialized structure that performs important cellular functions | Image33 | |
| 1. **cell wall** | Strong supporting layer around the cell membrane in plants, algae, and some bacteria; composed of cellulose in plants | cell_wall_pic |
| 1. **cell membrane** | Regulates what enters and exits the cell; thin, flexible barrier composed primarily of lipids | cell_membrane |
| 1. **chloroplast** | Plant cell organelle where photosynthesis light, carbon dioxide and water are converted to glucose (sugar) and oxygen | ts?t=5115094458050687671&pid=23296&ppid=8 |
| 1. **cytoplasm** | Jelly-like material inside the cell membrane that holds/cushions organelles | cytoplasm |

|  |  |  |
| --- | --- | --- |
| 1. **vacuole** | Organelle that stores materials such as water, salts, proteins, and carbohydrates | [Anatomy of the Plant Cell](http://www.molecularexpressions.com/cells/plantcell.html) |
| 1. **endoplasmic reticulum** | Internal membrane system in cells where proteins are modified (smooth and rough types) | j0282106 |
| 1. **Golgi body** | Stack of cell membranes that modifies, sorts, and packages proteins from the E.R. | j0186178 |
| 1. **ribosome** | Organelle where proteins are assembled (synthesized), made of RNA and protein | ribosome_protein |
| 1. **lysosome** | Cell organelle filled with enzymes needed to break down materials in the cell | j0252179 |
| 1. **mitochondria** | Organelle that releases ATP energy through the process of cellular respiration | ts?t=2210951127163837324&pid=23296&ppid=6 |
| 1. **nuclear membrane** | Layer of two membranes that surrounds the nucleus of a cell | nuclear_membrane |
| 1. **nucleus** | Center of the cell that directs cell activities and contains genetic material | eukaryotic1 |
| 1. **nucleolus** | Small, dense region within most nuclei in which ribosomes are made | ts?t=17213866879489562482&pid=23296&ppid=6 |

|  |  |  |
| --- | --- | --- |
| 1. **specialized cell** | A cell that is uniquely suited to performing a particular function | NB_Neuron |
| 1. **tissue** | Group of similar cells that perform a particular function | ts?t=6141857908019838185&pid=23296&ppid=6 |
| 1. **organ** | Group of tissues that work together to perform closely related functions | ts?t=8739045593875651094&pid=23296&ppid=6 |
| 1. **organ system** | Group of organs that work together to perform a specific function | ts?t=13299965879037880248&pid=23169&ppid=0 |

|  |  |  |
| --- | --- | --- |
| 1. **sexual reproduction** | Production of offspring that are genetically similar, but not identical, to the parents | j0158235 |
| 1. **asexual reproduction** | Formation of new organisms that are genetically identical to the original organism | [Paramecium Reproduction](http://www.biology-resources.com/drawing-paramecium-vorticella.html) |
| 1. **binary fission** | Asexual reproduction in which the parent cell splits in two | porn_binary_fission |
| 1. **budding** | Asexual reproduction whereby a new organism developed from an outgrowth that split off of the parent | wheals2 |
| 1. **vegetative propagation** | Asexual reproduction in which one plant produces many identical plants | how-to-grow-strawberries-in-containers0 |

|  |  |  |
| --- | --- | --- |
| 1. **microscope** | An optical instrument that uses lenses to magnify small objects | j0254476 |
| 1. **eyepiece lens** | Where you place your eye, magnifies an object 10x | ts?t=7798043939391498901&pid=23296&ppid=8 |
| 1. **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 |
| 1. **coarse adjustment knob** | Moves body tube or stage to allow rough focusing on an object under low power | ts?t=7798043939391498901&pid=23296&ppid=8 |
| 1. **fine adjustment knob** | Moves body tube or stage to allow precise focusing on an object under high power | ts?t=7798043939391498901&pid=23296&ppid=8 |
| 1. **body tube** | Connects the eyepiece and the objective | ts?t=7798043939391498901&pid=23296&ppid=8 |
| 1. **low power objective** | Magnifies an image 10x | ts?t=7798043939391498901&pid=23296&ppid=8 |
| 1. **high power objective** | Magnifies an image 40x or 43x or 45x | ts?t=7798043939391498901&pid=23296&ppid=8 |
| 1. **diaphragm** | Controls the amount of light | ts?t=7798043939391498901&pid=23296&ppid=8 |
| 1. **stage** | Supports a slide | ts?t=7798043939391498901&pid=23296&ppid=8 |
| 1. **base** | Supports the microscope | ts?t=7798043939391498901&pid=23296&ppid=8 |