**CELLabration Time! – Review**

* **Single-Celled Pond Organisms**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Image** | **Organism’s Name** | **Structure** | **Movement** | **Food Source** |
| **http://www.edencsd.org/cms/lib/NY19000545/Centricity/Domain/104/Graphics/vocab/Pond%20Life/euglena.jpg** | **Euglena** | Oval shaped; has an eyespot | Moves using flagella | autotroph & heterotroph |
| **http://www.premiumgroupgames.com/images/amoeba2.gif** | **Amoeba** | Shapeless; has pseudopods (finger-like projections) | Moves using pseudopodia | heterotroph |
| **http://img.sparknotes.com/figures/0/0a2e2068b60c8b7f8cfbe21c26e87498/paramecium.gif** | **Paramecium** | Oval, slipper-shaped; rounded front & pointed back | Moves using cilia | heterotroph |
| **http://touchspin.touchspin.com/images/GolgiVolvox.png** | **Volvox** | Round, several make a colony; green algae; have an eyespot | Moves using flagella | autotroph |

* **Plant & Animal Cells**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name of Organelle** | **Location** **(plant, animal, both)** | **Structure****(Description)** | **Function****(Job)** |
| Nucleus | Both | Rounded shape surrounded by rest of organelles | Controls the cells’ activities |
| Nucleolus | Both | Small, spherical structure inside the nucleus | Produces ribosomes |
| Cell Membrane | Both | Plant – inside cell wallAnimal – outer layer | Controls what comes in and out of the cell |
| Cytoplasm | Both | Clear gel-like fluid | Home to cell’s organelles (holds them) |
| Ribosomes | Both | Small bodies floating free or attached to the endoplasmic reticulum | Produces proteins |
| Mitochondria | Both | Bean shaped with inner membrane | Break down sugar molecules to create energy |
| Vacuole | Both | Fluid-filled sacs | Storage area for cells |
| Golgi Bodies | Both | Flattened sacs or tubes | Receives protein & other materials from ER, packages & redistributes them |
| Endoplasmic Reticulum | Both | Network of folded tubes or membranes | Carries protein and other materials from one part of the cell to another |
| Lysosomes | Plant cells- uncommonAnimal cells- common | Small round structures | Use chemicals to break down large food particles into smaller ones & breaks down old cells |
| Cell Wall | Plant Cells Only | outer layer, rigid, strong, stiff, non-living | protects & supports cell\*allows oxygen and water to pass through |
| Chloroplast | Plant Cells Only | Green, oval structures usually containing chlorophyll | Captures energy from sunlight & uses it to produce food for cells |

* **Multicellular Organisms – Hierarchical Organization**

**Cells, Tissue, Organs, Organ Systems, Organism**

**CELLabration Time! – Review**

1. Which of the following statements is part of the cell theory?

|  |  |
| --- | --- |
| a. | Only plants are composed of cells. |
| b. | All cells are produced from other cells. |
| c. | Cells can be produced from nonliving matter. |
| d. | Cells are one of several basic units of structure and function in living things. |

1. Mitosis is the process by which

|  |  |
| --- | --- |
| a. | toes become diseased. |
| b. | cells die. |
| c. | a cell divides. |
| d. | muscles become strained. |

1. Specialized cells are found only in

|  |  |
| --- | --- |
| a. | animals. |
| b. | single-celled organisms. |
| c. | bacteria. |
| d. | multi-cellular organisms. |

1. Which of the following *best* describes the function of mitochondria?

|  |  |
| --- | --- |
| a. | They convert energy from food molecules into energy the cell can use. |
| b. | They store energy from food molecules. |
| c. | They store energy from sunlight. |
| d. | They produce nucleic acids that release energy. |

1. All plants are

|  |  |
| --- | --- |
| a. | eukaryotes. |
| b. | unicellular. |
| c. | heterotrophs. |
| d. | prokaryotes. |

1. What type of organism is a paramecium?
2. Unicellular
3. Multicellular
4. Acellular
5. prokaryote