Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**LE-A Bell Work Topic: Classification**



1. Bird X most likely falls under which classification?
2. Certhidea
3. Geospiza
4. Camarhynchus
5. Platyspiza

*Kingdom Protista* is often referred to as the **“Junk Drawer Kingdom”** simply because it includes a wide variety of eukaryotic organisms that do not fit into other Kingdoms. Many protists are unicellular, but some protists are multicellular. Some protists are heterotrophic, some are autotrophic, and some are both! Most live in water, but some can be found in in most soil or even the human body. As you can see, there are many characteristics of protists...the only thing they ALL have in common is the fact that they are EUKARYOTIC organisms.

Protists are classified based on two factors: how they obtain nutrition and how they move. These classification factors lead to two protist categories:

1. Animal Like Protists (“Protozoans” or “First Animals) – Heterotrophs
2. Plant Like Protists (“Algae”) – Autotrophs

The three we will be learning about in our class are *Amoeba, Euglena and Paramecium.*

* 2. Why are protists considered the “Junk Drawer Kingdom”?
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* 3. What is the cell number for protists?
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* 4. What is the cell type of a protist?
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

5. What is the energy source of a protist?

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
1. Protista
	* Number of cells: Unicellular
	* Cell type: Eukaryotic
	* Energy source: Heterotrophic or Autotrophic
		+ Ingestion or absorption

Ex. Amoeba, Euglena and Paramecium



**Paramecium**

* Energy Source: Heterotrophic
* Mobility/ Locomotion: Cilia “Hair Like”
* Unique: Elongated & Oral groove

**Amoeba**

* Energy Source: Heterotrophic
* Mobility/ Locomotion: Pseudopod “False Feet”
* Unique: Food Vacuoles, Phagocytosis (Wraps around food)

**Euglena**

* Energy Source: Autotrophic
* Mobility/ Locomotion: Flagella ”Whip Like”
* Unique: Eye spot *(Stigma),* Pear Shaped, Whip like tail & Chlorophyll *(Green Color)*

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**LE-A Classification Day 3 Quiz**



1. What Kingdom do the above organisms ALL belong to?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Which letter represents Euglena? \_\_\_\_\_\_\_\_\_\_
2. Which letter represents Amoeba? \_\_\_\_\_\_\_\_\_\_
3. Which letter represent Paramecium? \_\_\_\_\_\_\_\_
4. Are the above organisms unicellular or multicellular?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. What is the nickname for this kingdom?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. List which organisms are autotrophic.

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Protista Review**

**Word Bank:** *Terms are underlined and description is in italics.*

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***69336_cell_sections_md.gif******Multicellular*** | ***cell-clipart-cell-nucleus-clipart-1.png******Unicellular***  | *Has a Nucleus**(Eu=True Nucleus)****Eukaryotic***  | *Lacks a Nucleus**(Pro=NO)****Prokaryote*** | *Protects the DNA in a cell****Nucleus***  | ***Screen%20Shot%202017-11-10%20at%203.30.57%20PM.pngHeterotrophic***  | ***Sun-clip-art-free-clipart-images-4.jpgAutotrophic*** |
| *“Whip-Like”****Flagella*** | *“Hair-Like”****Cilia*** | *“False-Feet”****Pseudopod*** | *Protists**---------->* | ***/Users/emilyumile/Desktop/477461979.jpg******Euglena*** | ***/Users/emilyumile/Desktop/Respiration1.gif******Amoeba*** | ***/Users/emilyumile/Desktop/479487105.jpg******Paramecium*** |

*Use the word bank above and your class notes to complete the chart below.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Kingdom****& Organism** | **Cell Number***Unicellular/Multicellular* | **Cell Type***Prokaryote/Eukaryote* | **Energy Source***Autotrophic/Heterotrophic* | **Mobility/Locomotion***Flagella/Cilia/Pseudopod* |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period\_\_\_\_\_\_\_\_\_\_ Date\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Classification HW**

**1.2.**

1. ****

****

1. Some species of algae are unicellular, motile, and photosynthetic. Under one modern system of classification, they would be classified as:
2. Mollusks b. Fungi c. Protists d. Tracheophytes
3. *Use the image below to identify the structures used for mobility/ locomotion of the Protista.*

Label A\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Label B\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Label C\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_