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Bell Work **Topic: Classification**

*Create two categories with the objects below*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| A : Toucan | B: Cardinal | C: Corn | D: Squash | E: Blue Jay |
| F: Eggplant | G: Peacock | H: Turkey | I: Pumpkin | J: Sweet Potato |

|  |  |
| --- | --- |
| *Group 1:* | *Group 2:* |
| *Object : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*  *Object: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*  *Object: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*  *Object: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*  *Object: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_* | *Object : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*  *Object: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*  *Object: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*  *Object: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*  *Object: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_* |

1. *Explain how you classified the objects into two groups*

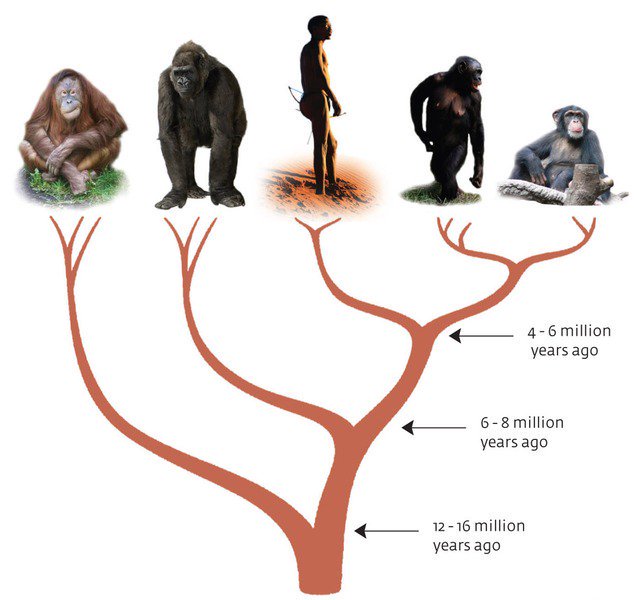
*\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

*\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

*\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

1. Topic: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  
   *Definition*

* The science of naming and classifying organisms based on **STRUCTURAL SIMILARITES** and **EVOLUTIONARY RELATIONSHIPS.**
* Structural Similarities= Appearance/ Characteristics / What they look like
  + \_\_\_\_Birds have feathers
  + Vegetables have seeds
* Evolutionary = Common Ancestors **Evolutionary Tree**



\*\*Another word for Classification is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\*\*

II. Kingdoms

*Define: Groups we organize all living things into.*

* There are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Kingdoms we classify all living things into.

II. Kingdoms

*Define: Groups we organize all living things into.*

* There are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Kingdoms we classify all living things into.
* We classify things into kingdoms according to 3 things:
  + - 1. Cell type                                      (prokaryote/eukaryote)​
      2. Their ability to make food             (autotroph/heterotroph)​
      3. The number of cells in their body   (unicellular/multicellular)

1. Plants

* Number of cells: Multicellular
* Cell type: Eukaryotic
* Energy source: Autotrophic
  + Photosynthesis

Ex. Grass, Trees and Flowers

1. Animals
   * Number of cells: Multicellular
   * Cell type: Eukaryotic
   * Energy source: Heterotrophic
     + Ingestion

Ex. Dog, Humans, Cat and Insects

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

Ex. Amoeba, Euglena and Paramecium

1. Fungi
   * Number of cells: Multicellular
   * Cell type: Eukaryotic
   * Energy source: Heterotrophic
     + Absorption

Ex. Mushrooms, mold, yeast

1. Monera
   * Number of cells: Unicellular
   * Cell type: Prokaryotic
   * Energy source: Heterotrophic or Autotrophic
     + Absorption

Ex. Bacteria (E.coli)

III. Dichotomous Key

*Definition*

* *A tool that allows the user to determine the identity of items based on characteristic and traits.*

|  |
| --- |
| Screen%20Shot%202017-11-10%20at%204.15.30%20PM.png |

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

**Plants and Animals Review**

**Word Bank:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***69336_cell_sections_md.gif***  ***Multicellular*** | ***cell-clipart-cell-nucleus-clipart-1.png***  ***Unicellular*** | *Has a Nucleus*  ***Eukaryotic*** | *Building blocks of all life*  ***Cell*** | *Protects the DNA in a cell*  ***Nucleus*** | ***Screen%20Shot%202017-11-10%20at%203.30.57%20PM.png***  ***Heterotrophic*** | ***Sun-clip-art-free-clipart-images-4.jpg***  ***Autotrophic*** |

***Example Choices:***

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ***Cat-clip-art-black-and-white-free-clipart-images-3.png***  ***Cat*** | ***images.png***  ***Flower*** | ***ant-20clip-20art-LcKzaAgca.jpg***  ***Ant*** | ***tree-md.png***  ***Tree*** | ***Cute-apple-clip-art-free-clipart-images-2.jpg***  ***Apple*** | ***Spider-black-and-white-spider-clipart-black-and-white-free-images-2-3.png***  ***Spider*** | ***images.jpg***  ***Wolf*** |

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Kingdom** | **Cell Number**  *Multicellular/Unicellular* | **Cell Type**  *Prokaryote/Eukaryote* | **Energy Source**  *Autotrophic/heterotrophic* | **Examples** |
| ***Plants*** |  |  |  |  |
| ***Animals*** |  |  |  |  |

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

**Plants and Animals Homework**

*Complete the following table by filling in the boxes with the corresponding characteristics of each organism.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Organism** | **Cell Number**  *Multicellular/Unicellular* | **Cell Type**  *Prokaryote/Eukaryote* | **Energy Source**  *Autotrophic/heterotrophic* | **Kingdom**  *Plants/Animals* |
| ***download.png***  ***Bear*** |  |  |  |  |
| ***download.png***  ***Leaf*** |  |  |  |  |
| ***caterpillar-clipart-black-and-white-003.jpg***  ***Caterpillar*** |  |  |  |  |
| ***download-1.png***  ***Pumpkin*** |  |  |  |  |
| ***Cute-apple-clip-art-free-clipart-images-2.jpg***  ***Apple*** |  |  |  |  |
| ***Spider-black-and-white-spider-clipart-black-and-white-free-images-2-3.png***  ***Spider*** |  |  |  |  |
| ***download-2.png***  ***Giraffe*** |  |  |  |  |

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

**Classification Day 1 Quiz**

1. What is the name of this topic?

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

1. *Define* classification.

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

1. How many Kingdoms are there?

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

1. What is another word for classification?

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