WEIGHT AND MASS

* **DEFINITIONS**
	+ **Mass- \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ an \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ has.**
	+ **Matter- something that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**
	+ **Weight- is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of an object, it is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ upon \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**
* **Units for Measuring Mass**
	+ **Mass is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*.***
		- **1 paper clip= 1 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
		- **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ =1 kilogram**
		- **The average \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ adult weighs \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
	+ **Tools for Measuring Mass**
		- **The \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is the tool we use \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ mass.**
* **COMPARE AND CONTRAST**
	+ **MASS vs. WEIGHT**
	+ **Always remains \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Depends on \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
	+ **Does \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ on gravity weight=\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ x gravity**
	+ **weight of an object \_\_\_\_\_\_\_\_\_\_\_ if the gravity changes**

 **Classification**

* **Species of Organisms**
	+ **There are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ known species of organisms**
	+ **This is only 5% of all organisms that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_!!!!!**
	+ **New organisms are still \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
* **What is Classification?**
	+ **Classification is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_of organisms into \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_based on their \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
	+ **Classification is also known as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
	+ **Taxonomists are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that identify & name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
* **Benefits of Classifying**
	+ **Accurately & \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ names organisms**
	+ **Prevents \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ such as starfish & jellyfish that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ fish**
	+ **Uses same \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (Latin or some Greek) for all names**
		- **Confusion in Using Different Languages for Names**
		- ****
		- **Latin Names are Understood by all**
		- ****
* **Early Taxonomists**
	+ **2000 years ago, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ was the first \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
		- **Aristotle \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ organisms into \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
		- **He subdivided them by their \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_---land, sea, or air dwellers**
	+ **John Ray, a botanist, was the first to use \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ for naming**
		- **His names were very long \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ telling \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ about the plant**
* **Carolus Linnaeus 1707 – 1778**
	+ **18th century \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
	+ **Classified organisms by their \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
	+ **Developed \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_still used today**
	+ **Called the “\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of Taxonomy”**
	+ **Developed the modern system of naming known as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
	+ **Two-word name (\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ & \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_)**
* **Standardized Naming**
	+ **used**
	+ ***Genus species***
	+ **Latin or Greek**
	+ **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ in print**
	+ **Capitalize \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, but NOT \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
	+ **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ when writing**
* **Rules for Naming Organisms**
	+ **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*Code for* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_contains the rules for naming organisms**
	+ **All names must be approved by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Congresses (International Zoological Congress)**
	+ **This prevents \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ names**
* **Classification Groups**
	+ **Taxon (taxa-plural) is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ into which \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ organisms are placed**
	+ **There is a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of groups (taxa) from \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to most \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
	+ **Domain, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, Phylum, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, Order, Family, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*, species***
* **Hierarchy-Taxonomic Groups**
	+ **Domain**
	+ **Kingdom**
	+ **Phylum (\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ – used for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_)**
	+ **Class**
	+ **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Family**
	+ **Genus**
	+ **Species**
	+ ****
	+ **Dumb**
		- **King**
			* **Phillip**
				+ **Came**

**Over**

**For**

**Gooseberry**

**Soup!**

* ****
* **Domains**
	+ **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, most inclusive taxon**
	+ **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ domains**
	+ **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ prokaryotes (no \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or membrane-bound \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_)**
		- **Archaea**
			* **ARCHAEBACTERIA**
				+ **Probably the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to evolve**
				+ **Live \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ environments**
				+ **Found in:**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Treatment Plants (Methanogens)**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ or Volcanic Vents (Thermophiles)**

**Hot Springs or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that are acid**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ water (Dead Sea; Great Salt Lake) - Halophiles**

* + - **Bacteria**
			* **EUBACTERIA**
				+ **Some may cause \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
				+ **Found in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ except \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ ones**
				+ **Important \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ for environment**
				+ **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ important in making cottage \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, buttermilk, etc.**
	+ **Eukarya are more \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and have a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ and membrane-bound \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
		- **Domain Eukarya \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_into \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
* **Kingdom**
	+ **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (protozoans, algae…)**
		- **Most are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
		- **Some are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
		- **Some are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, while others are \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
		- **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
	+ **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (mushrooms, yeasts …)**
		- **Multicellular, except \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
		- **Absorptive \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (digest food \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ their body & then absorb it)**
		- **Cell walls made of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
	+ **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (multicellular plants)**
		- **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
		- **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
		- **Absorb \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to make \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
		- **Cell walls made of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**
	+ **Animalia (\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_animals)**
		- **Multicellular**
		- **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ heterotrophs (consume \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_& digest it \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_their bodies)**
		- **Feed on plants or animals**
* **Basis for Modern Taxonomy**
	+ **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ structures (\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_)**
	+ **Similar \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ development**
	+ **Molecular Similarity in \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, or \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_sequence of Proteins**
	+ ****