

**A note about drinks, snacks, candy, & gum ...**

**You are allowed to have a clear water bottle with ONLY water. You may have other beverages if it is a reward/prize from a teacher or for the class.**

**You are NOT allowed to eat snacks or candy during my class unless it is a special reward time or prize from me.**

**You will be allowed to chew gum during my class AS LONG AS I don't find it on the floor, under the tables/seats, or anywhere else it doesn't belong. Too much gum? Gum page time!**

## Things to do ...

**Glue the Unit 1 Learning Targets page 5 (FAF - fold a flap) of your HDSN.**

**We will be learning about the items on this page throughout the first unit.**

**Some of them you may remember from last year, while others will be new ones for this year.**

## Unit Vocabulary

**Glue the Unit 1 Vocabulary list on page 4 (FAF - fold a flap) of your HDSN.**

**Look through the list of vocabulary words – front and back.**

**Rate each one based on what you know:**

- ☺ - *I know it and can write a scientific definition.*
- ☹ - *I have heard it, but cannot write a definition.*
- ☹ - *I don't know it.*

*You do NOT need to write any definitions right now.*

*We will do that as we discuss the words during our lessons.*

## Thursday, 8/25

### A note about notes ...

IF your notes are NOT DONE, you need to listen as we go over the notes and then complete them on your own time! It is not a free answer time! You can use the class notes to check your answers after you show me you are done!

IF your notes are DONE, you should make corrections or additions as we discuss the notes in class. Everything should be spelled correctly and everything should be completed to help you when we take note quizzes or you need to study for a quiz/test.

## Lesson 1

1. What term refers to living things? **ORGANISM**

2. Complete these statements about living things:

- Living things have a cellular organization, with **UNICELLULAR** organisms having only one cell, while those with many cells are called **MULTICELLULAR**.

C → T → O → OS

*Do you remember the levels of organization?*

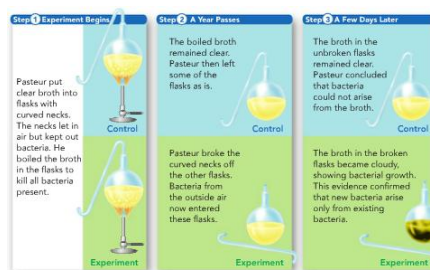
Cells make up **TISSUES**, which make up **ORGANS** that work together to make **ORGAN SYSTEMS** to support an **ORGANISM**

## 2. Complete these statements about living things:

- They contain similar chemicals, such as **CARBOHYDRATES** (for energy), **PROTEINS** and lipids (for building cells), and **NUCLEIC** acids (genetic material).
- Use **ENERGY** that they get from taking in and breaking down materials at a rate dependent on their **METABOLISM**.
- Respond to **STIMULI (stimulus)** in their environments, such as changes in light, sound, and other factors
- Go through a process of **DEVELOPMENT** as they change and become more complex.
- Reproduce either **ASEXUALLY** (one parent) or **SEXUALLY** (two parents).

## 3. What did the experiments by Redi & Pasteur investigate?

### SPONTANEOUS GENERATION



**Think About It:**  
*How do we know something is "living"?*



4. What is the difference between autotrophs and heterotrophs? Give an example of each.

**Autotrophs are organisms capable of making their own food, such as plants. Heterotrophs must eat other organisms for energy, such as animals.**

5. Besides food, what are the three other things living things need to survive? WATER, LIVING SPACE, and stable internal conditions (also called HOMEOSTASIS)

It's time to make a **BIOGLYPH!**

## What to do now?

Open your Pearson textbook

Continue working on your notes – finish the back.

**Hints:**

***The last question in Lesson 2 should be labeled with a 4 (not a 3).***



***You may have to use Google to find out how viruses are classified.***

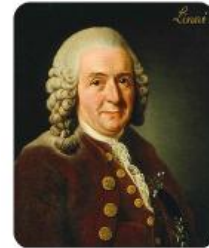
## Lesson 2

1. What do we call the scientific study of classification? **TAXONOMY**
2. What do we call the two-part scientific naming system?  
**BINOMIAL NOMENCLATURE**
3. What two words are used to make up an organism's scientific name? **GENUS & SPECIES**

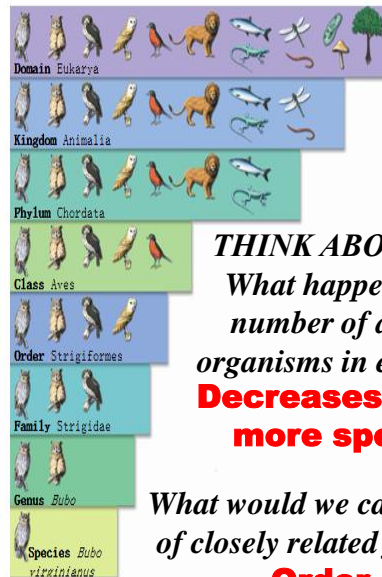
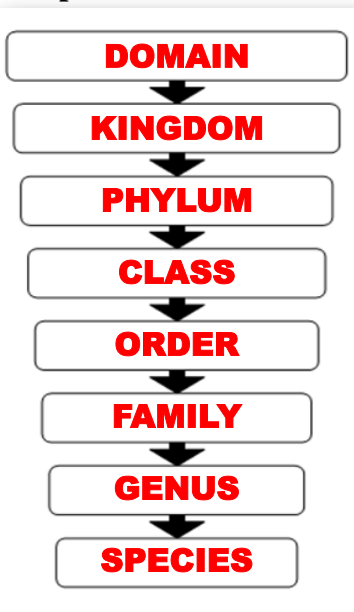
**Trivia Tidbit:** The binomial nomenclature system was developed by **LINNAEUS**.



**Add his name to your notes!**



4. What are the classification levels from the broadest to the most specific?



**THINK ABOUT IT ...**  
 What happens to the number of different organisms in each level?  
**Decreases & gets more specific**

What would we call a group of closely related families?  
**Order**

## Chapter 1 - Lesson 3

### 1. What are the three domains of life?

**BACTERIA:** Single-celled organisms that do not contain a nucleus

**ARCHAEA:** Single-celled organisms that do not contain a nucleus; have a different cell wall from bacteria

**EUKARYA:** Organisms with cells that contain a nucleus.

### 2. To which domain do each of the following belong?

Plants -       **EUKARYA**      

Animals -       **EUKARYA**      

Protists -       **EUKARYA**      

Viruses -       **None (not living)**      

**It's time to make  
a BIOGLYPH!**

## Day 2: Bioglyph Challenge

Can you identify your classmates?

### To complete this challenge:

1 – Ask questions (yes/no only) to help you identify your classmates.

*NOTE: You cannot ask, “Is this your bioglyph?”, “Are you #3?”, or similar questions.*

2 – Use “whisper” voices and don’t give away any answers. Also keep your worksheet hidden!

3 – When you know a match, write the person’s name on your worksheet on the line with the same number that is on their bioglyph page.

4 – After the time is up (10 mins), we will check your answers to see how many people you were able to match.

5 – Answer the questions on the back of the worksheet.

## Discussion Questions – Complete on the back of your challenge page & then turn it in.

- 1) How many classmates were you able to identify? \_\_\_\_\_
  
- 2) If you could only ask three questions for each classmate, what would they be?
  
- 3) Were you able to identify some people without asking them any questions? If so, how?
  
- 4) What type of characteristics do scientists use to classify living things?

Glue the worksheet on page 6 (fold-a-flap).


Go to [mrstomm.com](http://mrstomm.com) and click Science Spot Kid Zone.

Click Cells & Classification in the Biology section.

Due: \_\_\_\_\_

*Classification of Life* Name \_\_\_\_\_

Go to <http://sciencspot.net/> and click the [Kid Zone](#) logo. Click the link for [Cells & Classification](#) in the [Biology](#) section to find the sites for this assignment.




**Site #1: Biological Classification**

1. What does the word "species" mean in Latin? \_\_\_\_\_
2. What two terms are used for an organism's binomial name? \_\_\_\_\_ and \_\_\_\_\_
3. What is the scientific name for a red maple? \_\_\_\_\_
4. What do all trees in the Dicotyledoneae subclass have in common? \_\_\_\_\_

**Site #2: Animal Classification Game**

1. Click the link for "ANIMAL CLASSES" to help you identify each animal group by its description.



**The Science Spot's Kid Zone**  
A collection of resources for students

Google™ Custom Search

*What do you want to explore?*

<p><b>Biology</b></p> <ul style="list-style-type: none"> <li><a href="#">Cells &amp; Classification</a></li> <li><a href="#">Microscopes</a></li> <li><a href="#">Genetics &amp; DNA</a></li> <li><a href="#">Plants &amp; Animals</a></li> <li><a href="#">Insects</a></li> <li><a href="#">Bald Eagles</a></li> <li><a href="#">Health &amp; Human Body</a></li> <li><a href="#">Ecology &amp; Environment</a></li> <li><a href="#">Pond Water</a></li> </ul> <p><b>Astronomy</b></p> <ul style="list-style-type: none"> <li><a href="#">Solar System &amp; Planets</a></li> <li><a href="#">Stars &amp; Constellations</a></li> </ul> <p><small>Test your coding abilities with an activity from <a href="#">Code.com!</a></small></p>	<p><b>Chemistry</b></p> <ul style="list-style-type: none"> <li><a href="#">Matter &amp; Atoms</a></li> <li><a href="#">Periodic Table Sites</a></li> <li><a href="#">Acids &amp; Bases</a></li> </ul> <p><b>Physics</b></p> <ul style="list-style-type: none"> <li><a href="#">Motions &amp; Forces</a></li> <li><a href="#">Simple Machines</a></li> <li><a href="#">Sound &amp; Light</a></li> <li><a href="#">Electricity &amp; Magnetism</a></li> <li><a href="#">Junk Box Wars</a></li> </ul> <p><b>Earth Science</b></p> <ul style="list-style-type: none"> <li><a href="#">Earthquakes, Volcanoes, &amp; Plate Tectonics</a></li> <li><a href="#">Rocks &amp; Minerals</a></li> <li><a href="#">Dinosaurs &amp; Fossils</a></li> <li><a href="#">Weather</a></li> </ul>	<p><b>Other Topics</b></p> <ul style="list-style-type: none"> <li><a href="#">Forensic Science Page 1</a></li> <li><a href="#">Forensic Science Page 2</a></li> <li><a href="#">Measurement Systems &amp; Tools</a></li> <li><a href="#">Inventions &amp; History</a></li> <li><a href="#">Science News &amp; More</a></li> <li><a href="#">Science Fair Sites</a></li> <li><a href="#">Careers &amp; Money</a></li> <li><a href="#">Tech Skills</a></li> <li><a href="#">Reference Desk</a></li> <li><a href="#">Trivia Challenge</a></li> <li><a href="#">Science Games &amp; Puzzles</a></li> <li><a href="#">Fun &amp; Games</a></li> </ul> <p><small>Try a <a href="#">CSI Web Adventure</a> or <a href="#">other online activities!</a></small></p> <p style="text-align: right;"><small>Check it out ... <a href="#">PBS Kids - Design Squad</a></small></p>
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Click the link to go to the first site.

**Biology: Cells & Classification #1**

<p>Cells &amp; More  <a href="#">Amazing Cells</a>  <a href="#">Cell Biology</a>  <a href="#">Virtual Cell Tour</a>  <a href="#">Cells Alive</a>  <a href="#">Cell Inspector</a>  <a href="#">iknowthat.com - Cells</a>  <a href="#">Excell at Cells</a>  <a href="#">Nobel: Cells &amp; Organelles</a>  <a href="#">Quia - Cell Organelles</a>  <a href="#">Quia - Cell Challenge Board</a>  <a href="#">Quia - Cell Rags to Riches</a></p>	<p>Mitosis &amp; Meiosis  <a href="#">Cells Alive: Mitosis</a>  <a href="#">Cells Alive: Meiosis</a>  <a href="#">Center of the Cell</a>  <a href="#">Mitosis &amp; Meiosis</a>  <a href="#">Cell Cycle &amp; Mitosis Tutorial</a>  <a href="#">Nobel: Cell Division Activity</a>  <a href="#">NOVA: Mitosis</a>  <a href="#">Learn Genetics</a>  <a href="#">&amp; Meiosis</a>  <a href="#">Quia - Cell Reproduction Game</a></p>	<p><b>#4</b> → <b>Classification of Life</b>  <a href="#">Biological Classification</a>  <a href="#">Ology: The Tree of Life</a>  <a href="#">Ology: It Takes All Kinds</a>  <a href="#">Ology: What's This</a>  <a href="#">Ology: Biodiversity Everything Counts</a>  <a href="#">Classification of Living Things</a>  <a href="#">PBS Classifying Life</a>  <a href="#">Key to Classification</a>  <a href="#">UIUC Family Tree</a>  <a href="#">The Kingdoms of Life</a>  <a href="#">Six Kingdoms of Life</a>  <a href="#">BrainPop Six Kingdoms Movie</a></p>	<p><b>#2</b> ← <b>Classification Games &amp; Challenges</b>  <a href="#">Animal Classification Game</a>  <a href="#">A Touch of Class</a>  <a href="#">QUIA - Characteristics of Life</a>  <a href="#">QUIA - Animal Classification</a>  <a href="#">QUIA - Animal Classification Jeopardy</a>  <a href="#">QUIA - Animal Classification Millionaire</a>  <a href="#">Living &amp; Nonliving Quiz</a>  <a href="#">Animal Classification Hangman</a>  <a href="#">Animals of the World</a>  <a href="#">Animal Classification Hangman</a></p>
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After you have answered all 4 questions, click the ← to return to the Cells & Classification page.

Click the link for the second site, fill in all the answers, and then return to the Cells & Classification page.

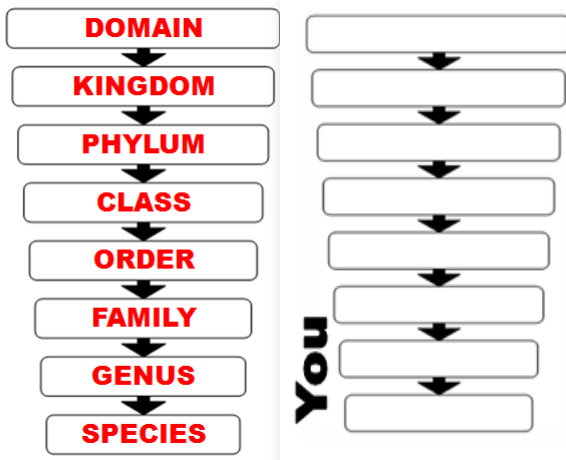
**Classification Groups – Broadest to Most Specific**

<p>Broadest Group</p> <p style="text-align: center;">↓</p> <p>Most Specific Group</p>	<p><b>Domain</b></p> <p><b>Kingdom</b></p> <p><b>Phylum</b></p> <p><b>Class</b></p> <p><b>Order</b></p> <p><b>Family</b></p> <p><b>Genus</b></p> <p><b>Species</b></p>	<p><b>D</b>andy</p> <p><b>K</b>ings</p> <p><b>P</b>ut</p> <p><b>C</b>rowns</p> <p><b>O</b>n</p> <p><b>F</b>amous</p> <p><b>G</b>irl</p> <p><b>S</b>couts</p>
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Create your own phrase and diagram/picture to help you remember the classification groups in order. Add to page 6 in your notebook.

### How would you be classified using your physical address?



*Think About It ...*

*What do you notice as you move down the levels?*

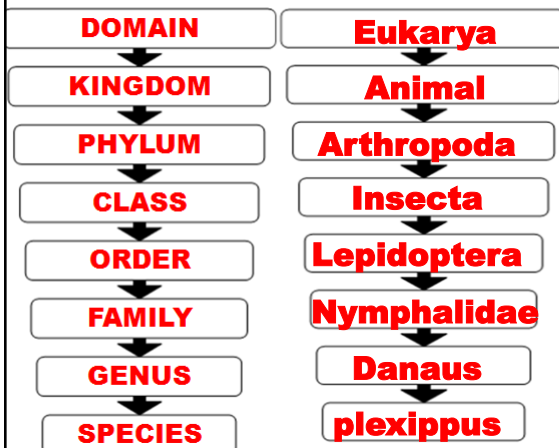
*Which levels do you have in common with your tablemates?*

*Which levels do you have in common with everyone in your class?*

**What do scientists use to classify plants and animals?  
They use the specific characteristics of an organism.**



### Challenge: How is a monarch butterfly classified?



*Think About It ...*

*What is its scientific name?  
**Danaus plexippus***

*Which levels do monarchs have in common with humans?*

***The first two – eukarya & animal***

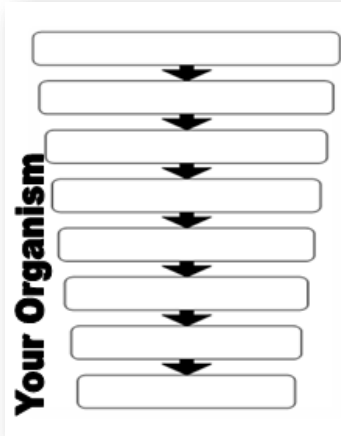
*Which levels would they have in common with another insect?*

***The first four levels  
Eukarya → Animal → Arthropoda → Insecta***

**1 - Your turn ... pick a plant or animal and complete a classification chart for it.**

**You will need to use a Google search to find the info!**

**2 - You also need to finish your Classification of Life worksheet from Friday.**



Glue this worksheet on page 6 (FAF) under your note worksheet.  
Complete for class tomorrow using what you have learned about classification.

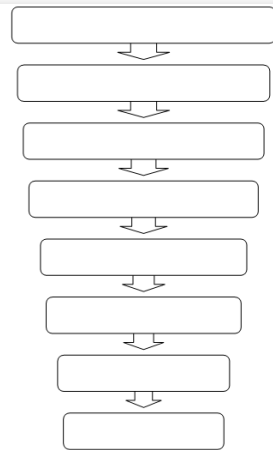
**Classification Challenge**

1. What are the eight classification groups from broadest (TOP) to the most specific (BOTTOM)? Fill in the boxes at right.

Word Bank: Family, Domain, Phylum, Genus, Order, Class, Species, Kingdom

2. Answer these questions about classification.

- A. Which level is divided into eukarya, archaea and bacteria? \_\_\_\_\_
- B. Which level has the largest number of different organisms? \_\_\_\_\_
- C. Which level is divided into 6 groups including plants & animals? \_\_\_\_\_
- D. Which level has only one type of organism? \_\_\_\_\_
- E. Where would you find more organisms: a class or a phylum? \_\_\_\_\_
- F. What do we call a group of related orders? \_\_\_\_\_
- G. An organism's scientific name is made using the \_\_\_\_\_ & \_\_\_\_\_.
- H. A house cat's scientific name is *Felis catus*. What's its genus? \_\_\_\_\_



***Which words do we know “scientifically”?***

<b>Term</b>	<b>Rating</b>	<b>Definition</b>
<b>Animals</b>		
<b>Autotrophs</b>		
<b>Bacteria</b>		
<b>Binomial nomenclature</b>		
<b>Cell</b>		
<b>Classification</b>		
<b>Eukaryote</b>		
<b>Evolution</b>		
<b>Fungi</b>		

<b>Term</b>	<b>Rating</b>	<b>Definition</b>
<b>Genus</b>		
<b>Heterotrophs</b>		
<b>Homeostasis</b>		
<b>Kingdom</b>		
<b>Metabolism</b>		
<b>Order</b>		
<b>Organism</b>		
<b>Plants</b>		
<b>Prokaryote</b>		
<b>Protist</b>		
<b>Protozoan</b>		

<b>Term</b>	<b>Rating</b>	<b>Definition</b>
<b>Reproduction</b>		
<b>Scientific name</b>		
<b>Species</b>		
<b>Taxonomy</b>		
<b>Virus</b>		