



## Kingdoms of Life

### **What I Will Be Learning In This Mastery Badge:**

In this mastery badge we will begin our study of living things and how they are classified. This will lay a foundation for the next three mastery badges that follow. You will learn how things are classified by scientists, and explore some of the disagreements that exist amongst scientists who work in this field. You will then be asked to choose a side. You will have to decide which scientists you most agree with, and present an argument as to why you believe that they are most correct.

### **What This Packet Includes:**

It is important that you complete all aspects of this packet so that you gain the knowledge and skills that we are working on.

#### **I. Discovering Lab**

A discovering lab is a fun, introductory lab, where we discover the knowledge on our own.

#### **II. Video Instruction**

You will watch a video presented by Mr. Bertoch, and answer questions about it.

#### **III. Literacy Practice**

Reading and writing are critical life skills, and also very important to science. You will read the assigned article and complete a writing prompt.

#### **IV. Applying Lab**

An applying lab is how you pass off the Mastery Badge. It serves as the quiz. It is a hands on demonstration that you have mastered the skills and content of this badge.

### **Key Things We Will Learn In This Mastery Badge**

Some of the most important things we will learn in this mastery badge:

- How living things are classified.
- Domain, Kingdom, Phylum, Class, Order, Family, Genus, Species
- What are the main kingdoms of life?
- Disagreement & Controversy

Name: \_\_\_\_\_

Date: \_\_\_\_\_



# Discovering Lab

## Learning Through Hands On Activities



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### Activity: Discovering How Living Things Can Be Classified

**Directions:** Follow the steps below to learn as much as you can about how living things might be classified. If you are unable to go outside, you can pick any living things that you want (from your imagination) to complete this assignment. Make sure you record all of your answers using complete sentences.



Video Instructions Available For This Assignment. Watch this video to learn how to do this assignment, and why it is important.

**Scan This QR Code To Watch Mr. Bertoch Give You Directions For This Assignment**

**Goal:** To learn as much as you can about how living things can be classified.

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**Step 1:** Go Outside (With Parental Permission). Collect samples from twenty different living things that you see. If you do not know their names that is okay. You can describe what they look like. In the case of plants, mushrooms, and mosses, take a physical sample back home with you.

In the case of animals, just take a picture (don't disturb any animals!). Insects and worms count as animals. Try to get a good variety of living things. Make sure that they are not all plants, all animals, or all mushrooms. Try to mix them up!

- 1.
- 2.
- 3.
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- 14.
- 15.
- 16.
- 17.
- 18.
- 19.
- 20.

**Step 2:** For this step you are going to create your own classification system. Don't worry about it matching anything created by other scientists. For this activity you are the scientist! Whatever you create is great! Just make sure to have at least three different categories. (Example: Green Things, White Things, Other Colors, or Hard Things, Squishy Things, Wet Things).

Classify your samples into each of your three groups.

**First Group:** \_\_\_\_\_

Which of my samples fit into this group?

**Second Group:** \_\_\_\_\_

Which of my samples fit into this group?

**Third Group:** \_\_\_\_\_

Which of my samples fit into this group?

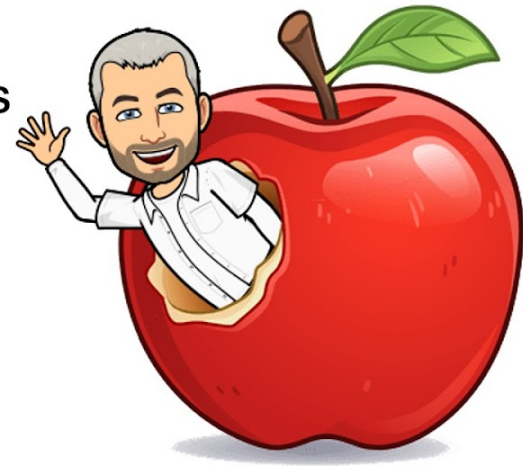
### Final Questions:

1. How does classifying your samples make them easier to compare or contrast to each other?

2. How might this help a scientist better understand an environment that they are studying?

3. Explain why you think scientists classify living things into categories.

4. Do you think that there is only one correct way to categorize living things? Explain your answer.



### **Handsome Science Teacher One Take Videos**

Now that you have completed the Discovering Lab let's watch the video that goes with it. In this video Mr. Bertoch will help connect the discoveries that you made during the lab to the broader concepts covered under this badge, and will also introduce the vocabulary that goes with these concept.

### **Take Your Time, Pause And Rewind As needed**

You are not in a hurry! It is more important that you understand the concepts in this video than that you finish it quickly. Take your time. If you don't understand something, pause the video and use the Internet or other resources to look up the concept that has you confused.

When you finish this video, you should have a good understanding of the concepts that have been taught. If you find yourself confused, rewind, and rewatch.

### **The Videos For This Mastery Badge Can Be Opened Using These QR Codes**

This Mastery Badge includes two video:



Watch The Assigned Science Videos

**Scan These QR Codes To Open And Watch The Assigned Videos For This Mastery Badge**

### **Check Point**

Let's make sure that you really did take your time and watch the video carefully! Remember that it is important to hold yourself accountable to a high standard and to take pride in your own success as a learner.

**I watched the video carefully, and paused to look up anything I didn't understand.**

### **Recording Your Learning**

On the next page, you will record your learning and connect it to things you already know.

### Ten Things I Learned From This Video

A powerful tool to help you retain what you learn is to take notes. Notes give you something that you can look back at later, to quickly remind your brain reinforcing the memories for the concepts you have learned. Record ten things that you learned or that you perhaps already knew that were discussed in this video.

- 1.
- 2.
- 3.
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- 5.
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- 7.
- 8.
- 9.
- 10.

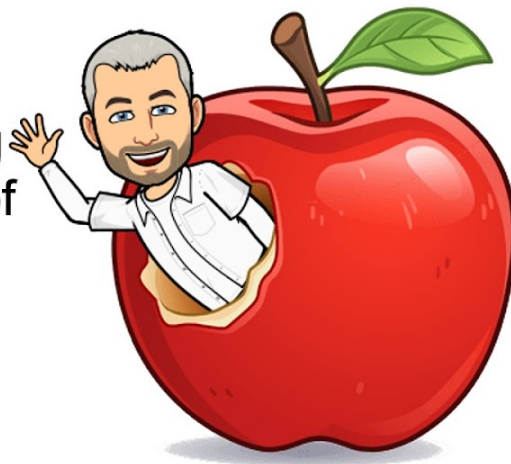
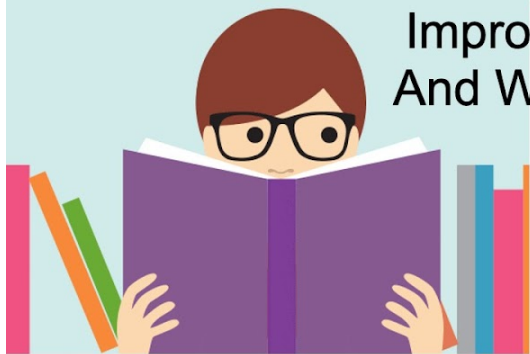
### Now, Let's Connect These New Concepts To Things You Already Knew

Another great way to help your brain retain new things is to connect these new concepts to other things that you already know. This gives your mind a place to store the new knowledge. Imagine that you are placing the new knowledge on a shelf in your brain next to facts that are already in there.

Write a paragraph explaining how the concepts taught in this video relate to things you already knew. There are no wrong answers. What are some things that you already knew that this video reminded you of?

# Literacy Practice

Improving Our Reading  
And Writing In Search of  
Knowledge



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## Activity: Reading And Writing About Biomes

**Directions:** Reading and writing are very important life skills. Good scientists must be able to learn through reading and communicate their own discoveries through writing.



Video Instructions Available For This Assignment. Watch this video to learn how to do this assignment, and why it is important.

**Scan This QR Code To Watch Mr. Bertoch Give You Directions For This Assignment**

### 1. Practice Reading For Understanding

Read the article below **for understanding**. Reading for understanding means that you take your time and monitor your own learning. If you get to the end of a sentence and you do not remember or understand what you read, **re-read it**.

### 2. Practice Writing To Communicate

Complete the writing prompt below. Do your very best to write clearly so that others will understand what you are saying. This means using correct spelling, grammar, and writing, taking your time to think about the best ways to clearly communicate to others the main ideas that you are trying to get across to them.

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## Article:



Read The Assigned Article Carefully For Understanding.

<https://handsomescienceteacher.com/Online-science-classes-kids/six-kingdoms-of-life/>

**Scan This QR Code To Open And Read The Article That Goes With This Mastery Badge**

### Check Point

Let's make sure that you really did read for understanding! Remember that it is important to hold yourself accountable to a high standard and to take pride in your own success as a learner.

**I Read For Understanding. I did not skim the article. I understood the material that the article discussed.**

### Quiz Time

Complete the quiz at the end of the article and post your score in the box below. Your goal is to get at least 75% on the quiz. Did you accomplish this goal?

%

### Now Let's Write To Communicate

Remember that when you write to communicate you are taking your time, and explaining the topic in a detailed and concise way. Don't rush! You are not in a hurry. Think about what you are going to say, and plan how you will say it. So that someone else who reads your paragraphs will understand them easily.

**Writing Prompt:** Write three paragraphs in your own words describing each of the kingdoms of life. Be detailed.



Name: \_\_\_\_\_

Date: \_\_\_\_\_



# Applying Lab

## Proving That We Can Do It Ourselves



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### Activity: Applying Classification Systems - Taking Sides

**Directions:** Now that you understand how the various classification systems function and how scientists use them to categorize living things, you are going to choose a side. Do you think that living things should be classified into five kingdoms or six?



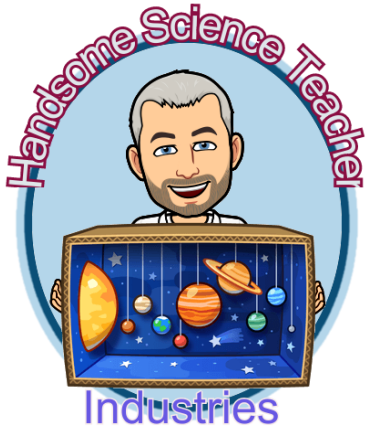
Video Instructions Available For This Assignment. Watch this video to learn how to do this assignment, and why it is important.

**Scan This QR Code To Watch Mr. Bertoch Give You Directions For This Assignment**

**Goal: To argue your opinion using evidence to prove that you are right**

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Choose a side! Do you think living things should be classified into five kingdoms or six? Write three paragraphs arguing why you believe that this is the case. Your answer must cite evidence to back up your opinion. Incidentally, it is okay to reject both of these systems and create your own system from scratch. If you choose this option explain your new system in detail including why it is better than the systems used by other scientists.



**Congratulations! You Have Completed The Entire Mastery Badge**

You have worked really hard to earn this mastery badge. More importantly, you have worked hard to earn your knowledge!

**Time To Evaluate Your Work**

Check each of the following to evaluate your work:

1. Did you do every assignment?
2. Did you read the assigned article?
3. Did you watch the assigned video?
4. Did you answer all the questions using complete sentences?
5. Are your answers accurate?

**My Self-Evaluation:**

Based on the criteria listed above, I believe I have passed off this Mastery Badge because...  
(Be detailed and specific)

**Mastery Badge Counselor Evaluation:**

I have reviewed this student's work. Based on the criteria listed above I hereby certify that they have passed off the Mastery Badge because... (Be detailed and specific) Note: Any adult may serve as a Mastery Badge Counselor, so long as they are committed to ensuring the highest standards of excellence.

\_\_\_\_\_  
Student's Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Mastery  
Badge Counselor

\_\_\_\_\_  
Date

## Certificate For Your Homeschool Records

The following certificate which has been awarded through self-evaluation by the student, and also certified by a mastery badge counselor proves that the student listed thereon has completed all the work and has mastered all the concepts for the specified topic.

**Keep this on file as evidence of your successful completion of this topic.**

If audited by the State, these certificates stand as evidence that you have worked on and successfully completed a rigorous science curriculum.

