



Biomes

What I Will Be Learning In This Mastery Badge:

This mastery badge will introduce you to the concept of biomes. By the end of this mastery badge you will be able to identify each major type of biome and accurately describe the factors within them. Including what types of living things inhabit these biomes, and how the climate affects these living things.

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:

- What is a biome?
- How climate affects biomes.
- Identifying major biomes.

Name: _____

Date: _____



Discovering Lab

Learning Through Hands On Activities



Activity: Discovering The Biome That I Live In

Directions: Follow the steps below to learn as much as you can about the biome that you live in. If you are unable to go outside, you can pick any biome that you want 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 the biome that you live in.

Step 1: Go Outside (With Parental Permission). List five different plants that you found. If you do not know their names that is okay. You can describe what they look like.

- 1.
- 2.
- 3.
- 4.
- 5.

Step 2: List five different animals that you found. If you do not know their names that is okay. You can describe what they look like.

- 1.
- 2.
- 3.
- 4.
- 5.

Step 3: Which of the following most accurately describes where you live? Desert, Forest, Grassland, Tundra / Taiga (cold), Aquatic (lots of water). Use your observations above to support your answer.



Step 4: Draw a detailed picture of what you think your homeland might look like if there were no buildings or people. Include each of the five plants and five animals that you listed above.



Final Questions:

1. How do you think climate affects living things where you live?



2. What role do plants play in providing food to the animals where you live?

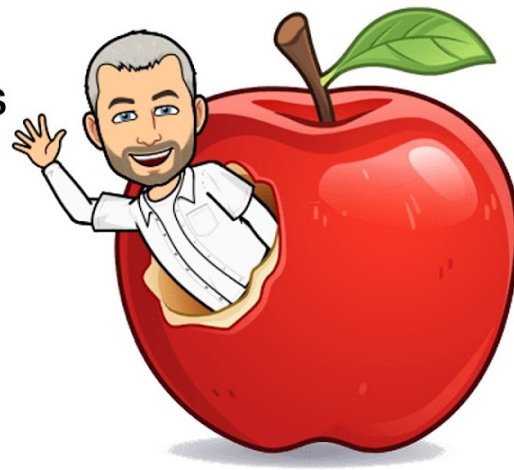


3. What role do animals play in the ecosystem where you live?



Video Instruction

Reviewing The Teacher's Instruction At My Own Pace



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 videos:



Watch The Assigned Science Videos

Scan This 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

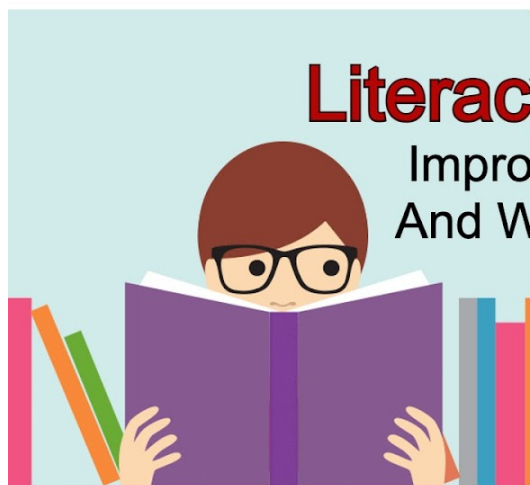
A powerful tool to help you retain what you learn is to take notes. Notes give you something that you can look back at later, to quickly remind your brain reinforcing the memories for the concepts you have learned. Record ten things that you learned or that you perhaps already knew that were discussed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

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

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

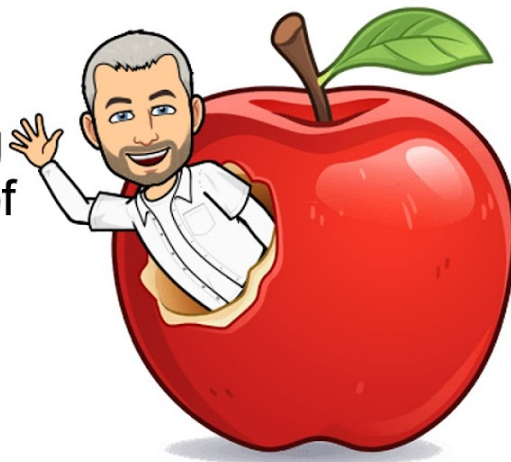
Another great way to help your brain retain new things is to connect these new concepts to other things that you already know. This gives your mind a place to store the new knowledge. Imagine that you are placing the new knowledge on a shelf in your brain next to facts that are already in there.

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



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.

Article:



Read The Assigned Article Carefully For Understanding.

<https://handsomescienceteacher.com/Online-science-classes-kids/biomes/>

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 two paragraphs in your own words explaining how scientists categorize different habitats and environments.

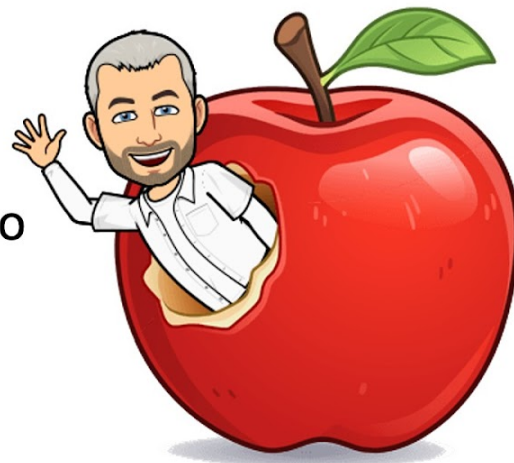
Name: _____

Date: _____



Applying Lab

Proving That We Can Do It Ourselves



Activity: Applying Biomes

Directions: You are going to create your own three dimensional model of a biome. Complete each step below to build your own model.



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 create your own model of a Biome

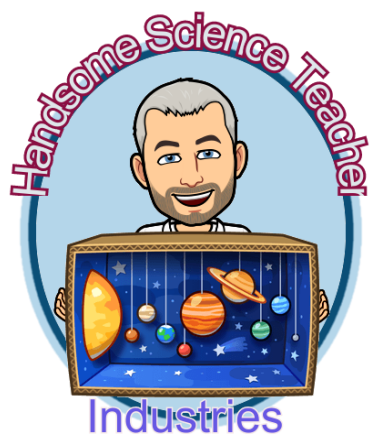
Step 1: Select a biome other than the one you live in. Examples: Desert, Forest, Tundra / Taiga, Aquatic, Grassland. Explain why you picked this biome.

Step 2: What kinds of living things inhabit your biome? Do research to identify living things that inhabit the biome you selected. List these living things below.

| Five Animals | Five Plants |
|--------------|-------------|
| | |
| | |
| | |
| | |
| | |

Step 3: To pass off this Mastery Badge, you need to create a detailed model including **ALL** of the producers, consumers, and decomposers that you listed above. Your 3d model can be made out of anything you want, such as clay, cardboard, or foam. **Include all of the following:**

1. Each item listed above.
2. Label your biome.



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.

