



Fossils Provide Us With A Record of The Past

What I Will Be Learning In This Mastery Badge:

In this mastery badge we will discover how fossils create a record that shows us the Earth's past.

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:

- Fossils form in different ways.
- Fossils show us what kinds of things lived on the Earth in the past.
- Fossils can be found all around us.

Name: _____

Date: _____



Discovering Lab

Learning Through Hands
On Activities



Discovering Fossils

Making your own discoveries.

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



Creating Your Own Fossils

Sometimes scientists recreate phenomena that they observe in nature in a lab in order to better understand them. In this activity, you will be creating your own fossils.



Supplies:

For this lab you will need clay, play dough, or homemade salt dough. You will also need living things to make fossils with, such as leaves, seashells, and your own hands (handprints).



1. Roll the clay out so that it's flat.
2. Take each living thing that you collected (leaves, seashells, your hands, etc) and gently press them into the clay.
3. Allow the clay to dry.

You Have Made Fossils! Good Job



Questions That Make You Think:

Always answer thinking questions using complete sentences.

1. In your experiment you used some type of clay. In nature clay is very common, but it isn't the only medium where fossils form. What are some other substances that you think fossils might form in?

2. How do you think fossils can be used to understand what life was like on the Earth millions of years ago?

Video Instruction

Reviewing The Teacher's Instruction At My Own Pace



Handsome Science Teacher One Take Videos



Good Job On Completing The Discovering Lab!
Now let's connect your discoveries to the vocabulary. Mr. Bertoch has created a video for you to watch.

Take Your Time, Pause And Rewind As needed
You are not in a hurry! It is more important that you understand the video than that you finish it quickly. Take your time. If you don't understand something, pause the video and discuss with an adult.

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 Video For This Mastery Badge Can Be Opened Using This QR Code

This Mastery Badge includes one video:



Watch The Assigned Science Video
Scan This QR Code To Open And Watch The Assigned Video For This Mastery Badge

Check Point

I watched the video carefully, and understood what Mr. Bertoch taught me.
(If not, that is okay. Watch the video again, and discuss it with an adult)

What I Learned From This Video



One very powerful way to help yourself remember what you learned from the video is to summarize it in your own words and in the form of pictures.

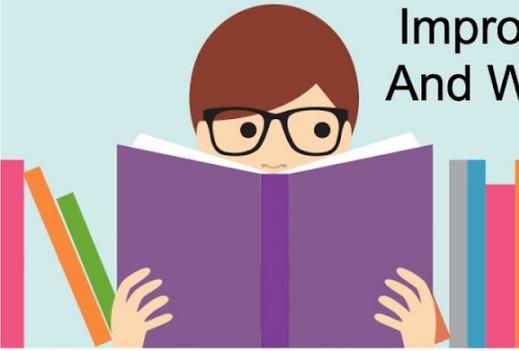
Write one sentence in your own words explaining what you learned from the video. Then draw a picture of something you learned from the video.

What I learned from this video (One Sentence):

A picture of something I learned from the video:

Literacy Practice

Improving Our Reading
And Writing In Search of
Knowledge



Activity: Reading And Writing



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.



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.



Read The Assigned Article Carefully For Understanding.

<https://handsomescienceteacher.com/Online-science-classes-kids/fossils-provide-clues-about-the-past/>

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 sentences will understand them easily.

Writing Prompt: Write two sentences describing how fossils form and how scientists use these fossils to understand the past.

Name: _____

Date: _____



Applying Lab

Proving That We Can Do
It Ourselves



Applying Fossils

Applying What We Have Learned.

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



Understanding The Past Using Fossils



This lab is going to require you to work like a detective in order to understand the past. The only clues you will have are fossils from long ago.

Your job is to examine each fossil, and then describe what life must have been like when these fossils formed. All of the fossils shown are from the same place and time period. Which means that they all lived together in the same environment.

Welcome Young Paleontologist To The Project!

Our team is working hard to identify thousands of fossils from long ago. Select a crate of fossils from off the shelf and get to work identifying them! These fossils will help us understand what the environment was like long ago.

	Fossil Type	What does this fossil tell us about the environment where it was found?
	<p>What kind of lifeform do you think this was?</p> <p>Leaf from a plant</p>	<p>What can we learn from the fossil?</p> <p>The leaf is broad. It looks like a leaf from a rainforest. The environment probably had a lot of water.</p>
	<p>What kind of lifeform do you think this was?</p>	<p>What can we learn from the fossil?</p>
	<p>What kind of lifeform do you think this was?</p>	<p>What can we learn from the fossil?</p>

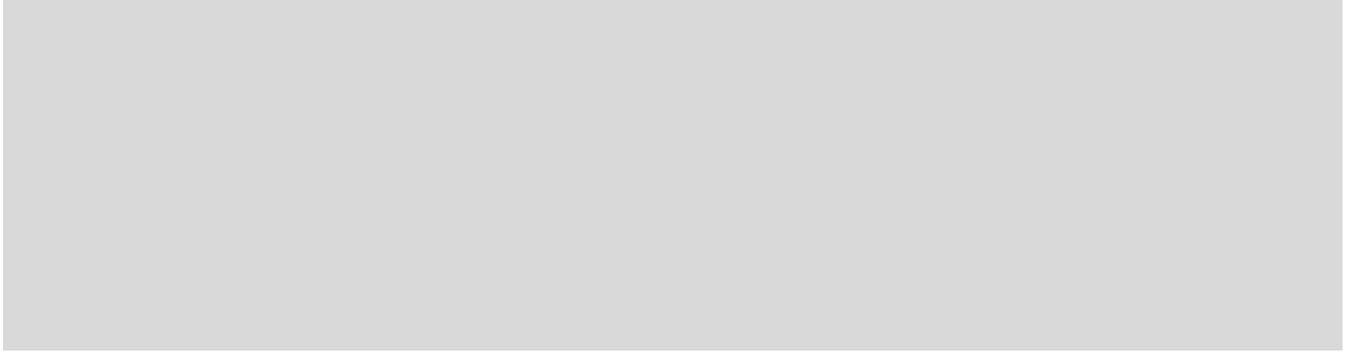
	Fossil Type	What does this fossil tell us about the environment where it was found?
	<p>What kind of lifeform do you think this was?</p>	<p>What can we learn from the fossil?</p>
	<p>What kind of lifeform do you think this was?</p>	<p>What can we learn from the fossil?</p>
	<p>What kind of lifeform do you think this was?</p>	<p>What can we learn from the fossil?</p>

Good Work My Young Paleontologist! Now, Let's Put The Clues Together

Wow, I know it is your first day as a paleontologist, but that was amazing! You have identified some very important information about this ancient environment and made many new discoveries.

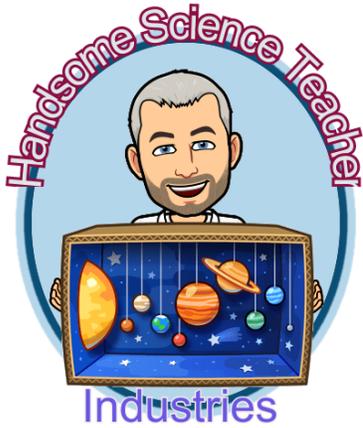
Now, put all these clues together to tell us what life was like in this ancient habitat.

1. Write two sentences describing what life was probably like in the ancient environment that you examined. Be detailed, and use the fossils as your evidence.



2. Draw a picture, showing what life was probably like in this ancient environment. Be detailed and include both plants and animals in your drawing.





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.



The certificate is framed by a decorative, repeating pattern of stylized faces. On the left side, there is a circular logo featuring a cartoon man with a beard and glasses, wearing a white lab coat, holding a tablet that displays a solar system with various planets. The text "Handsome Science Teacher" is written in a pink, curved font above the man, and "Industries" is written in a blue, curved font below the tablet.

Mastery Badge Certificate

Topic: Fossils

Student Name: _____

This certificate certifies that the person named above has completed all of the requirements to earn this Mastery Badge.

MASTERY BADGE COUNSELOR SIGNATURE

DATE AWARDED



A smaller version of the logo is located in the bottom right corner of the certificate.