



SCIENCE CAREER
ADVENTURES



Peighton the Paleobiologist: Fossil Evidence

Who is Peighton?



Hi, my name is Peighton! I am a paleobiologist. A paleobiologist studies extinct animals.

Here are some extinct animals that I have studied:

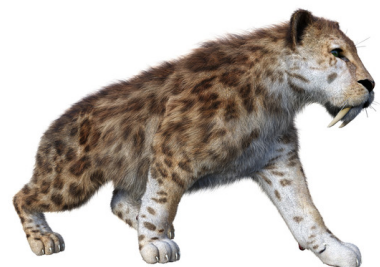
**Tyrannosaurus
Rex**



**Josephoartigasia Monesi
(A gigantic, 2200-pound
rodent)**



**Smilodon
(Sabertooth Cat)**



Starting a Podcast

Right now, I am creating a podcast to share information with the world about paleobiology. A podcast is a recording of someone talking about a specific topic. People listen to podcasts so they can get more information on a topic and learn about different opinions. People can listen to podcasts on a cell phone or computer.

My podcast is titled "Creatures from the Past." I want people to understand that paleobiologists study extinct animals and their fossils.

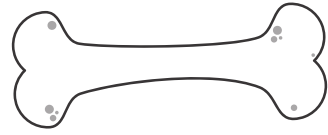


On my podcast, I will tell stories about my adventures studying extinct animals.

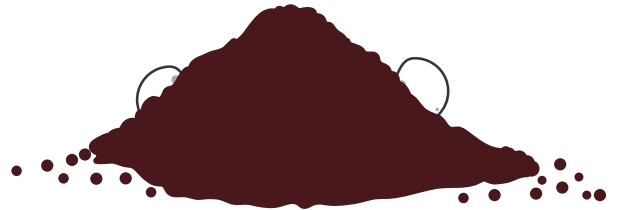
Recording a New Podcast Episode

My next podcast episode will start by discussing the steps that paleobiologists take to tell the age of a fossil.

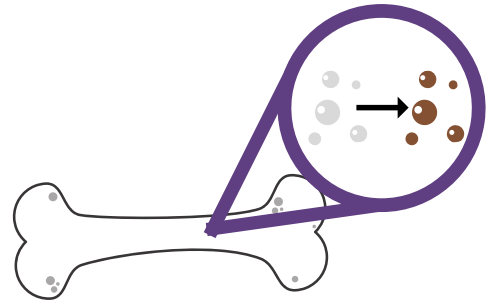
Step 1: An animal passes away and the soft parts of its body decompose, leaving behind the hard parts, like bones, teeth, and shells.



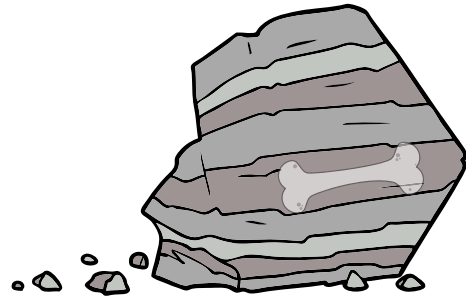
Step 2: Over time, the bones are covered in mud or silt. The mud has minerals inside of it.



Step 3: The minerals inside the bone gradually disappear and are replaced with minerals from the material that the fossil is buried in.



Step 4: Over time, pieces of the fossil can be shifted by water or movement of the Earth's tectonic plates. Sediment (small pieces of rocks and minerals) gradually build on top of the fossil, creating layers of rock.



Step 5: Scientists discover the fossil. Using the age of the rock layers surrounding the fossil, scientists can estimate the age of the fossil.



Recording a New Podcast Episode

The next part of the podcast will feature guest speakers from around the world! Dr. Jackie Clark and Dr. Chad Hook will be talking about their most exciting moments while being paleobiologists. Because Dr. Clark and Dr. Hook live in different parts of the world, I am recording their interviews over the phone. I will add them to the podcast later!

Here is what they said:

Dr. Jackie Clark from China said:

One time, I discovered the *Gomphotherium productum*. This extinct species of mammal is an ancestor of the modern-day elephant. From fossil discoveries, we can see that *G. productum* had tusks like elephants do today, but *G. productum* had four tusks instead of just two!



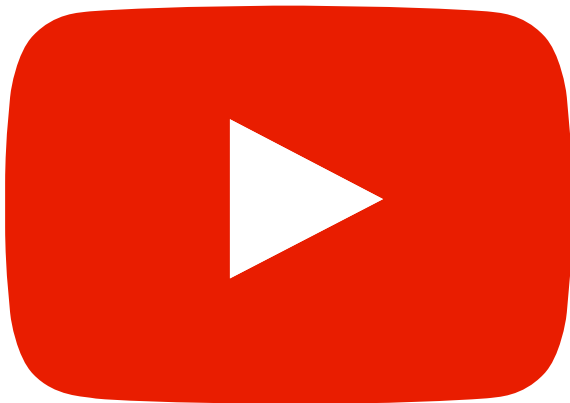
Dr. Chad Hook from New Mexico said:

My favorite discovery was the *Epirigenys lokonesis*. This discovery shows a link between hippos and whales. *E. lokonesis* is a common ancestor of hippos and whales, meaning that the hippo and the whale both evolved from the same animal! Scientists can see similarities in the jawbone and teeth fossils that show that the three organisms are related.



Posting the Podcast

After I record and edit the podcast, I upload it to my podcast channel. I also post it on Youtube so that the world can hear! Finally, I post on my Twitter account using the hashtag #favoritefossils. Once people watch the podcast, they can share their thoughts and use the hashtag.



@PaleoPeighton Check out the newest episode of my podcast! Tell me what you think! Use #favoritefossils

Did You Know?

Some fossils are of footprints, eggs, or animal burrows, rather than the animals themselves.



Fossilized poop is called coprolites. Scientists have found coprolites from *Tyrannosaurus rex* that contain bits of crushed bones.

