



## Junior Paleontologists Journal – Week 4



Welcome back, Junior Paleontologists!

Do you recall last week's mystery?

What is the bone that is V-shaped in the middle of the chest in this photograph of *Nothronychus*?



**Answer:** It is the wishbone, just like the wishbone in a Thanksgiving turkey. All birds have a wishbone.

Why is it important? Because it shows a direct connection to birds. Dinosaurs in the carnivore (meat-eater) category are the ancestors of birds. Or, another way to say that is, "BIRDS are DINOSAURS."

BONUS: A new YouTube video shows the variety of *therizinosaurs*, including our *Nothronychus* and some of the art from MNA. It uses a lot of confusing names, but it shows how strange this group is. The artwork is wonderful!

<https://www.youtube.com/watch?v=p4TrWckE5Gk>

For our fourth dinosaur for Junior Paleontologists, let us think BIG!

Our next dinosaur is HUGE. GIGANTIC. ENORMOUS.

This is my own favorite LARGE dinosaur.

It is a long-neck dinosaur from the Colorado Plateau, in New Mexico. It is a Jurassic giant. Its name will shake you up: *Seismosaurus* which means “Earth-Shaker Dinosaur.” Say it out loud: “SIZE-mo-SOAR-us.”



Look carefully at this picture of the skeleton on display at the New Mexico Museum of Natural History and Science. *Seismosaurus* is the giant long-neck dinosaur with the long tail. You can follow the neck all the way to the head, which is just below the flying pterosaur. The dinosaur attacking its neck is the giant predator *Allosaurus*. On the right side of the picture is *Stegosaurus*. All these dinosaurs are from the Jurassic Period.

### **Dinosaur Detectives and Artists:**

Puzzle: Can you figure out how long is the skeleton of *Seismosaurus* by using clues in this picture?

Or, can you draw this huge long-neck dinosaur and color it like you think it looked?

Or, can you write a story about this gentle giant?

Answer to Dinosaur Puzzle: How long was *Seismosaurus*?

*Seismosaurus* was about 120 feet long, or even longer. That is about 3 large size school buses in a line. The skeleton is so long its tail had to be curved backward to fit in the Jurassic Hall!



### **Dinosaur Detectives:**

Puzzle: How heavy was *Seismosaurus*?

Can you guess how many elephants it would take to be as heavy as *Seismosaurus*?

## Dinosaur Detectives on yesterday's puzzle:

How heavy was *Seismosaurus*? Answer: as heavy as 5 or 10 elephants, or even more. Can you see why Sam is called the Earth Shaker?



Now, let us think about what *Seismosaurus* ate. Does it look like a predator, or meat-eater? No, this long neck could only walk slowly on all four legs.

## Dinosaur Detectives:

Puzzle: What do you think this giant long neck dinosaur ate?

## Dinosaur Artists:

Can you make a drawing that shows *Seismosaurus* eating? Or, can you write a story or poem about this dinosaur?

**Tomorrow:** Stones!



**Dinosaur Detectives on yesterday's puzzle:** What did *Seismosaurus* eat?

Answer: plants plants plants.

All long necks had to feed on plants, all day long. And maybe all night long too! They had to eat all the time.

Did you already know what the long-neck dinosaurs ate?



This photograph shows the excavation of some of the bones of the tail, covered in plaster to protect them.

**Dinosaur Detectives:** Here is a huge mystery: what are these stones? We found them when we excavated *Seismosaurus*.

These stones were a BIG surprise!  
What do you think they are?



This picture shows my hand at the excavation, next to a rib of *Seismosaurus* still in the rock, and one of stones that we found. Does this give you any ideas on the answer to the puzzle?

**Dinosaur Artists:** Can you write a poem or a story about these stones that were found with the *Seismosaurus* skeleton?

**Dinosaur Detectives and Artists on yesterday's puzzle:** What are all those stones? They are stomach stones that the dinosaur had in its belly. Did you figure that out? Or write a story or poem about these stones?

Stomach stones are also called “gastroliths” which means “stomach stones.” Gastroliths are rare in dinosaur excavations. This was a lucky discovery!

Why were the stones in the belly? They are probably used to grind up the food in the belly. This was especially important because a long neck dinosaur would have to eat lots of food every day.

**Dinosaur Detectives and Artists: A Flying Dinosaur Puzzle**



What is happening here?

Is this a dinosaur rescue?

Or something else?

Can you imagine what's going on and write a story about it?

Have you ever seen a dinosaur fly?

Answer next Monday.

**Do you have any questions for Dinosaur Dave?**