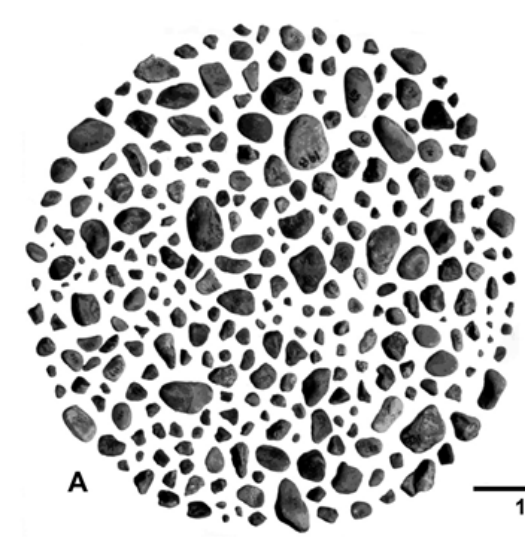


Junior Paleontologists Journal – Week 8



Welcome back Junior Paleontologists!

Dinosaur Detectives: What are all those stones from last week?



Answer: Do you remember gastroliths from the *Seismosaurus*? Yes, they are stomach stones from the MNA excavation of a short-neck plesiosaur – almost 300. They were inside, just below, and on top of the ribs.

Dinosaur Artists: Did you make a painting or a drawing, or write a story or a poem?

Now back to dinosaurs, but this time a dinosaur that lived in water.

A Dinosaur in a Watery World

Which would win: *T. rex* or *Spinosaurus*?

This is a hard question because they lived in different places. *Spinosaurus* (“SPY-no-SAW-rus”) has become popular as the dinosaur with huge spines on the back and a flat head with too many teeth.



Spinosaurus skeleton in a museum

Kabachi (Wikipedia)

Dinosaur Detectives: Look at the spines on the back. Can you figure out how they were used?

Dinosaur Artists: can you make a drawing or a painting that shows the spines on a *Spinosaurus*? Or can you write a story about *Spinosaurus*? Do you have any questions for Dr. Dave?

Dinosaur Detectives: did you come up with ideas on what the spines of *Spinosaurus* were for?

Answer: no one knows for sure. It looks like a sail, but *Spinosaurus* was too big to use like the sail of a sailboat. Maybe it was for gathering heat in the sun. Or, maybe these spines were for muscle attachment.



Kabachi (Wikipedia)

Dinosaur Artists: did you make a painting or a drawing, or write a story?



Descouens (Wikipedia)

Now look at the head. It is flat, with long jaws and lots of teeth.



Steveoc (Wikipedia)

Dinosaur Detectives: Does this head look like the head of any other dinosaur? Or any other animal that you know? Can you imagine where *Spinosaurus* lived by looking at the head?

Dinosaur Artists: Try to think how the jaws and teeth captured food and make a painting or drawing of your ideas. Or, write a story or poem about your idea on how they ate.

Dinosaur Detectives: Did you come up with ideas on where *Spinosaurus* lived?

Did you see that its head is a lot like the head of a crocodile?
Well, sort of like a crocodile.

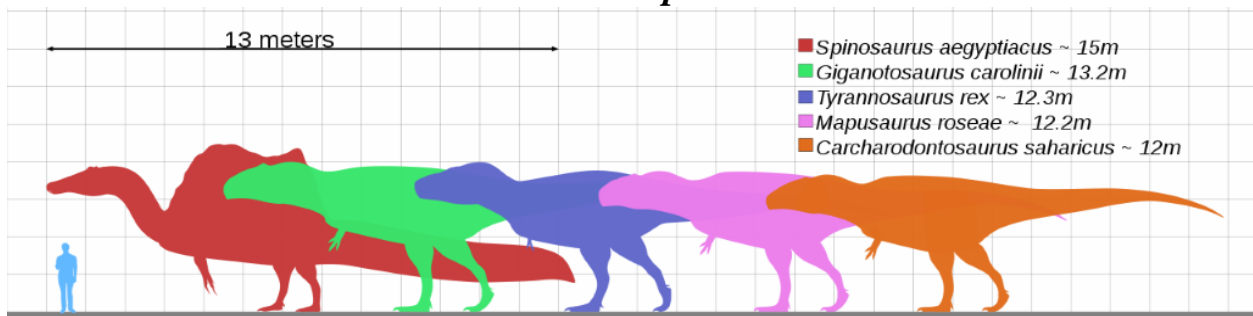


Steveoc (Wikipedia)

Answer: *Spinosaurus* probably spent most of the time in water but could also walk on land. All those teeth and the long, powerful jaws are for hunting anything that swam in water, like fish or crocodiles or even a dinosaur coming for a drink.

Dinosaur Artists: did you make a painting or a drawing, or write a story about *Spinosaurus*?

How BIG was *Spinosaurus*?



KoprX (Wikipedia)

Spinosaurus is the first dinosaur in this drawing (red). *T. rex* is the third dinosaur (blue).

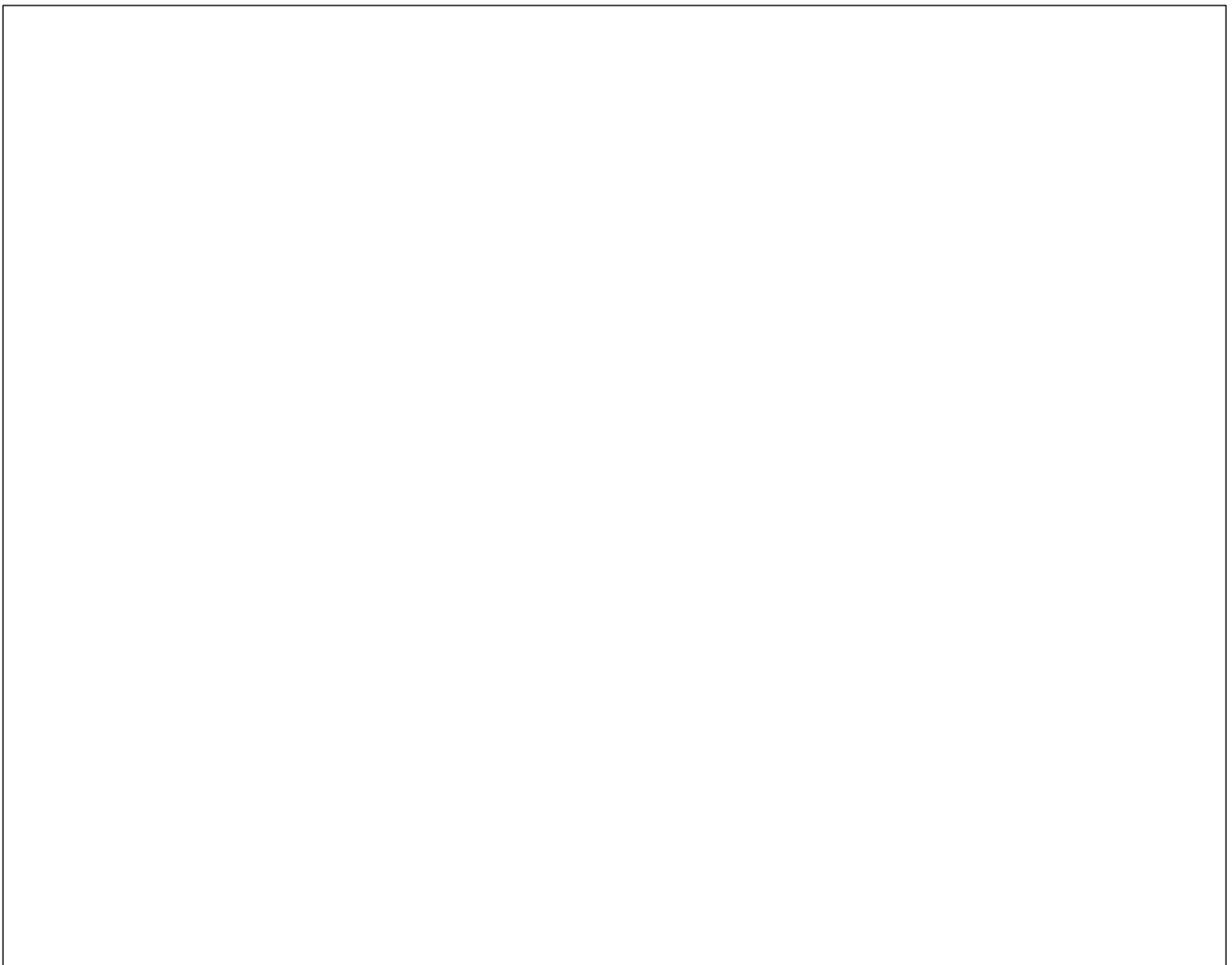
First, we can compare to a dinosaur you know: *Tyrannosaurus rex*. *T. rex* weighed as much as a large elephant. Think about that. *T. rex* walked on just two legs, and those two legs had to hold up as much as the four legs of an elephant!

And *Spinosaurus*? Surprise! Most paleontologists think that *Spinosaurus* was even BIGGER than *T. rex*.

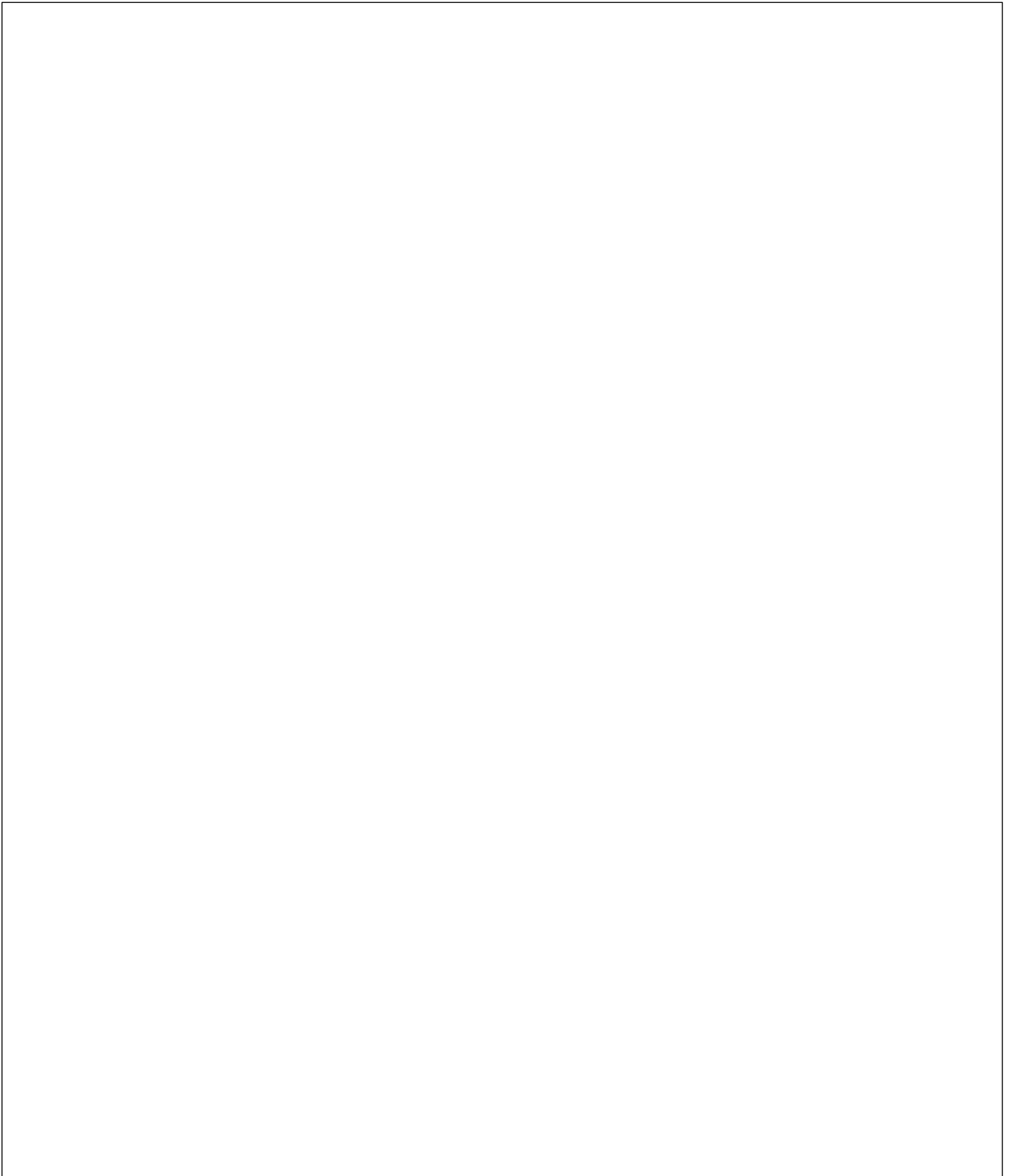
Answer: *Spinosaurus* weighed more than a large elephant. *Spinosaurus* was AWESOME!

Dinosaur Detectives: Now, how do you think *Spinosaurus* used the spines on the back? Remember, it lived in water like a crocodile.

Do you have any questions for Dinosaur Dave?

A large, empty rectangular box with a thin black border, intended for a drawing or painting of a Spinosaurus swimming in water.

Dinosaur Artists: Can you make a painting or a drawing of *Spinosaurus* swimming in water?





Kabachi (Wikipedia)

Dinosaur Detectives: Did you figure out how *Spinosaurus* used the spines on the back?

Answer: Maybe it was for steering while swimming in a current. Do you have other ideas?

Dinosaur Artists: Did you make a painting or write a story?



Spinosaurus swimming under water. By Kabachi (Wikipedia)

T. rex and *Spinosaurus* were the biggest predators that ever lived on land. But they lived in different places. *T. rex* lived in our area but *Spinosaurus* lived in Africa.

Dinosaur Detectives: Do you think *T. rex* and *Spinosaurus* could have lived in the same places, together?

Dinosaur Artists: Can you draw a picture or make a painting of *T. rex* and *Spinosaurus* together? Or can you write a story about them? Or a poem?

Dinosaur Detectives:

Could *T. rex* and *Spinosaurus* live in the same place together?

Answer: I think maybe they could live in the same place, with *T. rex* on land and *Spinosaurus* in water. What do you think?



Kabachi (Wikipedia)

Dinosaur Artists: Did you make a drawing or a painting? Or write a story or poem?

Back to the BIG QUESTION:

Who would win, *T. rex* or *Spinosaurus*?



Scott Robert Anselmo (Wikipedia)

Tyrannosaurus rex skeleton



National Geographic (Wikipedia)

Spinosaurus skeleton

Dinosaur Detectives: Who would win? Can you decide which one is THE KING??? Answer – next week. Do you have any questions for Dinosaur Dave?

Dinosaur Artists: Can you make a painting or a drawing that shows one of these dinosaurs wearing a crown as the KING OF THE DINOSAURS?

