



Day 5: Flagstaff Festival of Science Junior Paleontologists

Pentaceratops, Big Brother or Sister to Triceratops



Dave Gillette

Welcome back, Junior Paleontologists! To find more about this program, read the first page of Day 1. The best way to participate is to download and print each day's activities, and use those sheets to find answers, draw or paint your ideas, or write a poem or story. We will call this your Junior Paleontologist Notebook or Journal.

Remember

- Dinosaur detectives: all answers are good ideas.
- Dinosaur artists: all art is good art.
- Dinosaur writers: all stories and poems are good stories and poems.
- You are welcome to ask questions and try out your ideas.

Keep everything you make in your Junior Paleontologist Journal. When the Museum of Northern Arizona opens to the public, take your Journal to the front desk, ask for an official MNA Junior Paleontologist badge, and go see the fossil displays.

At the end of today's activities, I will give you an email address where you can send questions, your answers, your art, or your stories and poems.

Pentaceratops: Big Brother or Sister to Triceratops

Everybody knows *Triceratops*. It is a horned dinosaur from the Cretaceous Period. Its name means "three-horned face."

The horned dinosaur that lived in our area was *Pentaceratops*. "Penta" means "five."

Dinosaur Detectives

Can you figure out what "*Pentaceratops*" means?

Yes! It means "five horned face," for the five horns: two big ones behind the eyes, two small ones near the cheeks, and one big one over the nose. Now say "PENT-uh-SAIR-uh-TOPS."



This statue of *Pentaceratops* at the New Mexico Museum of Natural History was built by a sculptor who used a skeleton at MNA to get all the details correct. Its nickname is "Spike." It is as big as an elephant. Can you count the horns? (Hint: one horn is hidden on the other side of the head.)

Dinosaur Detectives

Can you imagine how Spike walked? What animal alive today is most like *Pentaceratops*? {Hint: it lives in Africa!} _____

Answer: a rhinoceros!

Dinosaur Authors

In the space below, write a story about a day in the life of this awesome dinosaur.

Dinosaur Artists

In the space below, make a drawing or painting that shows what colors *Pentaceratops* had.

That big flat area behind the horns is part of the skull we call the “frill.”

Dinosaur Detectives

How do you think this frill was used by *Pentaceratops*? Write your answer here.



Dinosaur Artists

Using the skeleton in this picture and the statue of Spike, can you draw a *Pentaceratops* and show how it used the horns (maybe for protection) and frill in the space below?

Dinosaur Authors

Can you write a story or poem about *Pentaceratops*?

Dinosaur Detectives

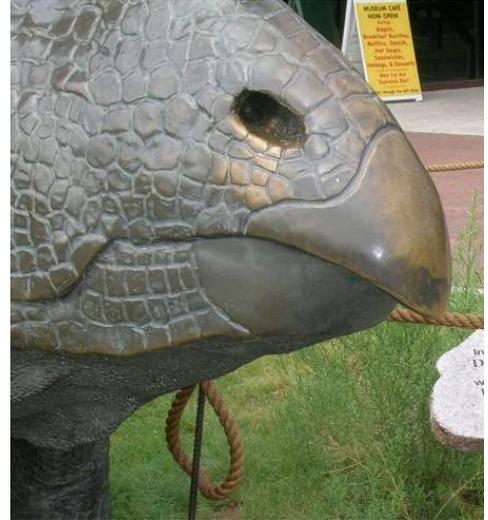
What were Sam's horns used for? _____

Answer: The horns were for protection from giant predators. The frill was probably used like a radiator to gather heat or get rid of heat and maybe to make it look even bigger!

Now check out the jaws of *Pentaceratops*. That big hole above the beak is the nose. Inside the mouth were lots of teeth for chopping plants. But it had no teeth at the front of the mouth. Instead it had a beak like on a parrot.

Dinosaur Detectives

Can you figure out how *Pentaceratops* used the beak? _____



Answer: *Pentaceratops* used the beak for chopping plants before chewing.

Dinosaur Artists

Can you imagine what Sam ate? If you can, make a drawing in the space below that shows *Pentaceratops* eating something.

Dinosaur Authors

In the space below write a story or poem about how *Pentaceratops* ate.

These pictures show the main enemy of *Pentaceratops*. It is a close relative of *Tyrannosaurus rex*. Now can you imagine how *Pentaceratops* used its huge horns?



Teaser for tomorrow:

Dinosaur Detectives

Triceratops and *Pentaceratops*: lived at the same time as *Tyrannosaurus rex* at the end of the Age of Reptiles. What happened to them? _____

Dinosaur Artists

Can you imagine what happened to the dinosaurs at the end of the Age of Reptiles? In the space below, draw a picture or make a painting to show your ideas.

Dinosaur Authors

In the space below, write a short story or poem about what happened to the dinosaurs.

Tomorrow: Out With a Whimper, or a BANG ?

You can send an email message to me at DavidDGillette2020@gmail.com. I would love to hear from you!