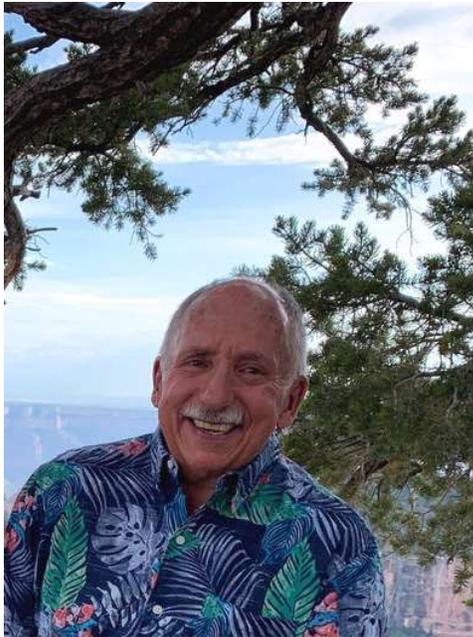




## Day 6: Flagstaff Festival of Science Junior Paleontologists

### Extinction of the Dinosaurs



Dinosaur 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.

## Dinosaur Detectives

Did you come up with an idea on what caused EXTINCTION of the dinosaurs? What is your best idea? \_\_\_\_\_

Today we will think about why the dinosaurs became extinct. That happened at the end of the Age of Reptiles about 65 million years ago. Something happened that caused the dinosaurs to be lost forever.

This is the greatest dinosaur mystery of all. And nobody knows for sure what happened.

One popular idea is that a HUGE meteorite hit the earth and the explosion caused fires and dust everywhere that killed all the plants and other food for dinosaurs. Here is one artist's idea:



## Dinosaur Detectives

How would a giant meteorite affect dinosaurs and other living animals and plants? Write your ideas in the space below.

**Answer:** After hitting the ground, the giant meteorite caused a huge explosion. The explosion caused fires and filled the air with enough dust to block sunlight. It also caused bad gases to build up in the air.

### **Dinosaur Artists**

Can you think of a dinosaur seeing the meteorite falling from the sky? What would happen next? In the space below draw or paint your ideas.

### **Dinosaur Authors**

Imagine a dinosaur watching a meteorite falling from the sky. In the space below, write a story or poem about your ideas.

Are there other ideas about dinosaur extinction? Yes, one important idea is volcanoes. Lava from volcanoes is VERY hot, but ash from volcanoes gets into the air and can block sunlight all over the world. Large volcanoes also make lots of dangerous gases.



### **Dinosaur Detectives**

How can volcanoes be dangerous to plants and animals? \_\_\_\_\_

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### **Dinosaur Artists**

In the space below, make a drawing or painting with a volcano and one of your favorite dinosaurs.

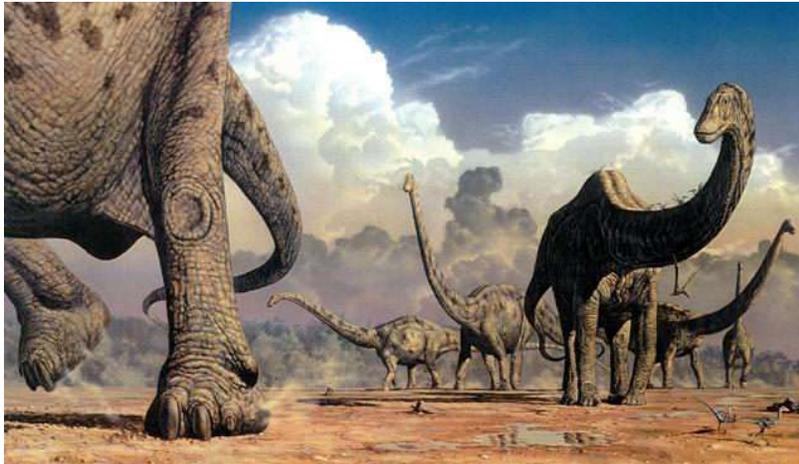
## Dinosaur Authors

In the space below, write a story about a huge volcano and dinosaurs.

**Answer:** How can volcanoes be dangerous to plants and animals? If they are close to the volcano, the lava and fire can be a huge problem. But farther away the poisonous gases and dust can get into the air and even turn day into night. When that happens, all plants and animals are affected.

So far, we have talked about meteorites and volcanoes that might have caused the extinction of dinosaurs. Are there other ideas? Yes!

Sickness might also cause extinction. I do not have any good pictures of sickness, so I am adding a picture of some dinosaurs here just for fun.



**Dinosaur Detectives:** What dinosaur is this? \_\_\_\_\_

**Answer:** This is *Seismosaurus*, shaking the ground!

## Dinosaur Detectives

Which dinosaurs became extinct? Which dinosaurs did NOT become extinct?

**Answer:** All the dinosaurs we have talked about so far in the Junior Paleontologist program. Some are famous, like *T. rex* and *Triceratops*. At the time of the great extinction there were hundreds of kinds of dinosaurs all over the world that also became extinct.



BIG dinosaurs became extinct. Smaller feathered dinosaurs did not.

## Dinosaur Artists

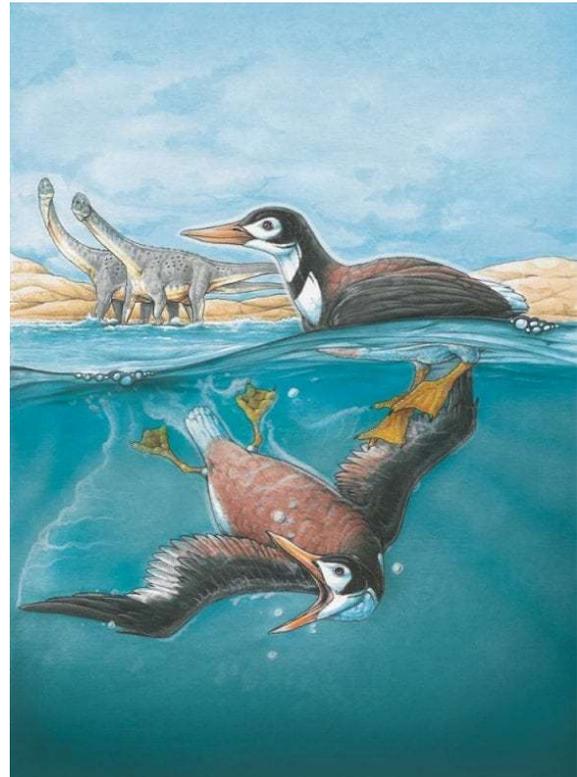
In the space below, make a drawing or a painting with GIANT dinosaurs and FEATHERED dinosaurs in the same picture.

## Dinosaur Detectives

Which dinosaurs did NOT become extinct? (Hint: they had feathers.)

**Answer:** SOME of the feathered dinosaurs did not become extinct – we call them “BIRDS!”

**Feathered dinosaurs (birds) that did not go extinct:**



## Dinosaur Detectives

Why did the big dinosaurs become extinct, but not the FEATHERED dinosaurs?

**Answer:** This is one of the greatest mysteries in all of paleontology. We do not have a good answer for this question.

### **Did You Know?**

Feathered dinosaurs (birds) had teeth when all the dinosaurs were alive. But after the extinction, feathered dinosaurs (birds) did not have teeth. No birds today have teeth.

Do you have a question for Dinosaur Dave?

**Tomorrow:** Avian Dinosaurs and Pterosaurs

You can send an email message to me at [DavidDGillette2020@gmail.com](mailto:DavidDGillette2020@gmail.com). I would love to hear from you!