

****Please note, these scripts were written to be put in a teleprompter and as such they are all right-aligned without indentations****

Kindergarten Level

VIDEO 1

Hi and welcome to Science!

Today, we are going to learn about animals that are no longer on the earth. These animals are called extinct.

A lot of these animals lived a very long time ago. No people were living on the earth back then.

We have to use something very special to learn about these animals—fossils! A fossil forms when an animal dies, and their bones are covered with dirt and sand. Everyday, wind and water bring in more dirt and sand. Over many years, the dirt and sand pile up and get *super* heavy. They push down so hard on the bone that it becomes part of the rock. And then the bone leaves a print, and we have a fossil!

Fossils can stay hidden in the earth for a really long time. When scientists find fossils, they dig them out of the dirt and rocks and learn about the animals they came from!

We have found a lot of fossils from one group of animals—Dinosaurs!

Let's learn more about a few dinosaurs. We'll start with one of the biggest dinosaurs! The tyrannosaurus rex, or T-rex for short.

T-rexes ate meat. They were so big, they could eat nearly any animal they found!

How big were they?

(pause)

A T-rex was about the size of a school bus! That's really big!

T-rexes walked on two feet and had very small arms, but they had really big heads and long tails.

Have you ever lost a tooth?

(pause)

When you lose a baby tooth, a new one grows back in its place. This happened for T-rexes, too. Their teeth were very important. Every few years, their teeth would fall out, and they would grow new ones. They needed to always have sharp teeth.

Luckily, not all their teeth would fall out at once, or else they wouldn't be able to eat! They would lose one tooth at a time. T-rexes are pretty cool, huh?

Let's learn about a dinosaur that ate plants. Have you heard of a triceratops?

(pause)

They were about the same size as an elephant.

Triceratops had many horns and spikes on their heads.

It kind of looks like a crown, but it's not.

If these horns weren't to make a crown, what were they for?

(pause)

They were used to help protect the triceratops from other dinosaurs.

Have you heard of an apatosaurus [uh-POT-uh-soar-us]?

(pause)

They were very long dinosaurs with very long necks. If you put two school buses next to each other, that's how long an apatosaurus was! Wow!

Their necks were long, kind of like a giraffe's. And just like a giraffe, apatosauruses ate plants! Those long necks would come in handy to reach the tops of trees!

Let's learn about another animal that is no longer on the earth.

This is a woolly mammoth. It kind of looks like an elephant, doesn't it?

They even had big, long tusks like elephants. Woolly mammoth tusks could be as long as 12 feet. If you put the bottom of the tusk on the floor, it would poke through the ceiling. That is very long!

Woolly mammoths lived a long time ago when the earth was covered in thick layers of ice and snow.

Luckily, they were prepared for the cold weather. Woolly mammoths were covered in thick hair to protect them from the cold, just like how you use a jacket to protect you from the cold.

They had long trunks that were split at the end. Their trunks were like fingers, allowing them to pick up plants.

They only ate plants. Woolly mammoths and triceratops must have spent most of their time eating. They would have had to eat a bunch of plants in order to get full! It probably would have taken all day for these big animals to eat enough food!

Dinosaurs and woolly mammoths are animals that are gone from the earth. They are extinct.

VIDEO 2 - Assignment 1

Today, we learned about dinosaurs!

Do you have a favorite dinosaur?

(pause)

Great!

Let's make your favorite dinosaur! To make this dinosaur, you will need playdough or clay. Get out your playdough and see which colors you have.

Think about what color your dinosaur should be.

Look at your play dough colors and pick one to work with.

Now it's time to build your dinosaur.

Make a body, a head, four legs, and a tail. You can look at pictures in the lesson video to remind yourself of what some dinosaurs looked like.

When you finish building your dinosaur, show it to someone. You can pretend your dinosaur is alive when you are done. What funny and interesting things can you imagine with your dinosaur?

VIDEO 3 - Assignment 2

We learned about dinosaurs today! Now you are going to do a dot-to-dot to make a dinosaur.

Ask a parent to print this handout.

Connect the dots together very carefully.

Connect the dot with the A to the dot with a B, then the dot with a B to the dot with a C. Keep going through the alphabet until you are done with the picture. If you need help, sing the alphabet song to remember which letter is next! Sit by a friend who can read in case you forget what a letter looks like.

Once you finish connecting all the dots, color in the dinosaur.

You can even give the dinosaur a name!

When you finish coloring, show the dinosaur to someone.

2nd Grade Level

VIDEO 1

Hi and welcome to Science!

We have four different categories for animals: thriving, threatened, endangered, and extinct.

These categories are based on whether or not an animal has all the things it needs to survive. What do you think an animal needs to survive?

(pause)

How about food, water, and shelter?

If an animal has all three of these things, it is thriving! It is happy and healthy, and it usually has a great big population!

If an animal is missing one or more of these things, it is considered threatened. When it isn't able to find the resources it needs, and the population gets really small, it is considered endangered.

That leaves one category left: extinct! We are going to talk about this today.

An extinct animal is an animal that is no longer on the earth. It's really sad when we lose animals from the earth, but luckily, we can learn from the past on how to prevent this from happening again.

This is a dodo bird. This isn't a real photo of a dodo bird—there weren't cameras back when they were alive to take pictures of them. But it's based on drawings made by people that actually saw dodo birds. The dodo bird lived on the island of Mauritius [muh-rish-us] in Africa.

The dodo bird was a flightless bird and had no predators. So why did it disappear?

(pause)

People moved to Mauritius and brought dogs, pigs, and other animals with them. These animals liked to eat the dodo bird eggs. The humans also disturbed their habitat by moving to the island. This caused all the dodo birds to die off in the 1600s.

Never again will a dodo bird live on earth. Let's use the story of the dodo bird as a learning experience. What do you think we can learn?

(pause)

We can learn the importance of protecting animals before they become extinct.

We can start protecting the animals now to save them from extinction. We can do this by making sure they have enough food and water.

It's not always humans that cause extinction. Some animals became extinct even before humans lived on earth.

But if there were no people, how do we know about some of these extinct animals from thousands of years ago?

(pause)

We learn about these animals from fossils. A fossil is made when a dead plant or animal is covered with soil and sand over time. After years and years, more soil and sand accumulate on top of the bones and plant matter. The build-up becomes so heavy and puts so much pressure on the plant or animal remains that they eventually become part of the rock, making a fossil.

There is a group of animals that lived thousands of years ago and is now extinct. We have found a lot of fossils of these animals. Can you think of what they might be?

(pause)

Dinosaurs! Most of what we know about dinosaurs comes from theories of scientists that study fossils.

Let's learn more about a few types of dinosaurs. We'll start with one of the most widely known—the tyrannosaurus rex, or T-rex for short.

“Tyrannosaurus” is the Greek word for “tyrant lizard,” and “rex” is the Latin word for “king.” That means “Tyrannosaurus rex” literally means “King of the Tyrant Lizards.” Seems like a fitting name for such a large animal!

Based on the fossils of T-rex skulls and teeth, scientists infer that they only ate meat. They were so big, they could eat nearly any animal they found!

How big were they really?

(pause)

A T-rex could be up to 40 feet long and 12 feet tall. They would weigh between 5 and a half and 8 tons. That's about the size of a school bus. These were massive creatures!

T-rex fossils have only been found in North America. Scientists believe that it took roughly 20 years for T-rexes to reach full size, and they would only live 5 to 10 years after that.

Let's learn about a dinosaur that eats plants. Have you heard of a triceratops?

(pause)

They weren't quite as long as the T-rex at only 30 feet, but they could weigh between 6 to 8 tons! That's roughly the same size as an elephant.

"Triceratops" means "three-horned face" in Greek. These dinosaur names are pretty descriptive, aren't they?

Triceratops had many horns and spikes, specifically on their massive heads. Kind of like a crown. This seems bizarre for an animal that didn't hunt, especially since they weren't the king of the dinosaurs—that was the T-rex.

Scientists have many theories on why they had these horns. Some believe they were used when they fought each other. Others believe they could have been decorative and showed maturity and rank amongst a group. Some scientists also believe these horns were used as protection against carnivorous predators.

Unlike the dodo bird, we don't know why dinosaurs became extinct. Some scientists believe all the dinosaurs died of some disease. Other scientists believe it was a natural disaster that killed them all.

Even the scientists who believe it was a natural disaster have different opinions on what natural disaster caused the extinction of dinosaurs. Some think it was an asteroid hitting the earth that destroyed all the plants, causing the dinosaurs to starve to death. Or that many asteroids caused massive fires. Others believe the extinction was caused by the earth freezing, which then froze the dinosaurs as well. Some believe there were massive volcanic eruptions that destroyed the dinosaurs' habitat.

Scientists will continue to study fossils and other remains. Maybe one day, we will know why the dinosaurs became extinct.

Let's learn about some other extinct animals.

This is a woolly mammoth. It's similar to our modern-day elephants. Unlike modern elephants, however, woolly mammoths lived during the Ice Age, when the earth was covered in thick layers of ice and snow.

Luckily, they were prepared for the cold weather. Woolly mammoths were covered in thick hair to keep them warm.

They also had massive tusks that were 12 feet long and could weigh as much as 200 pounds. Their long trunks were split at the end and functioned like fingers, allowing them to pick up plants, which was all they ate. Woolly mammoths and triceratops must have spent most of their time eating in order to get enough food for their huge bodies.

Just like dinosaurs, we aren't certain what caused the extinction of woolly mammoths. The most common theory is that a massive warming of the earth caused the extinction.

Woolly mammoths were uniquely made to handle the challenges of an icy earth, so the warm weather might have been too hot for them. The warming of the earth could have also killed off the plants they ate.

We have learned about a lot of animals: dodo birds, tyrannosaurus rex, triceratops, and woolly mammoths. It's too late to save these animals, but we can try to prevent other animals from becoming extinct. Extinct animals are gone from the earth.

VIDEO 2 - Assignment

Today, we learned about some extinct animals. Let's keep learning about them!

Choose an animal that is extinct. It can be a dinosaur that we didn't talk about in today's lesson or another animal. If you need help, use the internet to find a list of extinct animals.

After you choose an animal, research it.

Learn all about the animal. Fill out this handout by answering these questions:

What is the animal?

Where did it live?

What did it eat?

How big was it?

What might have caused its extinction?

Draw or print out a picture of your animal to add to your findings.

After you finish your research, share what you learned with someone.

8th Grade Level

VIDEO 1

Hi and welcome to Science!

We classify animals in four different categories: thriving, threatened, endangered, and extinct.

These classifications are based on whether or not an animal has all the things it needs to survive. What do you think an animal needs to survive?

(pause)

How about food, water, and shelter?

If an animal has all three of these things, it is thriving! It is happy and healthy, and it usually has a great big population!

If an animal is missing one or more of these things, it is considered threatened. When it isn't able to find the resource it needs, and the population gets really small, it is considered endangered.

That leaves one classification left: extinct! We are going to talk about this classification today.

An extinct animal is an animal that is no longer on the earth. It is really sad when we lose animals from the earth, but luckily, we can learn from the past on how to prevent this from happening again.

This is a dodo bird. This isn't a real picture of a dodo bird—there weren't cameras back when they were alive to take pictures of them. But it is based on drawings made by people that actually saw dodo birds. The dodo bird lived on the island of Mauritius [muh-rish-us] in Africa.

The dodo bird was a flightless bird and had no predators. So why did it disappear?

(pause)

People moved to Mauritius and brought dogs, pigs, and other animals with them. These animals liked to eat the dodo bird eggs. The humans also disturbed their habitat by moving to the island. This caused all the dodo birds to die off in the 1600s.

Never again will a dodo bird live on earth. Luckily, we can use the story of the dodo bird as a learning experience. What do you think we can learn?

(pause)

We can learn the importance of protecting animals before they become extinct.

We can start protecting the resources needed by threatened and endangered animals to prevent them from becoming extinct.

Some animals became extinct even before humans lived on earth.

But if there were no people, then how do we know about some of these extinct animals from thousands of years ago?

(pause)

We learn about these animals from fossils. A fossil is made when a dead plant or animal is covered with soil and sand over time. After years and years, more soil and sand accumulate on top of the bones and plant matter. The soil and sand build-up becomes so heavy that it puts great pressure on the plant or animal remains. These remains eventually become part of the rock, making a fossil.

There is a group of animals that lived thousands of years ago and is now extinct. We have found a lot of fossils of these animals. Can you think of what they might be?

(pause)

Dinosaurs! Most of what we know about dinosaurs comes from theories of scientists that study fossils.

There is no indication that any humans lived at the same time as dinosaurs, and if they did, they left no records for us to learn from.

Let's learn more about a few types of dinosaurs. We'll start with one of the most widely known—the tyrannosaurus rex, or T-rex for short.

“Tyrannosaurus” is the Greek word for “tyrant lizard,” and “rex” is the Latin word for “king.” That means “Tyrannosaurus rex” literally means “King of the Tyrant Lizards.” Seems like a fitting name for such a large animal!

Based on the fossils of T-rex skulls and teeth, scientists infer that they were carnivores. They were so big, they could eat nearly any animal they found!

How big were they really?

(pause)

A T-rex could be up to 40 feet long and 12 feet tall. They would weigh between 5 and a half and 8 tons. A school bus usually weighs about 5 tons. These were massive creatures!

T-rex fossils have only been found in North America. Scientists believe that it took roughly 20 years for T-rexes to reach their full size, and they would only live 5 to 10 years after that.

Let's learn about an herbivore dinosaur. Have you heard of a triceratops?

(pause)

They weren't quite as long as a T-rex at only 30 feet, but they could weigh between 6 to 8 tons! That is roughly the same size as an elephant.

"Triceratops" means "three-horned face" in Greek. These dinosaur names are pretty descriptive, aren't they?

Triceratops had many horns and spikes, specifically on their massive heads. Kind of like a crown. This seems bizarre for an herbivorous animal, especially since they weren't the king of the dinosaurs—that was the T-rex.

Scientists have many theories on why they had these horns. Some believe it was used when they fought each other. Others believe they could have been decorative and showed maturity and rank amongst a group. Some scientists also believe these horns were used as protection against carnivorous predators.

Let's look at another animal from this time period, the pterodactyl.

Did you know that a pterodactyl isn't actually a dinosaur?

It's a pterosaur [tare-o-saur]—a flying reptile. The word "pterodactyl" means "wing finger," which appropriately describes this flying animal with massive wings. The skeleton of a pterodactyl has four finger bones that are lined up one after the other to create the large wingspan.

Most pictures we see of pterodactyls are actually pictures of pteranodons [tare-an-o-donz], which are another type of pterosaur. Luckily, these two animals are pretty similar. They both ate fish, although pterodactyls also ate plants. Pteranodons were likely slightly larger than pterodactyls.

Unlike the dodo bird, we don't know why dinosaurs became extinct. Some scientists believe all the dinosaurs died of some disease. Other scientists believe it was a natural disaster that made all the dinosaurs die.

Even the scientists who believe it was a natural disaster have different opinions on what natural disaster caused the extinction of dinosaurs. Some think it was an asteroid hitting the earth that destroyed all the plants, causing the dinosaurs to starve to death. Or that many asteroids caused massive fires. Others believe the extinction was caused by the earth freezing, which then caused the dinosaurs to freeze as well. Some believe there were massive volcanic eruptions.

Scientists will continue to study fossils and other remains. Maybe one day, we will know why the dinosaurs became extinct.

Let's learn about some other extinct animals.

This is a woolly mammoth. It's similar to our modern-day elephants. Unlike modern elephants, however, woolly mammoths lived during the Ice Age, when the earth was covered in thick layers of ice and snow.

Luckily, they were prepared for the cold weather. Woolly mammoths were covered in thick hair to keep them warm.

They also had massive tusks that were 12 feet long and could weigh as much as 200 pounds. Their long trunks were split at the end and functioned like fingers, allowing them to pick up plants.

They were strictly herbivores. Woolly mammoths and triceratops must have spent most of their time eating in order to get enough food each day.

Just like dinosaurs, we aren't certain what caused the extinction of woolly mammoths. The most common theory is that a massive warming of the earth caused the extinction.

Woolly mammoths were uniquely made to handle the challenges of an icy earth, so the warm weather might have been too much for them. The warming of the earth could have also killed off the plants they ate.

Another animal that lived at the same time as the woolly mammoth was the saber tooth tiger. Contrary to their name, the saber tooth tiger is not actually related to the modern-day tiger at all.

They had long, curved teeth in the front of their mouth. These teeth are the largest teeth of any cat.

Even though these teeth were large and imposing, they were actually pretty fragile and only used to deliver the deathly last bite of a hunt.

Saber tooth tigers were carnivores and ate large mammals like bison and camels. The bison and camels they ate were very different from the bison and camels we have today.

Although we don't know for sure, the saber tooth tiger's extinction probably also came from the change in climate.

We have learned about a lot of animals: the dodo bird, tyrannosaurus rexes, triceratops, pterosaurs, woolly mammoths, and saber tooth tigers. We weren't able to save these animals, but

we can try to prevent other animals from becoming extinct. Extinct animals are gone from the earth.

VIDEO 2 - Assignment

Today, we learned about some extinct animals. Let's keep learning about them!

Choose an animal that is extinct. It can be a dinosaur that we didn't talk about in today's lesson or another animal. If you need help, use the internet to find a list of extinct animals.

After you choose an animal, research it.

Learn all about the animal.

Where did it live?

What did it eat?

How big was it?

What might have caused its extinction?

After you finish your research, write a two-page report on the animal.

Share your report with someone.