

## WORLD OF DINOSAURS INFORMATION SHEET

We are all familiar with the term “dinosaurs,” but most of us don’t know where it came from. The word’s origin is in Greek, and a paleontologist and biologist (scientist of the Earth, fossils and the world of animals) made the word official in 1841.

In Greek, “Dinos” means terrible, monstrous. And “zaurus” means a lizard.

So the word dinosaur means a huge lizard, a monstrous lizard. From their name alone, we can find out a lot about the dinosaurs we will study. As their name states, they are monstrous lizards.

So what else do we know about dinosaurs???

It’s important to remember that the information we know about dinosaurs was collected, investigated and checked by different people throughout many years. There are some things we will never know about dinosaurs, so we’ll always wonder about them...

Dinosaurs first appeared 250 million years ago, and disappeared 65 million years ago. We will find out the reason for their disappearance soon. In professional terms, the age of dinosaurs is called the Mesozoic Era. The Mesozoic Era was 190 million years long.

Dinosaurs lived on the Earth, like modern reptiles. They all, probably, laid eggs to reproduce. Dinosaurs went through an evolutionary process throughout the year – a process in which they changed physically and genetically.

In other words, dinosaurs developed to match themselves to the area in which they lived.

The same process happened to other animals who lived on Earth even before dinosaurs such as birds and sea animals.

It took millions of years for these animals to become the dinosaurs that we know today.

There are different families of dinosaurs, just like with the animals we know today. For example, we know that not all birds are chickens or pigeons, but there are different types of birds such as pigeons, eagles, and many others.

The same goes for dinosaurs.

As we go through this course, we will learn about the different families such as:

- Theropoda: Carnivores that included the famous T-Rex and the spinozaurus.
- Sauropoda: Huge dinosaurs that included the largest dinosaurs alive with the smallest brains. This family included the brachiosaurus and the diplodocus.
- Cerapoda: Small vegetarian dinosaurs

- **Marginocephalia:** Small vegetarians such as the Triceratops (the dinosaur we will build in are following lessons)
- **Thyreophora:** Small and medium-sized vegetarians such as the ankylosaurus and stegosaurus.

These are believed to have been the most common dinosaur families. An easier way to divide dinosaur types is by the terms carnivores and vegetarians.

A couple of questions arise:

Why are dinosaurs named this way? How do we even know how to divide them?

That's a very interesting thing.

Paleontologists, scientist who investigate fossils, found different types of dinosaurs in their studies.

The more skeletons and fossils they found, the more patterns they began to see between them. And that's how they divided dinosaurs into different families.

But how did the scientists know the dinosaurs' names?

Truth is, they didn't know the dinosaurs' names, but tried to come up with names that would match each dinosaur's characteristics. The names are in Ancient Greek.

Here are some examples of dinosaurs we know:

- Tyrannosaurus Rex (T-Rex): "Lizzard King Tyrant", because the T-Rex was the king of the dinosaurs
- Ankylosaurus: "Lizzard covered by roof" because it had a hard armor
- Velociraptor - "The quick thief" because he was a quick and small carnivore that could run as fast as almost as fast as a car.

You can look up the rest of dinosaur names, and find out where they came from.

But there's one more important question: where did the dinosaurs disappear? We learned that dinosaurs were extinct 65 million years ago. There must have been something that made these huge lizards disappear.

According to scientists there are 2 hypothesis (guesses) for the reason dinosaurs disappeared:

1. A huge meteorite hit the Earth.
2. A huge volcano exploded.

How can a volcano make all dinosaurs disappear?

The volcano didn't actually make all dinosaurs disappear, but started the process of their disappearance.

So let's understand what really happened...

A volcano explosion or a huge meteorite created toxic gas clouds that burst into the atmosphere. In other words, toxic gas went into the air and blocked the sun. But the darkness isn't all that hurt the dinosaurs.

Let's try to think who was mainly hurt by the darkness.

If you thought it were the plants, then you were right! Plants go through a process called photosynthesis, in which they use sunlight to make oxygen (air) and energy.

Therefore, the plants were the first to be hurt.

As some of you know, most dinosaurs were vegetarians, so they had no food. The lack of plants brought the extinction of the vegetarian dinosaur family, and then the extinction of the carnivore family who couldn't find food.

Many scientists think that only a very small number of animals from that period survived and became the animals we know today – birds, reptiles and insects.

The Jurassic world became very well known dozens of years ago, when movies were made about that period and about dinosaurs.

We will study the dinosaur we will build in depth in our next lessons.