

# Introduction

Dinosaurs first appeared on Earth more than 250 million years ago. For most of that time these enormous animals roamed throughout the world.

They were the kings of this planet. Humans, who appeared much later, are just four million years old at the most.

Dinosaurs had no natural enemies. Yet, 65 million years ago, they disappeared.

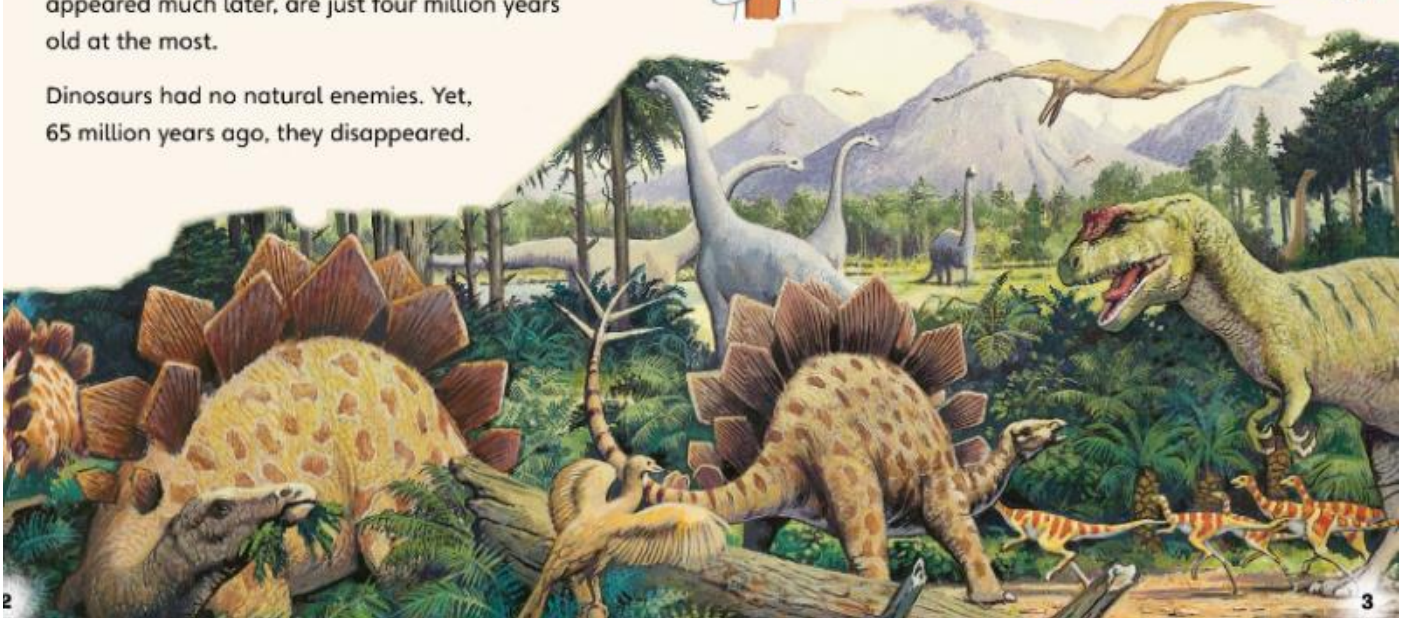
The big question is **Why?**

There are two main theories about what happened to the dinosaurs. Scientists have been arguing about theories for years.



**Theory One:**  
**The Great Disaster Theory**

**Theory Two:**  
**The Slow Death Theory**



## Theory One:

### The Great Disaster Theory

This is what some scientists believe:

A giant lump of rock, or **meteor**, from outer space crashed into Earth about 65 million years ago.



The crash was so violent that it left a huge dent (called a **crater**) on the surface of Earth.

When something like that happens, huge amounts of dirt and dust are thrown high up into the air.



There was so much dust that it blocked out the light and heat of the Sun for many months, perhaps even years.

Without sunlight, plants could no longer grow.

Some dinosaurs ate plants. They needed tons of plants each day, so they died first when the plants disappeared.

As the plant-eating dinosaurs died, the meat-eaters who hunted them had less and less to eat.



The dust cleared at last and the Sun shone again, but by then it was too late for the dinosaurs. They had all starved to death.

It might have happened even faster than that.

Some scientists believe dinosaurs needed sunshine to warm them up. If this was so, they would have died from the cold even before the food ran out.

## Theory One:

## Evidence For The Great Disaster Theory

What evidence do scientists have for this theory?

When scientists dug down to what was the surface of Earth 65 million years ago, they found a layer of metal called **iridium**.

Iridium is very rare on Earth's surface. It is much more common in rocks in outer space.

*Iridium can be seen in this layer of rock.*



*Fossil skeletons tell us about the dinosaurs that died.*



Scientists also found a type of brittle rock, called **quartz**, at the same level as the iridium. The quartz had cracks in it. The cracks were the sort you would expect to find if something struck Earth very hard.

Scientists also discovered lots of glass beads that they thought had been formed in the explosion when the meteor struck Earth.



*A close-up photo of cracked quartz*



Then, in June 1990, scientists found an enormous crater in Mexico. They believe the crater was made by a meteor that crashed to Earth 65 million years ago.

