

## Theory Two:

### The Slow Death Theory

However, some scientists believe another theory.

This is what they believe:

At the time the dinosaurs appeared on Earth, there was only one enormous stretch of land on the whole planet. The dinosaurs roamed across almost every part of it.



*This enormous land mass, called Pangaea, existed over 200 million years ago.*

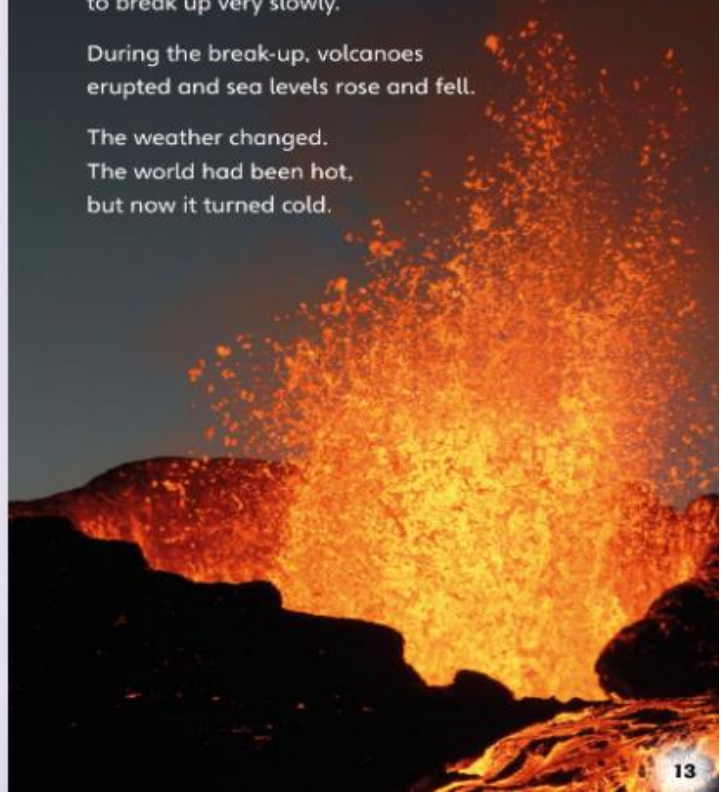
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Over millions of years, though, this great mass of land started to break up very slowly.

During the break-up, volcanoes erupted and sea levels rose and fell.

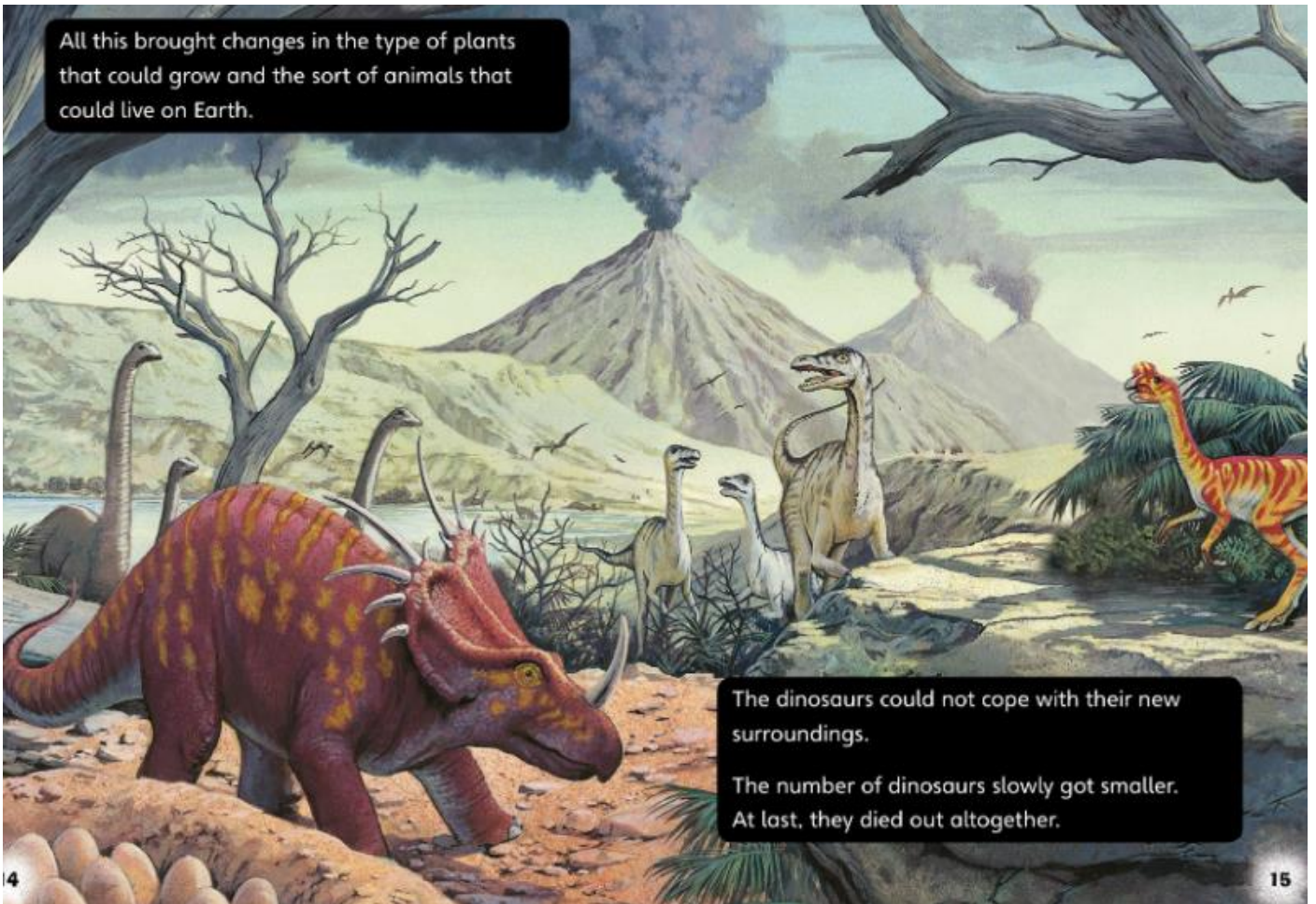
The weather changed.

The world had been hot, but now it turned cold.



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All this brought changes in the type of plants that could grow and the sort of animals that could live on Earth.



The dinosaurs could not cope with their new surroundings.

The number of dinosaurs slowly got smaller. At last, they died out altogether.

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## Theory Two:

### Evidence For The Slow Death Theory

What evidence do scientists have for this theory?



*This crack in Earth's surface shows where two continents are moving apart.*

Scientists now know that all the **continents** of the world are moving apart very, very slowly.

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Pangaea



About 100 million years ago



Today



*The break-up of Pangaea*

Scientists can tell that there was once a time when all the continents were pressed together in one great mass of land. If you look at a world map today, you can see how well Africa once fitted up against North America and South America, like pieces of a jigsaw puzzle.

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fossils found on high land

sea

Fossils of sea creatures have been found on high land and low land. This shows that the sea levels rose and fell millions of years ago.



*Fossil of a fish*

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Scientists have studied layers of melted rock, called **lava**, which is produced when volcanoes erupt. The lava shows that many volcanoes must have erupted at the time that the dinosaurs disappeared.



*Lava flowing from a volcano*

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## Which Theory Is Right?

A problem for scientists is that the same evidence can be used to support both the Great Disaster Theory and the Slow Death Theory.

A meteor crashing into Earth will produce glass beads, iridium, and cracks in quartz.



Volcanoes erupting will also produce glass beads, bring up iridium from deep inside Earth, and cause cracks in quartz.



In the years ahead, scientists might find evidence for a new theory. Perhaps they will find evidence that will settle the matter once and for all. Until they do though, the argument continues.

