



The Beginning

1 MATCH THE DINOSAUR

Copy and cut out these five different dinosaur pictures and their dino descriptions. Pupils have to match each dinosaur with the correct name and its description.



Name
GIGANTOSAURUS
Description
FLESH-EATING ALLOSAUR



Name
TRICERATOPS
Description
HORNED CERATOPSIAN WITH A NECK FRILL



Name
TYRANNOSAURUS REX
Description
MASSIVE MEAT-EATING PREDATOR



Name
DEINONYCHUS
Description
FAST-MOVING PREDATOR



Name
STEGOSAURUS
Description
BONY-PLATED BACK

DEBATE
Some scientists now argue that the heavy Tyrannosaurus rex was too slow to hunt live prey, and instead scavenged from corpses killed by others. Pupils could have their own debate 'Killer King vs Carcass Cruncher' and vote at the end for which category they think T Rex falls into. Visit the Natural History Museum website www.nhm.ac.uk and go to The Killer Question section to find out more information.

2 EXTINCTION SOAPBOX

What wiped out the dinosaurs 65 million years ago? Three different members of the class put forward three different theories, and at the end the class votes on which theory they think is the most likely. Perhaps it was a combination of factors that led to the dinosaurs' extinction?

THEORY 1: ASTEROID SMASH

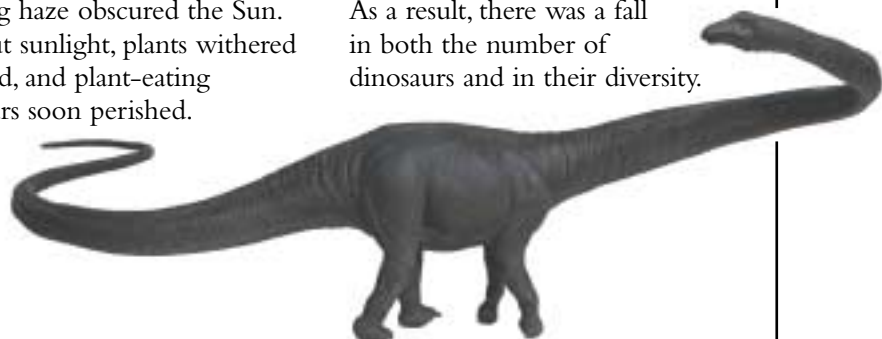
Scientists have discovered a dark thread in the rock that marks the end of the Cretaceous period. It contains a large amount of a metallic element called iridium that is rare on Earth, but which is commonly found in asteroids and meteorites. This suggests that an asteroid may have smashed into Earth and destroyed much of its life at the time.

THEORY 2: VOLCANIC FURY

The end of the Cretaceous period was a time of intense volcanic activity. These eruptions and explosions poured carbon dioxide into the atmosphere, and the resulting haze obscured the Sun. Without sunlight, plants withered and died, and plant-eating dinosaurs soon perished.

THEORY 3: DINO DECLINE

Geographical changes, such as the movement of tectonic plates, meant that certain regions were carried nearer to the poles and exposed to lower temperatures. As a result, there was a fall in both the number of dinosaurs and in their diversity.





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3 FOSSIL FORMATION

The four different stages of the most common fossil formation are outlined here, from Peter Ackroyd's *The Beginning*. Pupils have to match the correct illustration to its description.

HOW A FOSSIL IS FORMED

One of the most common types of fossil occurs when minerals fill pores in the hard tissues of an animal or plant and solidify. The soft parts of the organism rot away, leaving a fossil.

<p>1 DECAY The slowly decaying carcass of a dead Procolophon reptile lies exposed on the Earth's surface.</p>	<p>2 BURIAL Shallow streams sweep sediment such as sand and gravel over the reptile's body until it is completely buried.</p>	<p>3 FOSSILIZATION Under pressure over millions of years, sand around the skeleton turns to rock, and the bones become a fossil.</p>	<p>4 EXPOSURE The process of erosion, together with natural movements of the Earth, expose the fossil at ground level.</p>

4 THE MAKING OF FIRE

This extract from Peter Ackroyd's *The Beginning* is all about the discovery of fire (page 130). Ten words have been omitted, and pupils have to use their judgement to fill in the gaps, using the words from the list below.

Fire was the greatest _____ made by _____ people. It enabled them to keep _____ when the _____ became much colder than it is today. It helped them to keep wild _____ at bay, and _____ the tips of wooden spears. Fire also cooked _____, making certain _____ meats and plants edible, and so enlarged the food supply. The great advance came when people found out how to make _____ by rubbing _____ together to make heat.

- hardened fire
- indigestible sticks
- warm discovery
- animals food
- climate prehistoric

MIME TIME
Ask the pupils to mime the discovery of fire for the very first time. How would they feel? Would they be scared, happy or worried? Discuss the properties of fire, e.g. it provides heat and light, but it is also dangerous. How might prehistoric people have reacted to this?



PETER ACKROYD THE BEGINNING