

Dinosaur facts

What are fossils?

Fossils are the remains of once-living plants and animals that have been preserved in rock. These remains were buried in soft sediment such as sand or mud, which over millions of years became sedimentary rock. The fossils are part of the rock.

What are dinosaurs?

Dinosaurs are a group of reptiles that dominated life on land for more than 160 million years during the Mesozoic Era. Dinosaurs were different from the reptiles alive today because of their posture (how they stand). They stood upright whereas other groups of reptiles, such as crocodiles and lizards, stand with splayed legs – their thigh bones almost parallel to the ground.

When did dinosaurs live?

Dinosaurs lived between around 230 and 66 million years ago, during the Mesozoic Era. Not all types of dinosaurs lived at the same time. [Activity 1: Dinosaur timeline]

Where did dinosaurs live?

Dinosaurs lived on land all over the planet. Fossilised dinosaur remains have been found in countries on every continent, including Antarctica. Famous fossils have been found in Argentina, Australia, Brazil, Canada, China, France, Germany, India, Morocco, South Africa and the USA, as well as many other places, including all of the countries in the UK. [Activity 2: Discover a dinosaur]

What is Dippy's scientific name?

All fossils have a scientific name. Dippy's proper name is *Diplodocus carnegii*.

The name *Diplodocus* means 'double beam'. This refers to the double-beamed chevron bones on the underside of the tail.

When did Dippy live?

Dippy lived during the Late Jurassic Period, around 150 million years ago. This is in the middle of the Mesozoic Era. [Activity 1: Dinosaur timeline]

Where did Dippy live?

Dippy lived in what is now Wyoming in the USA.

What did Dippy eat?

Dippy ate plants, but not flowering plants because they had not yet evolved. [Activity 6: Dinosaur dinners]

Is Dippy a real fossil?

Dippy is not a real fossil. He is a cast plaster of Paris replica, carefully made from the fragile original bones. There are 10 other *Diplodocus* casts like Dippy in museums around the world. The original fossil skeleton is on display at the Carnegie Museum in Pittsburgh, USA.

What else was alive at the same time as Dippy?

- *Diplodocus* (sauropod dinosaur)
- *Allosaurus* (theropod dinosaur)
- *Camarasaurus* (sauropod dinosaur)
- *Ctenogenys* (a superficially crocodile-like reptile)
- *Docodon* (mammal)
- *Glyptops* (turtle)
- *Hoplosuchus* (small crocodilian)
- *Iridotriton* (salamander)
- *Mesadactylus* (pterosaur, winged reptile)
- *Mymoorapelta* (ankylosaur)
- *Stegosaurus* (stegosaur dinosaur)
- Wollemi pine conifer
- *Dickinsonia* (tree fern)

[Activity 10: Dinosaur habitats]

How are dinosaurs and birds related?

Birds are the living members of a group of dinosaurs called the theropods. They survived the huge extinction event that occurred 66 million years ago, which wiped out the non-avian dinosaurs as well as many other groups of land and sea animals, such as ammonites and plesiosaurs.

Fossils from Germany and China provide evidence that birds lived at the same time as dinosaurs during the Late Jurassic and Cretaceous periods.

What evidence do we have that birds and dinosaurs are related?

Victorian scientists suggested that birds might be related to reptiles because both groups of animals lay eggs. Clues from fossils that helped palaeontologists link birds to dinosaurs are the shape of their bones, the presence of feathers and their body shape. Like birds, some dinosaurs may have sat on eggs and cared for their young in a nest.

Who studies dinosaurs?

Scientists who study fossils, including dinosaurs, are called palaeontologists.