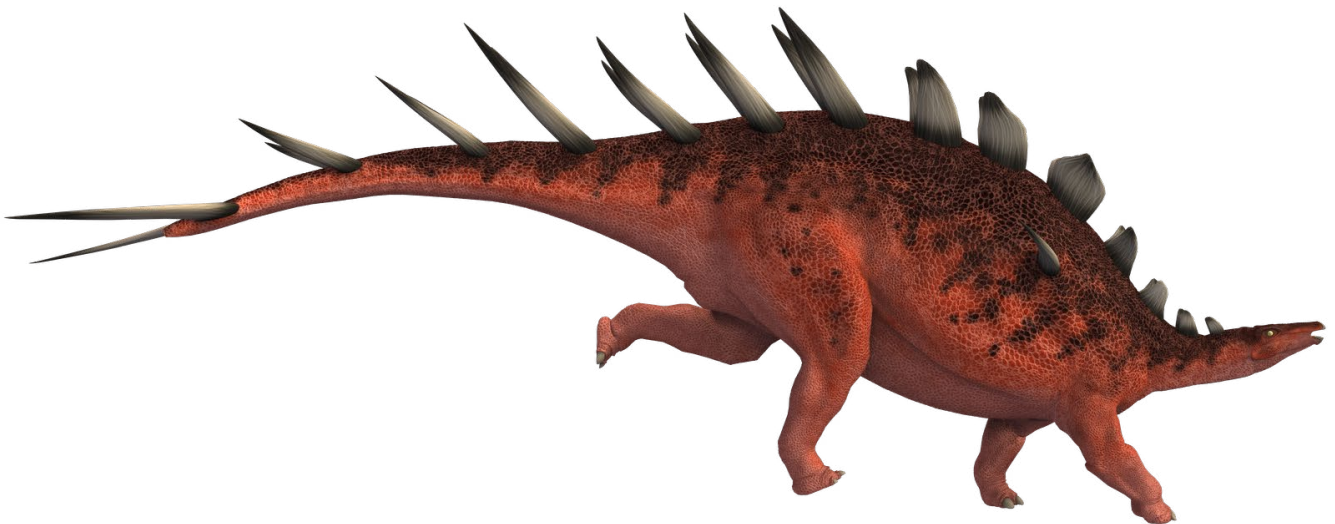


How Dinosaurs Gradually Changed (Evolution)

Many dinosaurs changed over long periods of time to become new species. This process is called evolution. It is the reason why many dinosaurs are grouped into families. Many dinosaurs (and animals and plants) that look similar are related, sharing a common ancestor.

Sometimes groups that appear related by appearance simply developed the same features by coincidence, or possibly due to environmental pressures. At times a particularly successful feature would cause the animal to thrive, and eventually split into separate species that had the same basic features. There are many examples of dinosaurs that illustrate this point. They include the tyrannosaurs, the massive long-necked and long-tailed sauropods, the horned and frilled ceratopsids and the spiky-tailed and plate-backed stegosaurus. Each member of these families was similar, but also had some features that were different. Examples would be Stegosaurus and Kentrosaurus, or Abelisaurus and Majungasaurus.



For some time there has been a theory that birds actually evolved from dinosaurs. This is based on skeletal structures and other evidence. However, it has not been until recently, with newer discoveries, that this theory has been more accepted. Some amazingly well preserved



fossils have shown that many dinosaurs were covered, at least partly, with feather like coverings. One particularly well-known species is Archaeopteryx, which is considered to be a linking species between birds and dinosaurs.

Evidence shows that Dromeosaurids were a family of feathered theropods (the group that includes T. Rex) and that included the tiny flying Microraptor, Velociraptor and

Deinonychus. Some evidence even points to feather like coverings on giant carnivores such as T Rex!



Artist interpretation of how a feathered Ornitholestes may have looked.