Why did some dinosaurs have horns?

As we know, dinosaurs were all very different, which means that these accessories had lots of different uses.

Dinosaurs had some interesting decorations, from horns and spikes to frills and feathers and sometimes a mix.

Pentaceratops

Kosmoceratops

Dilophosaurus

Stegosaurus

From *Pentaceratops* to *Carnotaurus*, lots of dinosaurs had horns. Some would use them to fight off attackers, but they had lots of other uses too! Male dinosaurs would use them to impress females and sometimes lock horns with one another to battle for a mate. They might even have used them to recognize fellow species members. Dinosaurs like *Protoceratops* are famous for their neck frills, but there was a whole range of frill styles, like *Dilophosaurus's* head frill. Scientists think some were used for protection or to impress mates, but they also had another important role: to keep the dinosaur cool and protect them from the Sun during the much warmer Mesozoic Era. To keep themselves safe from carnivores looking for a snack, some herbivores had sharp spikes on their bodies. The spikes along *Stegosaurus's* back made it tricky for a bigger dinosaur to take a bite. *Ankylosaurus* took this even further: it had a heavy, spiky tail that it could swing around to hit attackers with. Carnotaurus

Ankylosaurus

Protoceratops

When it comes to decoration, one dinosaur beats them all. *Kosmoceratops* had a huge neck frill and a grand total of 15 spikes and horns all over its face and neck.