

## **Cambrian Fact File**

### **Trilobite**

Trilobites were the beetles of their day – in fact, they are distant ancestors of all beetles, insects and crustaceans we see today, and share many characteristics with them.

### **Trilobite bodies**

Trilobites get their name from the shape of their body, where the abdomen appears to have a left, right and central lobe running from behind the head to the tail (tri = three, lobite = lobed). In fact, they are surprisingly complex animals and are thought to be the first real arthropods on Earth – they have the jointed legs and hard exoskeleton that define the arthropod group. They have a head, segmented abdomen and a tail piece, with many pairs of legs underneath. Some of these legs are adapted for swimming or eating while others carry gills for breathing.

Trilobites vary in size from some less than one centimetre long to others over 70cms long. Their general body plan is the same, but their shells were very diverse, often being decorated with spikes, ridges and bumps or stretched into strange shapes possibly as adaptations to a particular lifestyle. The exoskeleton gave them protection from most predators and also meant they make great fossils! Like woodlice, their abdomen had many segments to give them flexibility; it is thought that most trilobites could roll up into a ball like a woodlouse to protect themselves from attack.

### **Trilobite teatime**

It is probable that most trilobites grazed on the sponges and algae that were in such plentiful supply. Others may have been predators on the variety of small worms and even on smaller trilobites. It is even thought that some trilobites may have been specialised for filter feeding like the sponges, drawing currents of water under their bodies with their legs and using other legs to gather the tiny food particles.

### **Trilobite reproduction**

No-one is quite sure how trilobites reproduced, although some fossils have been found that appear to have egg sacs attached to their bodies. Did the mother carry them around like cockroaches do even now? We may not know that, but other fossils have been found that show trilobites shed their exoskeleton several times as they grew up, adding a new segment to their abdomen and increasing in size each time.