Crotalocephalus sp. trilobite - Object of the Month

Katie, Assistant Curator. Lapworth Museum of Geology, talks about her choice of the Object of the Month.

Title: **Crot (http://www.birmingham.ac.uk/facilities/lapworth-museum/about/object-shotton-map.aspx) alocephalus sp. trilobite - Lapworth Museum of Geology - Object of the Month (http://www.birmingham.ac.uk/facilities/lapworth-museum/about/object-shotton-map.aspx)**

Duration: 2.18 mins

Speaker Names (if given): **S1** Katie, Assistant Curator. Lapworth Museum of Geology

S1My name's Katie, I work here at the Lapworth Museum as Assistant Curator. I'm here to talk to you today about a trilobite. Trilobites lived 525 to 250 million years ago. Like all arthropods they had an exoskeleton made up of three distinct parts. The cephalon, which is the head here, and the segmented body which is the thorax and the pygidium or tail. So this was all to protect the soft body parts which you can see here. When trilobites first appeared in the rock record in the earliest Cambrian they already had this complex exoskeleton as well as the world's first complex visual system. They were very diverse and they had already diversified over a wide range of environments from shallow to deep water environments.

The trilobite I'm going to talk to you about today is called *Crotalocephalus*. It was found in the Anti Atlas in the Morocco region and it's from the Devonian period so it's actually 415-400 million years old. As you can see it's got very well preserved pygidium and pleural spines which you can see just about here. These would have been used to protect it from predators as well as to stop it sinking into the soft sediment. So it's likely that it would have lived on the sea floor and its glabella here, which is on the cephalon, is likely to indicate that it would have been a predator and it would have collected prey.

Trilobites as a species lived for over 275 million years. Over this time they did actually have a lot of extinction events to contend with. During the Devonian however their luck was coming to an end and the group was actually confined to just one order, which was the Proetida. So the order Proetida was restricted to shallow shelf environments. In the middle Permian unfortunately there was a major regression, which is a sea level fall, so this further restricted them to the environment and they couldn't survive when the end Permian mass extinction wiped out 95% of marine life so, unfortunately, the trilobites came to an end.

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