

## **Cambrian Fact File**

### **Crinoids (general)**

Crinoids are one of the oldest groups of multi-cellular animals on Earth, and are still found today in deep waters. They have been given the nickname 'sea lilies' because with their delicate arms waving in the currents they look very much like a group of strange underwater flowers.

### **Five-fold symmetry**

However, although they look like flowers, they are actually primitive animals, and related to starfish and sea urchins. Looking closely at them, it is possible to see the five-fold symmetry in their bodies that is characteristic of all echinoderms. Another similarity they share with sea urchins is their skeleton, which is made from plates of solid, dense and strong calcium carbonate, like an old-fashioned knight in armour. This skeleton means that crinoids make very good fossils!

### **Crinoid body plan**

Crinoids have a long stalk made of many small plates stacked on top of each other. At the top of this, they have a 'cup' that contains the body of the animal, and where the mouth can be seen. Attached to this are numerous feathery arms that waft around in the water, catching small particles of food, bacteria and algae. The feathers are really small 'tube feet' like those found on the underside of starfish, and they flex to drop any food into a groove that runs down the length of the arm towards the cup. Food is passed along this groove to the mouth to be digested by the guts hidden inside the 'cup' of the crinoid. All of this delicate structure is in fact surrounded with a hard exoskeleton of calcium carbonate to support it and protect the soft innards of the crinoid.

**See also:**      **Echmatocrinus**