## **Echinoderms: The Ultimate Animal Factsheet**

Echinodermata means 'spiny skin' in Greek.

Most echinoderms are either stationary or slow moving animals. They live only in the ocean and are prominent members of the marine environment.

Echinoderms include: sea stars, sea lilies, sea urchins, sea cucumbers, and brittle stars.

## **Features of the Phylum**

- Internal skeleton made of small calcium carbonate plates that are often spiny and always covered by a thin skin
- Five-part symmetry, without a head, eyes, or centralized brain
- Special fluid-filled system (called a water-vascular system) that hydraulically operates hundreds of tube feet

## Key words and additional concepts

<u>Five-part radial symmetry:</u> A body plan that is divided into five parts and is symmetrical about an axis that runs from the oral surface where the mouth is to the side opposite the mouth.

<u>Tube feet:</u> Tubular extensions of the internal water-vascular system that aid in locomotion, respiration, and grasping.

<u>Radial canal</u>: The branch of the water-vascular system that goes down each arm connecting all the tube feet.