



WESTERN SLATE PENCIL SEA URCHIN

PHYLLACANTHUS IRREGULARIS

DID YOU KNOW?

Sea urchins belong to the same group of animals as starfish. They are both made of chalk and water and have a body made up of 5 equal segments.

WHERE AT AQWA?

Hold a sea urchin in your hand and discover what it feels like at AQWA's Touch Pool.

SIZE: <11CM

DIET: HERBIVORE

MAIN PREDATOR:
CRABS, BIRDS,
SHARKS, EELS,
TRIGGERFISH,

HABITAT: 1-20M
ROCKY REEF

FOUND: WEST
& SOUTHERN
AUSTRALIA ONLY

PENCILS AND CHALK

The slate pencil sea urchin is recognised by its large, stout spines. These tapered spines were once collected and used as pencils on slateboards, before chalk and chalkboards were common.

LOCK AND KEY

The pencil urchin's spines can be up to 8cm in length and are longest on the upper side for protection, while shorter on the under side near the mouth to allow easy access to food. Each spine can turn in a circle, alike our knees.

These flexible spines can be folded down so the urchin can crawl into small crevices. When the urchin finds a secure hiding place, the spines pop back up and smaller 'spinlets' fold in to hold the spine in place. Once all spines are 'locked' in position, predators can't pull the urchin out!

WHAT'S THE POINT?

There is a very similar species that lives on the east coast however it is smaller and its spinelets are broad and scale-like rather than thin and pointed.

ARISTOTLE'S LANTERN

Sea urchins emerge from their hiding spots at night to feed. They have a round jaw lined with 5 spikey teeth that scrape down rocks to remove encrusting animals and plants, like sponges and algae. This unique jaw and tooth system is known as "Aristotle's lantern", named after the famous Greek scientist and philosopher. Aristotle described the jaw structure of sea urchins as appearing 'like a lantern' over 2,000 years ago!

TEST TUBES

The internal shell of an urchin is known as a 'test' and is made of 5 bony plates covered in little bumps called tubercles, in which the spines are mounted. Alike their cousins the starfish, sea urchins are also covered in hundreds of tube feet, through which water flows to allow the urchin to taste, move and breathe!