
Rocky Shore Organisms

Level

4-8+

Key question

How do organisms adapt to life on the rocky shore?

Key outcome

Describe differences in characteristics of rocky shore organisms, and relate these to the conditions in which they live.

Adapted from field work led by Mark Rodrigue, Marine Discovery Centre, Queenscliff, Victoria.

Two types of adaptations are common to species on a rock platform:

- Mechanisms to resist dislodgment: permanent attachment, suction, shape and shelter.
- Mechanisms to prevent desiccation (drying out) when not covered by the sea: hard coverings, shells, opercula, tubes of worms, retention of moisture, use of shade.

What you need

Clipboard, paper, pencil

What you do

This field activity is designed to allow you the opportunity to observe rock platforms and examine the animals on it in relation to these adaptations.

On a suitable rock platform:

- List as many animals as possible that have the adaptations listed in the accompanying data sheet (see data sheet 1).

Then consider:

- Are these adaptations related to where the organism lives on the rocky shore platform.

Extension

Are there any animals not showing these adaptations?

Why are these adaptations necessary if the animal is to live on the rock platform?

Using the adaptations listed, design an 'ideal' animal to live on this rock platform.

Compare your results with others: are they similar?

Why?

Undertake the rocky shore field work described in the units 'Field Methods' or 'Rock Platforms'.

Rocky Shore Organisms

Adaptation	Animal and number
Strong adhered foot	
Specialised breathing organs	
Bluntly conical or rounded shell	
Cement-like substance for attachment	
Filter feeding device	
Ability to withstand high temperature	
Flexible shell or overlapping plates	
File like tooth ribbons (radula)	
Flat jointed exoskeleton	
Holdfast for attachment	
Stinging cells	
Closed off shell with an operculum	
Rows of tube feet	
Larvae spending part of life as plankton	