

Lesson Ideas - Survival in the Sea

Broad Learning Outcomes

- Students will identify how different marine animals protect themselves
- Students will explore adaptations that have developed in marine animals and plants that make them suited to their environment.

Class Activities

- Discuss the outer coverings of sea creatures and how they protect, camouflage, attract or repel other animals. Use our <u>activity sheet</u> to show how one sea creature protects itself.
- Using images of South Australian marine animals, students will group marine invertebrates based on their body structure e.g. spiky skin, hard shell/exoskeleton, internal skeleton, soft outer covering. Does this reflect how they survive in the sea?
- Cut out images of different sized fish. If you like, attach paper clips and use a magnet on a string to catch fish. Using a <u>guide</u>, students will measure fish and decide whether it is big enough to keep, or if it must be thrown back. Discuss some responsible fishing practices.
- Students will research an introduced marine species in Australia; where does it occur, how
 does it affect the environment, how did it get there, where did it come from?
- Students will research a marine species that is currently endangered; what threats does it face, and what can be done to improve its survival? Students will use this information to write a letter to local government from the perspective of a marine conservationist.
- Students will investigate intertidal rock pools and consider how plant and animal life in this habitat is affected by living in an environment that is alternately covered with water and exposed to air and sun. Use our <u>Survival on the Reef information sheet</u> for some ideas. Use recycled materials to construct a diorama of a rock pool.
- Investigate the current Marine Protected Areas in your region. Discuss the activities allowed and banned in sanctuary zones. Why are some marine activities like snorkelling still allowed? Given some guidelines, students will design a marine park with different levels of protected zones on a made-up island.
- Students can use our <u>activity sheet</u> to design a new species of fish with features based on how it survives in the ocean.
- Students will research and illustrate the differences between seaweed, seagrass and mangroves, labelling parts of the plants. They should identify how they obtain energy and reproduce.