

Lesson Ideas – Coastal Changes

Broad Learning Outcomes

- Students will identify natural and human-made changes
- Students will learn about how different marine animals have their offspring
- Students will consider human impacts on the marine environment

Class Activities

- Investigate how waves and sand dunes are formed using a large tray, sand and paper straws. Simulate how wind can build up ridges or erode them. Add water to one side of the tray and describe how waves hit the beach and create ripples. Describe what happens to the sand dunes with large waves.
- Explore the life cycles of different South Australian marine animals. Have students draw each stage or give cut outs for younger students to arrange. These could include a Port Jackson shark, leafy seadragon, sand snail, seahorse, southern right whale, bottlenose dolphin or blue swimmer crab.
- Sort beachcombing items into natural or human-made materials. Discuss if they were once living and how we know this. Find items that would be considered litter and discuss how it got to the beach. Follow up with our [Where Does it Belong activity sheet](#).
- Draw pictures of the beach or coast in summer and winter and identify changes.
- Students will research a human impact on the marine environment and draw images of before and after, identifying what changes have occurred and what this means for marine plants and animals. This could include stormwater pollution, littering, building marinas, fishing or jet skiing. Use our [Beach Practices activity sheet](#) to get some ideas.
- Use different coloured paper plates to act out the relationship between the Sun, Moon and Earth. Explore the effect of the moon on tides on our beaches and discuss how tides and moon phases can trigger migration or spawning in different marine creatures. Why can knowing the tide cycle be important?
- Investigate what happens when different kinds of waste are buried in soil such as an apple piece, newspaper and plastic bottle top. How could these kinds of waste have an impact on marine animals? Find out how long some of these items last using our [Litter Timeline infographic](#).