

Activity 1

Recycled Penguins

Students use recycled materials to construct their own penguins. Through this activity students will learn about penguin features, and also the impacts recycling can have on the penguins' environment.

Background Information about our penguins

Our little penguins are highly adapted to their environment. Their feathers protect them against the cold, they hide in their burrows from predators, and the layer of air in their feathers helps them shoot to the surface to catch their prey.

All of their features and behaviours aid them in their natural environment; however, these adaptations can't help them with human introduced rubbish. Our SEA LIFE team help to rescue and rehabilitate many penguins that get entangled in rubbish in our oceans.

By reusing and recycling our rubbish, we can keep harmful debris out of our waterways and protect our penguins.

ACTIVITY

As a class, collect recycled materials suitable for crafts. This might include:

- Boxes
- Cardboard tubes
- Bottle caps
- Plastic bottles
- Plastic packaging such as chip packets

As a whole class students draw a penguin. Discuss the features of a penguin.

Students can use their penguin drawing as a plan for creating their 3D penguin. Using their collected recycled materials, tape, glue and scissors, students can make their own penguin.



Activity 1

Recycled Penguins

Penguin Template Instructions

Cut out the following shapes and place on your recycled materials to make your recycled penguin.



Activity 2

Our Environments

Students investigate a penguin's habitat and explore the different animals and plants that co-exist within this habitat.

Background Information about our penguin environment

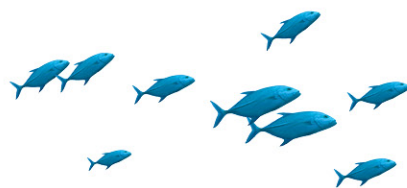
Penguins live in two habitats: the land and the ocean. Often when we think of penguins, we picture icy tundras, but the little penguins of Australia make their homes in the vegetation covering our sand dunes. Little penguins are best suited to the ocean, where their camouflaged and waterproof feathers help them survive. However, they need to come to land to moult, reproduce, and rest. On land penguins stay safe from predators such as birds of prey by hiding in their burrows. They share the space with other animals including wallabies, Cape Barren geese, short-tailed shearwaters and copperhead snakes. Penguins share the water with prey such as pilchards and squid, predators such as leopard seals and New Zealand fur seals, and co-exist with other animals such as crabs, Australian fur seals, and sharks.

ACTIVITY

Using chalk, students create pavement art depicting penguin habitat. As a class students will need to think about plants, animals, and landscape formations both on land and at sea. Students can complete pavement art in area which they can display to rest of the school.

EXTENSION ACTIVITY

Student can begin to think about the food chain or 'Who eats who' and represent this in their mural. They can show crabs filter feeding, fish nibbling seaweed, and penguins chasing fish.



Activity 3

Growing Time

From the time penguins hatch to when they fledge and head out to sea, they have a lot of growing to do!

Background Information about how our penguins grow

In late winter our little penguins begin returning to the colony in greater numbers as they build their nests and get ready to lay their eggs. In spring we start to see eggs in the nests with one parent guarding them and keeping them warm, while the other heads out to sea to fish. They usually lay two eggs, a couple of days apart. The eggs weigh 35g. Come summer, our fluffy penguin chicks appear throughout the colony where they can be heard loudly demanding food from their parents.

The fluffy down not only camouflages the chicks, but also helps them to thermoregulate. When they are cold, they stay still and the trapped air in the feathers heats up. When they are hot, they ruffle their feathers and move so the air can escape and cool them down. When the penguin chicks have grown large enough, both parents head out to sea to satisfy the chicks' demand for food.

Slowly the penguin's feathers start to change from their dark fluffy baby down, to the sleek blue and white feathers of an adult penguin.

ACTIVITY

Photocopy the flashcards on the next page so that there is a set for every student.

Ask the students to find the card with the adult penguin. Ask the students to identify different features on the penguin (eyes, feet, tummy, beak, flippers, and feathers) and to identify the equivalent features on their own bodies.

Discuss which features are similar (eyes, feet) and which are quite different (beak/ mouth, arms/flippers).

Ask the students how they knew that this was the adult penguin. Get the students to look at their cards and point out differences between the adult and chick (feathers, size, standing vs lying down).

Ask students why they think baby penguins have different feathers to adult penguins.

Ask students how they thought a penguin starts off. Get students to identify the egg and put that down as the first card in their time line.

Ask students which card they think comes next and why. Continue this process and walk the students through the growth of a penguin chick through to adult hood.

Activity 3

Growing Time

Penguin Flashcards



Activity 4

Hide'n'seek

Children use pictures to explore a penguin's camouflage abilities.

Background Information about how penguins protect themselves

Penguins rely on their feathers for survival. While the waterproof and insulating properties protect them against the environment, the colouration camouflages them against predators. While penguins are in the ocean, their dark blue feathers help them hide from sea eagles and other birds of prey searching from above. Their white feathers hide them from leopard seals and other predators from below, by blending in with the bright glare on the water's surface.

The camouflage also assists them with hunting and helps them to hide from their prey.

The change starts with the flippers and slowly moves over their whole body ending with a final collar of fluffy feathers. Once the penguin is completely covered in their adult feathers, they are waterproof

ACTIVITY

As a group, talk about what colours the ocean can be. Discuss what shapes we might see in the ocean such as waves or bubbles.

Ask students how penguins use their environment to hide themselves to hide?

Hand out picture scene of the beach to students and ask them to locate where in the picture they would find the penguins burrow?

Hint! Use the number key to help you work out where penguins like to make their burrows!



- Rockpools Bush Beach Dunes Creeks Cliffs Suburban Water

Activity 5

Penguin Dangers

Our little penguins are well adapted to their underwater environment, but when marine debris enters the picture sometimes, they need a hand from their ranger friends.

Background Information about penguin dangers

Penguins love to play and explore in their environment. While their 'wings' don't help them to fly through the air, their flippers let them perform amazing acrobatics under the water, flapping 3 times per second and 5 times per second when pursuing fish! This propels them through the water at an astonishing 12km/hr. While these birds are uniquely adapted to their underwater home, there are some things in the water that they can't adapt to. Sometimes bits and pieces of human rubbish make their way into the water. When the penguins approach this rubbish to find out what it is, sometimes they end up entangled in it. We find fishing line, pieces of net, plastic bags and ribbons from lost helium balloons tangled around our penguins' legs and flippers.

ACTIVITY

Bring out a pile of rubbish that you have collected and place inside a large tub of water to represent to student's what rubbish in the ocean looks like.

Discuss penguins and marine debris with the children. How does rubbish get into the ocean?

What might happen to a penguin that meets that rubbish?

Get the students to stand shoulder to shoulder in a circle. Ask them to reach out with their arms and cross them over. While their arms are crossed, they need to grab someone's hand. When everyone is holding hands ask the students to try and untangle themselves back into the circle without letting go. Starting off with smaller groups before trying a whole class entanglement is a good idea! When students have untangled themselves ask them if they think it would be easy to swim when tangled up? Ask students how they think penguins go at getting untangled?



Activity 6

Penguin Pledge!

Background Information

Our Little Blue Penguins zone incorporates a conservation-focused education program. Our colony of little penguins will be ambassadors for their species, playing a significant role in helping us communicate SEA LIFE Sunshine Coast's conservation values. Learn about the life cycle of a little penguin, their burrows, what they eat and how we can help protect them in the wild.

ACTIVITY

Take our little penguin pledge! Every little bit counts in helping to protect our beautiful environment.

Get students to decide which they would like to introduce into the school or classroom:

- Saying no to plastic straws.
- Reducing single use plastic in the classroom or lunch box.
- Pick up rubbish days- students one day a week pick up 10 pieces of rubbish in the playground and decide if it can be reused or recycled.
- Recycling presentation- present to assembly what they have learnt about little penguins and how other students can help protect them by recycling and reducing plastic use.
- Learn to make beeswax wraps and use instead of plastic wrap.

Get students to vote on which pledge they would like to take and work into the school community! Tell us by posting your pledge on the SEA LIFE Sunshine Coast Facebook page and keep us informed on your school progress!

