Coastal South Australia

Explorers' Guide

This is a sample of the *type* of booklets your students can borrow and use when visiting the museum.

It contains information about animal adaptations in arid environments. However, **the students' booklets are not exactly like this one.** Their booklets come in sets. Between *all* the booklets in a set the students will have all the information available, but each individual booklet has some bits missing.

Students must collaborate with the other members of their group to get all the facts they need. Four students in each collaborative group is ideal. **Please ensure students have their own paper to write on.**

Move to the *Beach*

Sea-lions

The family of seals in this case are Australian Sea-lions. Dad is the biggest.

Sea-lions are excellent swimmers that can hold their breath for over five minutes.

They have slits for nostrils that close under water.

Their special mouth and throat lets them eat underwater without swallowing sea water.

Seals' big eyes work well in low light underwater.

A thick layer of fat, called blubber, keeps them warm in cold water.

What other body features do seals have that help them live in the sea?

Compare the seal with the dolphin. Write down two features they share. Write down one important way they are different.

Families on the *Beach*

Pacific Gull

Standing on the dolphin is an adult Pacific Gull. Next to it is a young Pacific Gull. It has grown to almost the same size as its parent. It will grow new feathers as it grows older. Birds are always losing feathers and growing new ones.

What are the main differences between the young Pacific Gull and the adult?

Feathers fray and wear out. What would happen if birds did not lose their old, worn out feathers to grow new ones? (For example, look at the feathers of the dead bird washed up on the sand.)

Goslings – Baby Geese

Find the Cape Barren Goose and its babies.

How would you describe the gosling's feathers?

The baby bird's feathers are called *down.* Most adult birds also have down, underneath their other feathers. In what way might the down be useful to the birds?

Move to the skeleton display

Bones

Skeltons support animals.

Skeletons protect amimals' organs, such as their brains and hearts.

Skeletons are important in helping animals move.

Draw bones from three different skeletons.

*** A bone that protects.**

*** A bone that supports**

*** A bone that helps movement**

Return to the high end of the *Sand Dune* display

Hiding

Some animals are coloured so that they can hide from predators. They are *camouflaged.*

Some predators are *camouflaged* too, which helps them sneak up on their prey.

Find these in the high end of the sand dune display.

*** A camouflaged reptile**
*** A camouflaged insect**
*** A camouflaged egg**

Explain why these three things need to be camouflaged. Which one is best camouflaged?

Go to the *Rocky Beach*

Little Penguin

Little Penguins are the smallest of the penguins. They are the only penguins to make their homes in South Australia.

On land they live in burrows, where their chicks stay until they are old enough to leave home.

At sea, these birds feed on fish and squid. They look like they are flying through the water in the same way other birds fly through the air.

Penguins are good swimmers.
What body parts help them swim well?

Penguins are birds.
What do they have that all birds have?
In what ways are they different from most other birds?

Find the pool in the *Cliff Edge* display

In the pool

Some fish live in the sea. Others live in fresh water. Most fish will die, if they stray into the wrong kind of water.

Mulloway

But some fish can live in both fresh and salt water. The fish in this pool can live in both.

There are three species of fish in this pool. The largest is a Mulloway, which can grow to be two metres long. (As big as a tall person.) The smallest is a Blennie.

Fish living in shallow water need to be careful of predators. Hunters may lurk in the water, or out of the water.

*** What other animals in this display would hunt fish?**

*** What adaptations do they have for fishing?**

Look for the swan in the *Cliff Edge* display

Black swan

Scientists have cut open birds that have died and looked inside their stomachs. They did this to find out what the birds ate.

Inside swans they found water plants. Some of the plants could only grow half a metre or more under water.

Some parts of the swan's body are really useful for getting its food. What parts?

Birds on the *Rocky Beach*

White-bellied Sea-Eagle *(Number 2 on the screen)*

Osprey *(Number 10 on the screen)*

Find these two birds in the display. Birds like these are called *raptors.* They are hunters.

Raptors have curved beaks to tear meat and forward facing eyes to help them see clearly how far away their prey is.

What else do raptors have in common and how might these features help the birds?

Pick another bird in the same display case as the Osprey.

What special features does this bird have and how might these features help it?

Move to *Coastal Wetland*

Beaks for a purpose

All the birds in this glass case spend part of their lives in wetlands. They have quite different beaks to eat different foods. You can often tell what a bird eats by looking at the shape of its beak.

Magpie Goose
Eats seeds and roots.

Buff-banded Rail
Eats frogs, insects, fruit, seeds.

Swamp Harrier
Eats meat.

Pick another bird anywhere in the coastal displays and write down what you think it might eat. Each person in your group must pick a different bird and it cannot be one on this page. Ask other people in your group to check your answer. Do they all agree? Sketch the beak of the bird you chose.

Coastal South Australia

Record three things that you have learned about how animals survive in our coast.

Write down the names of three animals you have not seen before.

Using what you know about how animals live along the coast, note two ways that people can help look after these environments.

Collect • Research • Discover

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