Animals with Armour

Jill McDougall



PM

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Animals with Armour

Level 24 **Curriculum Area** Science

Running Words 1238 **Text Types** Information Report (Informative) pages 2–17
Procedure (Informative) pages 18–23

Retelling to encourage critical thinking about the content

Ask each student to retell the information report and procedure in his or her own words. Record the retellings for further discussion and reflection.

Think and Talk About ...

Fact boxes in the book encourage each student to explore the statements further and to share the information with others.

Questions to reinforce meaning and stimulate discussion

Literal

1 Why are snakes able to move over rough ground?
2 What is a seahorse?

Inferential

3 Why do other creatures avoid eating a seahorse?
4 Why do most turtles pull their feet, tail and head into their shells?
5 How would the Thorny Devil lizard get dew from its spikes?
6 Why does the hedgehog need to protect its belly and head?
7 Why are sharp quills useful armour?

Applied Knowledge

8 What would happen to a predator caught inside a clam shell?
9 Why doesn't the exoskeleton of some creatures grow?

Make Your Own Animal with Armour

Literal

1 What type of material was used to make the echidna's armour?

Inferential

2 Why is stiff cardboard used to make the model?
3 Why does wool have to almost block the centre hole in the body shape?

Links with other PM Guided Reading Books and Cards

Level 24	Card	Play	*A Scary Knight*
Level 23	Book	Information Report/Exposition	*All About Sharks*

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Contents

What Is Animal Armour? 2
Bony Plates 4
Shells 6
Scales and Skin 8
Spikes, Spines and Quills 10
Exoskeletons 14
Does Armour Always Work? 16
Make Your Own Animal with Armour 18
Glossary and Index 24

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What Is Animal Armour?

Many animals are born with special coverings to protect their bodies from **predators**. These coverings act like an animal's **armour**.

Some animals have armour made from strong pieces of bone. Other animals have a hard shell, tough scales or thick skin. And some animals, such as turtles, have all of these.

Spikes, spines and sharp quills also make useful armour.



Sea urchins have sharp spines to protect themselves.

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Armour makes it hard for predators to bite and eat their **prey**. Some animals use their armour to trick their attacker or give them a nasty shock.

Armour also helps an animal live in its **habitat**. The scales on a snake's belly allow it to move over rough ground or even climb trees.

Think and Talk About ...

In a hot, dry habitat, body armour helps keep animals cool. It keeps **moisture** inside their bodies so they do not dry out.



The snake's scales are on its belly.

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Bony Plates

The crocodile has such strong armour that few animals will try to attack it. Most of its body is covered in hard scales. Underneath these scales, there are rows of plates made of bone. When crocodiles fight one another, their teeth sometimes break off on the tough, bony skin.



The thick body armour on a crocodile prevents it from being attacked.

An armadillo is a small mammal that looks as if it is dressed in armour. Its body is covered from head to toe with hard, bony plates. The armadillo's armour helps to protect it from thorny bushes, as well as from predators.



An armadillo's bony plates look like a suit of armour.

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A seahorse's bony plates protect it from many of the predators found under the sea.

A seahorse is a type of fish that has hard, bony plates under its skin.
The rings around a seahorse's body show where these plates join.

Think and Talk About ...

Armadillos are the only mammals that have bony plates.

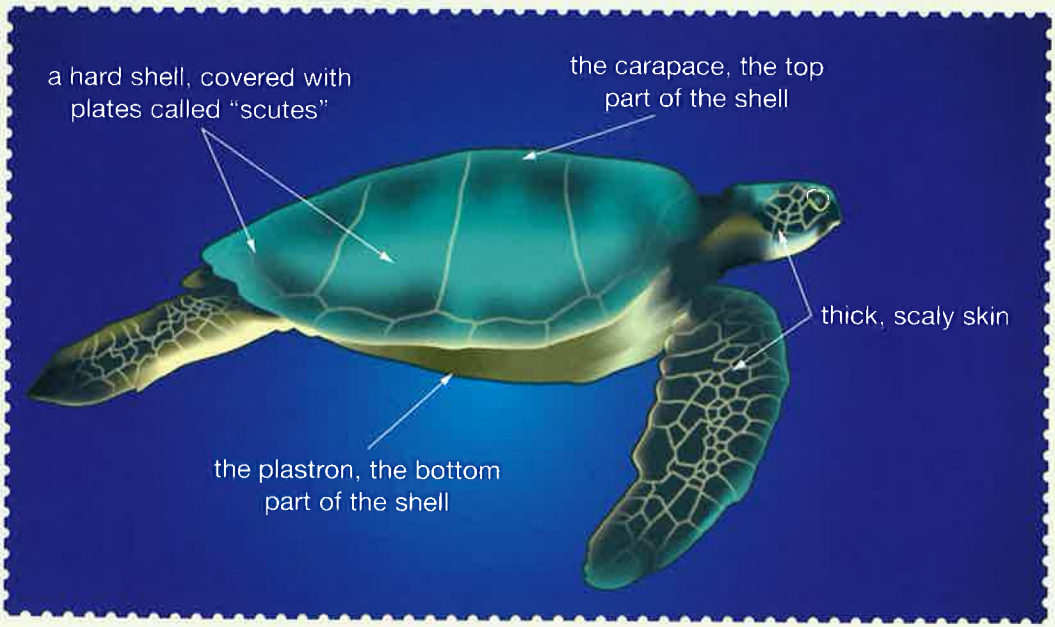
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Shells

Shells are a form of armour that protects the soft parts of an animal's body.

Most turtles have a shell made of very hard bone. However, the shell is not one large bone. It is made up of over 50 small bones joined together. The turtle's spine and ribs form part of the shell, so it cannot leave its shell behind.

When a predator is nearby, most land turtles pull their feet, tail and head into the shell until the danger has passed.



A sea turtle is protected by different types of armour.

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Some sea animals, such as clams, live inside two shells.
These are joined together at one side
by a **hinge** made of muscle.
If a predator comes near, the heavy muscles
snap the shell shut.



The clam will shut its shells to protect itself if a predator is nearby.

Think and Talk About ...

Sea turtles cannot pull their bodies inside their shells. They must swim quickly to avoid predators.