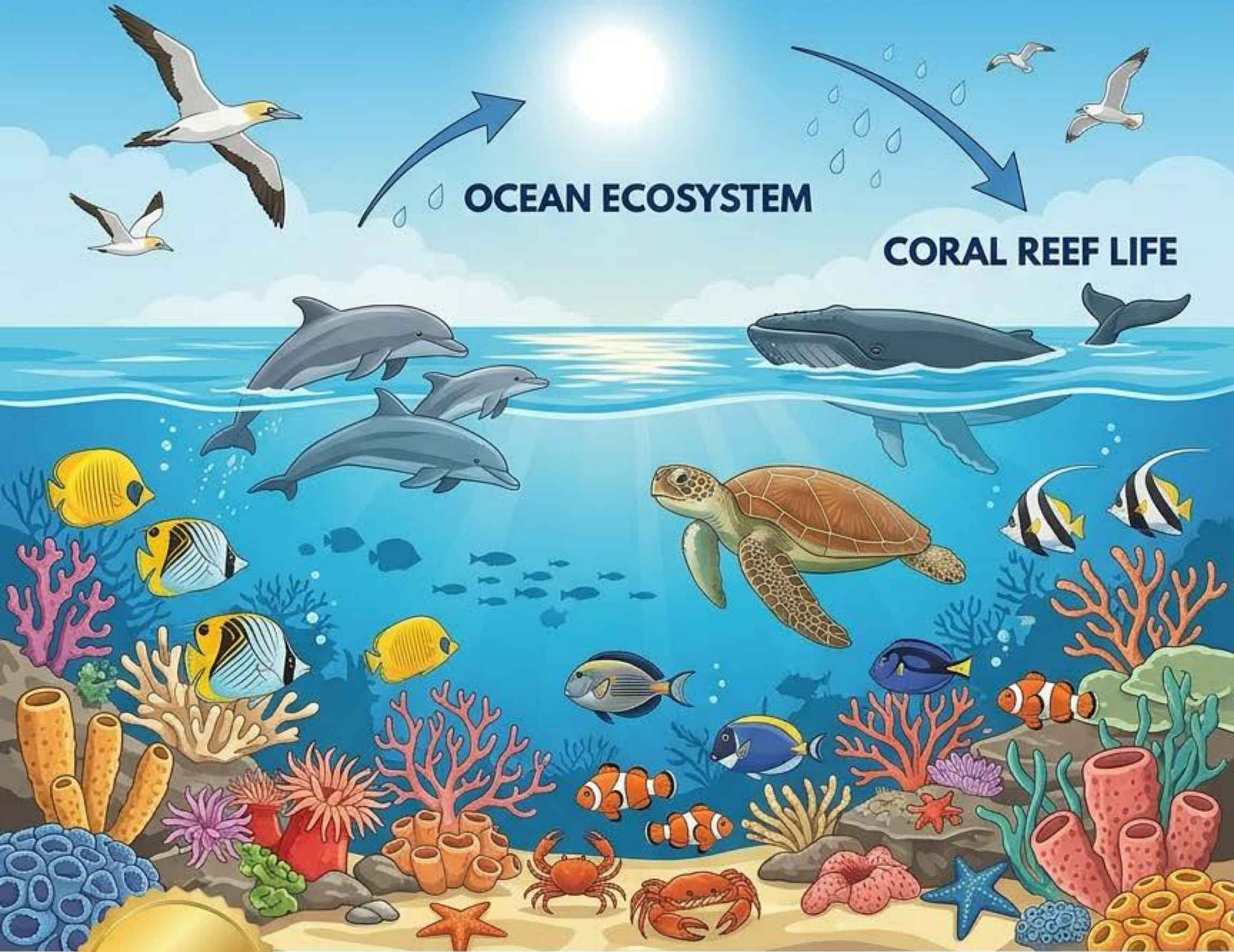


OCEAN ADVENTURES

TEACHER RESOURCE

YEAR FOUR

UK CURRICULUM



OCEAN ECOSYSTEM

CORAL REEF LIFE



www.barnettauthor.co.uk

Gloria Barnett
The Weird Fish Lady

SCHOOL NAME: _____

TEACHER NAME: _____

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A vibrant, cartoon-style banner for 'Ocean Adventures - Year Four'. The scene is set in a bright blue ocean under a sunny sky. In the foreground, a sandy seabed is populated with various colorful coral reefs, sea anemones, and purple sponges. A treasure chest overflowing with gold coins sits on the right. The middle ground is filled with diverse marine life: a large blue whale breaching the surface on the right, a green sea turtle swimming centrally, two dolphins, several clownfish, a blue tang, and a school of small fish. On the left, a submarine and a school of tiny fish are visible. The sky above the water is filled with several seagulls and two penguins. The central text 'OCEAN ADVENTURES - YEAR FOUR' is rendered in large, bubbly, multi-colored letters with a blue outline. The entire banner is framed by a decorative, wavy blue border.

OCEAN ADVENTURES - YEAR FOUR

OCEAN ADVENTURES

- YEAR FOUR



Classification

Classifying living things are living things.

Classification

- Classify and define various living things

Invertebrates

- Classify and name various invertebrates

Carnivore

- Classify and name various carnivorous living things

Fish

- Fish can be made from invertebrates

Sea Birds

Sea birds, from penguins to puffins, gulls, terns, etc.



Vertebrates & Invertebrates

The difference between invertebrates and fish and jellyfish.



Fish

- Fish
- Sea water



Example

- They live
- They live in water

Marine Mammals

Dolphins

- Dolphins are mammals that live in the ocean and are intelligent.
- They are different from whales and other marine mammals.
- They live in pods and are very social.

Whales

- Whales are the largest mammals on Earth.
- They live in the ocean and breathe through a blowhole.



Coral

- Types of sea living things.
- Types are in living things, natural materials to different ecosystems.
- Important of coral types = variable ecosystems; or-water.
- Importance of coral can amount to human specific countries.

Fish

- Gills there are gills
- Fins across the body
- There are the consumer
- Fish are mammals, and sea other animals, etc.



Reptiles

- Sea turtles and others but are in water, and even their coming.
- Others are turtles from ocean.
- Coral are on land and sea animals.

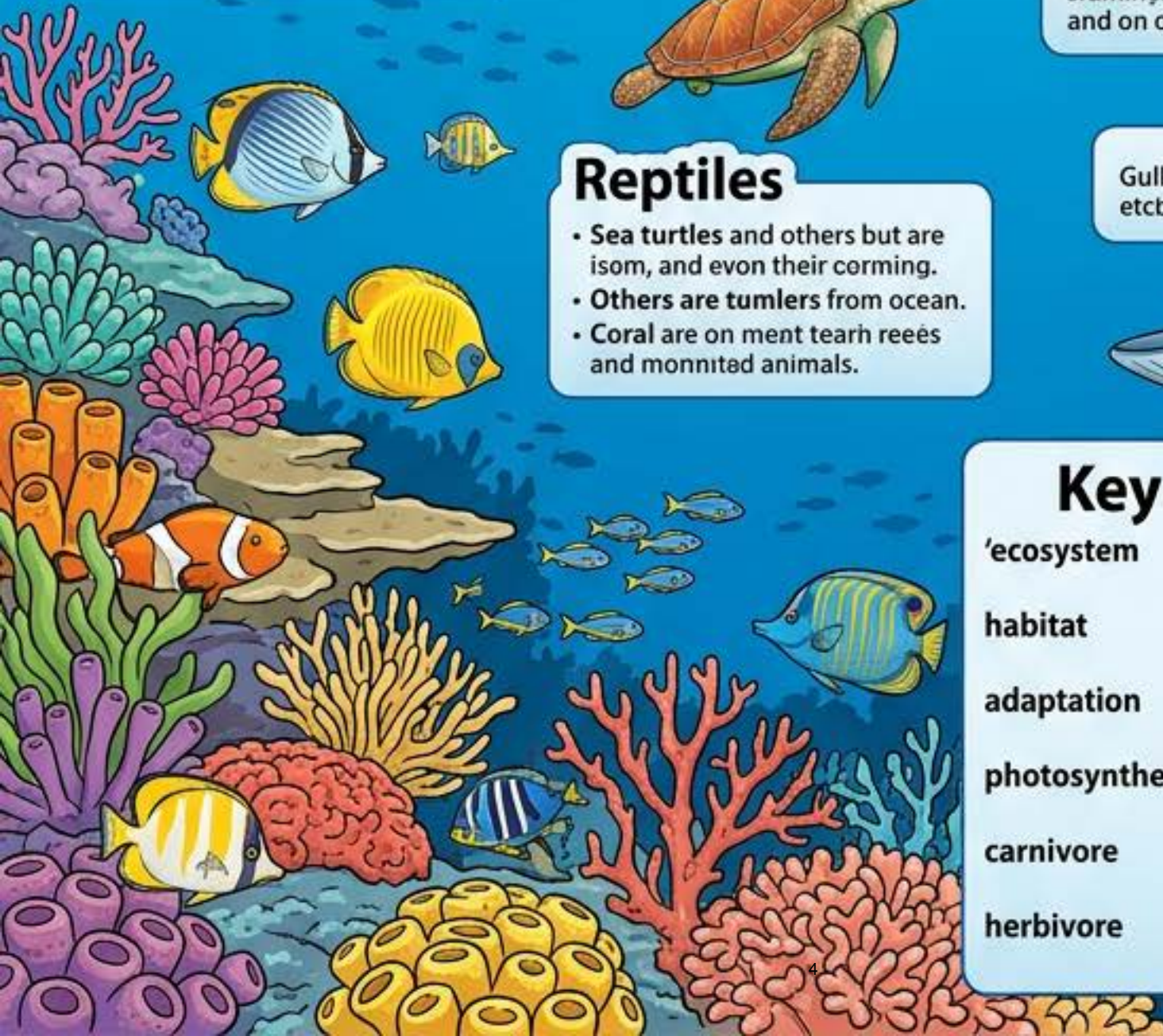
Sea Birds

Gulls, puffins, etc, those birds that live in the sea, etc.



Key Vocabulary

ecosystem	ecosystem is almost ocean in nature
habitat	habitat is where animals live and breed
adaptation	adaptation is a change in an organism to survive in its environment
photosynthesis	photosynthesis is the process by which plants use light energy to produce food
carnivore	carnivore is an animal that eats other animals
herbivore	herbivore is an animal that eats plants



Ocean Adventure Teachers' Resource

Preview Description

Complete “Ocean Adventure” Resource for

Year Four (Ages 8–9)

Take your students deeper into the fascinating world of marine life with this comprehensive, ready-to-use **Ocean Adventure Teacher’s Resource** for Year Four.

Designed specifically for upper KS2 progression, this downloadable pack supports students’ understanding of **marine animal classification, habitats and adaptations** through engaging, cross-curricular learning across three structured sessions.

Why Choose This Year FOUR Resource?

Year Four pupils build on their prior ocean learning by developing a deeper scientific understanding of how marine animals are classified and how they survive in ocean environments.

Through discussion, visuals, fiction links and interactive activities, students explore:

- Vertebrates and invertebrates
- Coral and reef ecosystems
- Fish and reptiles
- Marine mammals and sea birds
- Adaptations for survival
- Biodiversity in ocean habitats

Using the *Lucy Morgan Adventure Series* as a stimulating fiction anchor, alongside the non-fiction text “*50 Fabulous Facts about Ocean Animals*”, this resource blends scientific knowledge with literacy, enquiry and critical thinking.

Interactive sorting games, classification challenges, film guides, snap cards and identification keys allow pupils to apply their knowledge in practical and memorable ways.

This carefully structured programme not only develops scientific vocabulary and understanding of living things and their habitats, but also builds curiosity, analytical thinking and respect for the natural world.

By the end of the three sessions, pupils should confidently understand how scientists classify marine animals and can explain key differences between major ocean groups.

This resource is the companion for:

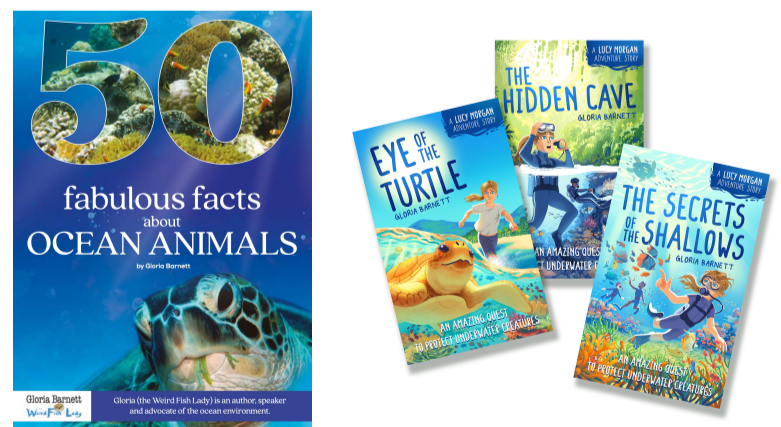
“*50 Fabulous Facts about Ocean Animals*”

and the fiction series:

Lucy Morgan Adventures

- *Eye of the Turtle*
- *The Secrets of the Shallows*
- *The Hidden Cave*

(See information on book purchasing on page 7 of this document)



Ocean Adventures Teachers' Resources

Preview of Resources for Year FOUR

Sessions 1 , 2 and 3

Purchase: Classroom Reading Books - 'Eye of the Turtle' - Book ONE of the Lucy Morgan Adventure Series. Book TWO- The Secrets of the Shallows and Book THREE 'The Hidden Cave'

Non-Fiction Book: '50 Fabulous Facts about Ocean Animals'

PowerPoint: Animals that Live in the Ocean – Photo Fact File.

Included Resources in this Unit

Session ONE, TWO & THREE - flexible Sessions length to be decided by ability of pupils

Information Sheets:

4a Vertebrates and Invertebrates

4b Images and Names

4c Classes of Animals

Original Film:

Invertebrates and Coral (use Film Guide).

Fish and Reptiles (use Film Guide).

Marine Mammals and Sea Birds (use Film Guide).

Information Sheets:

4d Sorting Sheet

4e Fish

4f Reptiles

4g Sorting Mammals

4h Sorting Sea Birds

4i Snap Cards

4j Snap ID Key

Poster 2 x (with and without numbers) + ID Key

This teacher's resource is a companion for the books:

50 Fabulous Facts about Ocean Animals: ISBN: 9781838064389

Eye of the Turtle: ISBN 9781838064303

The Secrets of the Shallows: ISBN 9781838064327

The Hidden Cave: ISBN 9781838064341

Print copies are available from Amazon and major English-language bookshops worldwide:

ebooks are available from Amazon.

Special bulk buy school pricing is available for UK schools. For more information, contact Gloria at: <https://barnettauthor.co.uk>

Ocean Adventures Teachers' Resource

UK National Curriculum

Links – Year 4

SESSION 1 –

Marine Classification: Vertebrates, Invertebrates & Coral

Science (Year 4 – Living Things and Their Habitats)

Pupils should be taught to:

- Recognise that living things can be grouped in a variety of ways
 - Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment
- Recognise that environments can change and that this can sometimes pose dangers to living things

Direct link:

This lesson explicitly teaches classification of marine animals into vertebrates and invertebrates, introduces coral as living organisms, and uses sorting keys and identification activities.

Geography (Key Stage 2)

Pupils should be taught to:

- Describe and understand key aspects of physical geography, including:
 - climate zones
 - biomes
 - vegetation belts

Direct link:

Understanding coral reefs as ocean biomes and recognising the ocean as a global habitat supporting biodiversity.

English – Reading (Lower KS2)

Pupils should be taught to:

- Retrieve and record information from non-fiction
 - Identify how language, structure and presentation contribute to meaning
 - Increase familiarity with a wide range of books, including fiction and non-fiction

Direct link:

[Using 50 Fabulous Facts about Ocean Animals and Lucy Morgan – Eye of the Turtle to support retrieval, discussion and vocabulary development.](#)

PSHE (Non-statutory but expected)

- Develop respect for living things
- Understand environmental responsibility

Direct link:

Recognising the importance of coral reefs and marine ecosystems.

Ocean Adventures Teachers' Resource

UK National Curriculum

Links – Year 4

SESSION 2 –

Fish and Reptiles

Science (Year 4 – Living Things and Their Habitats)

Pupils should be taught to:

- Recognise that living things can be grouped in a variety of ways
- Use classification keys to identify animals
- Construct and interpret a variety of food chains

Direct link:

This session compares fish and reptiles as vertebrates, explores adaptations (gills, lungs, scales), and discusses how animals survive in ocean food chains.

Science (Year 4 – Animals Including Humans)

Pupils should be taught to:

- Describe the simple functions of the basic parts of the digestive system
- Identify the different types of teeth in humans and their simple functions

Indirect link:

Discussion of carnivores and herbivores when studying fish and reptile diets supports understanding of feeding relationships.

Geography (Key Stage 2)

Pupils should be taught to:

- Describe and understand key aspects of physical geography, including:
 - climate zones
 - biomes

Direct link:

Understanding how fish and reptiles are adapted to specific ocean environments.

English – Reading & Vocabulary

Pupils should be taught to:

- Use dictionaries to check meaning of words
- Identify main ideas from more than one paragraph
- Retrieve and record information from non-fiction

Direct link:

Using non-fiction fact files and information sheets to compare fish and reptiles.

Ocean Adventures Teachers' Resource

UK National Curriculum

Links – Year 4

SESSION 3 –

Marine Mammals and Sea Birds

Science (Year 4 – Living Things and Their Habitats)

Pupils should be taught to:

- Recognise that living things can be grouped in a variety of ways
- Use classification keys
- Recognise that environments can change and pose dangers to living things

Direct link:

This lesson classifies marine mammals and sea birds, reinforces vertebrate groups, and consolidates classification across all ocean animal categories.

Science (Year 4 – Animals Including Humans)

Pupils should be taught to:

- Describe the basic needs of animals for survival
- Recognise that living things depend on each other and on their environment

Direct link:

Exploring how mammals breathe air, regulate temperature (warm-blooded), migrate and care for young.

Geography (Key Stage 2)

Pupils should be taught to:

- Describe and understand key aspects of physical geography including:
 - biomes
 - climate zones

Direct link:

Understanding migration of sea birds and distribution of marine mammals across global oceans.

English – Reading & Spoken Language

Pupils should be taught to:

- Participate in discussions
- Provide reasoned justifications
- Retrieve and record information from non-fiction

Direct link:

Using classification challenges, snap cards and ID keys to explain why whales are mammals and not fish.

Ocean Adventures Teachers' Resources

Year 4 Ocean Classification Unit

National Curriculum OUTCOMES

SESSION 1 – Vertebrates, Invertebrates & Coral

Science (Living Things and Their Habitats)

Pupils will be able to:

- Explain how living things can be grouped in a variety of ways
- Identify and classify marine animals as vertebrates or invertebrates
- Use simple classification keys to group and name ocean animals
- Describe coral as a living organism and explain its role in reef ecosystems

Science – Working Scientifically

Pupils will be able to:

- Ask relevant questions about similarities and differences between animals
- Observe carefully using images and film resources
- Gather, record and classify data using sorting activities
- Present findings using scientific vocabulary

Geography (KS2)

Pupils will be able to:

- Describe coral reefs as important ocean biomes
- Explain how marine habitats support biodiversity

English – Reading & Vocabulary (Lower KS2)

Pupils will be able to:

- Retrieve and record information from non-fiction texts
- Use subject-specific vocabulary accurately
- Participate in discussions about scientific concepts

Ocean Adventures Teachers' Resources

Year 4 Ocean Classification Unit

National Curriculum OUTCOMES

SESSION 2 – Fish and Reptiles

Science (Living Things and Their Habitats)

Pupils will be able to:

- Compare and contrast fish and reptiles
- Identify key characteristics of each group
- Explain how fish and reptiles are adapted to survive in ocean environments
- Construct simple food chains within marine ecosystems

Science – Working Scientifically

Pupils will be able to:

- Use classification keys to identify species
- Record findings in tables and comparison charts
- Draw conclusions based on observed characteristics

Geography (KS2)

Pupils will be able to:

- Describe how climate and habitat influence where animals live
- Explain why certain reptiles must return to land

English – Writing (Lower KS2)

Pupils will be able to:

- Write comparative explanations using paragraphs
- Use conjunctions to compare similarities and differences
- Apply accurate scientific vocabulary in written explanations

Ocean Adventures Teachers' Resources

Year 4 Ocean Classification Unit

National Curriculum OUTCOMES

SESSION 3 – Marine Mammals and Sea Birds

Science (Living Things and Their Habitats)

Pupils will be able to:

- Classify marine mammals and sea birds within vertebrate groups
- Explain why whales and dolphins are mammals and not fish
- Describe adaptations such as blubber, migration and warm-bloodedness
- Consolidate understanding across all marine classification groups

Science – Working Scientifically

Pupils will be able to:

- Apply classification knowledge to new examples
- Justify reasoning using scientific evidence
- Use identification keys independently

Geography (KS2)

Pupils will be able to:

- Explain migration patterns of sea birds
- Describe the global distribution of marine mammals

English – Spoken Language & Writing

Pupils will be able to:

- Present reasoned explanations verbally
- Use structured paragraphs in factual writing
- Use precise scientific vocabulary confidently

Ocean Adventures Teachers' Resource

YEAR FOUR

SESSION ONE

Ocean Adventures – Classification: Vertebrates, Invertebrates & Coral

Classroom Reading Book - 'Eye of the Turtle' Book ONE of the Lucy Morgan Adventure Series

Non-Fiction Book: '50 Fabulous Facts about Ocean Animals'

Session Structure

1. Starter

Ask:

- What is classification?
- Why do scientists group animals?
- What makes an animal a vertebrate?
- Can you name any ocean animals?

Display images from PowerPoint: [Animals that Live in the Ocean – Photo Fact File](#).

Key Teaching Point:

Scientists classify living things to help us understand similarities and differences. One main way animals are grouped is into **vertebrates and invertebrates**.

Introduce vocabulary verbally and display on board:

Classification
Vertebrate
Invertebrate
Backbone
Species
Coral
Habitat

2. Discuss:

- Vertebrates have a backbone.
- Invertebrates do not have a backbone.
- Most ocean animals are invertebrates.
- Coral is made up of tiny living animals called polyps.

Use:

[50 Fabulous Facts About Ocean Animals](#)

Start with **Classification (page 2 – Marine Animals)**

Teaching Point:

Classification helps scientists organise the natural world into clear groups.

Pause to ask:

- Is a jellyfish a vertebrate or invertebrate? Why?
- Are corals plants or animals?
- Why might coral reefs be important habitats?

3. Learning Time

Focus on: **Vertebrates vs Invertebrates**

Use Information Sheets:

[4a Vertebrates and Invertebrates](#)

[4b Images and Names](#)

[4c Classes of Animals](#)

Children:

- Identify which animals have backbones
- Sort image cards into correct groups
- Discuss similarities within each group

Show Original Film: [Coral \(use Film Guide\)](#).

Clarify misconception:

Coral reefs look like plants or rocks, but they are living animals.

4. Activity

Classification Sorting Activity

Children:

- Complete sorting sheet
- Label animals as vertebrate or invertebrate
- Write short explanation:
“A _____ is a vertebrate/invertebrate because...”

Extension:

Explain why coral reefs support biodiversity.

5 Fiction Link

Book: *Lucy Morgan Adventure Series – Eye of the Turtle*

Literacy Sheets: Based on *'Eye of the Turtle'* - *to be used when book has been read.*

Plenary

- What is the difference between vertebrates and invertebrates?
- Are corals animals or plants?
- Why do scientists classify living things?

Quick True/False:

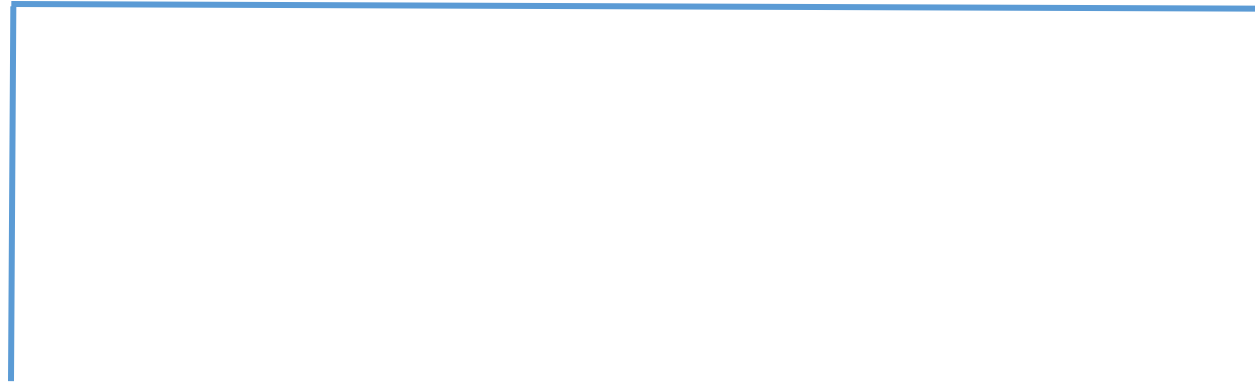
- “All ocean animals have backbones.”
- “Coral reefs are made by tiny animals.”

Ocean World

Animals that live in
the ocean

Photo Fact File

Animal Kingdom



Invertebrates
(creatures without a
backbone)

Vertebrates
(creatures with
a backbone)

Invertebrates

(creatures without a backbone)

Corals

Soft Coral
Hard Coral

Annelids

Christmas
Tree Worms
Duster Worms

Molluscs

Crabs
Clam
Octopus
Sea Slugs

Echinoderms

Starfish
Sea Urchin
Sea Cucumber

Vertebrates

(creatures with a backbone)

Fish

Sharks
Rays
Moray Eels
Butterfly fish

Mammals

Whales
Dolphins

Sea Birds

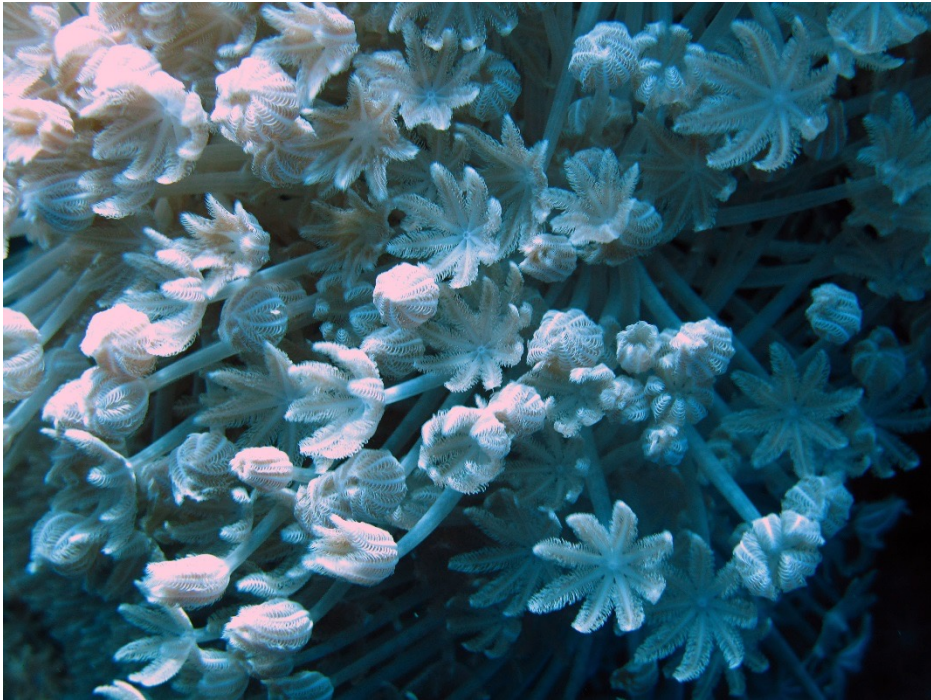
Puffin
Penguin
Albatross

Reptiles

Turtles
Sea Snakes

Corals

Corals are invertebrates and have no backbone.
There are two types Soft Coral and Hard Coral



Annelids

Annelids are Sea Worms. They do not have a skeleton but can live in tubes which they make in the hard coral.

Christmas Tree worm



Duster worm



Echinoderms

Some Echinoderms have an inside shell but none of them have a backbone.

You can only find Echinoderms in the Sea.

Starfish



Sea Urchin



Sea Cucumber



Molluscs

Molluscs do not have a skeleton (invertebrates). There are hundreds of types of mollusc. Here are just a few.

Crab



Clam



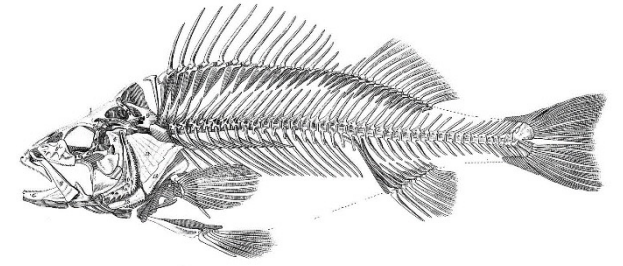
Octopus



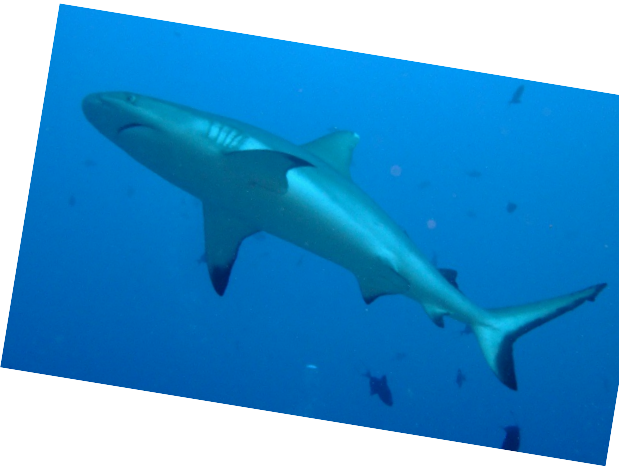
Sea Slug



Fish (Vertebrate)



Sharks



Rays



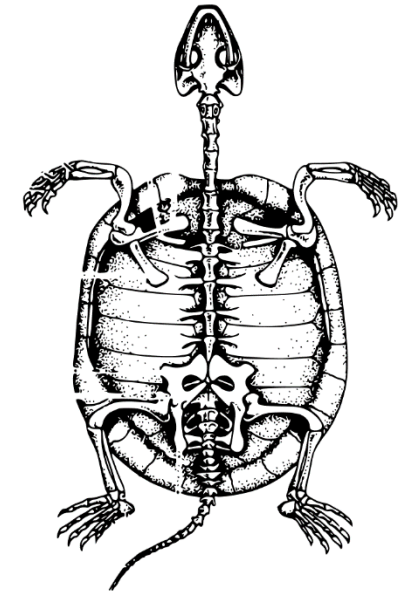
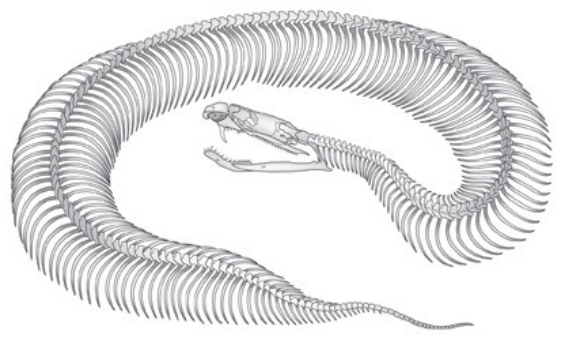
Moray Eels



Butterfly fish



Reptiles (Vertebrate)



Invertebrates **(Creatures without a Backbone)**

Coral

Soft Coral
Hard Coral

Annelids

Christmas Tree Worms
Duster Worms

Echinoderms

Clams
Octopus
Sea Urchin

Molluscs

Crabs
Starfish
Sea Slugs
Sea Cucumber

Vertebrates **(Creatures with a Backbone)**

Fish

Sharks
Rays
Moray Eels
Butterfly Fish

Mammals

Whales
Dolphins

Reptiles

Turtles
Sea Snake

Sea Birds

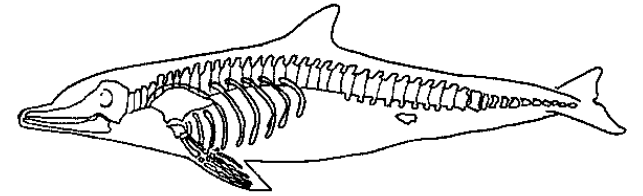
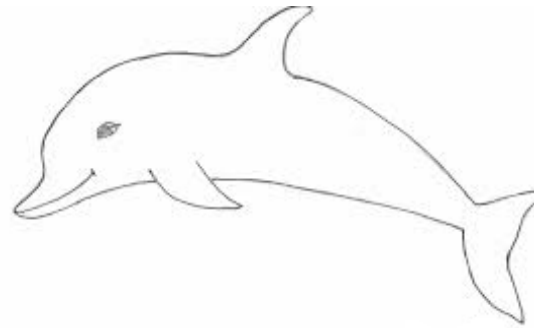
Penguin
Albatross

Mammals (Vertebrate)

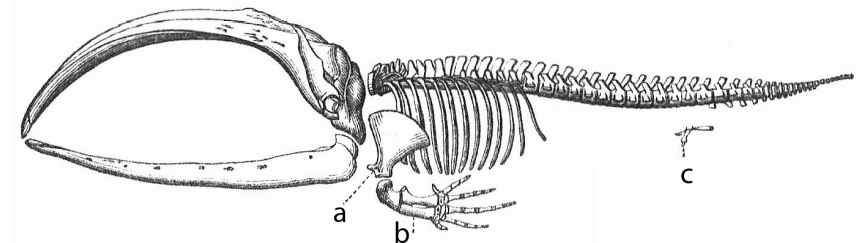
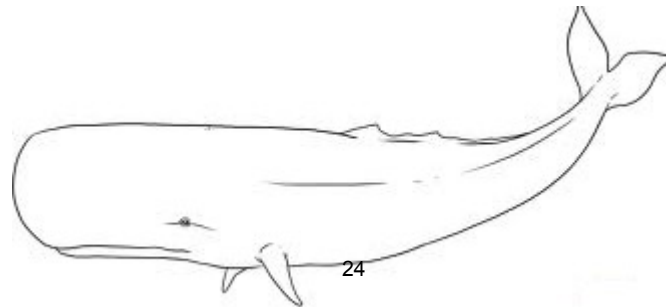
Mammals which live in the sea are called Marine Mammals



Dolphin



Whale



Sea Bird (Vertebrate)



Puffin



Penguin

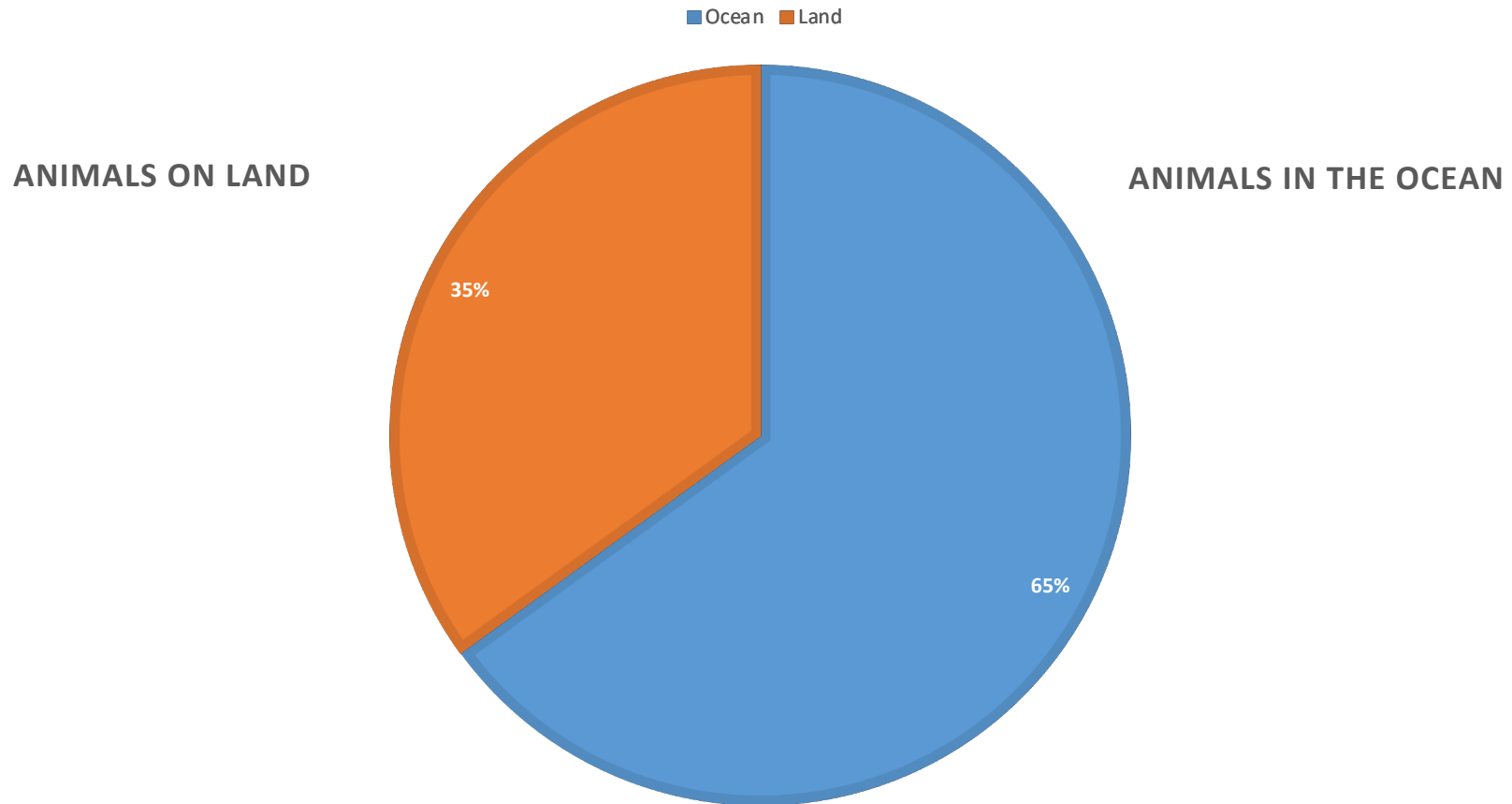


Albatross



Where do most animals live .. in the
ocean or on land?

Where do most animals live .. in the ocean on on land?



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Ocean World

Film Guide



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Ocean World – Coral

Hard coral is made of polyps which are cemented to the reef. They have tentacles which are pushed out into the water. These tentacles catch food particles in the water and push them into the central mouth cavity. Hard coral is not feeding all the time. The best hard coral to watch feeding is the pulsating xenoid coral.

Soft coral is water filled with water. They don't need tentacles as the soft coral tissue can collect the food particles easily. All corals have **algae** living inside their tissues – the algae benefit by being able to stay close to the sunlight near the surface and the coral benefits from the algae making glucose and oxygen from the sunlight.

Scene 1: A tropical coral reef. A coral reef is made up of thousands of tiny animals. The corals can be hard coral or soft coral.

Scene 2: Hard coral called **Staghorn coral** forms branches which are very sharp. There are thousands of individual polyps on each 'branch', all making up a community of corals of the same type. **Leather coral** moves in the currents and is also made of small polyps – when not feeding you can see the individual polyps. – looking like dimples.

Scene 3: These are the **pulsating xenoids**. They are feeding by holding out their tentacles into the water to catch food particles. The tentacles can open and close, up to 40 times every minute.

Scene 4: Brain coral is named because it looks like a human brain. There are thousands of individual polyps on this coral, all in lines. The lines hold hundreds of separate coral polyps.

Scene 5: Table coral. When thousands of staghorn polyps form a community they can form shapes like a table.

Scene 6: Feeding Leather Coral shows the individual coral polyps as white dots. The yellow **soft coral** has water inside it to support it (called a hydro-skeleton) and is just waving in the current. At the far left is hard **Fan coral** which can take hundreds of years to grow to this shape.

Scene 7: Cabbage coral shows the polyps closed up and they look like dimples, but you can see how many polyps it takes to grow into a complete cabbage coral 'leaf'.

Ocean World – Invertebrates

Invertebrates are animals without a backbone. Some have no bones at all, whilst others, such as crabs and lobsters have hard structures on the outside of their bodies (exoskeletons). All corals are invertebrates.

Scene 1: Anemone coral. This film shows the individual polyps waving in the current. (The nemo fish are nowhere to be seen.) Coral and jellyfish were the first 'real' animals to live on planet Earth (from 580 million years ago)

Scene 2: Jellyfish are drifters in the ocean. They are very simple animals. They don't swim – just undulate to keep them in the top surface of the sea water. Small **algae** (not plants or animals) live inside them which make oxygen and glucose from sunlight – so the jellyfish need to be near the surface where the sunlight shines down into the water.

Scene 3: Sponges were some of the first multi-celled animals. They are soft and squishy to touch and have chemicals on the outside which can harm your skin. It's best not to touch any coral or sponges when swimming underwater. Pipe sponges and Urn sponges are the most common types of sponge.

Scene 4: Marine Worms – a duster worm is a tube worm, and so are Christmas Tree worms.

Scene 5: Shrimps have bony structures on the outside of their bodies. This is a **Boxer shrimp** – watch carefully because it is feeding by waving the tentacles in the water to collect food particles, then scrapping off the food and pushing it into its mouth.

Scene 5: Sea Slugs are nothing like the slimy black slugs you'd find in your garden, sea slugs are really beautiful. A **pyjama chromadoris slug** has yellow, black and white stripes – just like pyjamas. Risbecia slugs stay together as they wander around the reef. Sea slugs have small mouths underneath their head which scrapes food off the hard coral.

They have two light organs on the top of their head which can only see light or dark, and they have a feathery structure near the back of their body which acts like fish gills as it collects the oxygen from the water.

Scene 6: Spiny lobsters have long antennae which they are using to try to push the camera away. They love to hide under the coral.

Scene 7: The Octopus and Goatfish Story. The goatfish will usually feed itself by putting its feelers into the sand and disturbing small pieces of dead fish or shrimps. In this film however, it seems like the fish wants to make the octopus move across the sea bed, disturbing the sand so the fish can be lazy. The octopus tries all sorts of camouflage tricks trying to frighten off the fish, but it doesn't seem to be working. The fish is definitely annoying the octopus, which tries to hide in a coral hole, waiting for over ten minutes (the film was edited at this point) and hoping the fish will have gone away – but the goatfish has staying close-by and sees the octopus emerge. Finally, the octopus swims off.

Ocean World – Fish

Scene 1: Hammerhead Shark. All sharks are fish. They breathe through gills and have fins to swim. It is swimming through a shoal of Blue Fusiliers, but is obviously not hungry. It is a mistake to think that sharks want to eat all the time.

Scene 2: Raccoon Butterfly Fish. These fish do not chase prey so they are not predators. They eat food particles lodged in the coral. Their mouths are shaped to allow them to reach into the coral crevices to eat.

Scene 3: Shoal of Yellow Snappers. These fish gather in hundreds to swim together. It is all about survival. If you are a fish in the middle of a shoal, then you are less likely to be eaten by a predator, but they have to take it in turns to be on the outside where it could be dangerous.

Scene 4: Anemone Fish (Nemos). Anemone coral has a nasty poison on the tentacles to help prevent it being eaten. Only nemo fish have a special covering on their bodies which allows them to go inside the anemone without being stung. Watch the tiny blue fish – they are not protected so they can't go inside the anemone.

Scene 5: Masked Butterfly Fish and Banner Fish. These fish form a partnership and stay together for life. The two masked butterfly fish are obviously life partners, but the striped banner fish seems to be alone.

Scene 6. Giant Moray and Cleaner Fish. This moray is the largest of all the moray species. It could bite off a diver's fingers if you got too close. Its teeth are very sharp. This moray is sitting in the reef being cleaned by a small blue and black wrasse which is picking off all the rubbish from the moray's fishy body.

Scene 7. Blue Spotted Ray. This is a gentle fish. Its mouth is under the front of its body and it sifts the sand looking for shrimps and small fish to eat. It hunts at night and during the day is found hiding in the sand or under a coral reef. It is frightened of humans and swims quickly away. It is related to sharks but where sharks have hard fins, the rays have developed undulating wings to enable them to swim.

Scene 8. Stingrays. These are members of the ray family, but they have very nasty stings in their tails. They hide in the sand with their eyes sticking out, watching for fish to pass by for them to catch.

Scene 9: Crocodile Fish. A very strange looking fish which looks at first like a crocodile, but then you can see it has no legs. It has fins at its sides and on the top of its body. It sits and waits, hidden by its camouflage, and watches for food to swim past. The eyes are the strangest of all as they move in different directions so the fish can see if a fish is coming past from both directions at once. If a fish comes close it snaps its mouth and eats it very fast indeed.

Scene 9. Moray Eels. The first eel is a young yellowmouthed moray, peeking out from a coral crevice and waiting to safely come out. The second is a green moray hiding in a crevice but it decides to retreat back into its hole. The third moray is out of its hole so you can now see the length of its body. The day before this was filmed, there was a big storm and all the sand particles are floating around in the water. When the camera lights shine on the sand it shows up as a red shining light, like small fireworks. The moray is hunting for food, but then hides in a crevice and tries to frighten the camera away.

Ocean World – Marine Reptiles

All marine reptiles go to the surface to breathe oxygen.

Scene 1: Sea Snake. This is a Sea Krait – a black and white banded snake which is very poisonous. One bite from this creature and you will be dead in minutes!

Scene 2: Green Turtle. A really friendly and harmless sea creature. The front flippers do all the work when swimming whilst the tail and back legs act as a rudder. A turtle has a hard mouth and can eat crabs, fish, shrimps and lots of soft coral. The algae in the coral is released into the water as it eats, spreading its green chemical everywhere around, including covering the turtle.

Scene 3. Marine Iguana. This iguana lives on land but when it's hungry it goes into the ocean and feeds on the algae on the rocks. It has big claws to scrape the algae off the rock and a big tail which acts like an engine. It can stay underwater for about 20 minutes, but then comes back to the surface to breathe. All these reptiles are known as marine reptiles as they could not survive without the food they get from the sea.

Ocean World Mammals

All Marine Mammals have to come to the surface to breathe oxygen.

Scene 1: Humpback Whales. This film was taken in Iceland (where it was too cold to dive!). There are three whales playing around the boat. When they stay at the surface with their heads under the water, it is known as logging. Often whales will sleep when logging. These whales however are enjoying themselves 'showing off' their ability to dive. Can you guess where and when they are going to 'blow', then watch for their arched backs and wait for their tail flukes to show. There are three whales – all with a different pattern on the underneath of their flukes.

Scene 2: Dolphins. Firstly, a large pod of dolphins swimming in the Pacific Ocean. Are they competing for who can jump out of the water the highest? Then diving with dolphins in the warmth of the Red Sea. Listen for the clicks as the dolphins talk to each other.

Scene 3: Sealions look awkward on land, especially when walking on the rocks. They can make a lot of noise. The young sealion pups seem happy to go for swimming lessons.

Ocean World Sea Birds

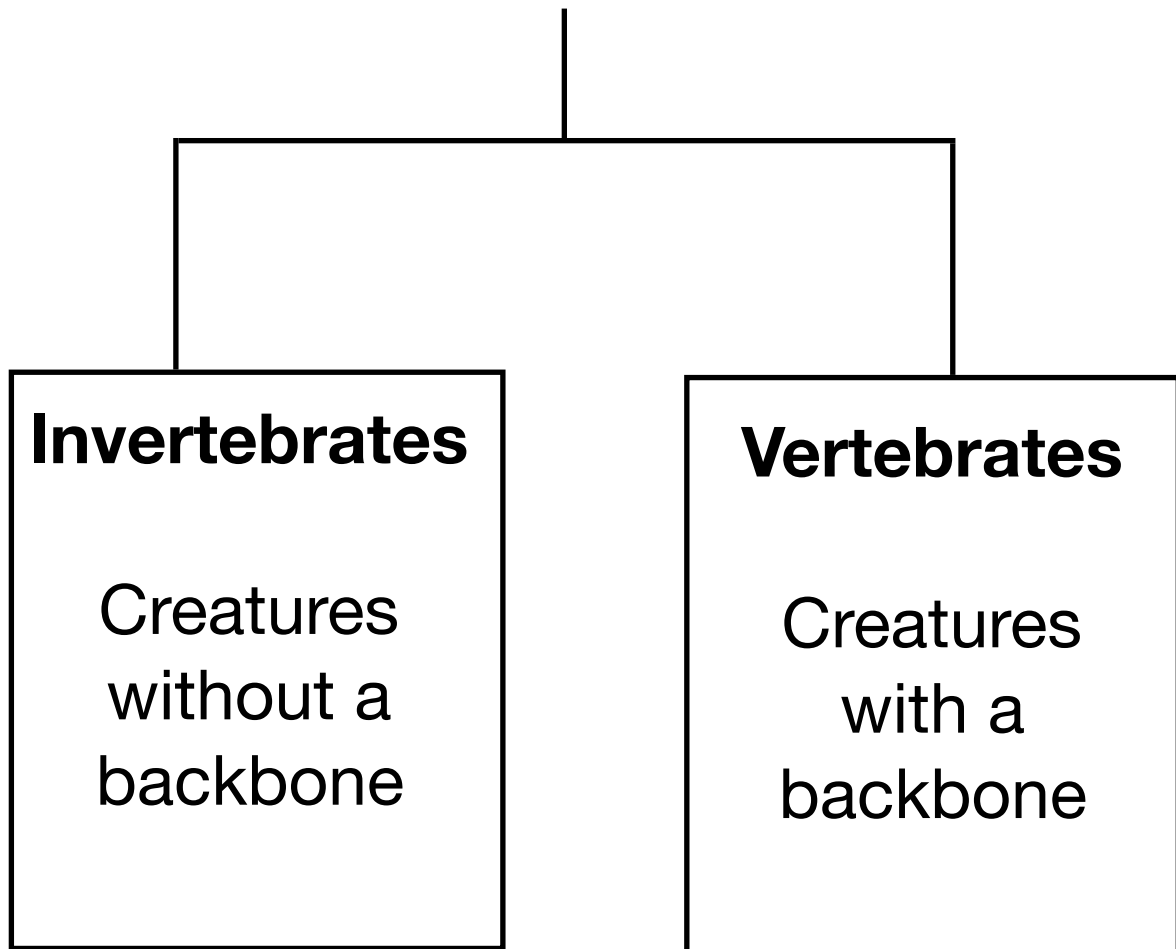
Scene 1: Penguins. These are Magellan penguins filmed in the Beagle Channel in South America. They are experts at fishing for their dinner.

Scene 2: Magnificent Frigate Bird. The males of this species of bird have a bright red pouch under their bill. This throat colour is puffed up in the mating season to attract a mate. When they find a new mate, they rub their bills together.

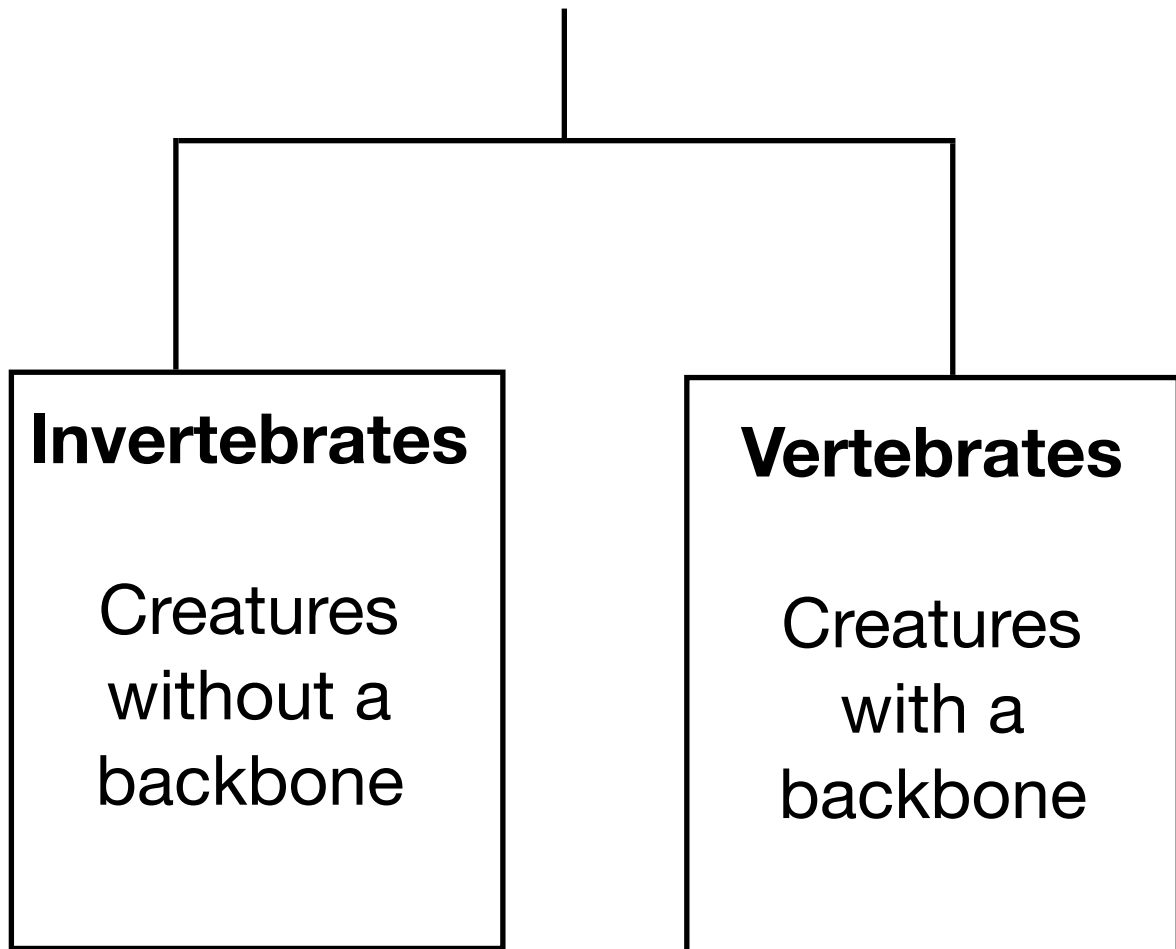
Scene 3: Blue-footed Boobies. Filmed in the Galapagos Islands, these birds show off their incredible bright blue feet to attract a mate. It looks like their dancing. What story would you tell about this film clip?

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Animal Kingdom

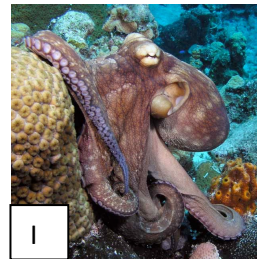
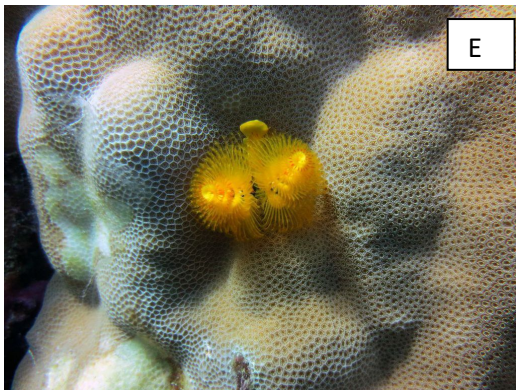
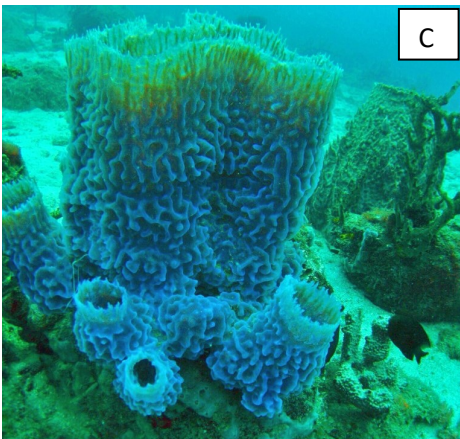
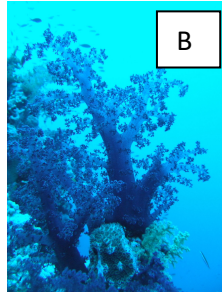
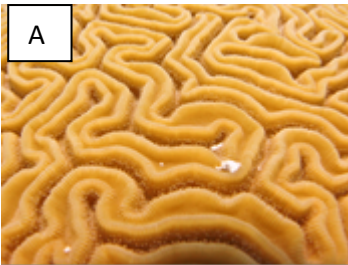


Animal Kingdom



Invertebrates

- A. Hard Coral
- B. Soft Coral
- C. Sponge
- D. Sea Snail
- E. Marine Worm (in honeycomb coral)
- F. Sea Slug
- G. Echinoderm (Starfish)
- H. Sea Cucumber
- I. Mollusc – (Cephalapod) - Cuttlefish



Invertebrates

(creatures without a backbone)

Coral

Soft Coral

Hard Coral

Annelids

Christmas Tree Worms

Duster Worms

Echinoderms

Starfish

Sea Cucumbers

Molluscs

Clams

Sea Slugs

Vertebrates

(creatures with a backbone)

Fish

Sharks

Moray Eels

Mammals

Whales

Dolphins

Reptiles

Turtles

Sea Snake

Sea Birds

Penguin

Albatross

Teachers' Resources

Literacy

A busy teacher's Booklet of Worksheets :

Use with pupils age 8 and above after reading ...



‘Eye of the Turtle’- a Lucy Morgan Adventure Story -

by Gloria Barnett

ISBN: 978-1838064303

LITERACY

Comprehension Exercise ONE

Worksheet to be used after reading 'Eye of the Turtle' Chapter 1.

'Eye of the Turtle' Worksheet 1.

Lucy's story starts in London - then she moves to 'Pontus Island' in the Caribbean.

Read the extract below - and answer the questions.

"The window rattled and she turned to watch the wind battering rain against the glass.

'There's nothing special for us here, Lucy. It's cold and damp. Look down. There's hardly a tree in sight. This isn't leafy green London, full of royal parks and palaces. We're living on the twelfth floor of a concrete block. We're breathing in fumes from the motorway. This isn't the life I want for us.'

Mum looked away from the window, sat up straight and pulled her shoulders back. 'We need to make BIG decision.'

She sprang to her feet. Her tall, thin body paced up and down like a captive tiger in a cage. Was she nervous or excited?

'We should get away from here. I'll find a better job. We'll improve our lives!' She pushed her long blonde hair away from her face and smiled.

Somehow, I didn't expect to see Mum smile so soon after her shattering news. Words came tumbling uncontrollably out of her mouth. I only caught a few phrases. Great opportunity! Live somewhere warm! Move away!

Move away? Where to? I've lived in London for every second of my eleven years. I know nothing about anywhere else! My fingers twisted in my long hair. I watched her closely as she calmed down, but I couldn't tell what was on her mind."

Comprehension Exercise ONE

'Eye of the Turtle' Worksheet 1.

Questions

1. *Mum 'turned to watch the wind battering rain against the glass.'* Does this phrase make you feel warm or make you want to shiver?
2. *'a)... wind battering rain' or b) 'wind blowing the rain.'* Which phrase is the most dramatic?
3. *How did Mum describe the weather in London?*
4. *When Mum said they 'didn't live in the 'leafy green parks of London' - what did she mean was missing?*
5. *Did Lucy live in a house with a garden, or in a flat in a tower block?*
6. *How did Mum describe the air that they breathed in London?*
7. *What animal does the author compare Mum to as she paced up and down?*
8. *Why was Lucy surprised to see her Mum smile?*
9. *How many years had Lucy lived in London?*
10. *'My fingers twisted in my long hair.'* What feelings do you think Lucy was experiencing?

Comprehension Exercise ONE

'Eye of the Turtle' Worksheet 1.

Answers

1. *Shiver*
2. *Battering*
3. *Cold and damp*
4. *Trees*
5. *A flat in a tower block*
6. *Fumes from the motorway*
7. *Tiger*
8. *Mum had just lost her job and was upset.*
9. *All of her 11 years*
10. *Nervousness.*

Comprehension Exercise TWO

Worksheet to be used after reading 'Eye of the Turtle' Chapter 1.

'Eye of the Turtle' Worksheet 5.

Read the extract below:

'It's here!' Mum squealed, staring at her iPad.

'What's here?' I asked, although I had a fair idea. It was nearly a week since our library trip, and she'd been checking her emails about once a minute every since.

'It's the answer I've been hoping for!' she explained. It's a job! I've been offered a new job!'

I'd never seen her smile so widely. 'Great.' I mirrored her smile. This was obviously good news. Mum needed a job.

'It's amazing!' She said, I've been offered a job in a new Community Library and I'll be helping the staff to run the English Language classes.'

You'll love that,' I said, 'helping people is what you're good at and there's lots of people in London who don't speak very good English.'

'Well, yes.' She hesitated and looked away from me, but it's not quite as simple as a job just around the corner, Lucy. It's ... not in London.'

'Where is it then?'

'Well, the job is on Pontus Island,' she said quietly.

'Where on earth is that? I've never heard of it.'

'It's in the Caribbean,' she explained.

'The Caribbean?' I could hear my voice echoing loudly around the quiet room. 'That's the other side of the world isn't it?' My thoughts were spinning around trying to make sense of what was happening. 'But ...we'll be leaving everything we know ... to move to a strange country!'

'I know,' she said, smiling, 'isn't it exciting? We can start again. A new beginning.'

My brain was in overload. My palms went clammy and I began to shake with panic. I'd be leaving my school, my friends ... and our neighbours, Maggie and Stan ... they were like the grandparents I didn't have. I'd be leaving London to travel thousands of miles away ... and I'd never see them or my friends ever again.'

Comprehension Exercise TWO

'Eye of the Turtle' Worksheet 2.

Questions

1. Give an example of 'exaggeration' from the extract above.
2. How did Lucy mirror her Mum's smile?
3. Why was Mum hesitant to tell Lucy where the job was?
4. How did Mum show she was nervous about telling Lucy where the job was?
5. Why were Lucy's thoughts 'spinning'?
6. Why did Lucy's voice get louder?
7. Was Lucy as excited as her Mum was about the move?
8. Which phrase was used to show that Lucy's thoughts were in a turmoil ?
9. What happened to Lucy's hands when they were 'clammy'.
10. Which people was Lucy going to miss if she moved away?

Comprehension Exercise TWO

'Eye of the Turtle' Worksheet 2.

Answers

1. 'she'd been checking her emails about once a minute every since.'
2. Lucy copied her Mum, by smiling back
3. She knew Lucy would probably not want to move
4. Mum looked away, and her voice went quiet
5. She didn't even know where Pontus was, and she could not imagine it
6. Lucy didn't want the accept they were going to move
7. Absolutely, NOT!
8. Lucy's brain was in overload
9. Lucy's hands were wet and sticky
10. Lucy would miss her school friends, and her neighbours Maggie and Stan

Comprehension Exercise THREE

Worksheet to be used after reading 'Eye of the Turtle' Chapter 6.

'Eye of the Turtle' Worksheet 3

Read the extract below:

"We turned away from the road. Our steps quickened. As I looked ahead, warm air rushed into my open mouth.

'WOW!'

I'd never been on a beach before, not in my whole life... ever! It was beautiful! Bleached white sand stretched out ahead dotted with tall coconut palm trees. The droopy green fronds of the trees created ever-changing shady spots on the sand. The breeze made the leaves dance. The white sand merged with wavelets of gentle, white-topped surf at the edge of the blue waters of the bay.

As my hair blew in the gentle breeze, I swept it behind my ears, keeping my eyes clear to absorb the scene.

'What a view!' My voice was a whisper.

As I walked, my feet sank into the soft warm sand. I took off my shoes and socks. Looking down I saw my toes disappear, but the sand was dry and quickly released my feet as I moved forward.

The beach was quiet and peaceful. A few people sat on sunbeds, under the shade of green umbrellas. Further along customers were sitting at sunny tables outside a building with signs saying, 'Drifters Restaurant and Bar.'

Comprehension Exercise

Worksheet to be used after reading 'Eye of the Turtle' Chapter 6.

'Eye of the Turtle' Worksheet 3.

Questions - Worksheet 6

1. *What was the temperature of the air?*
2. *What sort of trees were on the beach?*
3. *What is a 'shady' spot?*
4. *How does the word 'droopy' describe the way the leaves were facing?*
5. *Is the 'surf' on the sand or on the top of the seawater?*
6. *What colour is 'bleached' sand?*
7. *When she first saw the beach, why did Lucy's voice turn to a whisper?*
8. *How did Lucy stop her hair from blowing in the wind?*
9. *Why did Lucy's feet not get stuck in the sand?*
10. *What could you buy at 'Drifters'?*

Comprehension Exercise THREE

Worksheet to be used after reading 'Eye of the Turtle' Chapter 6.

'Eye of the Turtle' Worksheet 3.

Answers - Worksheet 3

1. *Warm*
2. *Coconut palm trees*
3. *Shady is out of the direct sunlight*
4. *Droopy means the leaves are facing downwards*
5. *Surf is found on the top of the water, as it gets closer to the edge of the sand.*
6. *White (bleached by the sun)*
7. *Lucy thought the sight of the beach was beautiful.*
8. *She tucked her hair behind her ears.*
9. *The sand was dry - not wet and sticky.*
10. *Food and drink*

Ocean Adventures Teachers' Resource

YEAR FOUR

SESSION TWO

Ocean Adventures – Fish and Reptiles

Classroom Reading Book - 'The Secrets of the Shallows' Book TWO of the Lucy Morgan Adventure Series

Non-Fiction Book: '50 Fabulous Facts about Ocean Animals'

Session Structure

1. Starter

Ask:

- What makes a fish a fish?
- Are sharks fish or mammals?
- Which reptiles live in the ocean?

Recap:

Vertebrates vs Invertebrates

Key Teaching Point:

Fish and reptiles are both vertebrates, but they have different characteristics.

Vocabulary:

Gills

Scales

Cold-blooded

Fins

Habitat

Adaptation

2. Discuss

Use:

[50 Fabulous Facts About Ocean Animals](#)

[Original Films: Fish and Reptiles \(use Film Guide\)](#)

Teaching Points:

Fish:

- Breathe through gills
- Have fins
- Lay eggs (most species)

Reptiles:

- Breathe air with lungs
- Have scales
- Cold-blooded
- Lay eggs on land (e.g. sea turtles)

Pause to ask:

- Why must sea turtles come to land?
- How do fish breathe underwater?

3. Learning Time

Use Information Sheets:

[4d Sorting Sheet](#)

[4e Fish](#)

[4f Reptiles](#)

Children:

- Compare fish and reptiles
- Identify key differences
- Complete sorting activity

Focus on adaptations for survival.

4. Activity

Classification Table

Children create a comparison table:

Feature	Fish	Reptiles
Breathing		
Body Covering		
Habitat		

Extension:

Explain why reptiles are not fully aquatic.

5. Fiction Link to be used when book has been read.

[Book: Lucy Morgan – The Secrets of the Shallows](#)

Discuss:

- Which sea creatures appear in the story?
- How are they adapted to survive?

Plenary

- What is one difference between fish and reptiles?
- Why are both groups vertebrates?
- Which group returns to land to lay eggs?

Quick Check:

- “Fish breathe with lungs.”
- “Sea turtles are reptiles.”

Sorting Out Sea Creatures

FACT: There are four main groups of **Vertebrate** sea creatures:

Fish, Marine Reptiles, Marine Mammals and Sea Birds

All these creatures have backbones plus something special to sort out which group they belong to:

1. Fish

All **fish** have – **Gills, Scales and Fins**

Gills are special body parts that help a fish obtain oxygen from the water.

Slippery **scales** are on their bodies for protection.

Fins help them swim in the water. **Cod** and **sardines** are fish. **Sharks** are fish too!

2. Marine Reptiles

Marine reptiles **breathe oxygen from the sea surface.**

Sea snakes and **turtles** have no fins and no gills so are not fish.

Turtles have a rough skin, hard shell, legs, strong flippers and **lay soft shelled eggs.**

3. Marine Mammals

Marine mammals like **whales** and **dolphins** live their lives beneath the ocean but **come to the surface to breath** oxygen.

They **give birth to live young** and **produce milk** for their babies to suckle in the first few weeks of life.

4. Birds

Sea birds look like land birds in their shape – but they rely on the oceans to find their food and some can **dive under the water** to collect fish. **Birds have wings and feathers, and lay hard-shelled eggs.**

Gannets and **puffins** dive into the ocean to collect their food.

1. Fish

All **fish** have – **Gills, scales and fins**

Gills are special body parts that help a fish obtain oxygen from the water.

Slippery **scales** are on their bodies for protection.

Fins help them swim in the water. **Cod** and **sardines** are fish. **Sharks** are fish too!

Shark



Ray



Moray Eel



Butterfly Fish

2. Marine Reptiles

Marine reptiles **breathe oxygen from the sea surface.**

Sea snakes and *turtles* have no fins and no gills so are not fish.

Turtles have a rough skin, hard shell, legs, strong flippers and **lay soft shelled eggs.**

Sea Snake



Turtle

Ocean Adventures Teachers' Resource

YEAR FOUR

SESSION THREE

Ocean Adventures – Marine Mammals and Sea Birds

Classroom Reading Book - 'The Hidden Cave' Book THREE of the Lucy Morgan Adventure Series

Non-Fiction Book: '50 Fabulous Facts about Ocean Animals'

Session Structure

1. Starter

Ask:

- What makes an animal a mammal?
- Can birds live in the ocean?
- Are whales fish?

Recap previous learning:
Classification groups

Key Teaching Point:
Marine mammals and sea birds are vertebrates with special adaptations for ocean life.

Vocabulary:
Mammal
Warm-blooded
Blubber
Migration
Predator
Prey

2. Discuss

Use: *50 Fabulous Facts About Ocean Animals*

Original Films: *Marine Mammals and Sea Birds (use Film Guide)*

Teaching Points:

Marine Mammals:
• Breathe air
• Warm-blooded
• Give birth to live young
• Feed milk to babies

- Sea Birds:
 - Have feathers
 - Lay eggs
 - Adapted for diving or floating
 - Migrate long distances
- Use Ocean for supplying food

Pause to ask:

- Why do whales need to surface?
- How are penguins adapted to cold oceans?

3. Learning Time

Use Information Sheets:
4g Sorting Mammals
4h Sorting Sea Birds

Consolidation of all classification groups:
Invertebrates
Coral
Fish
Reptiles
Marine Mammals
Sea Birds

Use:
4i Snap Cards
4j Snap ID Key
Poster (with and without numbers)

Children identify and classify animals correctly.

4. Activity

Classification Challenge

Children:
• Sort snap cards into correct groups
• Match to ID key
• Create their own mini classification poster

Extension:
Explain why whales are mammals and not fish.

2. Fiction Link to be used when book has been read.

Book: *Lucy Morgan – The Hidden Cave*

Discuss:
• What mammals or birds appear?
• How do they survive in the ocean?

Plenary

- What makes a mammal different from a reptile?
- Why are sea birds important to ocean ecosystems?
- Which classification group contains the most ocean species?

Final True/False:
• "Whales are fish."
• "Penguins are sea birds."
• "All mammals live on land."

3. Marine Mammals

Marine mammals like *whales* and *dolphins* live their lives beneath the ocean but **come to the surface to breathe** oxygen.

They **give birth to live young** and **produce milk** for their babies to suckle in the first few weeks of life.



Dolphin



Whale

4. Birds

Sea birds look like land birds in their shape – but they rely on the oceans to find their food and some can **dive under the water** to collect fish. **Birds have wings and feathers, and lay hard shelled eggs.**

Gannets and **puffins** dive into the ocean to collect their food.

Puffin



Penguin



Albatross & Chick



Albatross

Gannet



Rules for Ocean World Snap

Teachers: - You have been supplied with one copy of the printed cards. Depending on your number of pupils, you will need to print more of these for your classroom needs. Print one set of cards three times to get a basic set of 64 cards which would allow 4 pupils to a game. More than one type of SNAP game can be played such as matching the exact card, or by matching types of animal e.g. fish or birds or even non-SNAP games such as 'Who Am I' or use them as reference cards to sort into Vertebrates or Invertebrates. You have an identification sheet to help you. The only thing stopping you finding ways to use these cards is your imagination!

OCEAN WORLD SNAP is a card game where all of the cards are shuffled and dealt equally to players (a group of 2, 3 or 4 players). Cards are left in a face down pile in front of each player.

Starting with the youngest player and moving clockwise, each player (on their turn) QUICKLY turns over the top card from their face-down pile and puts it on top of a central face-up pile. When a card is turned over which matches the previous central card, the players race to be the first to say "Snap!"

The player who says "Snap!" first wins the central pile and adds those cards to the bottom of their face down pile.

The player who wins all the cards (or who has the most cards after a time limit) wins the game.

In the Ocean World SNAP Game there are different creatures from the Ocean:

Marine Invertebrates - Sea Star, Crab, Coral, and Jellyfish.

Marine Mammals - Dolphins, Whale, and Seal.

Marine Reptiles -Turtle and Sea Snake.

Sea Birds - Gannet, Penguins and Albatross.

Fish - Shark, Butterfly Fish, Anemone Fish (Nemo), and Lionfish.

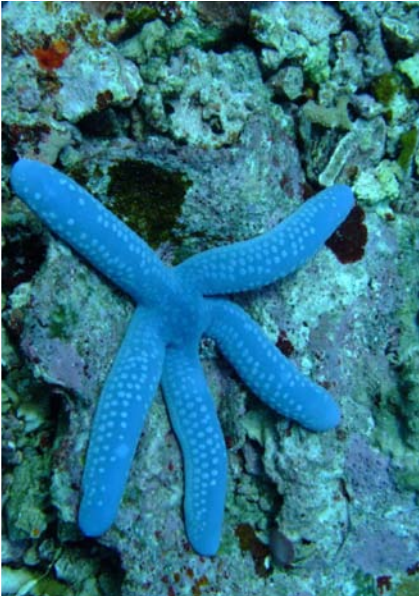
Sanity suggestion: Get pupils to store the cards in sets of 64 at the end of the session.

You can also use these SNAP card to play the **Who am I Game**. The 'Who am I' game – is played by children in pairs, or groups of 4 or 6 who play the 'Who Am I' game by showing a picture of an animal, but not seeing it themselves –and by asking questions – find out 'who they are'.

Have Fun!

SNAP Identification Sheet

1	Sea Star	Invertebrate	Echinoderm
2	Sea Snake	Vertebrate	Reptile
3	Dolphins	Vertebrate	Mammal
4	Seal	Vertebrate	Mammal
5	Whale	Vertebrate	Mammal
6	Turtle	Vertebrate	Reptile
7	Crab	Invertebrate	Crustacean
8	Coral	Invertebrate	Cnidaria
9	Jellyfish	Invertebrate	Cnidaria
10	Gannet	Vertebrate	Sea Bird
11	Albatross	Vertebrate	Sea Bird
12	Penguins	Vertebrate	Sea Bird
13	Shark	Vertebrate	Fish
14	Butterfly fish	Vertebrate	Fish
15	Anemone Fish	Vertebrate	Fish
16	Lionfish	Vertebrate	Fish



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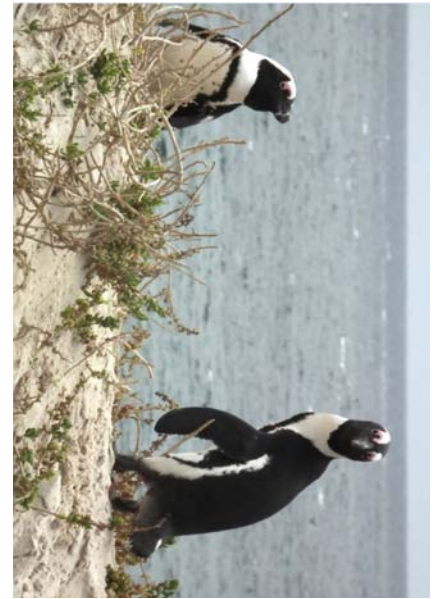
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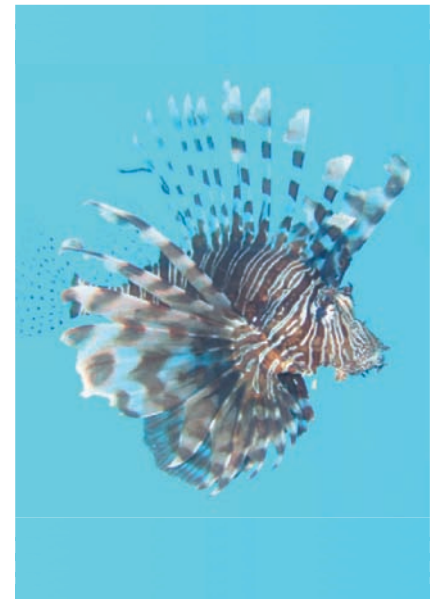


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Ocean World



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1	Albatross	Bird	23	Staghorn Coral	Invertebrate
2	Dolphins	Mammal	24	Sponge	Invertebrate
3	Gannet	Bird	25	Brain Coral	Invertebrate
4	Jellyfish	Invertebrate	26	Yellow Headed Jawfish	Fish
5	Turtle	Reptile	27	Pebbled Sea Star	Invertebrate
6	Damsel Fish	Fish	28	Slimy Leather Coral	Invertebrate
7	Blue Fusiliers	Fish	29	Blue Sea Star	Invertebrate
8	Spade Fish	Fish	30	Staghorn Coral	Invertebrate
9	Human Diver	Mammal	31	Octopus	Invertebrate
10	Blue Trigger Fish	Fish	32	Dome Coral	Invertebrate
11	Titan Trigger Fish	Fish	33	Pink Honeycomb Coral	Invertebrate
12	Napoleon Wrasse	Fish	34	Acrophora Coral	Invertebrate
13	Fantail Stingray	Fish	35	Rough Leather Coral	Invertebrate
14	Barracuda	Fish	36	Masked Pufferfish	Fish
15	Blue Whale	Mammal	37	Moray Eels (s)	Fish
16	Grouper Fish	Fish	38	Pyjama Chromadoris Sea Slug	Invertebrate
17	Oceanic White Tip Shark	Fish	39	Anemone Fish	Fish
18	Trevally fish	Fish	40	Anemone Coral	Invertebrate
19	Sweetlips Fish	Fish	41	Fan Coral	Invertebrate
20	Soft Coral	Invertebrate	42	Soft (hydro-skeleton) coral	Invertebrate
21	Butterfly Fish	Fish	43	Racoon Butterfly Fish	Fish
22	Half and Half Chromis Fish	Fish	44	Cowrie Snail	Invertebrate

Ocean Adventures Teachers' Resource

YEAR FOUR

Video Resources

Ocean World - Invertebrates.mp4

Video link

https://youtu.be/4lc3aSk_QGU

Ocean World - Coral .mp4

Video link

<https://youtu.be/J2-Bk8sAH58>

Ocean World - Fish .mp4

Video link

https://youtu.be/Yds-XpP3C_s

Ocean World - Reptiles.mp4

Video link

<https://youtu.be/2rdPzHG68wQ>

Ocean World Mammals.mp4

Video link

<https://youtu.be/B8cWualTN9Q>

Ocean World - Sea Birds.mp4

Video link

https://youtu.be/vE9t6z_hbdA

Ocean Adventures Teachers' Resources

Year 4 – Assessment for Learning

SESSION 1

Vertebrates, Invertebrates & Coral

Prior Knowledge Check

- What is a vertebrate?
- What is an invertebrate?
- Can you name an ocean animal from each group?

Key AfL Questions During Learning

- What characteristics tell you this animal is a vertebrate?
- How do you know this animal does not have a backbone?
- Can an animal live in the ocean and still be an invertebrate?
- Why is coral classified as an animal?
- How does using a classification key help scientists?

Mini-Plenary Checks

- Sorting Task
Pupils correctly group a selection of marine animals into vertebrates and invertebrates.
- Think–Pair–Share
Explain why a jellyfish is not a fish.
- Exit Ticket
Write one sentence explaining what coral is.

Success Indicators

- Correctly uses the terms *vertebrate* and *invertebrate*
- Identifies at least two distinguishing features
- Uses scientific vocabulary accurately

Ocean Adventures Teachers' Resources

Year 4 – Assessment for Learning

SESSION 2

Fish and Reptiles

Retrieval Starter

- What makes an animal a vertebrate?
- Is a shark a mammal? Why or why not?

Key AfL Questions During Learning

- How do fish breathe?
- Why must reptiles return to land?
- What is the difference between gills and lungs?
- Are fish warm-blooded or cold-blooded?
- How are fish adapted to life underwater?

Mini-Plenary Checks

- Venn Diagram Activity
Pupils compare fish and reptiles using similarities and differences.
- True or False Challenge
“Sea turtles are fish.”
Pupils must justify their answer.
- Food Chain Check
Construct a simple marine food chain including a fish or reptile.

Success Indicators

- Correctly identifies key characteristics of fish and reptiles
- Uses comparison language (however, whereas, both)
- Explains at least one adaptation clearly

Ocean Adventures Teachers' Resources

Year 4 – Assessment for Learning

SESSION 3

Marine Mammals and Sea Birds

Retrieval Starter

- Name one characteristic of a reptile.
- What makes coral an animal?

Key AfL Questions During Learning

- Why are whales mammals and not fish?
- What does warm-blooded mean?
- How do marine mammals care for their young?
- Why do some sea birds migrate?
- How do mammals survive in cold oceans?

Mini-Plenary Checks

- Classification Challenge
Pupils classify a new set of animals independently.
- Justification Task
Explain in three sentences why a dolphin is a mammal.
- Vocabulary Match-Up
Match terms such as *adaptation*, *migration*, *warm-blooded*, *blubber* to definitions.

Success Indicators

- Applies classification knowledge independently
- Provides reasoned explanations
- Uses precise scientific vocabulary
- Makes links across all three sessions

End-of-Unit Formative Assessment Opportunity

Pupils complete a mixed classification challenge where they:

- Sort animals into correct groups
- Identify adaptations
- Explain one example in paragraph form
- Use at least five key vocabulary terms correctly

Ocean Adventures – Year 4




Pupil Self-Assessment

Name: _____

Date: _____

1. What I Know Now

Put a ✓ in the box that best shows how confident you feel.

I can...	 I'm confident	 I'm getting there	 I need more help
Explain what classification means	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Explain the difference between vertebrates and invertebrates	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Identify whether an animal has a backbone	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Explain why coral is an animal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Describe how fish breathe	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Explain why sea turtles are reptiles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Describe what makes a mammal a mammal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Explain why whales are not fish	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Describe how sea birds are adapted to ocean life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Use words like habitat, adaptation, predator and prey correctly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

2. Show What You Understand

Complete the sentences:

1. A vertebrate is _____
2. An invertebrate is _____
3. Coral reefs are important because _____
4. Whales must surface because _____
5. One adaptation that helps fish survive is _____

3. My Strongest Area

The part of Ocean Adventures I understand best is:

- Classification
- Fish
- Reptiles

Marine Mammals

Sea Birds

Because: _____

4. My Stretch Thinking

One thing I found challenging was:

To improve, I
could: _____

5. Greater Depth Reflection (Optional Challenge)

I can explain clearly why whales are mammals and not fish:

Yes confidently

Mostly

Not yet

If yes, explain briefly:

6. My Effort

I listened carefully and tried my best during this unit:



(Colour in or circle how many stars you think you earned.)

Ocean Adventures Teachers' Resources - Year FOUR

Year 4 – End of Unit Quiz

Expected Standard (Multiple Choice)

Name: _____

Class: _____

Date: _____

Instructions:

Read each question carefully. Circle the correct answer.

Section 1: Classification

1. What is classification?
A) Watching animals
B) Grouping living things by their similarities and differences
C) Feeding animals
D) Naming pets
2. What is a vertebrate?
A) An animal with wings
B) An animal with a backbone
C) An animal that swims
D) An animal with scales
3. Invertebrates...
A) Have a backbone
B) Have feathers
C) Do not have a backbone
D) Live only in water
4. A jellyfish is a...
A) Vertebrate
B) Invertebrate
C) Mammal
D) Reptile
5. Coral reefs are made by...
A) Plants
B) Rocks
C) Tiny living animals called polyps
D) Fish

6. Why are coral reefs important?
A) They are colourful
B) They provide habitats for many species
C) They are made of sand
D) They float on water

Section 2: Fish and Reptiles

7. Fish breathe using...
A) Lungs
B) Gills
C) Skin
D) Feathers
8. Fish use _____ to help them swim.
A) Fins
B) Wings
C) Fur
D) Claws
9. Sea turtles are...
A) Fish
B) Mammals
C) Reptiles
D) Amphibians
10. Sea turtles return to land to...
A) Find food
B) Lay eggs
C) Sleep
D) Breathe

Turn over the page/.

11. Reptiles are...
A) Warm-blooded
B) Cold-blooded
C) Covered in fur
D) Mammals
12. Which is a difference between fish and reptiles?
A) Fish breathe with gills; reptiles breathe with lungs
B) Fish have backbones; reptiles do not
C) Fish lay eggs; reptiles do not
D) Fish are vertebrates; reptiles are not

Section 3: Marine Mammals and Sea Birds

13. Marine mammals breathe...
A) Water
B) Through gills
C) Air
D) Through their skin
14. Whales are...
A) Fish
B) Mammals
C) Reptiles
D) Invertebrates
15. Mammals feed their babies...
A) Seaweed
B) Fish
C) Milk
D) Water

16. Which of these is a mammal?
A) Shark
B) Dolphin
C) Sea turtle
D) Jellyfish
17. Sea birds...
A) Have fur
B) Lay eggs
C) Breathe underwater
D) Have gills
18. Penguins are adapted to cold oceans because they have...
A) Thin skin
B) Blubber and thick feathers
C) Gills
D) Scales
19. Migration means...
A) Sleeping underwater
B) Moving long distances at certain times of year
C) Changing colour
D) Hunting in groups
20. Which statement is TRUE?
A) All ocean animals have backbones
B) Whales are fish
C) Penguins are sea birds
D) All mammals live on land

For Teacher Use

Score: _____ / 20

Working Towards: 0–10
Expected: 11–15
OCEAN ADVENTURES

Year 4 – End of Unit Quiz

TEACHER ANSWER SHEET

Answer Key

Q	Answer	Q	Answer
1	B	11	B
2	B	12	A
3	C	13	C
4	B	14	B
5	C	15	C
6	B	16	B
7	B	17	B
8	A	18	B
9	C	19	B
10	B	20	C

Marking Guidance

Total Marks: 20

- **0–10** = Working Towards
- **11–15** = Expected Standard
- **16–20** = Secure

Question Focus Breakdown (For Assessment Use)

Classification (Q1–6)

Understanding of:

- Definition of classification
- Vertebrate vs invertebrate
- Coral as living animals
- Importance of habitats

Fish & Reptiles (Q7–12)

Understanding of:

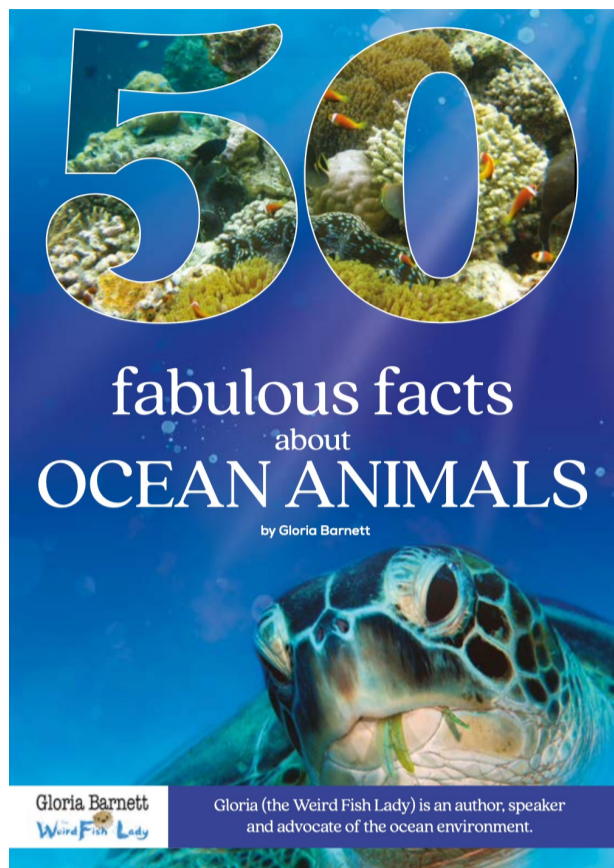
- Gills vs lungs
- Adaptations
- Cold-blooded reptiles
- Egg-laying on land

Marine Mammals & Sea Birds (Q13–20)

Understanding of:

- Mammal characteristics
- Adaptations (blubber, feathers)
- Migration
- Common misconceptions (whales/fish, mammals on land)

Secure: 16–20



**These are the companion books for
Year FOUR Ocean Adventures Teachers' Resources**

50 Fabulous Facts about Ocean Animals: ISBN: 9781838064389

Eye of the Turtle: ISBN 9781838064303

The Secrets of the Shallows: ISBN 9781838064327

The Hidden Cave: ISBN 9781838064341

Print copies are available from Amazon and major English-language bookshops worldwide:

ebooks are available from Amazon.

Special bulk buy school pricing is available for UK schools. For more information, contact Gloria at: <https://barnettauthor.co.uk>

All ideas for the development of teaching strategy for these resources are those of the author Gloria Barnett. The videos are original and have been filmed by Gloria and the books are written by Gloria too. I'd love to hear from you. Contact me with questions or suggestions. Tell me how you heard of the Ocean Adventures Resources or give me a quick review. Why not tell me which parts of this resource your pupils enjoyed the most or get some images of your children's work on my website or on instagram.

**Contact me at gloria@barnettauthor.co.uk or join me on:
Instagram:@ 'The Weird Fish Lady - Gloria Barnett'**