3

ALL ABOUT ANIMALS

Learning objectives

By the end of this unit, your pupils will have achieved a greater understanding of the following concepts:

- the main characteristics of vertebrates: mammals, birds, reptiles, amphibians and fish
- the main characteristics of invertebrates: arthropods and molluscs
- animal nutrition

Competences

This unit covers the following competences:

• Linguistic competence

• Digital competence

- Mathematical competence and basic competences in science and technology
- Learning to learn
- Social and civic competencies
- Initiative and entrepreneurship
- Cultural awareness and expression

Key vocabulary

Vertebrates: amphibian, animals, baby, bat, beak, bird, breathe, carnivore, chimpanzee, crocodile, dog, dry skin, egg, feather, fish, fly, fur, frog, gill(s), giraffe, habitat, hair, herbivore, land, leg, lion, lungs, mammal, milk, moist skin, move, newt, omnivore, oviparous, reptile, salamander, sardine, scale(s), seagull, snake, swim, tail, tortoise, viviparous, water, wing

Invertebrates: antennae, arthropod, butterfly, crab, cuttlefish, exoskeleton, grasshopper, joints, limbs, molluscs, mussel, octopus, scorpion, segment(ed), shell, shrimp, snail, tentacles

Cambridge English Qualifications practice

You will find **A1 Movers** activity types in the following exercises: Pupils Book, page 41, Activity 1 – Reading and Writing Part 1 Activity Book, Page 2, Activity 2 - Reading and writing Part 3. Activity Book, Page 18, Activity 10 - Reading and writing Part 4.

Throughout this unit, you will find the following *A1 Movers* vocabulary: another, any, at, back, band, bat, because, both, different, farmer, fish, fly, how, internet, often, think, walk



38

CAMBRIDGE

Cambridge University Press 978-1-108-56460-1 — Science Skills Level 2 Teacher's Book with Downloadable Audio 1 Paperback, 1 Downloadable audio file 9781108564601 Excerpt <u>More Information</u>



Materials needed for projects:

- cardboard for group work, magazines
- coloured cardboard, pipe cleaners, worksheet (download from Digital resource bank), string
- animal pictures, cardboard

Materials needed for experiment:

modelling clay, pipe cleaners

Experiment

The *experiment* provides your pupils with the opportunity to differentiate between vertebrates and invertebrates by creating their own animals using a pipe cleaner as backbone.

Mindful time

Each unit has a mindful feature that encourages pupils to relate learning to their feelings and emotions, their relationships with classmates, and their well-being.

In this unit, the Mindful time activity consists of focusing pupils' attention on the movement of a butterfly's wings.

Other Resources

Interactive activities Flashcards: mammals, birds, fish, vertebrates, invertebrates, molluscs Song: *Difference is good* Chant: *Arthropod band* Video documentary: *Amazing animals!* Mindful time: *Be a butterfly*

UNIT 3 PAGES 30–31

Objective:

Pupils will learn about how different animals are classified depending on their characteristics, how they reproduce, what they eat and if they have a backbone or not.

Key vocabulary

ant, ant hill, ant nest, bird, butterfly, chimpanzee, fly, frog, grass, parrot, pond, snake, worm

Warm up

Ask pupils to look at the picture on pages 30–31 for one minute and to count how many animals they can see. Then ask them to close their book and name all the animals they remember. One pupil can write the names on the board.

Ask pupils to open their book again and check how many animals they remembered correctly.

Main concepts

- Ask pupils *What do you think you are going to learn in this unit?* We are going to learn about animals.
- Ask pupils to look at the picture.
 Ask individual pupils to read out the questions on the page and elicit answers.



Mindful time

The Mindful time activity focuses pupils' attention on moving their arms as if they were the soft, delicate wings of a butterfly. ant, bird, butterfly, chimpanzee, fly, frog, parrot, snake, w<u>orm</u>



- Ask pupils to look at Little Goodall. Say Little Goodall is learning about chimpanzees. Explain that they have many things in common with us, both physically and psychologically.
- Demonstrate that the chimpanzees in the poster are feeling scared / annoyed.
- Explain that we can classify animals depending on the different characteristics they have.

Learn more

 Ask pupils to look at the list of animals on the board from the Warm up. Can they classify the animals? Put the pupils in groups of five or six and ask them to look for characteristics the animals have in common, e.g. they have feathers, they have bones, they eat plants.

Song

The song focuses on differences between animals: reptiles, amphibians, vertebrates and invertebrates.

Documentary

The documentary focuses on the different types of mammals, how they live and their characteristics.

UNIT 3 PAGE 32

Objective:

Pupils will learn about mammals and their characteristics.

Key vocabulary

carnivore, dog, fur, giraffe, hair, herbivore, lion, mammal, omnivore, vertebrate, viviparous

Warm up

Give out some mammal flashcards to different pupils. Ask them to describe their animal without saying its name. They can only talk about its characteristics, e.g. *It has (fur/hair), It has (number of legs), It is (colour).* The class tries to guess the animal.

Main concepts

- Ask Are we mammals? Focus on the photos and text. Ask pupils to look and read. Explain vocabulary, then elicit why are we mammals.
- Read the question on the page together and discuss ideas as a class.
- Pupils draw another mammal. Ask them to draw a slightly unusual mammal if they can think of any.
- Read the Fun Fact. Look at the picture and ask pupils where a bat's thumbs are and what they do with them.

Learn more

• Pupils find out more about bats at home and present their information in class.



42



UNIT 3 PAGE 33

Objective:

Pupils will consolidate their understanding of mammals. They will create a poster using pictures of mammals from magazines.

Key vocabulary

fur, mammals, vertebrates, viviparous

Warm up

Play *Mammal chain.* The first pupil names a mammal, e.g. cow. The next pupil repeats the first mammal and adds a new one, e.g. *cow, dog.* The next pupil repeats the previous two and adds one more. Play the game around the class.

Main concepts

- Say Let's make posters about mammals. Put pupils in groups to find and cut out photos, glue them and write each mammal's characteristics.
- Read *My dictionary* as a class. Ask pupils to find the sticker and trace the words.
- Ask pupils to read and complete the *What have I learnt?* box individually.

Learn more

• Pupils can present their poster to the rest of the class.

More Information

UNIT 3 PAGE 34

Objective:

Pupils will learn about the physical characteristics of birds and fish. They will also think about what they eat and the things they have in common.

Key vocabulary

beak, carnivores, feathers, fins, gills, herbivores, legs, omnivores, oviparous, sardine, scales, seagull, tail, wings

Warm up

Read the title question. Ask pupils to mime flying and swimming. Then they look at the pictures and point to the animal that flies and the animal that swims.

Main concepts

- Ask pupils to look at the photos and read the texts. Explain vocabulary as necessary. Have them name the animals. Say Can you name any other birds or fish?
- Discuss the question What have birds and fish got in common? Have pupils share their ideas.
- Pupils find and circle the eggs.
- Read the Fun Fact and ask pupils if they have heard of or seen flying fish.

Learn more

• Pupils can find out more about flying fish at home and present their information in class.

Birds usually fly and fish swim but there are some exceptions: some birds can't fly, and some fish jump so high it looks like they fly.



Both have a tail. Both can be carnivores, herbivores or omnivores and both are oviparous.



UNIT 3 PAGE 35

Objective:

Pupils will consolidate their understanding of the characteristics of birds. They will create a hanging mobile.

Key vocabulary

beak, feathers, fins, gills, oviparous

Warm up

Display photos of the birds in the worksheet: eagles, hummingbirds and sparrows. Ask pupils what each one eats and whether they are carnivores, herbivores or omnivores.

Main concepts

- Say Let's make a hanging mobile! Look at the activity and explain what they will do. Ask a pupil to explain again in his/her own words.
- Give out the materials and ask pupils to complete the task. You can make a display of their work.
- Read *My dictionary* individually. Ask pupils to find the sticker and trace the words.
- Ask pupils to read and complete the *What have I learnt?* box individually.

Learn more

35

• Pupils can present their mobiles to the class.

UNIT 3 PAGE 36

Objective:

Pupils will learn about the characteristics of amphibians and reptiles. They will also think about the similarities and differences between them.

Key vocabulary

amphibian, crocodile, dry, frog, gills, land, lungs, moist, newt, oviparous, reptile, salamander, snake, skin, tortoise

Warm up

Display images of reptiles and amphibians. Write Reptile and Amphibian on the board and ask pupils to classify them. They can check their answer at the end.

Main concepts

- Ask pupils to read the title question. Have them read and find the answer.
- Play the audio. Pupils listen and point, then read the texts aloud.
- As a class, discuss the question What have they got in common?
- Point out the hidden feature instruction. Pupils find the hidden butterfly.
- Read the Fun Fact. Ask pupils if they have ever seen an old snake skin.

Learn more

• Pupils choose an amphibian or a reptile to research and present to the class.

They live on land and in water.





UNIT 3 PAGE 37

Objective:

Pupils will review the characteristics of the animal types they have studied: mammals, birds, fish, amphibians and reptiles.

Key vocabulary

amphibian, dry skin, lungs, moist skin, reptile

Warm up

Tell pupils they are going to make a game to play with friends. Tell them a riddle as an example. They raise their hand when they think they know the answer.

Main concepts

- Go through the instructions and give out the materials. They make their cards and play in pairs.
- Read *My dictionary* individually. Ask pupils to find the sticker and trace the words.
- Ask pupils to read and complete the *What have I learnt?* box individually.

Learn more

• Pupils can invent more riddles at home to prepare a game for the class.

UNIT 3 PAGE 38

Objective:

Pupils will be able to identify and classify arthropods and molluscs. They will learn about invertebrate animals.

Key vocabulary

antennae, arthropods, crab, cuttlefish, grasshopper, invertebrates, joints, limbs, mollusc, mussel, octopus, scorpion, segmented, shell, shrimp, snail, soft, tentacles

Warm up

Explain to the class that they are going to learn about invertebrates. Encourage them to name any invertebrates they know. Can they think of a way to classify the examples they give?

Main concepts

- Read the title question with pupils. Give them time to read the information on the page and answer.
- Have pupils read the texts and complete the tracing activity.
- As a class, discuss the question *Where do arthropods and molluscs live?*

Learn more

Encourage pupils to do a project at home about an arthropod or a mollusc. They can draw or stick a photo of the animal and label its body type. Then they write its characteristics, e.g. where it lives, how it reproduces.



Arthropods live in many different types of habitat.

> Vertebrates have got a backbone. Invertebrates haven't got a backbone. The giraffe is a mammal. It has got fur. The ladybird is an arthropod.

> > Try it out



Let's make animals.

1 Look at the pictures and talk about them with a friend.



2 Make one vertebrate animal and one invertebrate animal.





What are the main differences between these animals?



UNIT 3 PAGE 39

Objective:

Pupils will perform an experiment to find out the main differences between vertebrate and invertebrate animals.

Key vocabulary

backbone, vertebrate, invertebrate, x-ray

Warm up

Display pictures of different types of animals and say *Vertebrate* or *Invertebrate*. If you are telling the truth, pupils repeat the statement. If you aren't telling the truth, pupils remain silent.

Main concepts

- Tell pupils We're going to find out what the differences are between vertebrates and invertebrates.
- Ask pupils to predict which animal will be stronger and bigger.
- After making the model animals, complete the conclusion.

Learn more

39

• Pupils can do other experiments with their model animals. They can find out how strong they are or see if they can make a very big invertebrate out of plasticine.

UNIT 3 PAGE 40

Objective:

Pupils will experience the different butterfly metamorphosis phases by performing different yoga positions.

Key vocabulary

butterfly, caterpillar, chrysalis, egg

Warm up

Tell pupils they are going to practise some yoga positions. Ask them to concentrate on their breathing as they take three deep breaths.

Main concepts

- Demonstrate the yoga positions in the book. Do each one very slowly and maintain the position for a few seconds. Ask pupils to do the same. They should breathe deeply five times in each position.
- After doing all the positions, ask pupils *How are you feeling?*
- Give them time to draw themselves as a butterfly in Activity 2.

Learn more

• Encourage pupils to share these yoga positions with their families at home and to practise deep breathing every day for concentration.



More Information



UNIT 3 PAGE 41

Objective:

Pupils will review the content of the unit and read about Jane Goodall.

Key vocabulary

amphibian, backbone, bat, carnivore, egg, fur, hair, mammal, meat, mollusc, mussel

Warm up

Sing and do the actions for the *Arthropod band* chant. Divide the class into two groups to sing alternate lines. Then swap roles and repeat.

Main concepts

- Check that pupils remember the different classifications for animals.
- Read the instructions for Activity 1 and ask pupils to complete the task. They compare with another pair before checking answers.
- Let pupils compare their answers in pairs before checking answers together.
- Read the instructions for Activity 2 with pupils. Play the audio twice, pausing as necessary.
- Look at the photo of Jane Goodall and read the information.

Learn more

- Use the internet to look for more information about Jane Goodall.
- Go to page 82 for more activities.
- Pupils can now put their fingerprint in the passport on page 5.

UNIT 3 LET'S REVIEW PAGE 82

Find the right words answers

1

- **a** is
- **b** is jumping
- **c** are flying
- **d** is / is eating
- e is looking
- 2
- **a** Why / Because
- **b** Why / Because
- c Why / Because

Look back answers

- 1
- **a** a crab
- **b** a snake
- **c** a zebra

This activity gives pupils practice of *A1 Movers* Reading and writing Part 1.

2

- **a** mammals
- **b** birds
- **c** fish
- **d** Amphibians
- **e** arthropods
- **f** molluscs

UNIT 3 TRACKLIST

Track 19 Page 31, Song Difference is good Track 20 Page 32, Are we mammals? Track 21 Page 34, Do I fly or do I swim? Track 22 Page 36, Where do amphibians live? Track 23 Page 38, Do all molluscs have tentacles? Track 24 Page 41, Listening activity Track 25 Page 41, Chant: Arthropod Band Track 26 Page 41, I am Jane Goodall. Character Track 53 Page 82, Listening activity