

Natural
Science



Second
Edition



CAMBRIDGE

Teacher's Book
with Digital Pack



NATURAL SCIENCE 2



Course introduction

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Here we go again!

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**How can machines
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Audio scripts

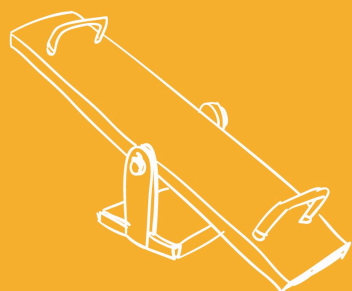
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Activity Book answers

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WELCOME TO CAMBRIDGE NATURAL SCIENCE



Cambridge Natural Science Second Edition follows the new Primary Natural Science curricula with complete coverage of the Science competencies.

- An **enquiry-based approach** with Big Questions promotes critical thinking around relevant Science topics.
- **Hands-on experiments and manual activities** engage students with the content in a child-friendly, memorable way.
- Three **competency-based projects with posters and assessments** encourage pupils to deepen their exploration of new concepts while strengthening their collaboration and presentation skills.
- A **new content review section** on every spread ensures that students have enough practice with new concepts to effectively consolidate their knowledge.
- **English speaking, listening, reading and writing skills are developed while grammar structures** presented in Cambridge Primary courses are systematically reinforced.
- **Exam vocabulary and practice for Cambridge English Qualifications** for young learners are featured in every level:
 - Level 1: Pre A1 Starters**
 - Level 2: A1 Movers**
 - Level 3: A1 Movers and A2 Flyers**
 - Level 4: A2 Flyers**
 - Level 5: A2 for Schools and B1 Preliminary for Schools**
 - Level 6: B1 Preliminary for Schools**

Cambridge Natural Science Second Edition has been developed around the key Science competencies stipulated in the new curriculum. For every lesson you teach, the competencies covered by the content are listed on the corresponding Teacher's Book spread. In addition, the three level projects are supported by competency-based assessments.



Sci C1 Digital competency

Use digital devices and resources in a safe, responsible and efficient way.



Sci C4 Competency in self-awareness and empathy

Develop awareness of one's own and others' physical, emotional and social well-being.



Sci C7 Competency in historical awareness

Understand continuity and change in society and culture.



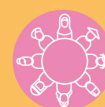
Sci C2 Scientific thinking competency

Use different techniques, instruments and modes of scientific thought to interpret and explain facts and phenomena occurring in their own natural, social and cultural environment.



Sci C5 Competency in preservation of natural and cultural heritage

Identify and understand relationships between systems in the natural, social and cultural environment to appreciate the value of cultural and natural heritage and preserve it.



Sci C8 Competency in cultural and social awareness and empathy

Value plurality and respect other cultures to build a more harmonious society that integrates EU values.



Sci C3 Problem-solving competency

Use design projects and computational thinking to cooperatively solve problems in interdisciplinary projects.



Sci C6 Competency in environmental sustainability

Develop awareness of human impact on the environment, including sustainable practices.



Sci C9 Citizenship competency

Recognise democratic values, human and child rights and the principles of the Spanish Constitution and the EU.

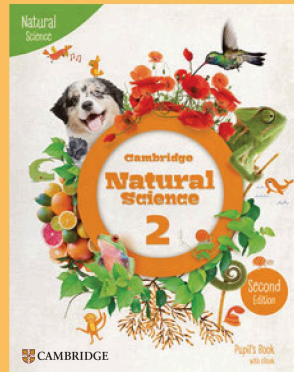
Course Components

Pupil's Book with eBook: Each unit includes hands-on experiments, manual activities, mixed-ability assessment and practice of the Cambridge English Qualifications for young learners. There are three competency-based projects per level: each **Our Project** includes an accompanying **Project Poster**, **Project Worksheet** and **Project Assessment Grid**. Pupils can find their eBook access code on the inside front cover of their Pupil's Book.

Activity Book with Digital Pack: Each unit features activities that consolidate the concepts introduced in the Pupil's Book and practise the Cambridge English Qualifications for young learners. Self- or peer-assessments are included on the Activity Book project pages. The Digital Pack access code is on the inside front cover of the Activity Book.

Teacher's Book with Digital Pack: Teaching ideas are offered at each stage of the lesson and competencies are flagged. Each unit highlights Cambridge English Qualifications vocabulary and practice activities, as well as links to digital components. Teachers can access digital content using a unique code found on the inside front cover of the Teacher's Book.

Flashcards: Full-colour printed flashcards (Levels 1–4) bring Science topics to life. Digital flashcards are available for all levels.



Digital components on Cambridge One platform

The digital components for **Cambridge Natural Science Second Edition** are available on our new **Cambridge One** online learning platform.



Presentation Plus: Digital front-of-class presentation with interactive versions of the Pupil's Book and Activity Book and a variety of features to help pupils cement their understanding of key concepts.

- **interactive Pupil's Book and Activity Book activities**
- **documentary videos** for every Pupil's Book unit
- **animations** to support the meaning of core concepts
- **digital flashcards**
- **class audio with scripts**

Test Generator: Features downloadable ready-made mixed-ability tests and allows teachers to build their own exams.

Teacher's Resource Bank: Includes teacher training videos; *Our Project* assessment grids, worksheets, posters, and self- and peer-evaluations; revision worksheets; concept maps; letters to parents; and downloadable class audios and videos.

Practice Extra: Teachers can set homework and track each pupil's progress. Provides extra practice in a way that rewards and motivates young learners.

HERE WE GO AGAIN!

PAGES 4-5

Objective:

Pupils will meet the main characters and will become familiar with the topics that they will learn throughout this book. They will also have their first introduction to the scientific method.

Key vocabulary

animals, materials, plants, scientific instruments, senses, the human body

C2



Warm up

Write the vocabulary words on the board. Read them aloud and encourage pupils to read with you. Make sure they all understand the meaning. Ask pupils to raise their hands if they like animals, or plants, or scientific instruments, and so on. Explain that these are the key topics for the year.

Main concepts

- Play a ball game. Ask the pupils to stand in a circle. Start by saying *My name is* (say your name). *I like plants.* Throw the ball to a pupil, who will repeat. Play until everyone has had a turn.



I can think, predict, experiment, observe and conclude.

Scientific method:
 1 Predict
 2 Experiment
 3 Observe and conclude

Scientist card

Put your fingerprint here when you complete a unit.

Name: _____
 Age: _____

Welcome Unit	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
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the human body

senses

animals

plants

materials

scientific instruments

What about you?
 My favourite topic is _____.

5

Pupils' own answers

- Ask pupils to look at the picture and say what they can see. Read the name labels and ask pupils if they know any of these famous people. This will help them make connections with previous knowledge.
- Ask volunteers to read the name labels. In pairs, pupils connect each person with the key topics on the board.
- Ask pupils to look at the photo of a girl. Ask the class to read aloud together. Then ask *Do you like experiments? Which was your favourite experiment from last year?* Explain that they are going to do lots of experiments. Point out the Scientist card for them to complete after each experiment.
- Finally, read the activity about favourite topics. Make sure everyone understands what to do. They can talk with a partner or in a small group about what they like.

Learn more

Ask pupils to write a word for each category they can, e.g. animals: cat. For those they do not know (body systems or materials) tell they will learn and complete it as they go along.

1

HOW DO OUR BODIES WORK?

Learning objectives

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

- the five senses
- the digestive system
- the respiratory system
- the stages of life

Competencies

This unit covers the following competencies:

- Sci C1: Digital competency 
- Sci C2: Scientific thinking competency 
- Sci C4: Competency in self-awareness and empathy 
- Sci C7: Competency in historical awareness 
- Sci C8: Competency in cultural and social awareness and empathy 

Key vocabulary

Five senses: bitter, brain, flavours, hear, information, salty, see, sour, smell, sweet, taste

Digestive system: anus, carbohydrates, large intestine, mouth, protein, small intestine, stomach, teeth, vitamins

Respiratory system: air, blood, breathe, heart, lungs, oxygen

Stages of life: adolescent, adult, baby, born, child, elderly person, nutrients, tummy

Cambridge English Qualifications practice

You will find **A1 Movers** activity types in the following exercises:

Pupil's Book, Page 17, Activity 2 – Reading and Writing Part 2

Pupil's Book, Page 85, Activity 1 – Reading and Writing Part 1

Activity Book, Page 3, Activity 4 – Reading and Writing Part 3

Activity Book, Page 6, Activity 10 – Reading and Writing Part 5

Throughout this unit, you will find the following **A1 Movers** vocabulary:

break, cold, cry, hot, how, how much, loud, message, quiet, stomach, strong, sweet, teeth





Digital Resources on Cambridge One

- Song: *Breathe and eat*
- Chant: *I am going to be eighteen!*
- Video documentary: *Our senses*
- Mindful time: *Listen to the gong.*
- Presentation Plus with interactive activities
- Practice Extra with interactive activities
- Test Generator
- Resource Bank:
 - Flashcards: 13, 46, 48, 79–88
 - Worksheets for *Hands On*, *Game Zone* and revision
 - Concept map
 - Letter to parents
 - Practice Extra answer keys
 - Oracy talking points worksheet and cue cards
 - Programaciones
 - Downloadable class audios and videos

Materials needed for *Hands on*

- slices of bread, spoons, water, resealable bag
- uninflated balloons
- Family worksheet (download from Digital Resource bank), coloured pencils, scissors
- pictures of people and their family members

Materials needed for *Experiment*

- water, sugar, salt, grapefruit or lemons, olives; plates, boxes or trays labelled *sweet*, *sour*, *salty* and *bitter*

Materials needed for other activities

- a six-metre-long piece of string
- an example of Braille

Experiment

The *experiment* provides your pupils with the opportunity to try different types of food and to identify their flavours. They will think about how different tastes can be classified.

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 focuses on active listening. An audio track (Track 03) is available to carry out the activity.

Objective:

Pupils will learn about the external parts of the body, about actions, feelings and the five senses. They will connect previous knowledge with new concepts.

Key vocabulary

flowers, happy, park, run, slide, smell, sunny, trees

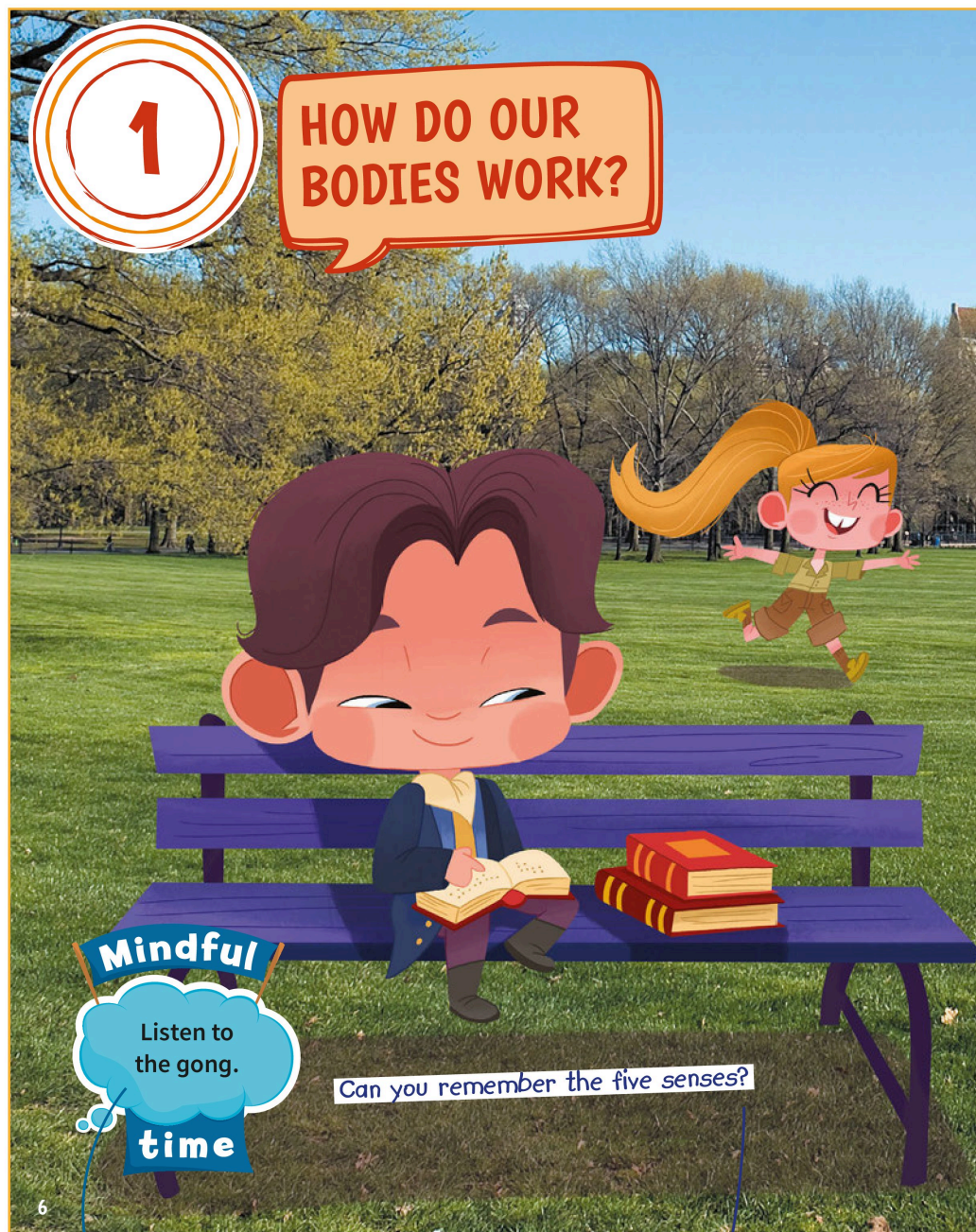


Warm up

Ask pupils *What can you see in the picture?* Elicit some answers by asking about the weather, the plants in the picture, and how the children are feeling. Ask pupils to look at the picture, describe what they can see and identify the characters. Say *Point to the (slide)*.

Main concepts

- Ask pupils *What do you think we are going to learn in this unit? We are going to learn about how our body works.*
- Ask a pupil to read the title. Then ask pupils to suggest some actions we can do with our body. Accept their suggestions, and elicit answers related to the unit contents, such as *eat* or *breathe*.
- Ask individual pupils to read out the questions on the page and elicit answers from the class.



Mindful time

Children will listen to the gong. They close their eyes and listen to the sound. They put up their hand when the sound has finished.

see, smell, hear, taste, touch

Learn more

Ask pupils to write the five senses on a piece of paper. If necessary, write them on the board for pupils to copy. Ask them to draw the organ we use for each one next to the word.

Song

The song focuses on the main body organs in each system and their functions.

Documentary

The video focuses on the senses and the example of Ludwig van Beethoven who overcame sensory impairment.



The sense of touch, the sense of taste,
the senses of sight, smell and hearing.

He can't see. / The sense of sight.