

CLIL World

Class Book Pack

**with Digital Class Book
& Active Learning Kit**

All the written activities in this book should be completed in your own notebook, and not in this book.

Todas las actividades de carácter escrito propuestas en este libro se deben realizar en un cuaderno aparte, nunca en el propio libro.


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0. You're a scientist Page 8	<ul style="list-style-type: none"> • What has science achieved? • What are some important inventions in science? 		
1. Ecosystems Page 10  Watch.	How do we classify living things?	What's an ecosystem?	STEAM Challenge Make an insect hotel
2. Rocks and relief Page 26  Watch.	What different landforms are there?	Can you understand a relief map?  Watch.	STEAM Challenge Make a contour map of an island
Page 40 Project. Learning situation 1 Protect national parks			
3. Heat and temperature Page 42  Watch.	What are sources of heat?	How can we measure temperature?	STEAM Challenge Make a thermometer Culture Daniel Fahrenheit
4. Forces Page 58  Watch.	What's a force?  Watch.	What are contact and non-contact forces?  Watch.	What's gravity? Culture Isaac Newton
Page 72 Project. Learning situation 2 Friction			
5. Machines Page 74  Watch.	What's a machine?  Watch. Culture Archimedes	STEAM Challenge Make a catapult	How did machines change the world?  Watch.
6. Digital devices Page 90  Watch.	How has technology changed our world?  Watch. Culture Steve Jobs	How can we use technology to communicate?	How can we use digital devices safely?
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<p>How do living things interact in an ecosystem?</p> <p> Watch.</p>	<p>How can we protect ecosystems?</p> <p> Watch.</p> <p>Culture Rachel Carson</p>	<p>Why are ecosystems important?</p>	<p>Science lab</p> <p>Which location has the most air pollution?</p> <p> Watch.</p>	<p>Review & Reflect</p> <p>What have you learned about ecosystems?</p>
<p>How do we classify rocks?</p> <p> Watch.</p>	<p>Science lab</p> <p>Which rocks are sedimentary?</p> <p> Watch.</p>	<p>What's a mineral?</p> <p>Culture Ermeloite</p>		<p>Review & Reflect</p> <p>What have you learned about rocks and relief?</p>
<p>How can heat change states of matter?</p> <p> Watch.</p>	<p>What are conductors and insulators?</p>	<p>How can we use heat as an energy source?</p> <p> Watch.</p>	<p>Science lab</p> <p>Which spoon is the best thermal conductor?</p> <p> Watch.</p>	<p>Review & Reflect</p> <p>What have you learned about heat and temperature?</p>
<p>How do magnets work?</p>	<p>Science lab</p> <p>Are big magnets always stronger than smaller ones?</p> <p> Watch.</p>	<p>STEAM Challenge</p> <p>Design a forces game</p>		<p>Review & Reflect</p> <p>What have you learned about forces?</p>
<p>What are simple machines?</p>	<p>What are complex machines?</p>	<p>Science lab</p> <p>Does the surface of an inclined plane affect how fast a marble rolls?</p> <p> Watch.</p>	<p>What is the difference between simple and complex machines?</p>	<p>Review & Reflect</p> <p>What have you learned about machines?</p>
<p>Can you program...?</p> <p> Watch.</p>	<p>STEAM Challenge</p> <p>Design a website</p>	<p>Can you design a ...?</p> <p> Watch.</p>	<p>Design lab</p> <p>How can you design an object to help someone?</p>	<p>Review & Reflect</p> <p>What have you learned about digital devices?</p>

- Language learning lab in every unit
- WebQuest in every unit

 Watch. unit videos, content videos and experiment videos

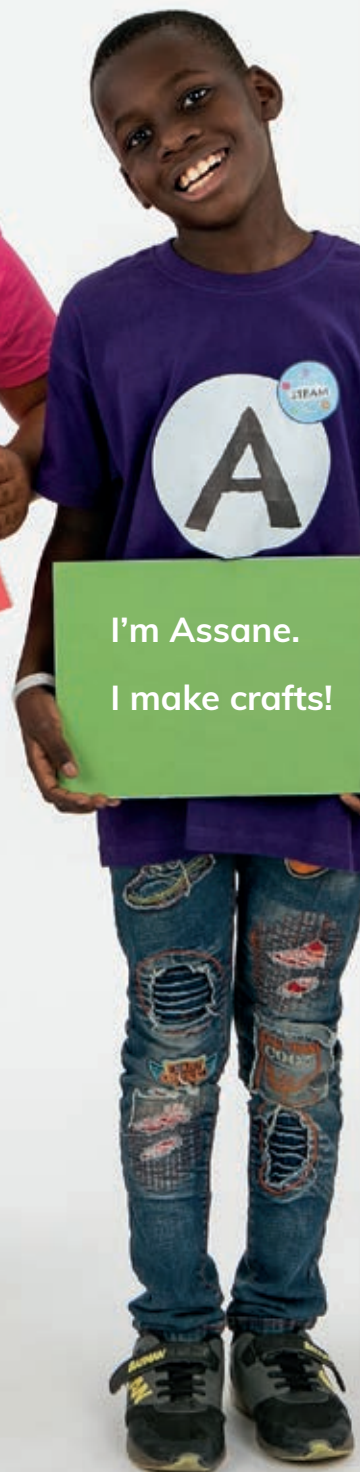
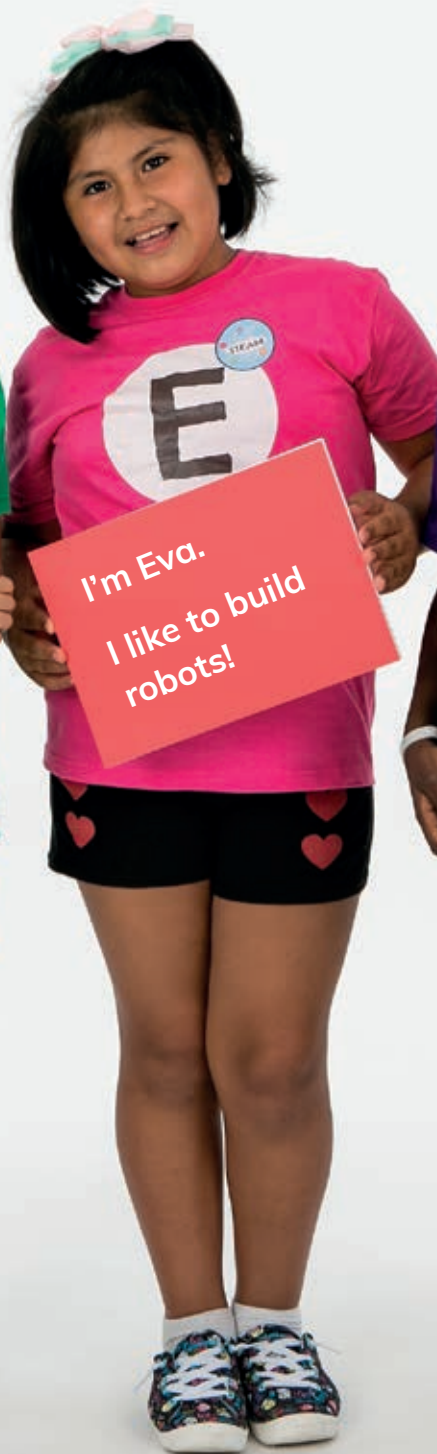
Key competences

 Linguistic communication  Science, Technology, Engineering and Mathematical (STEM)  Digital

 Personal, social and learning to learn  Entrepreneurship  Citizenship  Cultural awareness and expression

Meet the STEAM Team!

Science
Technology
Engineering
Arts and
Mathematics



Do STEAM challenges.

Challenge Make a symmetrical butterfly

Can you make a symmetrical animal?

Before you start

1 Look at the two sides of these animals. Are they the same?

Almost all animals are symmetrical. This means their left and right sides are the same.

You need...

- a paintbrush
- card
- paints
- pencil
- scissors

Planning

- 1 Fold the card in half. Draw an outline of half a butterfly.
- 2 Cut out your butterfly.
- 3 Use the paintbrush. Put some paint on one side of your butterfly.
- 4 Fold and press.
- 5 Open carefully. You have got a beautiful butterfly!
- 6 Display your butterflies around the class.
- 7 Look at your classmates' butterflies. Are they symmetrical?

Ask important questions.

Project Learning situation 1

Protect the pollinators

Animals need plants to survive but some plants also need animals to help them reproduce. Animals that spread pollen from one flower to another are called pollinators. Some pollinators are endangered. This means they might become extinct unless we protect them.

How can we protect pollinators?

bee butterfly fruit bat hummingbird

If the pollinators become extinct then the plants they pollinate might also die.

Many fruits and vegetables need pollinators to reproduce.

Many flowers need pollinators to reproduce.

Language learning lab

Learn to describe animals with a classmate.

It's got ... / It hasn't got ...

a tail	wings	scales
gills	feathers	fur

It's a bird / a mammal / an amphibian / a fish / a reptile.

- Choose an animal. Write three sentences.
- Play the guessing game!
- Ask questions for more information: Has it got ...? Yes, it has. / No, it hasn't.

3 Investigate using the Internet and answer the question.

Whales live in the water, but they aren't fish. Why not?

Listen and say the Vertebrate chant. Guess the missing words. 003

CULTURE

Jane Goodall is a British scientist. She studied chimpanzees in Africa for more than 50 years. What characteristic do chimpanzees have?

Teach the vertebrate chant at home.

Solve STEAM activities.

Learn together!

Some animals, such as mammals, are viviparous. They give birth to live babies.

Birds, amphibians and most fish and reptiles are oviparous. Their babies are born from eggs. Most invertebrates are oviparous.

4 Work in pairs. Answer the questions.

- Find out the names of these animals.
- Which of these animals are oviparous?
- Which of these animals have lungs?

Interaction

All animals interact with their environment.

5 Look at the pictures and answer the questions.

- Some animals fight with other animals. Why are the tigers fighting?
- Sometimes animals help other animals. We call this **symbiosis**. How are the birds helping the deer? Why do the birds do this?

At home Find a carnivore, a herbivore and an omnivore from your environment.

