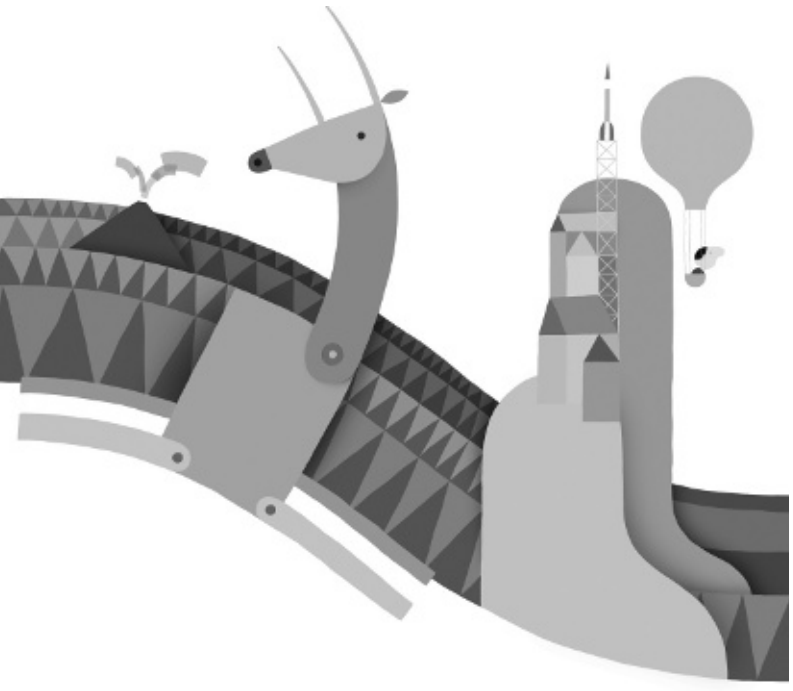


Essential Science Plus 5 PRIMARY

Teacher's Resource Book

Richmond PUBLISHING

SANTILLANA

Contents

Worksheets

Answer keys

Introduction

Essential Science Plus 5 Teacher's Resource Book provides a wide variety of photocopiable worksheets designed to complement **Essential Science Plus 5 Student's Book** and **Essential Science Plus 5 Teacher's Book**.

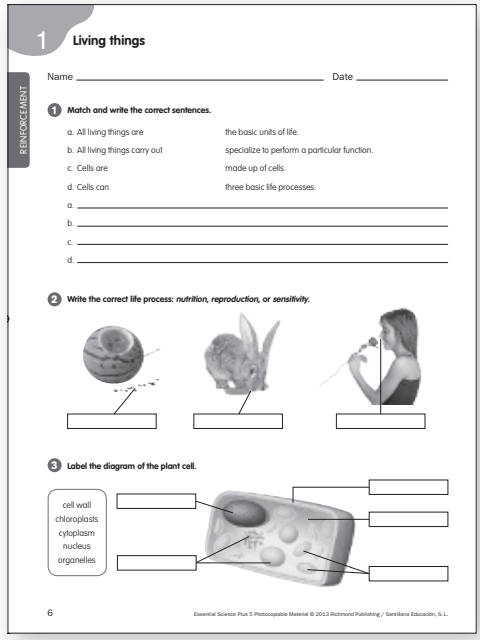
These worksheets facilitate a flexible approach in the classroom. Students in the same class can be given different worksheets. Stronger students can expand on the material learnt in class. Weaker students can use the worksheets to revise. Alternatively, students can work together with stronger peers to complete the tasks. In addition, these worksheets can be photocopied and used for homework.

There are five categories of worksheets: **Reinforcement**, **Extension**, **Culture**, **Investigate!** and **Assessment**. Answer keys are provided at the back of this book.

Reinforcement and Extension worksheets

There are twenty-four **Reinforcement worksheets** and twelve **Extension worksheets**. The Reinforcement worksheets are designed to provide additional support for students in need of further practice. They can be used after the relevant section in the Student's Book, before the *Show what you know* sections, or as extra preparation for the Unit assessment. Depending on the students, they can complete the worksheets with or without consulting their Student's Books, in the classroom or at home, individually or in pairs.

The Extension worksheets can be used for fast finishers or to expand on the material covered in class.


1 Living things

REINFORCEMENT

Name _____ Date _____

1 Match and write the correct sentences.

a. All living things are — the basic units of life.
b. All living things carry out — specialize to perform a particular function.
c. Cells are — made up of cells.
d. Cells can — three basic life processes.

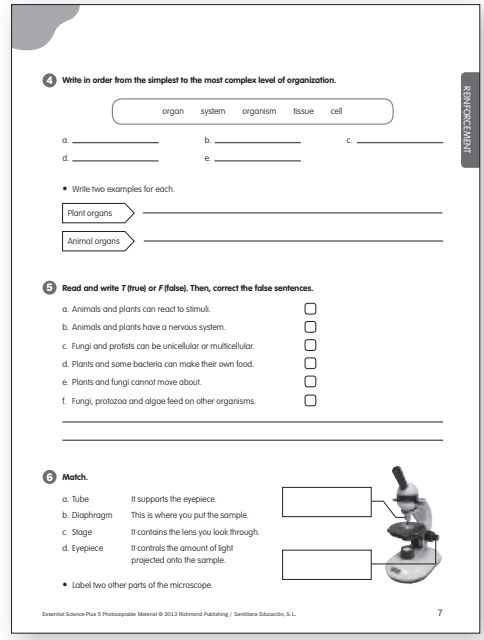
a. _____
b. _____
c. _____
d. _____

2 Write the correct life process: *nutrition, reproduction, or sensitivity.*

3 Label the diagram of the plant cell.

cell wall
chloroplasts
cytoplasm
nucleus
organelles

6


4 Write in order from the simplest to the most complex level of organization.

organ system organism tissue cell

a. _____ b. _____ c. _____
d. _____ e. _____

• Write two examples for each.

Plant organs _____
Animal organs _____

5 Read and write *T* (true) or *F* (false). Then, correct the false sentences.

a. Animals and plants can react to stimuli. ☐
b. Animals and plants have a nervous system. ☐
c. Fungi and protists can be unicellular or multicellular. ☐
d. Plants and some bacteria can make their own food. ☐
e. Plants and fungi cannot move about. ☐
f. Fungi, protozoa and algae feed on other organisms. ☐

6 Match.

a. Tube — It supports the eyepiece.
b. Diaphragm — This is where you put the sample.
c. Stage — It contains the lens you look through.
d. Eyepiece — It controls the amount of light projected onto the sample.

• Label two other parts of the microscope.

REINFORCEMENT

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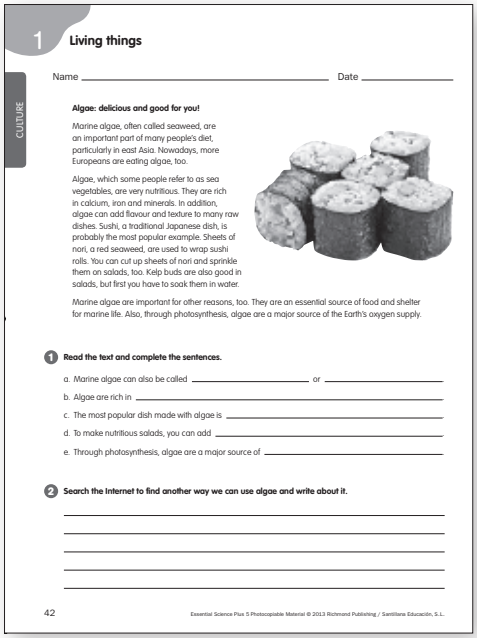
Culture worksheets

There are twelve **Culture worksheets**, one for each unit. They provide opportunities to learn about different aspects of culture around the world. Students have the opportunity to relate their learning to the real world.



1 Living things

Name _____ Date _____

CULTURE

Algae: delicious and good for you!

Marine algae, often called seaweed, are an important part of many people's diet, particularly in east Asia. Nowadays, more Europeans are eating algae, too.

Algae, which some people refer to as sea vegetables, are very nutritious. They are rich in calcium, iron and minerals. In addition, algae can add flavour and texture to many raw dishes. Sushi, a traditional Japanese dish, is probably the most popular example. Sheets of nori, a red seaweed, are used to wrap sushi rolls. You can cut up sheets of nori and sprinkle them on salads, too. Kelp buds are also good in salads, but first you have to soak them in water.

Marine algae are important for other reasons, too. They are an essential source of food and shelter for marine life. Also, through photosynthesis, algae are a major source of the Earth's oxygen supply.

1 **Read the text and complete the sentences.**

a. Marine algae can also be called _____ or _____

b. Algae are rich in _____

c. The most popular dish made with algae is _____

d. To make nutritious salads, you can add _____

e. Through photosynthesis, algae are a major source of _____

2 **Search the Internet to find another way we can use algae and write about it.**

_____

_____

_____

_____

_____

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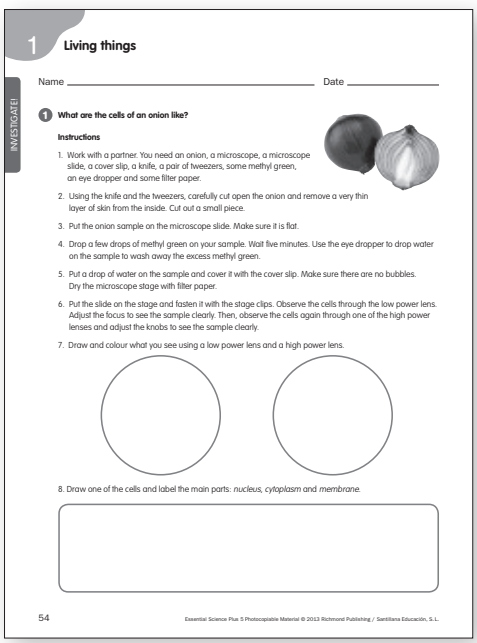
Investigate! worksheets

There are twelve **Investigate! worksheets**, one for each unit. These worksheets provide opportunities for students to carry out simple investigative tasks, either in the classroom or at home.



1 Living things

Name _____ Date _____

INVESTIGATE!

1 **What are the cells of an onion like?**

Instructions

1. Work with a partner. You need an onion, a microscope, a microscope slide, a cover slip, a knife, a pair of tweezers, some methyl green, an eye dropper and some filter paper.
2. Using the knife and the tweezers, carefully cut open the onion and remove a very thin layer of skin from the inside. Cut out a small piece.
3. Put the onion sample on the microscope slide. Make sure it is flat.
4. Drop a few drops of methyl green on your sample. Wait five minutes. Use the eye dropper to drop water on the sample to wash away the excess methyl green.
5. Put a drop of water on the sample and cover it with the cover slip. Make sure there are no bubbles. Dry the microscope stage with filter paper.
6. Put the slide on the stage and fasten it with the stage clips. Observe the cells through the low power lens. Adjust the focus to see the sample clearly. Then, observe the cells again through one of the high power lenses and adjust the knobs to see the sample clearly.
7. Draw and colour what you see using a low power lens and a high power lens.

8. Draw one of the cells and label the main parts: *nucleus*, *cytoplasm* and *membrane*.

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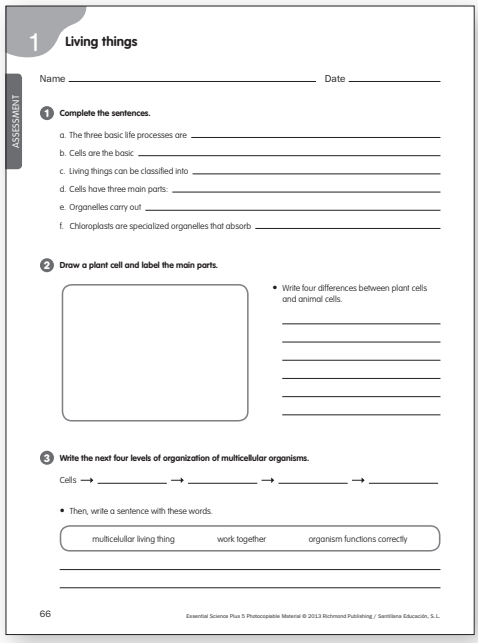
Assessment worksheets

There are twelve double-page **Assessment worksheets**, one for each unit. These worksheets can be given to students once the unit has been completed, as a revision test, or to check progress at any point during the year.


1 Living things

ASSESSMENT

Name _____ Date _____

1 Complete the sentences.

a. The three basic life processes are _____

b. Cells are the basic _____

c. Living things can be classified into _____

d. Cells have three main parts: _____

e. Organelles carry out _____

f. Chloroplasts are specialized organelles that absorb _____

2 Draw a plant cell and label the main parts.

• Write four differences between plant cells and animal cells.

3 Write the next four levels of organization of multicellular organisms.

Cells → _____ → _____ → _____ → _____

• Then, write a sentence with these words.

multicellular living thing | work together | organism functions correctly

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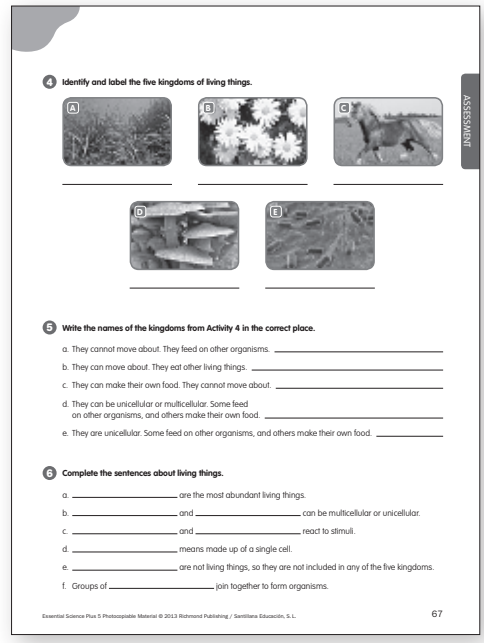
4 Identify and label the five kingdoms of living things.

A _____ B _____ C _____

D _____ E _____

ASSESSMENT

5 Write the names of the kingdoms from Activity 4 in the correct place.

a. They cannot move about. They feed on other organisms. _____

b. They can move about. They eat other living things. _____

c. They can make their own food. They cannot move about. _____

d. They can be unicellular or multicellular. Some feed on other organisms, and others make their own food. _____

e. They are unicellular. Some feed on other organisms, and others make their own food. _____

6 Complete the sentences about living things.

a. _____ are the most abundant living things.

b. _____ and _____ can be multicellular or unicellular.

c. _____ and _____ react to stimuli.

d. _____ means made up of a single cell.

e. _____ are not living things, so they are not included in any of the five kingdoms.

f. Groups of _____ join together to form organisms.

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Digital resources

i-solutions

The **i-solutions** pack contains 4 CDs:

CD 1

Digital Flashcards, Digital Posters and Web bank

The digital flashcard bank offers over 100 images to project onto an interactive whiteboard or to print out. There are four digital posters which can be printed out. The web bank includes some of the best free web links for teaching Science, Geography and History.

CD 2

IWB Activities

The Interactive Whiteboard Activities CD contains three interactive activities per unit to help reinforce the Student's Book content in a fun way.

CD 3

i-book

The i-book contains the core course material in digital format: Student's Book, Activity Book and Teacher's Book. It can be used on an interactive whiteboard in the classroom or for class planning.

CD 4

Teacher's resources

This CD contains the PDFs of this Teacher's Resource Book.

1 Living things

REINFORCEMENT

Name _____ Date _____

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b. All living things carry out	specialize to perform a particular function.
c. Cells are	made up of cells.
d. Cells can	three basic life processes.

a. _____

b. _____

c. _____

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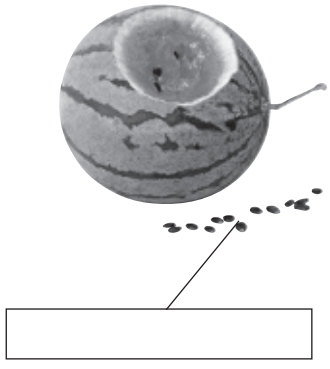
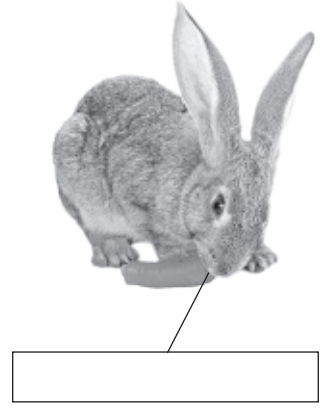
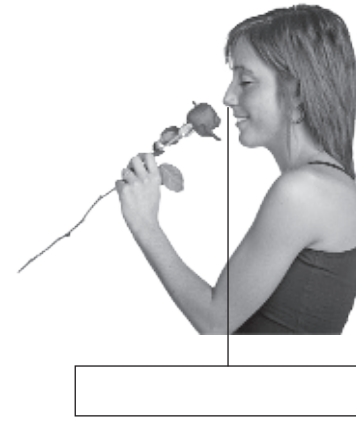
2 Write the correct life process: *nutrition, reproduction,* or *sensitivity*.

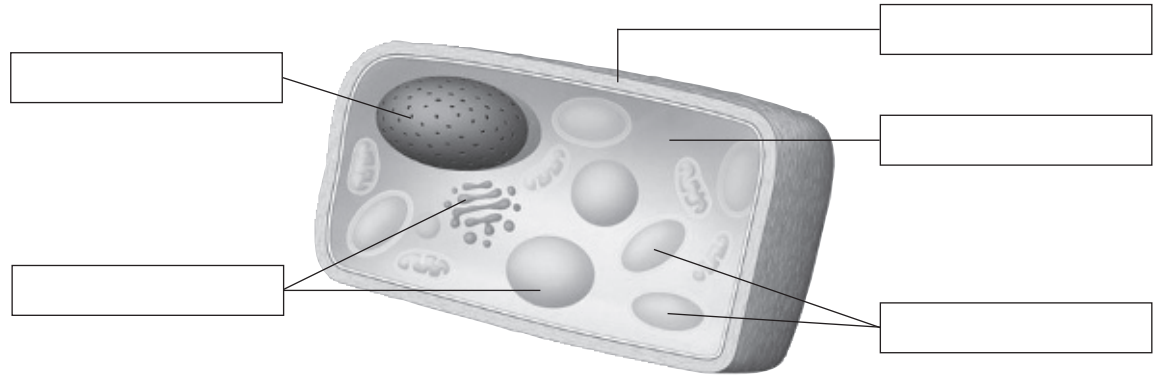






3 Label the diagram of the plant cell.

cell wall
chloroplasts
cytoplasm
nucleus
organelles



4 **Write in order from the simplest to the most complex level of organization.**

organ system organism tissue cell

a. _____ b. _____ c. _____

d. _____ e. _____

- Write two examples for each.

Plant organs _____

Animal organs _____

5 **Read and write *T* (true) or *F* (false). Then, correct the false sentences.**

a. Animals and plants can react to stimuli. ☐

b. Animals and plants have a nervous system. ☐

c. Fungi and protists can be unicellular or multicellular. ☐

d. Plants and some bacteria can make their own food. ☐

e. Plants and fungi cannot move about. ☐

f. Fungi, protozoa and algae feed on other organisms. ☐

_____

_____

6 **Match.**

a. Tube	It supports the eyepiece.
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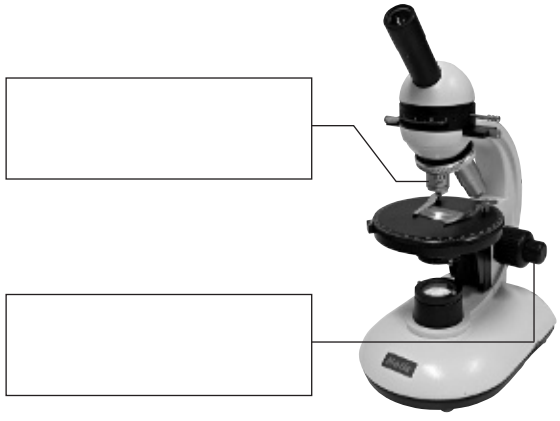
c. Stage	It contains the lens you look through.
d. Eyepiece	It controls the amount of light projected onto the sample.



- Label two other parts of the microscope.

2 Animals

REINFORCEMENT

Name _____ Date _____

1 **Write *M* (mammal), *B* (bird), *R* (reptile), *A* (amphibian) or *F* (fish). Then, write one characteristic for each vertebrate group.**

☐ 

_____

☐ 

_____

☐ 

_____

☐ 

_____

☐ 

_____

2 **Write one similarity and one difference between each two groups.**

a. Mammals and birds

_____

_____

b. Birds and reptiles

_____

_____

3 **Name one example of each type of invertebrate.**

a. sponge _____

b. cnidarian _____

c. worm _____

d. echinoderm _____

e. mollusc _____

f. arthropod _____

4 **Use the categories from Activity 3 to label the photos.**

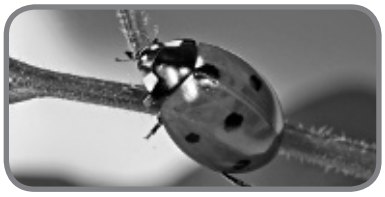
_____

_____

_____

_____

_____



_____

5 **Complete the table about these arthropod groups.**

arthropod group	number of legs	body parts	antennae	example
insects				
arachnids				
myriapods				
crustaceans				

6 **What arthropod group does the bee belong to? Write a short description of the bee.**

_____

_____

_____

_____

_____

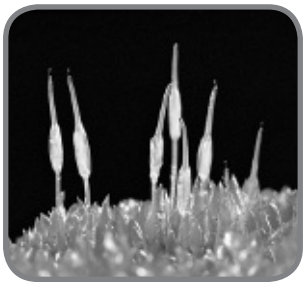
3 Plants

REINFORCEMENT

Name _____ Date _____

1 Write the name of each type of plant. Then, write one characteristic for each.



_____ _____ _____ _____

_____ _____ _____ _____

2 Complete the sentences about plant sensitivity.

a. Plants can detect _____ in the environment, called _____, and _____ to them.

b. Plants are sensitive to light, _____, _____, temperature changes and sometimes to _____.

c. In general, plant responses are _____ than animal responses.

d. Plant responses result in the plant _____ in a particular _____.

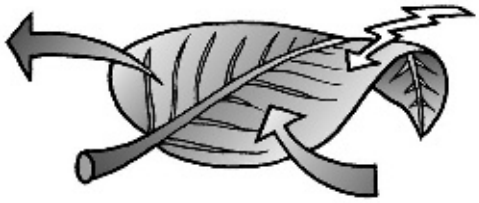
e. _____ plants lose their _____ in autumn as a response to changes in _____ and _____.

3 Match the sentences about plant nutrition. Then, number them in order.

☐ a. Raw sap and carbon dioxide transform into	through xylem vessels.
☐ b. Plants take in carbon dioxide	through stomata in the leaves.
☐ c. Raw sap travels up from the roots	elaborated sap through photosynthesis.
☐ d. Sunlight is trapped by	through phloem vessels.
☐ e. Plants absorb water and mineral salts	through their roots.
☐ f. Elaborated sap is distributed	chlorophyll found in the leaves.

4 **For each drawing colour the arrows green for oxygen and red for carbon dioxide.**

photosynthesis



respiration

5 **Complete the text about gas exchange in plants.**

Through photosynthesis, plants take in _____ and release _____ during the day. Through respiration, plants take in _____ and release _____ during the day and at night.

6 **Read and write the stages of sexual reproduction. Then, number them in order.**

- ☐ A pollen grain reaches an ovule in the ovary: _____
- ☐ Seeds start to grow into new plants: _____
- ☐ Pollen is transferred from the anther of a flower to the stigma of the same flower or a different one: _____
- ☐ Seeds are dispersed in different places: _____

7 **Label each type of asexual reproduction.**

_____

_____

_____

4 Ecosystems

REINFORCEMENT

Name _____ Date _____

1 **Look at the pictures. Which factors in the environment influence living things in these ecosystems?**



_____ _____ _____

_____ _____ _____

2 **Match the words to complete the definitions.**

a. Competition		two species where both benefit.
b. Parasitism	is the relationship between	different species that compete with each other to survive.
c. Mutualism		two species where one benefits while the other one suffers as a result.

3 **Look at the pictures. Name each type of relationship.**



_____ _____ _____

_____ _____ _____

4 **Write one example for each.**

a. Producer: _____

b. Primary consumer: _____

c. Secondary consumer: _____

d. Tertiary consumer: _____

e. Scavenger: _____

f. Decomposer: _____

5 **Number the living things in this food chain in order. Then, label them.**

_____

_____

_____

_____

6 **Complete the table about dangers to ecosystems.**

enviromental problem	causes	consequences

7 **Write an example of each of the 3 Rs.**

a. Reduce: _____

b. Reuse: _____

c. Recycle: _____

5 The Universe

REINFORCEMENT

Name _____ Date _____

1 **Read and write which star is brighter in each situation.**

a. Stars A and B have the same luminosity, but star A is closer to the Earth. _____

b. Stars A and B are at the same distance from the Earth, but star A has less luminosity. _____

2 **Complete the sentence about our galaxy. Then, make a drawing to show the location of the Solar System within the galaxy.**

- The Solar System belongs to a _____ galaxy known as the _____.

3 **Complete the chart about the Solar System.**

The Solar System

inner planets:	outer planets:	dwarf planet:
• _____	• _____	• _____
• _____	• _____	
• _____	• _____	
• _____	• _____	

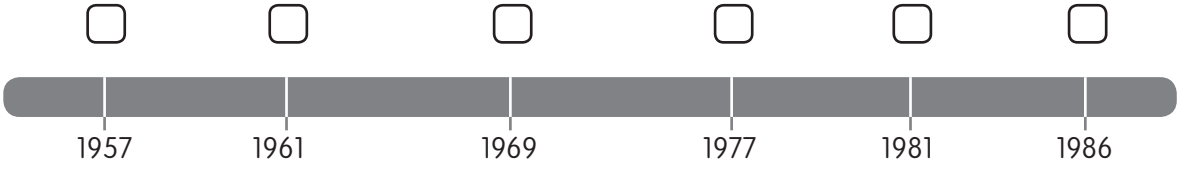
4 **Label the following small celestial bodies. Write one characteristic for each.**

_____ _____ _____

_____ _____ _____

5 **Match to complete the timeline about space exploration.**

a. first person in space
b. first people on the Moon
c. first artificial satellite in space
d. launch of first space probe
e. launch of first module of space station
f. launch of first space shuttle



6 **Write a sentence about life in space with each group of words.**

a. International Space Station | astronauts | countries

_____

b. daily life | gravity | float

_____

c. sleep | eat | drink

_____

6 The Earth

REINFORCEMENT

Name _____ Date _____

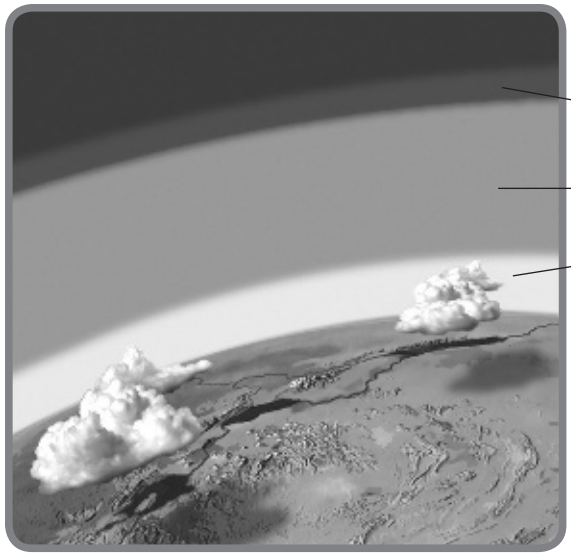
1 **Name the Earth sphere for each photograph. Write one characteristic for each sphere.**




_____ _____ _____ _____

_____ _____ _____ _____

2 **Label the main layers of the atmosphere. Indicate the ozone layer with an X.**



_____

_____

_____

- In which layer do aeroplanes fly?

_____

3 **Complete the text about the weathering of rocks in cold temperatures.**

_____ accumulates in cracks in rocks. The water _____

and _____. The rocks fracture and _____

into smaller pieces. This happens in places with _____ _____.

4 **Classify the words.**

magma chamber	epicentre	gases	tsunami	lava
crater	seismometer	ashes	focus	unpredictable

volcanoes _____

_____

earthquakes _____

_____

5 **Classify the rocks. Then, tick (✓) the rock with no crystals.**

coal	obsidian	conglomerate	limestone
pumice	marble	gneiss	granite

sedimentary	igneous	metamorphic
_____	_____	_____
_____	_____	_____

6 **Read the definitions and write the words.**

a. Rocks formed by the compaction of sediments: _____

b. The conditions required for metamorphic rocks to form: _____

c. Rocks formed when magma cools and crystallizes: _____

d. The process that transforms metamorphic rocks into magma: _____

e. Rocks formed when exposed to heat and pressure: _____

f. The process that transforms other rocks into sediment: _____

7 The landscapes of Spain

REINFORCEMENT

Name _____ Date _____

1 **Name two groups of mountains in each area in the Iberian Peninsula.**

a. The Inner Plateau: _____

b. Surrounding the Inner Plateau: _____

c. Beyond the Inner Plateau: _____

2 **Read the descriptions and write the words.**

a. The mountain chain that includes the Picos de Europa: _____

b. The extensive area of high land in the centre of Spain: _____

c. The mountain chain that includes the highest peak on the Iberian Peninsula: _____

3 **Complete the sentences with these words. Then, match the pictures to the descriptions.**

Atlantic	sandy	Cadiz	Tarifa Point
rocky	longest	Mediterranean	Galicia

☐ The _____ coast is low and _____. In the north, it begins at Cape Creus and goes south to _____. It is the _____ Spanish coast.

☐ The _____ coast is high and _____. It is divided in two parts: the coast of _____ in the north and the coast of the Gulf of _____ in the south.

4 **Circle the correct words and copy the sentences.**

a. Most rivers in Spain flow *east* / *west* into the *Atlantic Ocean* / *Mediterranean Sea*.

_____

b. A *source* / *river basin* is an area of low land drained by *a river* / *torrents*.

_____

c. There are *four* / *three* watersheds in Spain. The Atlantic watershed is the *largest* / *smallest*.

_____

5 **Classify the rivers into their corresponding watershed. Then, tick (✓) the rivers that drain into the Mediterranean watershed.**

Segura	Tagus	Navia	Guadalquivir	
Jucar	Nervion	Ebro	Duero	Nalon

Cantabrian watershed	Mediterranean watershed	Atlantic watershed
_____	_____	_____
_____	_____	_____
_____	_____	_____

6 **Read and write *T* (true) or *F* (false). Then, correct the false sentences.**

a. Lakes and lagoons are natural bodies of still water. ☐

b. Most mountain lakes are man-made. ☐

c. The water in many lakes on the plains comes from rainwater. ☐

d. Reservoirs are shallow lakes with saltwater or freshwater. ☐

e. Reservoirs are man-made lakes. ☐

_____

_____

8 The climates of Spain

REINFORCEMENT

Name _____ Date _____

1 **Complete the table.**

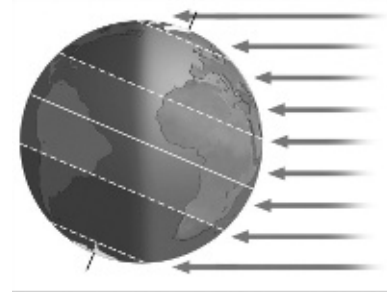
	definition	unit of measurement	instrument of measurement
temperature			
precipitation			

2 **Which has a warmer climate, the Balearic Islands or the Canary Islands? Explain.**

_____

_____

_____



3 **Complete the table. Then, answer the questions.**

climate	temperatures	precipitation
Continental Mediterranean	low in winter and high in summer	
Dry Mediterranean		very scarce and irregular
Typical Mediterranean		

- Which regions of Spain have a Continental Mediterranean climate? _____
- Which regions of Spain have a Dry Mediterranean climate? _____
- Which regions of Spain have a Typical Mediterranean climate? _____

4 **Write the climate that corresponds to each description.**

a. Mild temperatures throughout the year with scarce rainfall: _____

b. Very cold winters and cool summers with abundant rainfall: _____

c. Mild winters and warm summers with abundant, regular rainfall: _____

d. Cold winters and hot summers with low, irregular rainfall: _____

e. Mild winters and hot summers with scarce, irregular rainfall: _____

5 **Write two examples of vegetation for each place.**

a. Mediterranean forest: _____

b. Mediterranean shrubland: _____

c. Atlantic forest: _____

d. Mountains above 2,000 metres: _____

6 **Classify the plants in the table.**

palm tree · yellow broom · thyme · fir tree · ferns · rosemary
maple tree · dragon tree · Teide violet · chestnut tree

Mediterranean vegetation	Oceanic vegetation	Subtropical vegetation	Mountain vegetation

- Which type of vegetation is most common in the Canary Islands? _____

_____

9 Population and the economy

REINFORCEMENT

Name _____ Date _____

1 **Complete the sentences with *more than* or *less than*.**

a. When the birth rate is _____ the death rate, the population increases.

b. When the birth rate is _____ the death rate, the population decreases.

c. When the number of emigrants is _____ the number of immigrants, the population increases.

d. When the number of emigrants is _____ the number of immigrants, the population decreases.

2 **Look at the map and answer the questions.**

a. Which two provinces have a very high population density?

_____

_____

b. Which two provinces have an average population density of less than 10 inhabitants per km^2?

_____

_____

3 **Complete the table about crop production in Spain.**

type of crops	examples	Autonomous Community

4 **Write sentences using only the words related to the primary sector.**

natural resources	metallurgy	crops	communications
quarries	education	manufactured goods	pig farming

_____

_____

_____

5 **Complete the sentences about industry in Spain.**

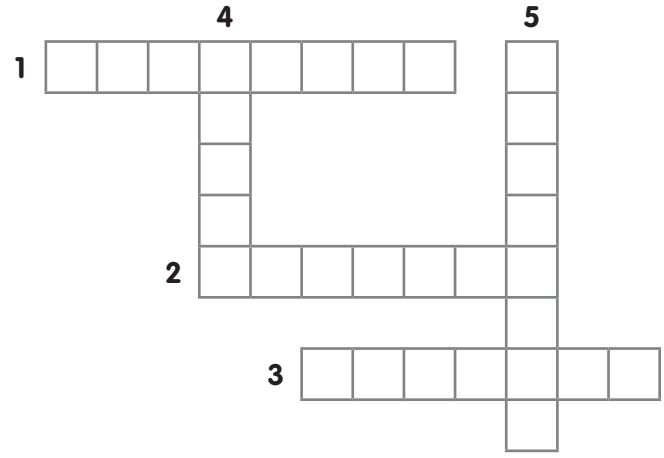
a. The percentage of the population working in industry is _____

b. The main industries are _____

c. The Autonomous Community with the most jobs in industry is _____

6 **Complete the crossword puzzle.**

1. Sector that employs 74 % of the active population.
2. Products sold to other countries.
3. Travel for relaxation or fun.
4. The buying and selling of products.
5. Trade within a country.



10 Prehistory

REINFORCEMENT

Name _____ Date _____

1 Complete the sentences.

a. Prehistory started with _____

b. Prehistory ended with _____

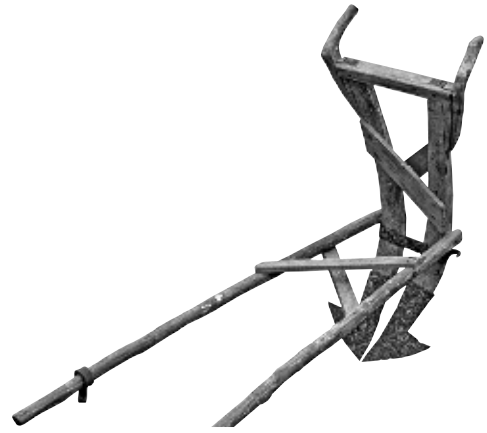
c. Prehistory is divided into three periods: _____

2 Cross out the odd one out. Then, write the corresponding period of Prehistory.

a. sickles	hunting	nomads	harpoons	_____
b. polished stone	caves	sedentary	crops	_____
c. quern stones	plough	wheel	metals	_____

3 Circle five tools and classify them in the table. Then, tick (✓) the one used for weaving.

w	t	s	d	e	v	m
p	g	t	b	h	q	l
r	s	i	r	d	s	z
o	p	l	o	u	g	h
n	e	e	d	l	e	o
a	a	p	m	o	c	s
g	r	t	h	o	e	m
m	v	t	n	m	d	l



Palaeolithic Age	Neolithic Age	Metal Ages
_____	_____	_____
_____	_____	_____

4 **Use each group of words to write a sentence about a period in Prehistory. Then, number them in order.**

a. soldiers traders metalworkers

☐ _____

b. crop farmers domesticated animals sedentary

☐ _____

c. fishing gathering hunting

☐ _____

5 **Label the photographs and write the period of Prehistory. Then, number them in order.**

_____ _____ _____

_____ _____ _____

6 **Name an important discovery that changed people's lives in each period.**

a. Palaeolithic Age: _____

b. Neolithic Age: _____

c. Metal Ages: _____

11 Ancient History

REINFORCEMENT

Name _____ Date _____

1 Answer the questions about the Iberians and the Celts. Use the map to help you.

a. Where did the Iberians settle?

_____

b. Where did the Celts live?

_____

c. Write the names of three Celtic tribes and three Iberian tribes.

_____

_____

d. Which tribes lived in round houses, the Iberians or the Celts?

_____

2 Classify the sentences about the early colonizers.

They came from Africa.	They built polis.	They founded Malaca.
They owned a large fleet.	They introduced coins for trading.	They developed an alphabet.

Phoenicians	Greeks	Carthaginians
_____	_____	_____
_____	_____	_____

- Where were the main Carthaginian colonies?

_____

- Where were the main Greek colonies?

_____

3 **Write a sentence about these aspects of life in Roman Hispania.**

a. Society: _____

b. Entertainment: _____

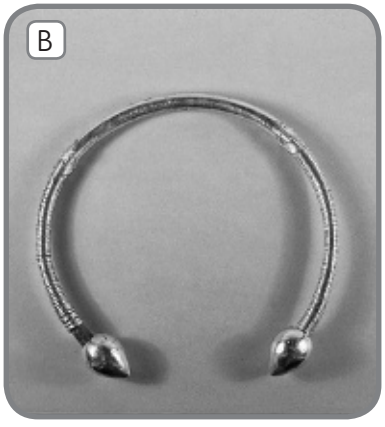
c. Language: _____

d. Religion: _____

e. Economy: _____

f. Transport: _____

4 **Label the art objects as *Greek, Iberian* or *Celtic*.**



_____ _____ _____

5 **Write a sentence about each piece of art in Activity 4.**

a. _____

b. _____

c. _____

6 **Name two examples of each of these Roman buildings.**

a. Entertainment buildings: _____

b. Commemorative buildings: _____

c. Public works: _____

12 The Middle Ages

REINFORCEMENT

Name _____ Date _____

1 **Complete the table about the Visigoth Kingdom.**

capital	language	religion	political system

2 **Look at the map of the Iberian Peninsula and answer the questions.**

a. Which century is represented in this map? Explain.

_____

_____

b. How long did it take for the Muslims to conquer most of the Iberian Peninsula?

_____

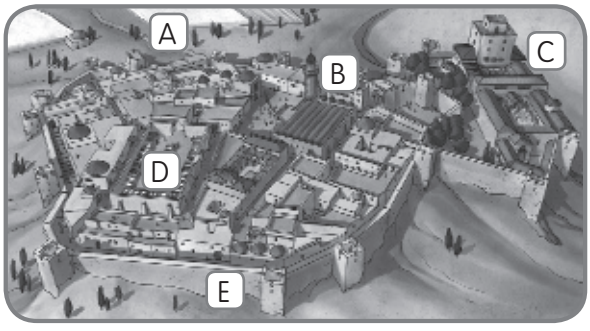
c. Which city was the capital of the Muslim territories?

_____

d. How long did the Muslims rule the Iberian Peninsula?

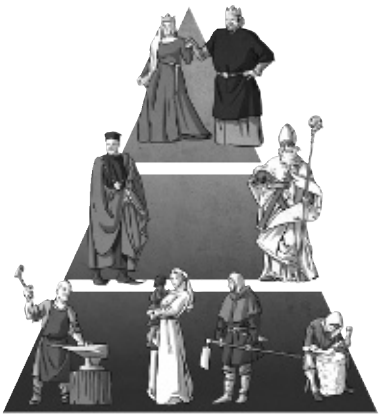
_____

3 **Write the names of these places in a medieval city.**



- A: _____
- B: _____
- C: _____
- D: _____
- E: _____

4 **Name and write a sentence about each of the social groups in the pyramid of medieval society.**

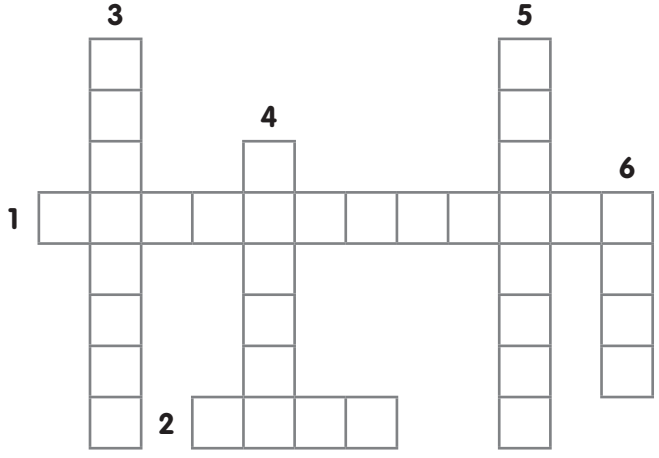


_____

_____

_____

5 **Complete the crossword about medieval times.**



1. Structure of medieval society (two words).
2. Peasant who served a nobleman.
3. City in Spain where one of the first universities was founded.
4. Medieval city fortress where noblemen lived.
5. Neighbourhood in a medieval city.
6. A clergyman who lived in a monastery.

6 **Draw the windows. Then, write two characteristics of each style of architecture.**

Romanesque window

_____

_____

Gothic window

_____

_____

EXTENSION

Name _____ Date _____

Bacteria and viruses

Both bacteria and viruses cause illnesses. Bacteria cause tuberculosis and cholera. AIDS, measles and the common cold are caused by viruses.

However, there are important differences between bacteria and viruses. Bacteria are the most abundant living things, and they can live in many different environments. Most bacteria are not harmful to people. Viruses are even smaller than bacteria, but they can only reproduce inside living things. For example, they live inside people, animals or plants.

Probably the most important difference between bacteria and viruses is that antibiotics usually kill bacteria, but they cannot kill viruses. Because people have not used antibiotic drugs correctly, some types of bacteria have become more difficult to treat. They have become resistant to antibiotics, which means that antibiotic drugs may not be effective in the future. This is creating a very serious problem for world health.

1 **Read the text and complete the sentences.**

a. Both bacteria and viruses cause _____.

b. Bacteria cause _____.

c. Viruses cause _____.

d. Antibiotics can usually kill _____.

e. When a bacteria has become difficult to treat, we say it is _____.

2 **Search the Internet for information about how we can prevent bacteria becoming resistant. Write three examples.**

_____

_____

_____

Animals

Name _____ Date _____

Creatures of night

Nocturnal animals rest or sleep during the day and are active at night. There are several reasons for this. In the dark, they can hide better from their predators. In addition, it is easier to find food because there is less competition. Also, in areas with tropical climates, it is cooler at night.

The bodies of nocturnal animals have adapted to being active in the dark. Some have an excellent sense of hearing, like hedgehogs, or exceptional eyesight, like cats. Other nocturnal animals, like mice, have an acute sense of smell. Bats hunt at night, so they use sound waves to help them navigate.

The most amazing nocturnal animal is the owl. Owls have very large eyes. They are so large that they cannot move their eyes, so they rotate their necks instead. Owls also have excellent hearing. Because of their incredible vision and hearing, owls can hunt very tiny animals in almost complete darkness.

1 **Read the text and complete the sentences.**

a. Nocturnal animals can find food easily because _____.

b. Hedgehogs have _____.

c. The owl is a nocturnal animal. It can _____.

d. Owls cannot move their eyes, so they _____.

2 **Search the Internet to find two more nocturnal animals. Then, complete the table**

nocturnal animals	
vertebrate	**invertebrate**

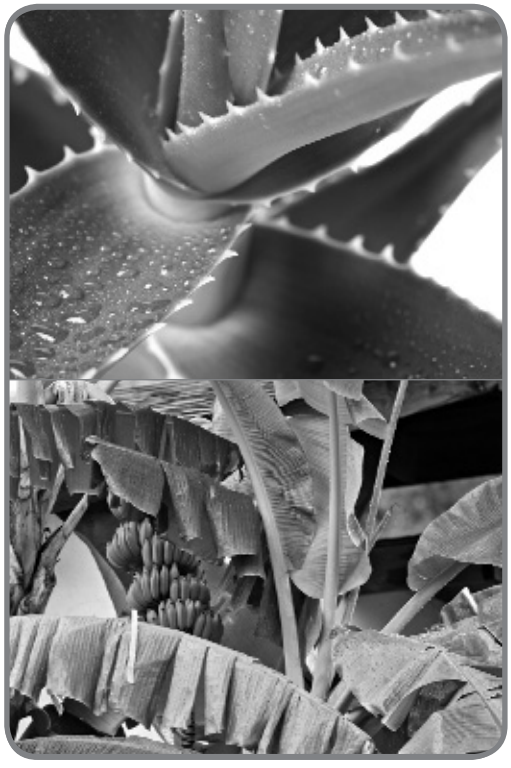
EXTENSION

Name _____ Date _____

How plants adapt

In order to survive, plants have developed specific adaptations to each particular climate. Some examples are:

- Plants in dry climates grow farther apart because water is scarce. They may have waxy leaves, or some have no leaves at all. This helps to reduce loss of water through evaporation.
- Trees in temperate climates have broad leaves to absorb lots of sunlight. They have thick bark to protect themselves against cold winters.
- Trees in cold climates may have needle-like leaves to help to reduce loss of water and to allow snow to fall off more easily. Their leaves are dark in colour to absorb sunlight and heat.
- Plants in very cold climates are small. By growing close to the ground, they keep warm. Their leaves are dark in colour to absorb sunlight and heat. Plants in cold climates grow in groups to keep out the wind and cold air.



1 **Read the text and complete the table.**

type of climate	plant adaptation	reason for adaptation

2 **Search the Internet for information about how cacti adapt to desert conditions. Complete the card.**

CACTI

Adaptation: _____

Reasons: _____

Name _____ Date _____

Pollution at sea

Due to human activity, many pollutants end up in our oceans. These pollutants include liquid waste, such as oil, and solid waste, such as plastics. Some of these pollutants accumulate on the seabed. Tiny marine organisms eat them and this can poison marine food webs.

Oil spills float on water and block out sunlight. Algae need sunlight to produce their own food. Algae are the main producers in marine ecosystems. Therefore, when algae are destroyed, marine food webs are harmed. Oil causes other problems. It sticks to birds' feathers and animal fur, causing them harm and eventually killing them.

Solid waste is another threat to marine life. Many marine animals mistake plastics for food. Solid waste is carried by ocean currents and wind to different places on Earth, creating huge heaps of debris, called garbage patches. These garbage patches consist mainly of tiny plastic fragments which block sunlight and are very hard to clean up. The Great Pacific Garbage Patch, located in the northern Pacific Ocean, is sometimes called the Plastic Continent.

1 Read the text and answer the questions.

a. What type of waste substances are polluting the oceans?

_____

b. How is marine pollution affecting marine food webs?

_____

c. How do oil spills harm marine algae?

_____

d. How can plastics harm marine animals?

_____

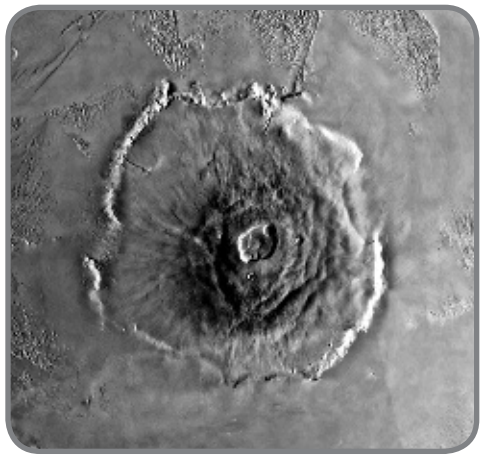
e. What are garbage patches?

_____

EXTENSION

Name _____ Date _____

The fabulous landscapes of Mars



Mars is known as the Red Planet because of its red soil. Mars has the largest mountain in the Solar System, Olympus Mons. It is about 25 kilometres high! That is about three times higher than Mount Everest. Olympus Mons is an extinct volcano, with a base diameter of approximately 600 kilometres. The volcano's summit is a huge crater about 80 kilometres wide.

Mars also has one of the largest systems of canyons in the Solar System, Valles Marineris. This canyon runs across one quarter of its circumference. It is about 4,000 kilometres long and up to 7 kilometres deep. That is five times longer than the Grand Canyon in Colorado.

How do scientists know about the landscapes of Mars? It is thanks to NASA's Mars Reconnaissance Orbiter (MRO). MRO is a spacecraft that travels for seven months until it reaches its orbit around Mars. There it remains for several months to take high-resolution, close-up photographs of the surface of the planet.

1 Read the text and answer the questions.

a. What is Olympus Mons? _____

b. How does Olympus Mons compare to Mount Everest? _____

c. What is Valles Marineris? _____

d. How does Valles Marineris compare to the Grand Canyon? _____

e. What is the name of the spacecraft that takes photographs of Mars? _____

2 Search the Internet for more information about the Red Planet and make an index card.

MARS, THE RED PLANET

Size (compared to the Earth): _____

Position from the Sun: _____

Description: _____

Moons: _____

The Earth

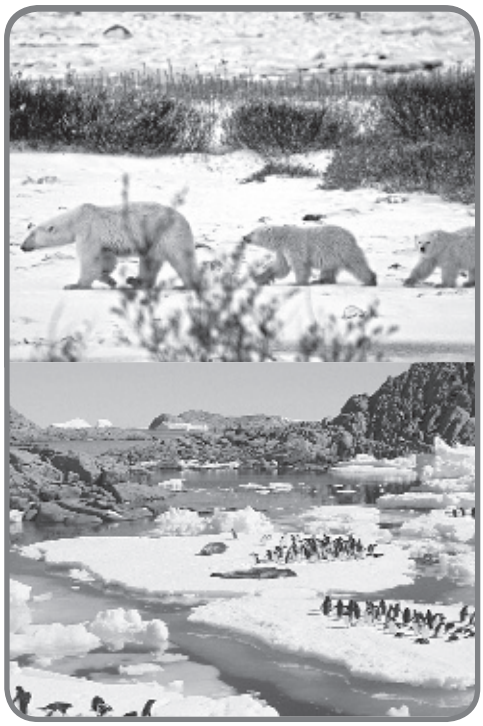
Name _____ Date _____

The two poles of the Earth

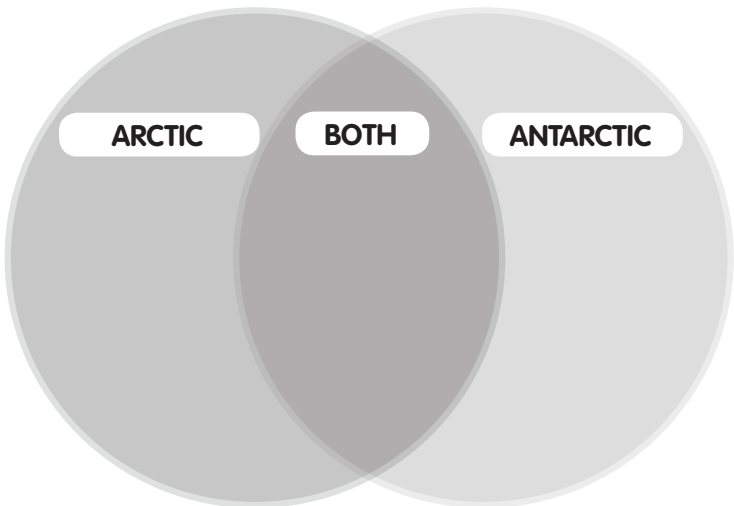
The Arctic region and the Antarctic are found at the poles of the Earth, but they are very different. The Arctic, where the North Pole is located, consists of a frozen ocean surrounded by land. The Antarctic, where the South Pole is located, consists of a large mass of land surrounded by ocean.

The Antarctic is much colder than the Arctic and has no vegetation. However, tundra grows in the land surrounding the frozen Arctic Ocean. There are no terrestrial mammals in the region of the South Pole, but there are many in the North Pole, including polar bears, caribou and reindeer. On the other hand, penguins only live in the Antarctic and not in the Arctic region.

There is no permanent population in the Antarctic. In fact, it is the only land on Earth that belongs to no country. In contrast, the Arctic region has a population of over 4 million people distributed throughout Alaska, Canada, Greenland, Norway, Sweden, Finland, Iceland and Russia.



1 **Read the text and complete the Venn diagram.**



2 **On a blank map of the world, colour the two polar regions. Find photos of both regions and glue them to your map. Write a description for each photo.**

The landscapes of Spain

Name _____ Date _____

Doñana National Park

Doñana is considered one of the most important wetland reserves in the world and is a haven for birds. It is located in the delta of the Guadalquivir River, and extends over an area of over 500 km^2 in the provinces of Huelva, Seville and Cadiz.

Doñana has many different ecosystems, such as marshes, lagoons and sand dunes. These ecosystems are home to an enormous variety of wildlife. The biodiversity of Doñana National Park is unique in Europe. The fauna includes over 300 species of vertebrates. About six million migratory birds stop off in Doñana both in summer and in winter, on their way between northern and central Europe. Doñana is also home to endangered species, such as the Iberian Lynx and the Spanish Imperial Eagle. Due to its great ecological value, Doñana is a UNESCO Biosphere Reserve and a World Heritage Site.

1 **Read the text and answer the questions.**

a. Where is Doñana National Park? _____

b. Which river flows through Doñana? _____

c. What type of ecosystems can you find in Doñana? _____

d. Why is Doñana a haven for migratory birds? _____

e. Which endangered species can you find in Doñana? _____

2 **Search the Internet for information about two migratory birds you can find in Doñana National Park. Then, complete the table.**

migratory bird	description	migratory flights

The climates of Spain

Name _____ Date _____

The strawberry tree

The strawberry tree is an evergreen shrub or small tree. It grows in Mediterranean regions, in western France and in Ireland. It has glossy, dark green leaves with lighter undersides and serrated edges. The strawberry tree flowers in autumn. The small white or pink flowers grow in clusters. These flowers develop into bright red or yellow fruits which ripen over the course of a year. This is why flowers and fruits can be found on the strawberry tree at the same time.

The fruits of the strawberry tree are edible but are not very tasty, so they are used to make jams and preserves. The leaves, bark and roots have medicinal properties. The bark is also used to tan leather.

The strawberry tree appears as part of the coat of arms of the city of Madrid, which includes a bear eating the fruit of a strawberry tree. Before Madrid became a city, many bears roamed the region. There is a statue of the bear and the strawberry tree in Madrid's famous square, the Puerta del Sol.

1 **Read the text and answer the questions.**

a. What type of plant is the strawberry tree? _____

b. Where does it grow? _____

c. What do the flowers and fruits look like? _____

d. Where is a famous statue of a strawberry tree? _____

2 **Search the Internet for information about another tree. Complete the index card.**

_____

Scientific name: _____

Where it grows: _____

Main characteristics: _____

9 Population and the economy

EXTENSION

Name _____ Date _____

The secret of longevity

The term *Blue Zone* refers to areas of our planet where people live long and healthy lives. The Greek island of Ikaria is a *Blue Zone* area. Here, residents live on average 10 years longer than people in other places. In fact, one of every three people on the island lives to over 90!

The secret of Ikarian longevity seems to be a combination of diet and lifestyle. The Ikarian diet includes olive oil, fruits, nuts, local vegetables, fresh fish, goat's cheese and goat's meat, honey, and tea made with local herbs. All these foods are naturally produced and free of chemicals. In addition, the Ikarians are very active physically.

Ikarians have an active social life, which creates a strong sense of community. They preserve local traditions and celebrate summer festivals with family and friends. Mealtimes are very important and are a time to relax and socialize.

In short, longevity on Ikaria comes from a healthy Mediterranean diet and a balance between work and leisure.

1 Read the text and answer the questions.

a. Which Greek island is in a *Blue Zone* area? _____

b. How much longer is life expectancy there compared to other places? _____

c. What is the secret of Ikarian longevity? _____

d. What does the Ikarian diet consist of? _____

e. What else is an essential part of the Ikarian way of life? _____

2 Search the Internet to find information about another *Blue Zone*. Why do people live longer there?

_____

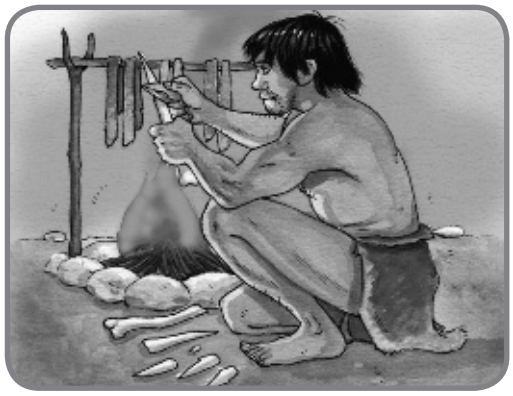
_____

_____

Prehistory

Name _____ Date _____

The discovery of fire



The discovery of fire was incredibly important for prehistoric people. They eventually learned to control fire so they could use it in their daily lives. People used fire for lighting, heating, cooking, making pottery, and as protection against wild animals. In particular, fire allowed for the addition of new ingredients to the diet, especially cooked meat. People were better fed and warmer, which greatly increased their chances of survival. People gathered round large fires and, as a result, social interaction improved within groups.

Initially, prehistoric people used fire that came from natural sources, such as lightning or volcanic eruptions. Later on, people developed ways to start fires themselves. They learned to create sparks by spinning a wooden stick against a hole in another piece of wood. As time went by, they learned another way to create sparks, by striking a flint stone against a rock which contained iron. Starting a fire was a hard and skilful job which gave prehistoric people control over their lives.

1 **Answer the questions.**

a. How did the discovery of fire change daily life for prehistoric people?

_____

b. How did cooking food improve the diet of prehistoric people?

_____

c. What two things did fire give prehistoric people to help them to survive?

_____

2 **Search the Internet for information about how to start a fire using a piece of glass or a magnifying glass. Draw a picture and write a description.**

_____

_____

_____

_____

Name _____ Date _____

Las Medulas

Las Medulas is a historical site in the province of Leon. It was once the most important gold mine in the Roman Empire. The mine was productive for over two centuries. During this period, the Roman monetary system was based on the *aureus*, a gold coin. The *aureus* was used for all trading activities, so the demand for gold was very high.

The Romans used a gold mining technique known as *ruina montium*. They dug narrow tunnels into a mountain and then filled the tunnels with water. The water pressure was so high inside the tunnels that it caused the rocks inside the mountain to break into pieces. These pieces fell into the water and were carried to the foot of the mountain. Roman workers panned the rock pieces to separate the gold.

Today, the unique landscape of Las Medulas is the result of both natural processes over time and human activity in the gold mine. It is a beautiful landscape as well as an example of innovative Roman technology. In 1997, Las Medulas was declared a UNESCO World Heritage Site.

1 **Read the text and answer the questions.**

a. What is Las Medulas?_____

b. How long was this gold mine in operation? _____

c. Why was Las Medulas important during the Roman Empire? _____

d. What kind of mining technique did the Romans use in Las Medulas? _____

2 **Search the Internet to find information about the mining technique *ruina montium*. Draw a series of diagrams to illustrate the process.**

Name _____ Date _____

The Great Mosque of Cordoba

The Great Mosque of Cordoba is one of the most splendid Islamic buildings in Spain. It consists of the main prayer hall of the mosque and a courtyard with beautiful gardens.

The prayer hall has over eight hundred slender columns connected by red and white double arches. These arches are made up of a lower horseshoe arch and an upper semi-circular arch.

The Great Mosque of Cordoba displays an exceptional combination of different architectural styles. In 786 A.D. the Muslim ruler Abd-ar-Rahman I started to build the mosque on the site of a Visigoth church. The church had previously been the site of a Roman temple. More changes were made over the next two hundred years by four different rulers. Originally, the Great Mosque was used for religious, social, cultural and political activities.

In the 13th century, Cordoba was conquered by the Christian King of Castile, Ferdinand III. He converted the Mosque into a Christian church. In 1523, a Gothic cathedral was built in the middle of the Mosque. Today, the Great Mosque of Cordoba is a Catholic cathedral.

1 **Read the text and answer the questions.**

a. What was the first building on the site of the Great Mosque of Cordoba?

_____

b. What was the Great Mosque used for originally?

_____

c. What is the Great Mosque of Cordoba used for today?

_____

2 **Copy and write a timeline of the different buildings which have occupied the site of the Great Mosque.**

CULTURE

Name _____ Date _____

Algae: delicious and good for you!

Marine algae, often called seaweed, are an important part of many people's diet, particularly in east Asia. Nowadays, more Europeans are eating algae, too.

Algae, which some people refer to as sea vegetables, are very nutritious. They are rich in calcium, iron and minerals. In addition, algae can add flavour and texture to many raw dishes. Sushi, a traditional Japanese dish, is probably the most popular example. Sheets of nori, a red seaweed, are used to wrap sushi rolls. You can cut up sheets of nori and sprinkle them on salads, too. Kelp buds are also good in salads, but first you have to soak them in water.

Marine algae are important for other reasons, too. They are an essential source of food and shelter for marine life. Also, through photosynthesis, algae are a major source of the Earth's oxygen supply.

1 **Read the text and complete the sentences.**

a. Marine algae can also be called _____ or _____.

b. Algae are rich in _____.

c. The most popular dish made with algae is _____.

d. To make nutritious salads, you can add _____.

e. Through photosynthesis, algae are a major source of _____.

2 **Search the Internet to find another way we can use algae and write about it.**

_____

_____

_____

_____

_____

Animals

Name _____ Date _____

Sacred animals

In some countries and cultures, certain animals are considered sacred. This means these animals are respected, venerated and worshiped.

In India, the Hindus consider cows to be sacred animals. In Hindu villages, nearly every family has at least one cow to provide milk and butter. Cows are therefore a symbol of wealth. They cannot be harmed and are allowed to roam freely everywhere. You can be sent to jail for injuring or killing a cow!

In Vietnam, fishermen consider whales to be sacred animals. They never hunt whales. They think of whales as a symbol of good fortune and prosperity. Fishermen tell stories of whales saving people from drowning at sea.

In Ancient Egypt, cats were sacred animals. They caught the mice which ate cereal grain. Cats were also an essential part of family life, because people thought they protected the inhabitants of the house. Cats were protected by law. Killing a cat, even by accident, was punished by death.

1 **Read the text and complete the table.**

country	sacred animal	symbolizes

2 **Find information about another sacred animal. Write a brief description.**

_____

_____

_____

_____

_____

Name _____ Date _____

Smelly but delicious!

Durian, also known as the king of fruits, is a large, heavy fruit covered with sharp spikes. It grows on trees in hot and humid tropical climates. Throughout Southeast Asia, it is considered a wonderful delicacy. Its abundant flesh, with very little juice, has a unique sweet taste and a creamy texture.

A durian can be eaten raw. You can use your fingers to pull apart the sections of flesh. Durians can also be used to flavour a variety of desserts, including ice cream.

When they are ripe, durians release a strong, pungent odour, even when the fruit is not open. The smell is so overwhelming when the fruit is in season, that durians are banned from most public places, such as hospitals and trains. Some hotels in Southeast Asia put signs on the entrance saying: 'No Durians'. Apparently, after eating a durian, your sweat can smell like the fruit the next day!

1 **Read the text and answer the questions.**

a. What is a durian? _____

b. Where does it grow? _____

c. How do you eat durians? _____

d. What is special about durians? _____

2 **Durians are rich in nutrients. Search the Internet for information and make a list of the nutrients they contain.**

_____

_____

3 **What is your favourite fruit? Write a few sentences to describe it.**

_____

_____

Ecosystems

Name _____ Date _____

World Environment Day

World Environment Day (WED) takes place every year on 5th June. It is a day to promote positive environmental actions. WED was originally established by the United Nations in 1972.

Each year, a different city is chosen to host the event, and a particular theme is chosen. The themes emphasize different environmental concerns. They include promoting a green economy, caring for the world's forests, valuing biodiversity, fighting climate change, protecting the world's oceans or preventing the desertification of dry lands.

Numerous inspiring activities are organized to promote the event. They include clean-up campaigns, tree planting, concerts, green walks and parades, among many others activities.

Decisions are made to help protect ecosystems around the world. Governments, corporations and individuals all need to work together to protect the environment. World Environment Day is an opportunity for people in different countries to share their ideas.

1 **Search the Internet for information about the last five WED celebrations and complete the table.**

year					
country					
theme					

2 **In pairs, find recent news about an environmental problem in your country. Write a description of the problem and its negative effects.**

_____

_____

_____

CULTURE

Name _____ Date _____

The International Space Station

The International Space Station (ISS) is the largest artificial satellite in space. It is located about 400 kilometres above the surface of the Earth and orbits the planet once every 90 minutes. It was launched in 2000 and has orbited the Earth over 82,000 times!

This space station is a joint project of the United States, Russia, Europe, Japan and Canada. There is always a full-time crew of six astronauts on ISS. Astronauts from fifteen different countries make up these expeditions. There have been 36 expeditions to date. ISS does research in four main areas: human health, physical science, earth and space science, and researching future space exploration.

Because of its large size and proximity to our planet, we can see ISS from Earth with the naked eye. However, it reflects so much sunlight that the best time to observe it is just before sunrise or sunset.

1 Read and write *T* (True) or *F* (False). Then, correct the false sentences.

a. The ISS is the largest space shuttle in space. ☐

b. It orbits the Earth twice every 90 minutes. ☐

c. There are five participating countries in the project. ☐

d. The ISS can be seen from Earth with the naked eye. ☐

_____

_____

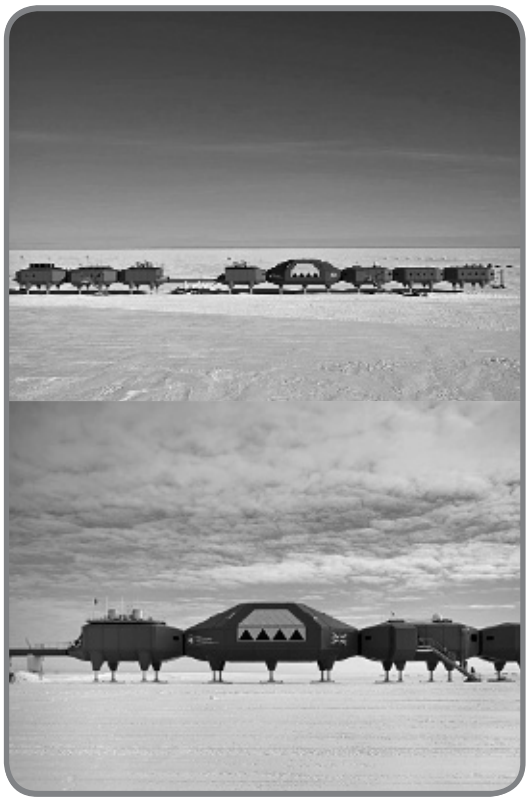
2 Check the location of the International Space Station in real time by visiting *http://www.isstracker.com/* and complete the table.

time	location of the ISS in real time
10:00	
12:00	
14:00	

The Earth

Name _____ Date _____

Halley VI Research Station



The newest research station in the Antarctic, Halley VI, is the first mobile research station in the world. It consists of eight connected modules built on hydraulic legs with skis. Each module can be lifted to avoid being buried by the snow. Each module can also be moved independently. There is a central red module which includes the common areas such as the kitchen, dining room and social areas. The other seven blue modules are used for bedrooms, laboratories and offices. There is even a vegetable garden and a wall to practise rock climbing!

The research station is open all year round, but the population increases in the summer months, from early November to late February. There are not only scientists, but also a chef, a doctor, an electrician, a plumber and several engineers. Life at Halley VI Research Station is marked by the seasons with a short, busy summer and a long, silent, dark winter.

At the research station, scientists study the Earth's atmosphere, including damage to the ozone layer, atmospheric pollution and climate change.

1 **Read the text and answer the questions.**

a. What is unique about Halley VI? _____

b. What advantages does a research station with legs have? _____

c. What kind of facilities can you find in Halley VI? _____

d. When is it summer in the Antarctic? _____

e. Why are winters long, silent and dark? _____

f. What is the main research done at the station? _____

2 **Imagine you spend three months in Halley VI Research Station. In your notebook, write a diary for one day.**

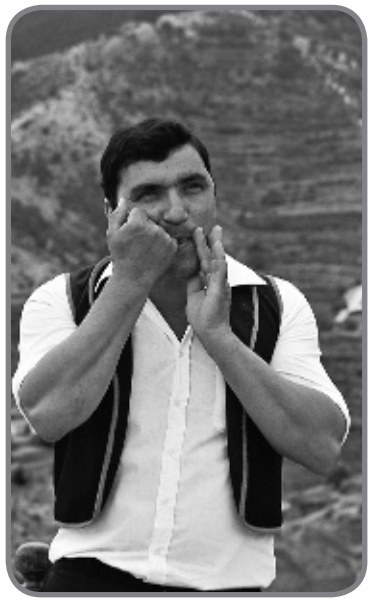
▶ Example: *I have breakfast in the red module. Then I go to the laboratory.*

7 The landscapes of Spain

CULTURE

Name _____ Date _____

A whistled language: the Silbo Gomero



The Silbo Gomero, also known as El Silbo, is an ancient language used on the Canary Island of La Gomera. This island has deep valleys, steep ravines and high cliffs. As a result, the islanders developed a whistling language to be able to send messages over such difficult terrain. This was quicker than sending a messenger on foot.

The Silbo Gomero consists of two different whistles for vowels and four different whistles for consonants. The whistles have different pitches, and they can be interrupted or continuous. With practice, any message can be communicated. Depending on the landscape, a message can be heard three kilometres away!

The origins of the Silbo Gomero are not known, but when the first Europeans arrived in the 15th century, Gomerans already communicated by whistling. Of course, this language has changed since then. Today the Silbo has adapted to modern Castilian.

The Gomerans do not wish to lose their unique language. It represents their cultural heritage. For this reason, nowadays El Silbo is an obligatory subject in primary school on La Gomera.

1 Read the sentences. Cross out the wrong words and rewrite the sentences.

a. El Silbo was invented for faster communication on flat land.

_____

b. It consists of two whistles for vowels and five for consonants.

_____

c. Whistles of El Silbo have different tones and are always continuous.

_____

d. Today, the Silbo Gomero is an optional subject in primary schools.

_____

2 Search the Internet for videos about the Silbo Gomero and listen to them.

The climates of Spain

Name _____ Date _____

Cork: a renewable resource

Cork is a light, resilient material which comes from the bark of cork oak trees. Cork is also waterproof, elastic and fire resistant. It is used to make many products including wine bottle stoppers, soundproofing, floor and wall tiles, shoes and even baseballs and cricket balls!

Cork is considered to be a renewable resource because the bark of the tree grows back again with time. Cork oaks are left to grow for twenty-five years before the bark is cut off for the first time. The bark is cut off in the summer. The bark has to be skilfully cut with special knives to avoid damaging the trees.

Once the bark is removed, the trees are left alone for nine to twelve years to allow the bark to grow back again. Cork oak trees live for 150 to 250 years. This means their bark can be harvested about twelve times in their lifetime.

Spain has produced cork since the end of the 17th century. Today, Spain and Portugal are the most important cork producers in the world.

1 **Read the text and complete the table about cork.**

properties	obtained from	harvested	uses
_____	_____	_____	_____
_____	_____	_____	_____

2 **Find objects made of cork in your house or at school and make a list.**

_____

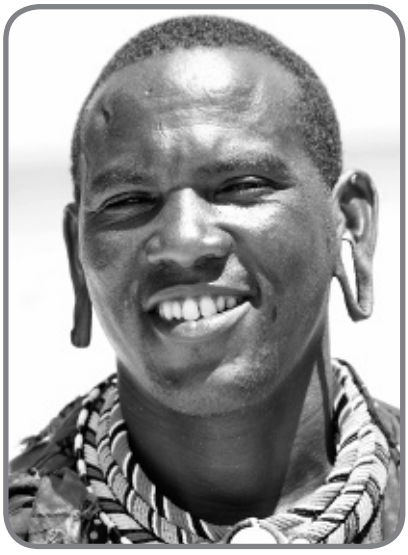
_____

_____

Population and the economy

Name _____ Date _____

Indigenous peoples of the world



Indigenous peoples are ethnic groups who are native to a particular region. They are people who share a distinct identity, culture and language. In fact, of the 7,000 languages spoken in the world, over 4,000 are indigenous languages. Indigenous peoples are deeply connected to their natural environment, which they respect and protect.

At present, it is estimated that there are over 350 million indigenous peoples in the world. This is over 5% of the world's population. They live in every corner of the Earth, from the cold Arctic region to the tropical forests of the Amazon. However, about 70% of indigenous peoples live in Asia. Indigenous groups vary in size, but tend to be small compared to the majority culture of their countries.

Some examples of indigenous peoples include the Masai people of Africa, the Inuit of the Arctic region, the Karaja people from the Brazilian Amazon, the Hmong people from Southeast Asia and the Sami people from northern Europe. Today, many indigenous groups are endangered, mainly due to human development, which is posing a threat to their natural environments.

1 **Read the text and answer the questions.**

a. What are indigenous peoples? _____

b. Where do they live? _____

c. Name some groups of indigenous peoples. _____

d. Why is their lifestyle threatened today? _____

2 **Search the Internet for information about a group of indigenous people and complete the index card.**

Name of group: _____

Region(s): _____

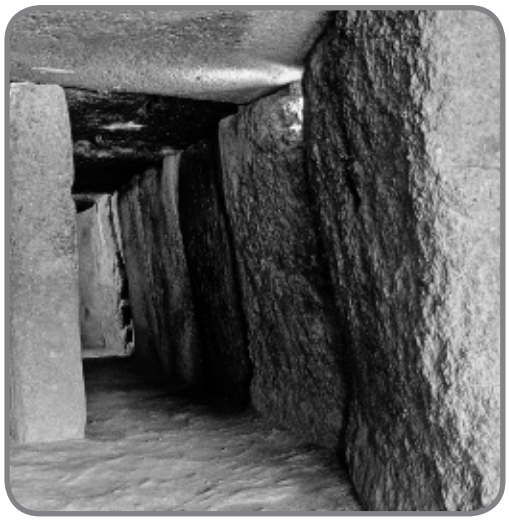
Population: _____

Language(s): _____

Prehistory

Name _____ Date _____

The Dolmen of Menga



The Dolmen of Menga is a megalithic burial monument from the Metal Ages. It was built about 5,000 years ago. It is located near Antequera, a city in the province of Malaga. The Dolmen of Menga is considered the largest structure of its kind in Europe. It is a gallery dolmen over 25 metres long and up to 6 metres high. It consists of an entrance and a corridor, which gets wider and ends in a burial chamber. It was built using thirty-two megaliths, the biggest one weighing about 180 tons. The cover of this megalithic monument consists of five enormous slabs held up by three large menhirs.

Apparently, the Dolmen of Menga was built by aligning the megaliths in a ditch dug in the ground, then raising them with a system of pulleys and ropes. Next, the inside was filled with dirt and a ramp was made to haul up the large slabs that form the cover. Finally, the dirt was cleared out from inside. After its completion, the Dolmen of Menga was covered with a mound of dirt, known as a tumulus, which is about 50 metres in diameter.

1 **Read the text and complete the table about the Dolmen of Menga.**

type of megalithic monument	construction date	location	dimensions	use

2 **Search the Internet for information about another megalithic monument. Draw a picture and write a few sentences to describe it.**

_____

_____

_____

_____

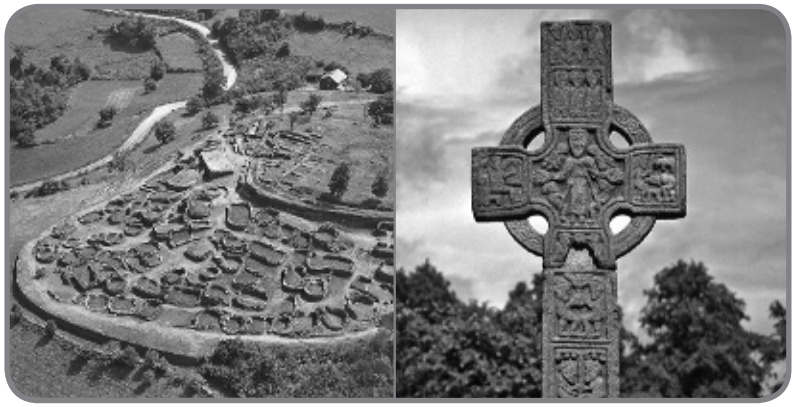
_____

11 Ancient History

CULTURE

Name _____ Date _____

The Celtic legacy in Spain



The Celts settled in a large area of the Iberian Peninsula and remained over a long period of time. They left behind a significant archaeological and cultural legacy.

By studying the ruins of Celtic settlements, we know about their strategic location and how they were organized. Inland castros, such as the Castro of Coaña in Asturias, were located on hills and surrounded by walls and moats. Coastal castros, such as the Castro of Baroña in Galicia, had the sea as a natural defence. The Celts lived in castros, circular houses with low stone walls and cone-shaped roofs made of straw.

Today, we can still see many aspects of Celtic culture. For example, the Celtic music tradition is alive in Galicia, Asturias and Cantabria. Celtic music includes many songs and rhythms. It is performed with different wind, string and percussion instruments. The bagpipes, or *gaita*, is the traditional lead instrument of Celtic music. In Ortigueira, Galicia, a Celtic music festival is held every summer.

The Celts have left behind symbols, such as the Celtic cross, as well as decorative motifs. Many of these motifs can be found today in designs on jewellery and porcelain.

1 **Read the text and write an example.**

a. Celtic settlement: _____

b. Celtic musical instrument: _____

c. Celtic music festival: _____

d. Celtic symbol: _____

2 **Search the Internet for information about another Celtic musical instrument. Write a brief description and draw a picture.**

_____

_____

_____

The Middle Ages

Name _____ Date _____

Muslims, Christians and Jews in Al-Andalus

For over seven centuries, Muslims, Christians and Jews lived together in Al-Andalus. The three religions coexisted. Muslims practised Islam, and Christians and Jews were allowed to practise their religions. Christians were allowed to keep their churches and monasteries under Islamic rule. Christians who continued to practise their religion were called *mozarabs*.

Muslims, Christians and Jews generally shared a peaceful existence, and they interacted in many ways. In fact, they shared their knowledge of different fields of learning. Muslims contributed with their knowledge of science and engineering. Jews were famous for their excellent translations of important documents. Al-Andalus became a great cultural centre.

However, the three groups were not treated equally under Islamic rule. Christians and Jews, except for old people, women, children and disabled people, had to pay a tax, known as *jizya*. As a result, many Christians converted to Islam to be treated as equals and to avoid paying the tax. These people were known as *muladi*. Towards the end of Muslim rule, religious intolerance spread through Al-Andalus, and Christians and Jews who refused to convert to Islam were exiled.

1 **Read the text and answer the questions.**

a. What were the relationships like between Muslims, Christians and Jews? _____

b. What was the *jizya*? _____

c. Who were the *muladi*? _____

d. What happened towards the end of Muslim rule? _____

2 **Find out more about the Muslim, Christian and Jewish religions. Complete the table.**

	holy book	religious celebrations
Muslims		
Christians		
Jews		

Name _____ Date _____

1 What are the cells of an onion like?

Instructions

1. Work with a partner. You need an onion, a microscope, a microscope slide, a cover slip, a knife, a pair of tweezers, some methyl green, an eye dropper and some filter paper.
2. Using the knife and the tweezers, carefully cut open the onion and remove a very thin layer of skin from the inside. Cut out a small piece.
3. Put the onion sample on the microscope slide. Make sure it is flat.
4. Drop a few drops of methyl green on your sample. Wait five minutes. Use the eye dropper to drop water on the sample to wash away the excess methyl green.
5. Put a drop of water on the sample and cover it with the cover slip. Make sure there are no bubbles. Dry the microscope stage with filter paper.
6. Put the slide on the stage and fasten it with the stage clips. Observe the cells through the low power lens. Adjust the focus to see the sample clearly. Then, observe the cells again through one of the high power lenses and adjust the knobs to see the sample clearly.
7. Draw and colour what you see using a low power lens and a high power lens.

8. Draw one of the cells and label the main parts: *nucleus*, *cytoplasm* and *membrane*.

Name _____ Date _____

1 What types of foods do ants eat?

Instructions

1. Work in small groups. Collect some ants in a glass jar.
2. Place small amounts of different foods in the four corners of a shoe box. Try honey, bread crumbs, a slice of orange and a lettuce leaf.
3. Place the ants in the shoe box with the food, then put the lid on.
4. Look in the box after 15 minutes. Count the number of ants around each item of food.
5. Check the box again after 30 minutes. Count the number of ants around the food items again.
6. Then, complete the table.

N° of ants	honey	bread crumbs	orange	lettuce
After 15 minutes				
After 30 minutes				

7. Analyse your results and answer the questions.
   a. Do the ants try all the foods? _____
   b. What is the food they like the most? _____
   c. What is the food they like the least? _____
8. Repeat the experiment again with different foods. Try some ham, a slice of onion, a biscuit and some cheese. Record the results in your notebook.
9. Do you think ants are herbivores, carnivores or omnivores? Explain.

_____

_____

- Ants like _____ the most.
- Ants like _____ the least.

Name _____ Date _____

1 Which plants can grow from cuttings?

Instructions

1. Work in groups. Bring to class cuttings from two household plants, and two herbs, such as basil and rosemary.
2. With scissors, cut the end of the cuttings diagonally to expose more of the surface of the stems.
3. Remove the leaves immediately above the cut. Make sure you leave a bare leaf joint in this section of the stem.
4. Fill four glass jars with water. Place the cuttings inside the jars with their lower parts immersed in water. Label each jar with the name of the plant. Put the jars in a sunny place.
5. Check the jars every two days and observe the bottom of the stems to see if there are any roots growing. Change the water in the jars every day.
6. Draw your observations in the table.

	house plant 1 _____	house plant 2 _____	herb 1 _____	herb 2 _____
day 2				
day 4				
day 6				
day 8				

- _____ and _____ can grow new plants from cuttings.
- When the roots are about 10 cm long, cuttings can be transferred to pots with potting soil.

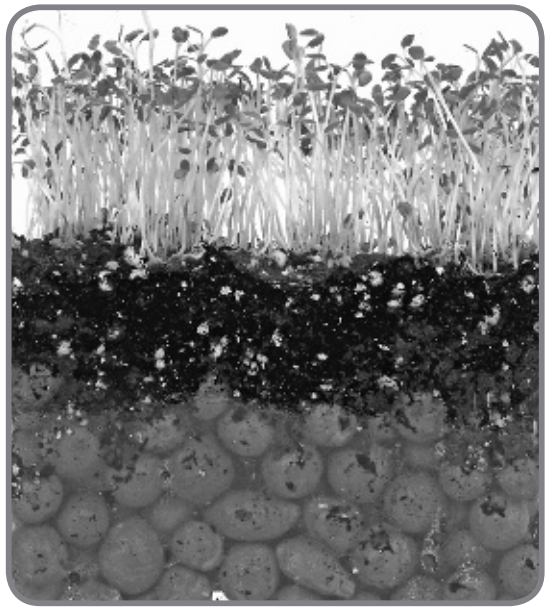
Ecosystems

Name _____ Date _____

1 Can you build an ecosystem? Make a terrarium.

Instructions

1. Work in groups of four. Cover the bottom of a clear glass or plastic container with small pebbles.
2. Add some soil. Make small holes in the soil and plant seeds and small plants.
3. Add water and place the container in a sunny place.
4. Cover the top of the container with clear plastic film.
6. Allow the seeds to germinate and the plants to take root. Water your terrarium regularly, but moderately.
7. Collect some insects in a jar, for examples ants, ladybirds and centipedes. Add them to your terrarium.
8. Observe your terrarium every week. Record and draw your observations in the table, including interactions among the living things.



week 1	week 2	week 3	week 4
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

- Is a terrarium an ecosystem? _____

Name _____ Date _____

1 How can you drink water in space?

Instructions

1. Work with a partner. Take turns to perform the experiment.
2. You need a plastic bag with a zip, a straw, some tape, and some water.
3. Half fill the plastic bag with water. Insert the straw. Seal the bag and tape the straw to the bag so the water cannot leak out.
4. Lie on the floor with your feet up on a chair, so your head is lower than your legs.
5. Your partner holds the bag of water in front of you. Take a few sips through the straw.
6. Repeat steps 4 and 5 with your partner.
7. Answer the questions.
   - Were you able to drink from the bag in the upside down position?

     _____
   - Do you think you could drink from a normal glass in the upside down position?

     _____
   - Why do people in space need to drink water from a sealed bag with a straw?

     _____
8. Draw an astronaut in space carrying out a daily task. Remember that astronauts float because there is no gravity. Describe the task.

   _____

   _____

   _____

   _____

Name _____ Date _____

1 Can you simulate a volcanic eruption?

Instructions

1. Work in groups of four. You need some soil, a small plastic bottle, a tray, some red food colouring, vinegar, baking soda, liquid soap and some warm water.
2. Protect your table with newspaper. Place the plastic bottle, without the cap, in the centre of the tray. Fix it to the tray with tape.
3. Build a small mountain around the bottle with the soil, making sure no soil goes into the bottle.
4. Add a few drops of food colouring to the warm water. Dissolve 4 tablespoons of baking soda in it and add a few drops of liquid soap. This will be your volcanic lava.
5. Fill the bottle half way up with this mixture.
6. Slowly pour vinegar into the bottle and watch your volcano erupt!
7. Now, read how your volcano erupted.

The baking soda reacted with the vinegar and released carbon dioxide. The carbon dioxide caused pressure to build up in the bottle, so the lava mixture was forced out of the bottle.

8. Draw a picture of your experiment.

The landscapes of Spain

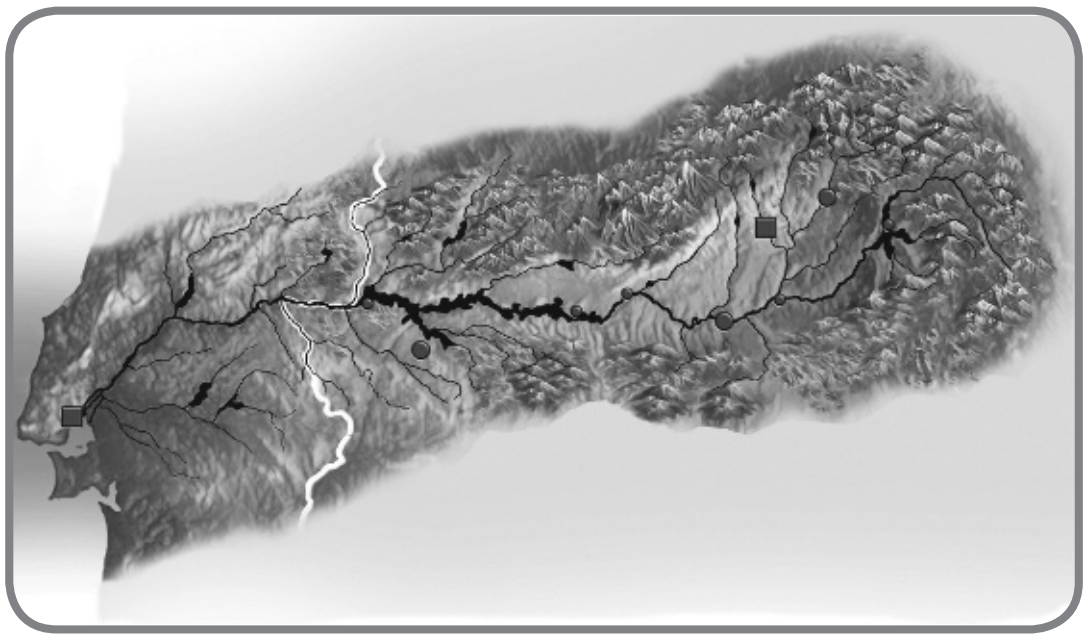
Name _____ Date _____

1 What are the points of interest along a river basin?

Instructions

1. Work in groups of four. Choose one of Spain's main rivers to study.
2. Search the Internet for information about your river.

   Find out:
   - its source
   - its length
   - the sea it flows into
   - the names of its main tributaries
   - the names of the main towns it flows through
3. On white card, draw and colour the river and its river basin. Draw the main tributaries. Draw and label the landforms surrounding the river basin. Use this picture as a model.



4. Use a red felt-tip pen to mark and label the main towns along the river.
5. Glue on photos taken from different places along the course of the river.
6. Write a brief description of your river.

_____

_____

_____

The climates of Spain

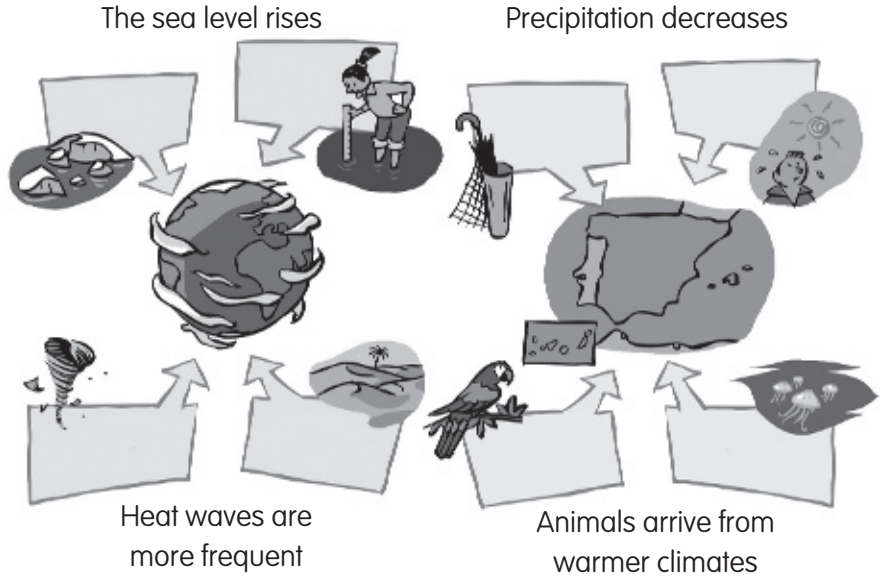
Name _____ Date _____

1 What are the consequences of climate change in Spain?

Global warming is making temperatures rise on Earth. This is causing glaciers to melt in the Pyrenees, and the sea level to rise. Heat waves and droughts in the Mediterranean regions are more frequent. As a consequence, water supplies are threatened, land on the coast is diminishing, and plants and animals are moving to higher elevation.

Instructions

1. Work in groups of four. Search the Internet for information about a particular area in Spain which is suffering some of the consequences of climate change, for example: a glacier in the Pyrenees, a coastal area, etc.
2. Find out how the flora and fauna are being affected.
3. Make a poster showing how the area has changed over the years. Write a short report about the consequences of climate change in your chosen area and illustrate your report with photos.



_____

_____

_____

4. Present your poster to the class.

Population and the economy

Name _____ Date _____

1 What are traditional 'made in Spain' products?

Instructions

1. Work with a partner.
2. Search the Internet for information about traditional products made in Spain. Find out where they are produced and give some examples.
3. Complete the table.

	produced in	products
leather goods		
wicker		
ceramics		
embroidery		
guitars		

4. Design a brochure to advertise 'made in Spain' products. Fold a piece of paper in three sections. Write a title on the front page. On the other pages draw or glue pictures of traditional Spanish products and write a brief description of each one.

5. Present your advertising brochure to the class.

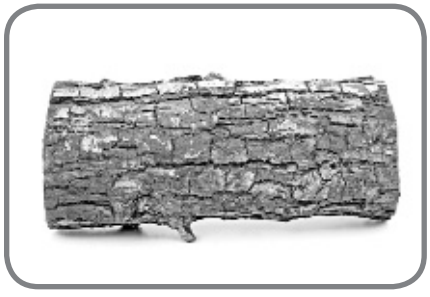
Prehistory

Name _____ Date _____

1 How did prehistoric people use things from nature?

Instructions

1. Work in groups.
2. Visit a park or nature area near your school. Collect natural objects that prehistoric people could have used for hunting, fishing, painting, storing food or water, grinding, etc.
3. Discuss with your group the possible uses of each item. Pay attention to specific characteristics for a particular use, for example, sharp edges of rocks for hunting, smooth rocks for grinding, coloured soil, pigments in leaves and flowers to make dyes, flexible sticks and stems for making arrow shafts, etc.
4. What do you think prehistoric people used these objects for? Write the uses.



_____ _____ _____

_____ _____ _____

_____ _____ _____

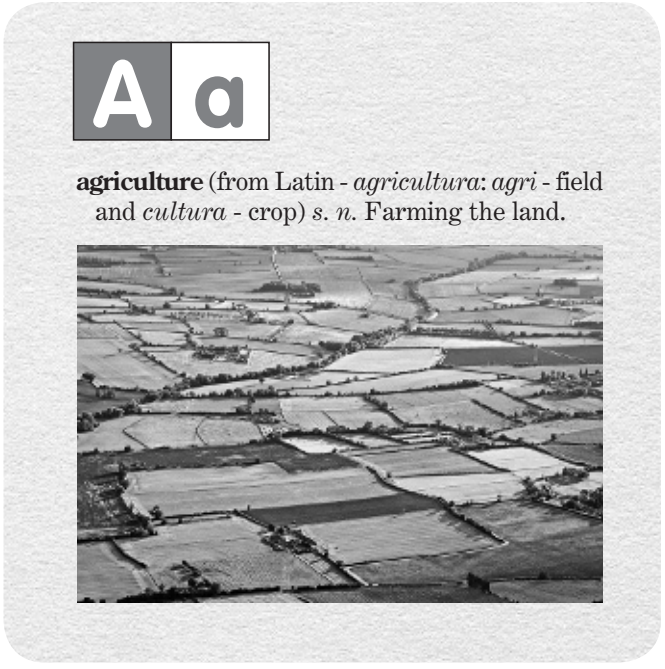
5. Make a display of your objects and write a description of their uses.
6. Draw a picture to demonstrate how the tools and objects were used.

Name _____ Date _____

1 Which words are of Latin or Greek origin? Make an alphabet wall chart.

Instructions

1. Work in two teams: *Latin* and *Greek*.
2. Each team searches the Internet for information about words with a Latin or Greek root, for example, **agriculture** (Latin root: *agri-* which means field) and **anemometer** (Greek root: *anem-* which means wind).
3. Each student chooses a word for a different letter of the alphabet.
4. They write the word on a sheet of card. They can use a different felt-tip pen to write the Latin or Greek root and a black felt-tip pen to write the rest of the word. Below, they write the meaning of the word, and illustrate it with a drawing or a photograph.
5. Each team joins their sheets of card together with tape to make their Latin or Greek alphabet wall chart.
6. Display the charts on the classroom wall.
7. Which words did your team find? Make a list.



_____

_____

_____

_____

_____

_____

The Middle Ages

Name _____ Date _____

1 How did boys become knights during the Middle Ages?

Instructions

1. Work in groups of three.
2. Do research on the Internet or in encyclopaedias to find out about the three steps needed to become a knight during the Middle Ages: a page, a squire, then a knight.
3. Make a triptych using a sheet of card. At the top write the title: *The stages to become a medieval knight*.
4. Then, fold the card lengthwise into three sections. Label each section as follows: *To become a page*; *To become a squire* and *To become a knight*. Use a different coloured felt-tip pen for each section.
5. Include drawings and information for each step. Try to answer these questions.
   a. How old did you have to be to become a page?
   b. How did a page become a squire?
   c. What sort of training did each stage require?
   d. What were the most important ceremonies?
6. Present your triptych to the class.

1 Living things

Name _____ Date _____

1 Complete the sentences.

a. The three basic life processes are _____

b. Cells are the basic _____

c. Living things can be classified into _____

d. Cells have three main parts: _____

e. Organelles carry out _____

f. Chloroplasts are specialized organelles that absorb _____

2 Draw a plant cell and label the main parts.

- Write four differences between plant cells and animal cells.

_____

_____

_____

_____

_____

_____

3 Write the next four levels of organization of multicellular organisms.

Cells → _____ → _____ → _____ → _____

- Then, write a sentence with these words.

multicelullar living thing	work together	organism functions correctly

_____

_____

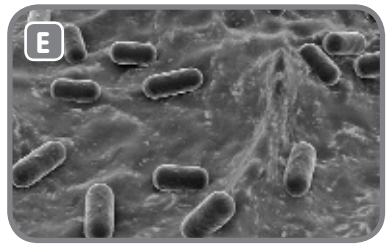
4 **Identify and label the five kingdoms of living things.**

_____

_____

_____

_____



_____

5 **Write the names of the kingdoms from Activity 4 in the correct place.**

a. They cannot move about. They feed on other organisms. _____

b. They can move about. They eat other living things. _____

c. They can make their own food. They cannot move about. _____

d. They can be unicellular or multicellular. Some feed on other organisms, and others make their own food. _____

e. They are unicellular. Some feed on other organisms, and others make their own food. _____

6 **Complete the sentences about living things.**

a. _____ are the most abundant living things.

b. _____ and _____ can be multicellular or unicellular.

c. _____ and _____ react to stimuli.

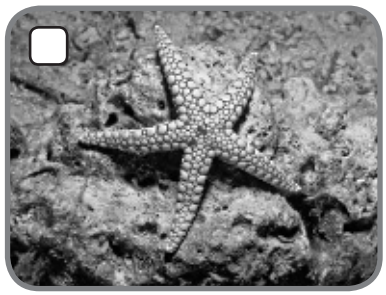
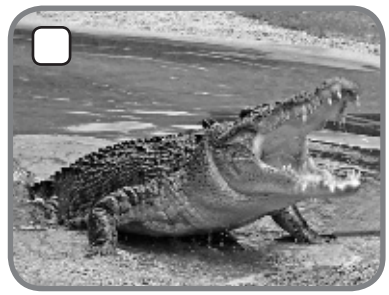
d. _____ means made up of a single cell.

e. _____ are not living things, so they are not included in any of the five kingdoms.

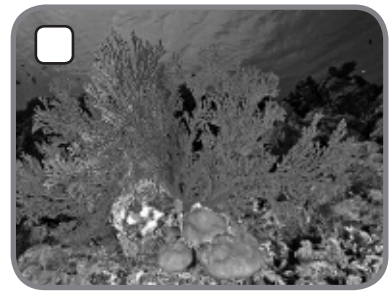
f. Groups of _____ join together to form organisms.

Name _____ Date _____

1 **Write *V* (vertebrate) or *I* (invertebrate). Then, write the main difference between the two groups.**



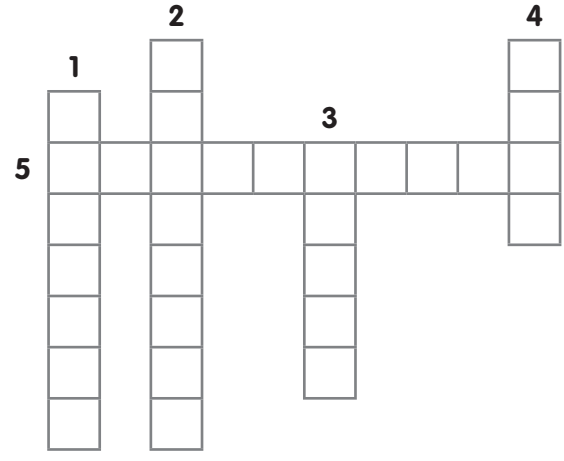


_____

_____

2 **Complete the crossword about vertebrate groups.**

1. Warm-blooded and viviparous.
2. Cold-blooded and oviparous, with lungs.
3. Warm-blooded and oviparous.
4. Cold-blooded and oviparous, with gills.
5. Cold-blooded and oviparous, with bare skin.



3 **Read the definitions and write the invertebrate group.**

a. Invertebrates with soft bodies. Some have a shell: _____

b. Simple invertebrates that filter seawater to obtain food: _____

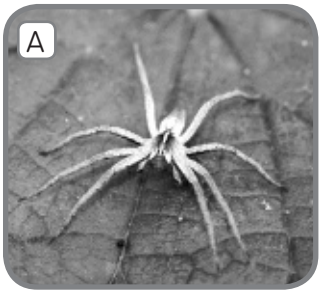
c. Marine invertebrates with radial symmetry: _____

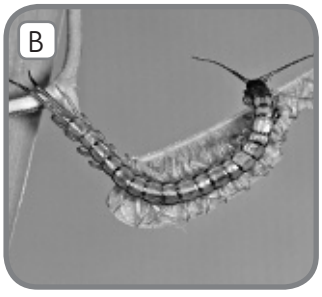
4 **Classify the invertebrates in the table.**

lobster mussel sea urchin barrel sponge jellyfish earthworm
coral starfish snail yellow tube butterfly marine flatworm

sponges	cnidarians	worms	echinoderms	molluscs	arthropods

5 **Write the name of each arthropod group and one characteristic.**





6 **Read and write *T* (true) or *F* (false). Then, correct the false sentences.**

a. Arthropods are the largest group of animals on Earth. ☐

b. Insects are the largest arthropod group. ☐

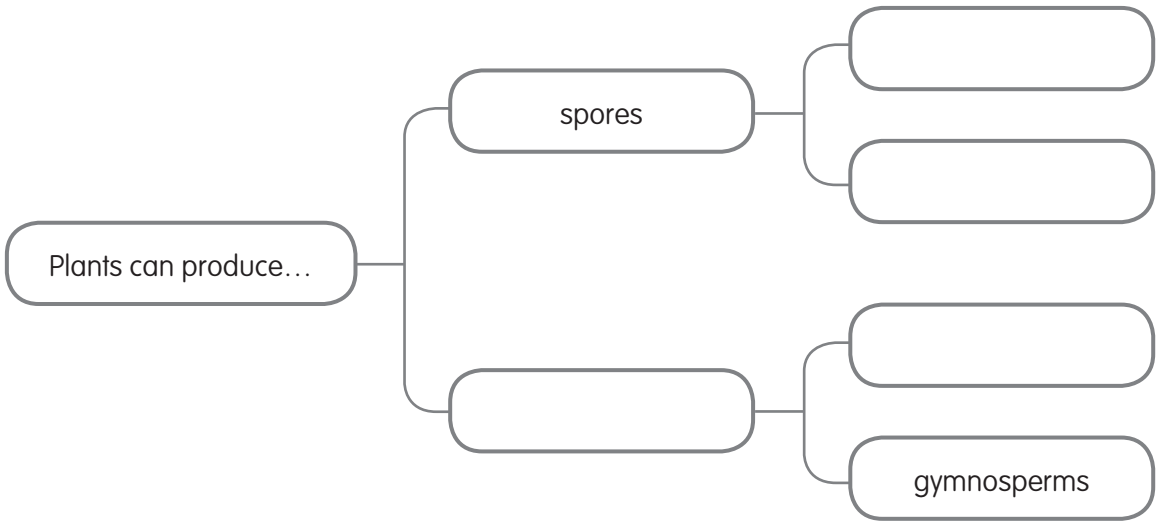
c. Insects, arachnids and myriapods have segmented bodies. ☐

d. Insects, arachnids and crustaceans have antennae. ☐

3 Plants

Name _____ Date _____

1 **Complete the chart.**



2 **Match each plant type from Activity 1 with the corresponding picture.**




_____ _____ _____ _____

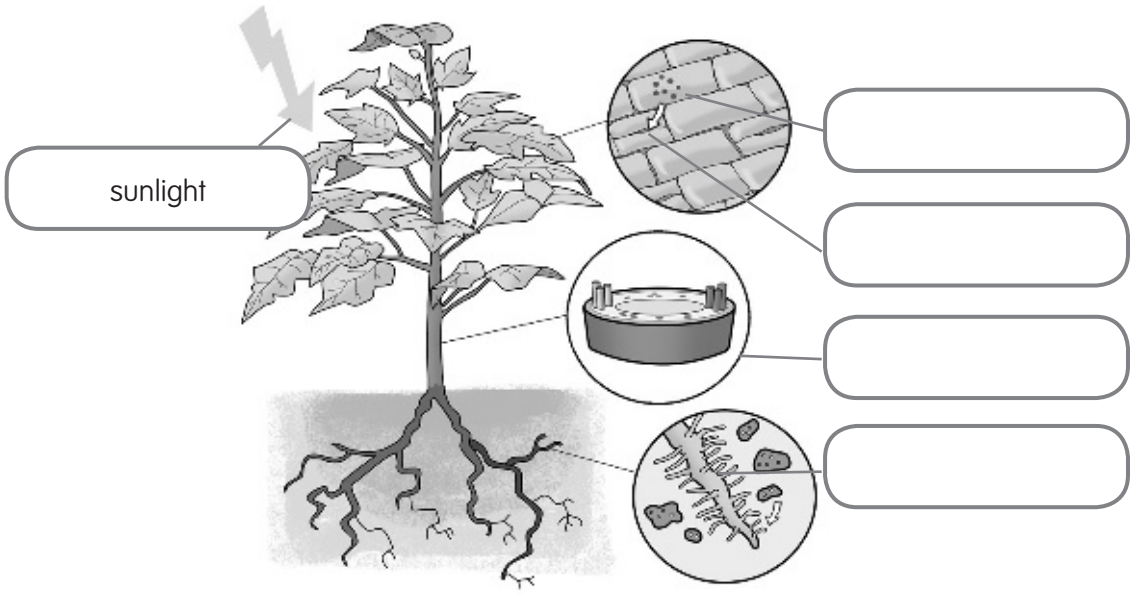
3 **Circle the words related to plant nutrition. Then, choose two to complete the sentences.**

stomata	stamens	chlorophyll	bulbs	elaborated sap
gravity	photosynthesis	anther	chloroplasts	stigma

- _____ is a green substance which traps sunlight.
- _____ are specialized organelles which contain chlorophyll.

4 **Label the parts of the plant.**

stomata root hairs carbon dioxide xylem vessels



5 **Write a sentence to describe each stage of sexual reproduction.**

pollination germination seed dispersal

6 **Circle the plant parts that can be used to reproduce identical plants. Explain your answer.**

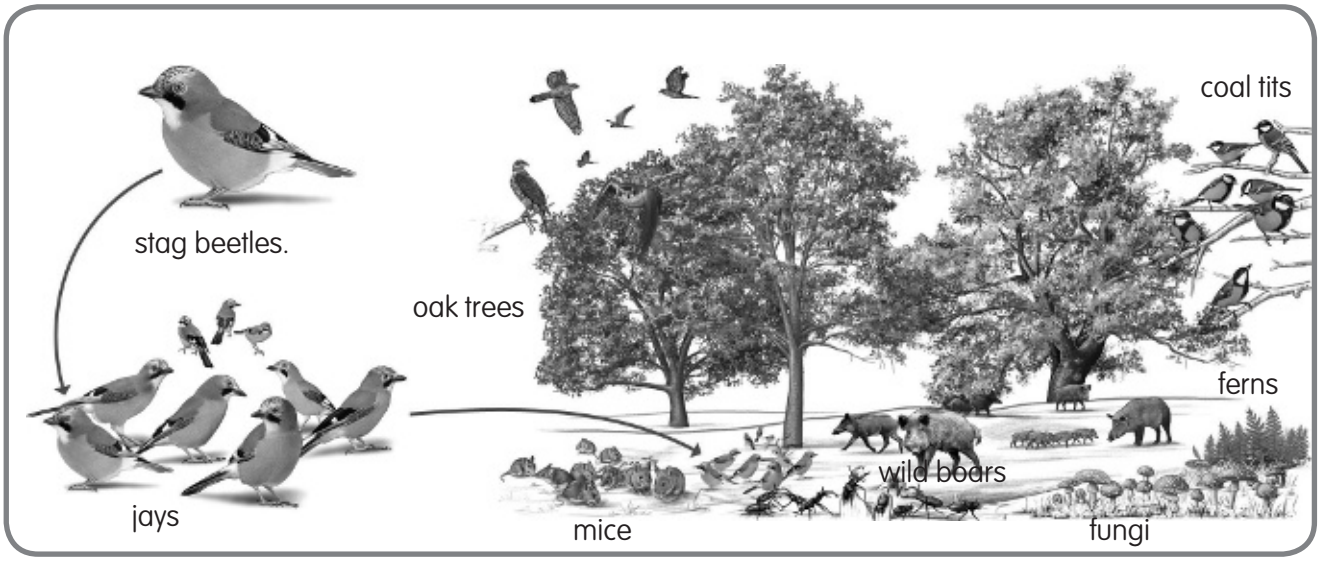
seed tuber root fruit stolon bulb

4 Ecosystems

ASSESSMENT

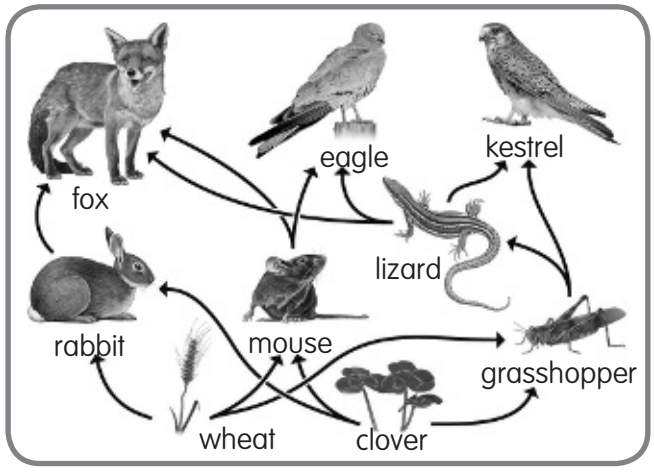
Name _____ Date _____

1 **Look at the picture and classify the populations in this ecosystem.**



producers	consumers	decomposers

2 **Look at the food web and write examples.**



a. Two producers: _____

_____

b. Two primary consumers: _____

_____

c. Two secondary consumers: _____

_____

d. Two tertiary consumers: _____

_____

- Then, trace over the arrows to show one food chain in this food web.

3 **Write one example of each type of relationship.**

- Competition: _____
- Mutualism: _____
- Parasitism: _____

4 **Name the two environmental problems.**

_____ _____

- How do they happen?

_____

_____

5 **Make a list of four ways you can help to protect the environment.**

_____

_____

_____

_____

_____

_____

_____

Name _____ Date _____

1 Complete the sentences.

a. Different constellations are visible in different _____ because the Earth _____ around the Sun.

b. Different constellations are visible at different _____ because the Earth _____ on its axis.

2 Draw and describe the shape of each type of galaxy.

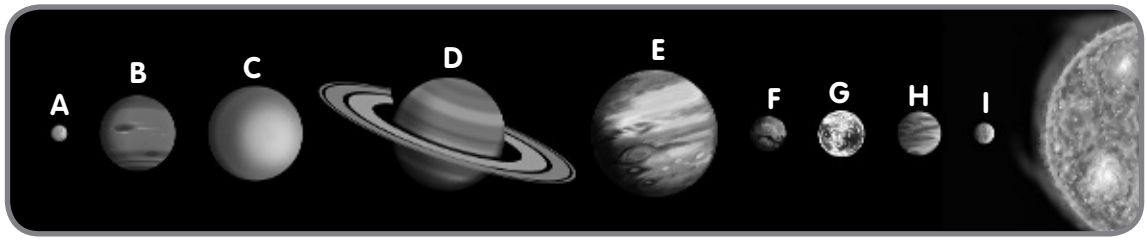
spiral galaxy	elliptical galaxy	irregular galaxy
_____	_____	_____

3 Write the names of the planets. Then, answer the questions.

a. _____ d. _____ g. _____

b. _____ e. _____ h. _____

c. _____ f. _____ i. _____



- Between which planets is the asteroid belt? _____
- Where is the Kuiper belt? _____

4 **Read and write *T* (true) or *F* (false). Then, correct the false sentences.**

a. Dwarf planets are irregular-shaped celestial bodies, much smaller than planets. ☐

b. Asteroids are small celestial bodies that orbit the Sun. ☐

c. The Kuiper belt is closer to the Sun than the asteroid belt. ☐

d. Meteoroids are small fragments of asteroids that fall to the Moon. ☐

e. Comets are giant balls of ice and dust that orbit the Sun. ☐

f. Shooting stars are not real stars. ☐

5 **Match. Then, write sentences about the spacecrafts.**

a. Sputnik 1	first person in space
b. Apollo 11	first space probe
c. Vostok 1	first mission to the Moon
d. Voyager 1	first artificial satellite

6 **Complete the information about this spacecraft.**

- Type of spacecraft: _____
- Uses: _____

6 The Earth

ASSESSMENT

Name _____ Date _____

1 **Cross out the odd word out. Then, write the corresponding Earth sphere.**

a. ozone layer, troposphere, stratosphere, aeroplanes _____

b. ocean, magma, river, water cycle _____

c. inner core, crust, snow, molten rock _____

d. seahorses, ferns, stratosphere, penguins _____

2 **Read the definitions and write the words.**

a. The middle layer of the geosphere where you find molten rock: _____

b. All the solid, liquid and gaseous water on Earth: _____

c. The layer in the stratosphere which absorbs harmful ultraviolet radiation: _____

d. All the living things on the geosphere and in the hydrosphere: _____

3 **Write the words for these definitions of external change of the Earth's crust.**

a. The movement of eroded materials by water or wind. _____

b. The removal of rock fragments by water or wind. _____

c. The settling of eroded and transported materials from other places. _____

d. The slow process by which rocks break down into smaller pieces. _____

4 **Name one similarity and one difference between volcanic eruptions and earthquakes.**

▶ Similarity:

_____

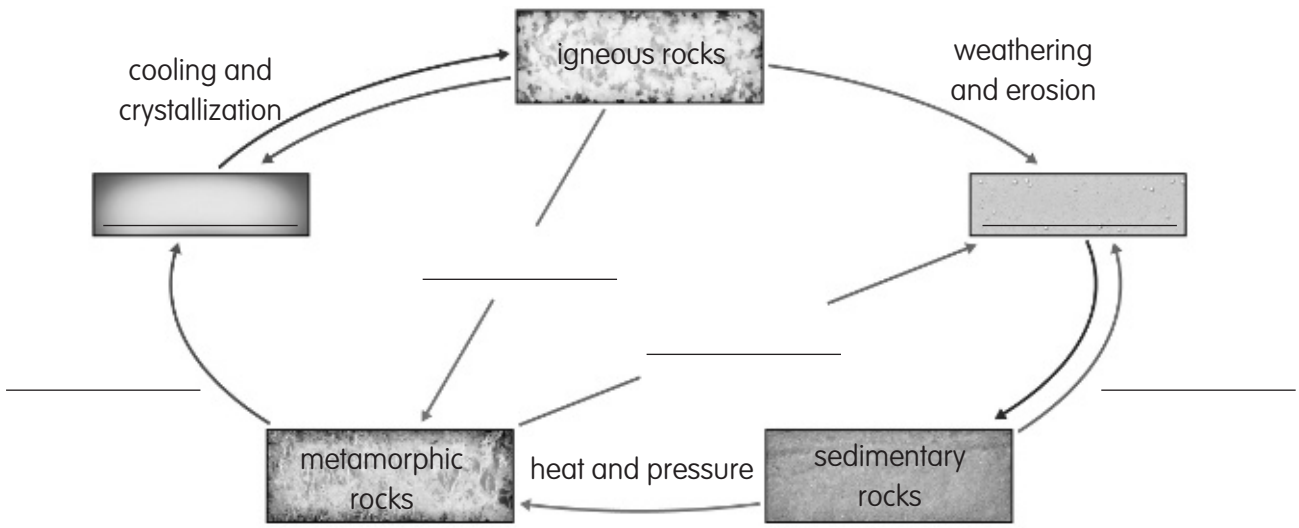
▶ Difference:

_____

5 **Complete the table about rocks.**

	description	examples
sedimentary rocks	_____ _____	_____ _____
metamorphic rocks	_____ _____	_____ _____
igneous rocks	_____ _____	_____ _____

6 **Complete the diagram of the rock cycle.**



7 The landscapes of Spain

ASSESSMENT

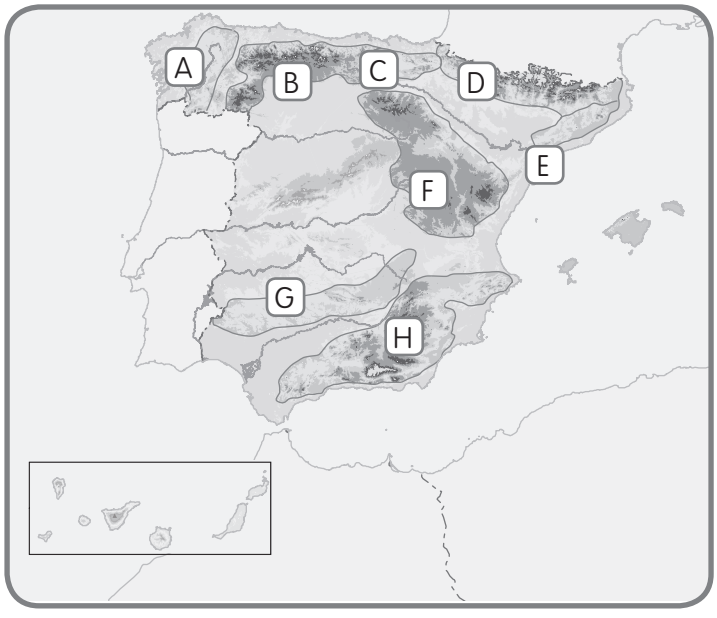
Name _____ Date _____

1 **Classify the mountains in the table.**

Central Mountain Chain | Basque Mountains | Mountains of Toledo | Baetic Mountain Chain
Cantabrian Chain | Iberian Mountain Chain | Sierra Morena | Pyrenees

mountains of the Inner Plateau	mountains surrounding the Inner Plateau	mountains beyond the Inner Plateau
_____	_____	_____
_____	_____	_____

2 **Look at the map and write the names of the mountains from Activity 1.**



a. _____
b. _____
c. _____
d. _____
e. _____
f. _____
g. _____
h. _____

3 **Label the archipelagos on the map in Activity 2. Then, write the names of the islands.**

- Balearic Islands: _____
- Canary Islands: _____

4 **Read and circle the five errors. Then, write the correct text.**

Most rivers in Spain are long and have a high flow. Most have their source on the plains in and around the Inner Plateau. They flow east into the Mediterranean Sea. The River Ebro is an exception.

_____

_____

_____

_____

_____

_____

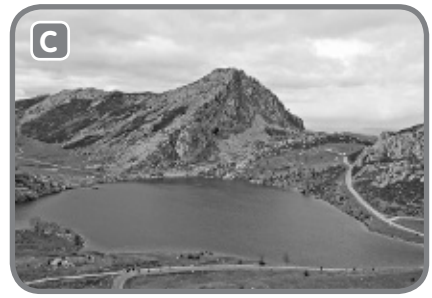
5 **Name two rivers from each watershed.**

a. Cantabrian: _____

b. Mediterranean: _____

c. Atlantic: _____

6 **Look at the photos. Write *lake, lagoon* or *reservoir*. Then, write a sentence to describe each.**



_____ _____ _____

a. _____

b. _____

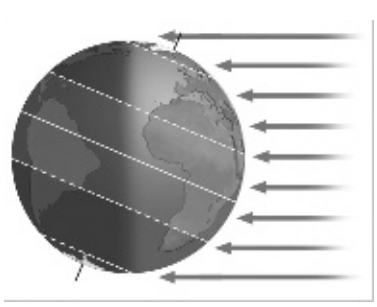
c. _____

8 The climates of Spain

ASSESSMENT

Name _____ Date _____

1 **Label the world's climatic zones on the diagram.**



2 **What are the three main factors that affect climate?**

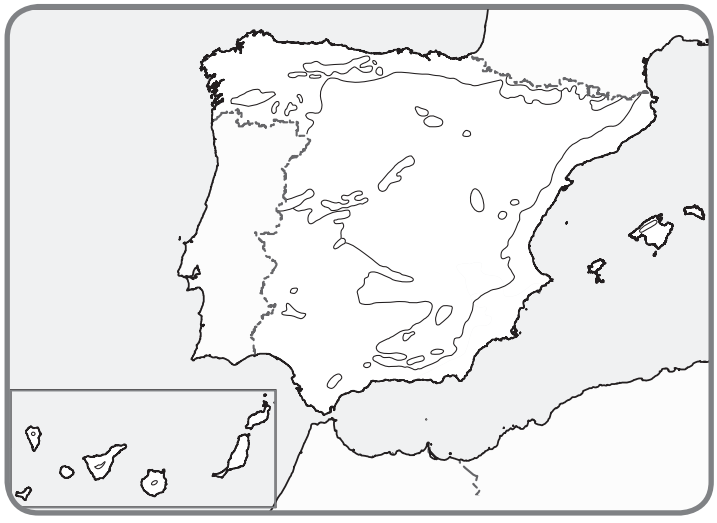
_____

_____

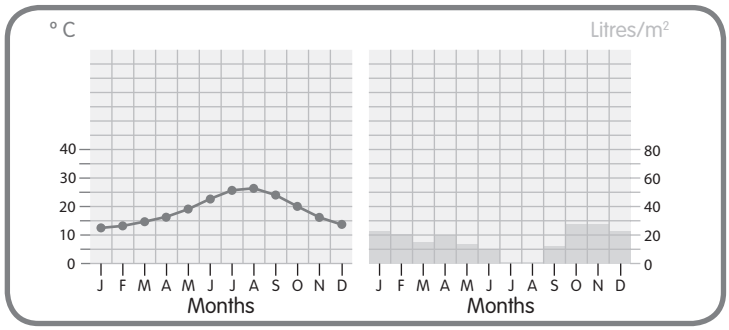
_____

3 **Colour the main climate areas of Spain. Use this key.**

Continental Mediterranean (brown) Oceanic (green) Mountain (purple)
Typical Mediterranean (yellow) Subtropical (red) Dry Mediterranean (blue)



4 **Answer the questions. Then, identify the type of climate that corresponds to the climate graphs.**



a. Which are the hottest months of the year? _____

b. Which are the coldest months? _____

c. In which months is there most precipitation? _____

d. How many litres /m^2 of rain fall in December? _____

e. Which type of climate do these graphs represent? _____

5 **Label the plants. Then, identify the type of vegetation.**

_____ _____

_____ _____

6 **Name two plants that grow in each place.**

a. The Pyrenees: _____

b. The Community of Valencia: _____

c. The Canary Islands: _____

d. Cantabria: _____

9 Population and the economy

ASSESSMENT

Name _____ Date _____

1 **Read the definitions and write the words. Then, tick (✓) the factors that cause population changes.**

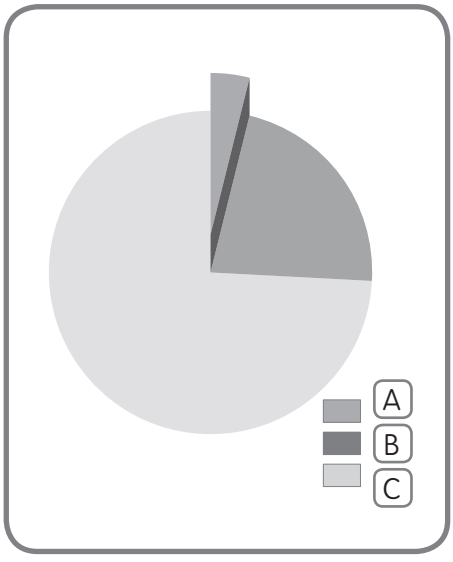
- ☐ a. The number of babies born in a place in one year: _____
- ☐ b. People who live in cities and towns: _____
- ☐ c. The number of people who die in a place in one year: _____
- ☐ d. The number of people who live in a particular area: _____
- ☐ e. People who come to live in a new country: _____
- ☐ f. The number of inhabitants per square kilometre: _____
- ☐ g. People who leave their country to live in another country: _____
- ☐ h. People who live in villages: _____

2 **Write the provinces in order, from the lowest to the highest, according to their population density.**

Soria | Toledo | Madrid | Caceres | Alicante | Zaragoza

_____

3 **Label the key of the pie chart of the working population in Spain. Then, write a sentence describing each sector.**



a. _____

b. _____

c. _____

_____

_____

_____

_____

4 **Write *T* (true) or *F* (false). Then, correct the false sentences.**

- ☐ a. The active population of Spain works in three sectors: agriculture, industry and health care.
- ☐ b. In Spain, dry crops are cultivated over most of the agricultural land.
- ☐ c. Cattle farming is concentrated in regions of southern Spain.
- ☐ d. Industry and construction jobs in Spain have increased in recent years.
- ☐ e. Spain exports shoes and cars, and imports petroleum and computers.

5 **Write the following economic activities in their order of importance for the Spanish economy.**

industry agriculture services livestock farming fishing construction

6 **Why is the tertiary sector the most important one in Spain?**

10 Prehistory

ASSESSMENT

Name _____ Date _____

1 **Complete the timeline. Then, write a sentence about each period.**

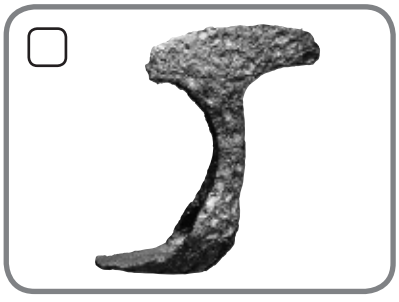
2 million years ago | 10,000 years ago | 7,000 years ago

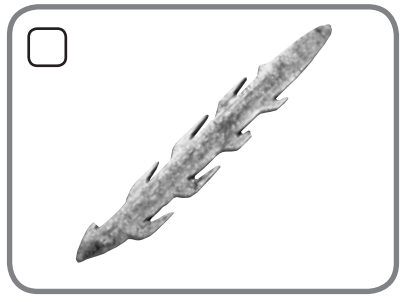
_____

_____

_____

2 **Identify the objects and the period of Prehistory. Then, number them in chronological order.**





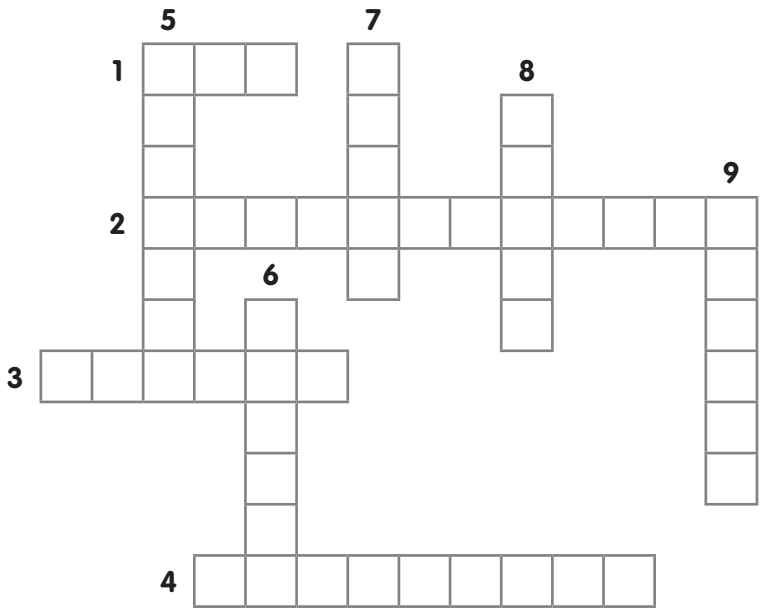
_____ _____ _____

3 **Classify the words.**

nomads hoes polished stone flint looms dolmens traders
arrowheads fire stick figures iron villages towns sail sedentary

Palaeolithic Age	Neolithic Age	Metal Ages

4 Complete the crossword about Prehistory.



1. Tool made of polished stone used for turning the soil.
2. Oldest and longest period of Prehistory.
3. Large, upright, standing stone used for religious purposes.
4. Period of Prehistory when people became sedentary.
5. Tool made of bone used for fishing.
6. Tool made of metal used for cutting crops.
7. Invention that made it possible to transport people and goods by cart.
8. Type of stone used to make tools. It is very resistant and easy to shape.
9. First metal used to make tools. It is easy to mould and shape.

5 Write *Palaeolithic, Neolithic* or *Metal Ages* next to each sentence.

a. People built megalithic monuments. _____

b. People painted animals on cave walls and ceilings. _____

c. People used polished stone axes to cut trees. _____

d. People made houses of adobe with straw roofs. _____

e. People raised animals in fenced areas. _____

f. People were organized in tribes. _____

11 Ancient History

ASSESSMENT

Name _____ Date _____

1 **Write two similarities and two differences between Iberian and Celtic tribes.**

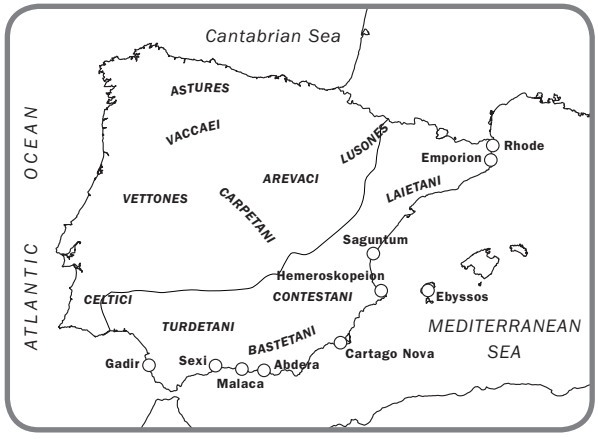
▶ Similarities:

_____

▶ Differences:

_____

2 **Use the key and colour the colonies on the map. Then, write a sentence about each colonizer.**



red	Celtic and Celtiberian zone
blue	Iberian territory
green	Phoenicians
yellow	Greeks
orange	Carthaginians

a. Phoenicians: _____

b. Greeks: _____

c. Carthaginians: _____

3 **Read the sentences and underline the mistakes. Then write the sentences correctly.**

a. Celts made and carved objects in stone, iron and bronze.

_____

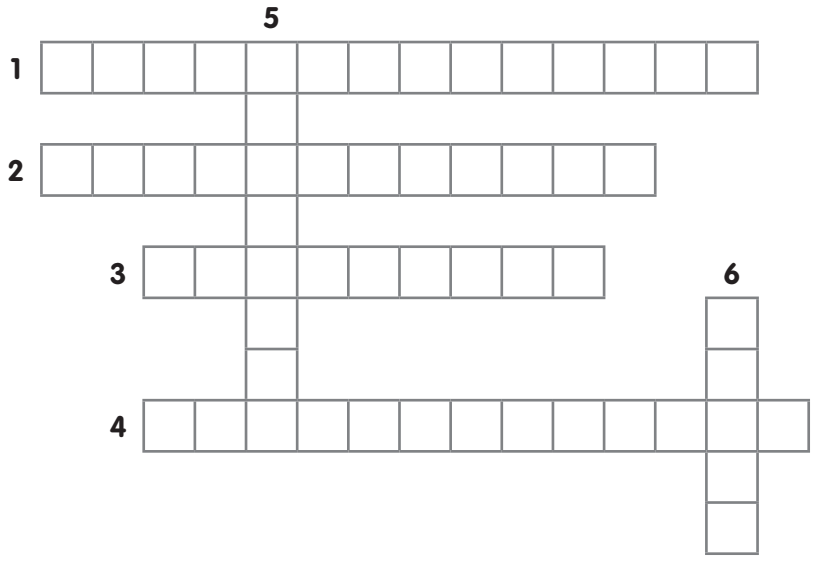
b. The Corinthian column was simpler than the Doric column.

_____

c. The Romans decorated their ceilings with mosaics.

_____

4 Complete the crossword about Roman Hispania.



1. The province of Hispania where Toletum was located.
2. The official religion of the Roman Empire.
3. A slave who fought to entertain others.
4. The Roman road which crosses Spain from north to south (two words).
5. The name of the Iberian Peninsula in Roman times.
6. The official language of Hispania.

5 Cross out the odd one out. Then, write the corresponding period of Ancient History.

a. Malaca	alphabet	warriors	sailors	_____
b. metal workers	coins	jewellery	clans	_____
c. entertainment	Baetica	hill forts	roads	_____
d. Cartago Nova	Greece	fleet	cotton	_____
e. round houses	chieftain	writing	pottery	_____
f. potter's wheel	polis	Gadir	coins	_____

6 Read the definitions and write the words.

a. Large Iberian burial sites. _____

b. Elements of Greek temples used for support. _____

c. A stone construction to carry water. _____

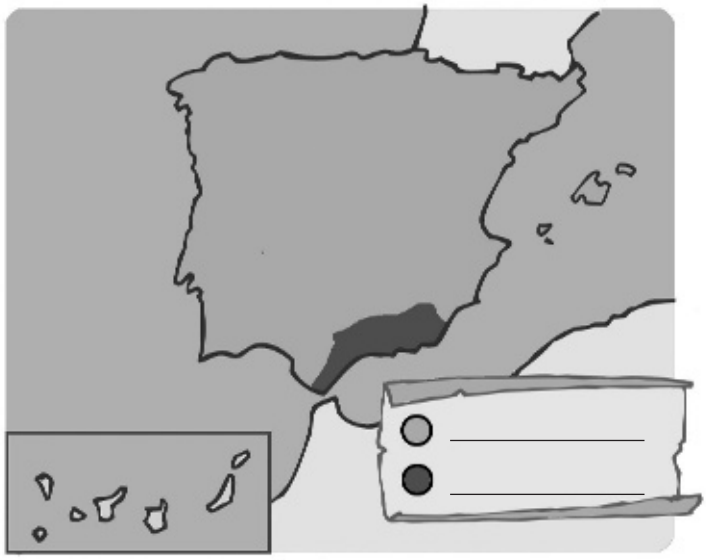
12 The Middle Ages

Name _____ Date _____

1 **Cross out the odd one out. Write the corresponding medieval period. Then, number them in order.**

☐	a. Christian Reconquest	peasants	Islam	Catholic Monarchs	_____
☐	b. elective monarchy	emirate	Toledo	Roman law	_____
☐	c. Christianity	Arabic	Cordoba	caliphate	_____

2 **Look at the map. Label the key. Which medieval period does it represent?**



_____

3 **Read and write the answer.**

a. The capital of the Visigoth Kingdom: _____

b. The reason for the end of the Visigoth Kingdom: _____

c. The small kingdoms within Al-Andalus: _____

d. The official language of Al-Andalus: _____

e. The name given to the conquest of Muslim territories: _____

f. The largest medieval social group: _____

4 **Read the sentences and underline the mistakes. Then write the sentences correctly.**

a. The Visigoths were a British tribe from the north of Europe.

_____

b. Abd-ar-Rahman III ruled Al-Andalus when it was a dependent emirate.

_____

c. Christians were the most powerful religious group in Al-Andalus.

_____

d. The marriage of the Catholic Monarchs united the Crowns of Portugal and Navarre.

_____

e. In the feudal system, the noblemen were the highest political authority.

_____

5 **Answer the questions about medieval cities.**

a. How were medieval cities protected from invaders?

_____

b. Write the name of two important buildings in medieval cities.

_____

c. Who lived in the houses inside the city?

_____

d. Name two universities that were founded in medieval times.

_____

6 **Identify the style of architecture and write *Al-Andalus, Romanesque* or *Gothic.***

a. Very small, narrow windows: _____

b. Ribbed ceilings and pointed towers: _____

c. Courtyards that had fountains and pools: _____

Answer keys

Reinforcement & Extension

Reinforcement

1. LIVING THINGS

PAGE 6

1. Match and write the correct sentences.

a. All living things are made up of cells.

b. All living things carry out three basic life processes.

c. Cells are the basic units of life.

d. Cells can specialize to perform a particular function.

2. Write the correct life process: *nutrition, reproduction,* or *sensitivity*.

reproduction; nutrition; sensitivity.

3. Label the diagram of the plant cell.

left, top to bottom: nucleus; organelles.

right, top to bottom: cell wall; cytoplasm; chloroplasts.

PAGE 7

4. Write in order from the simplest to the most complex level of organization.

a. cell; b. tissue; c. organ; d. system; e. organism.

Model Answer (MA)

plant organs: leaves; stems.

animal organs: muscles; bones.

5. Read and write *T* (true) or *F* (false). Then, correct the false sentences.

a. T; b. F; c. T; d. T; e. T; f. F.

Animals have a nervous system, plants do not.

Fungi and protozoa feed on other organisms.

6. Match.

a. Tube; It supports the eyepiece.

b. Diaphragm; It controls the amount of light projected onto the sample.

c. Stage; This is where you put the sample.

d. Eyepiece; It contains the lens you look through.

top to bottom: objective lenses; focusing knobs.

2. ANIMALS

PAGE 8

1. Write *M* (mammal), *B* (bird), *R* (reptile), *A* (amphibian) or *F* (fish). Then, write one characteristic for each vertebrate group.

top to bottom, left to right: A; R; M; B; F.

MA. top to bottom, left to right: cold-blooded; covered with scales; breathe with lungs; oviparous; breathe through gills.

2. Write one similarity and one difference between each two groups.

MA

a. Both mammals and birds breathe with lungs. Mammals are viviparous, but birds are oviparous.

b. Both birds and reptiles are oviparous. Birds are warm-blooded, but reptiles are cold-blooded.

3. Name one example of each type of invertebrate.

MA

a. barrel sponge; b. jellyfish; c. earthworm; d. starfish; e. octopus; f. spider.

PAGE 9

4. Use the categories from Activity 3 to label the photos.

top row: sponge; worm; echinoderm.

bottom row: cnidarian; mollusc; arthropod.

5. Complete the table about these arthropod groups.

arthropod group	number of legs	body parts	antennae	example
insects	six	three	one pair	bee
arachnids	eight	two	none	spider
myriapods	more than twenty	two	one pair	millipede
crustaceans	ten to fourteen	two	two pairs	prawn

6. What arthropod group does the bee belong to? Write a short description of the bee.

MA

The bee is an insect. It has six legs and three body parts: a head, a thorax and an abdomen. It has one pair of antennae and it has wings.

3. PLANTS

PAGE 10

1. Write the name of each type of plant. Then, write one characteristic for each.

ferns, (MA. They grow in humid and shady places.); angiosperms, (MA. They are flowering plants.); gymnosperms, (MA. They produce seeds that are grouped together in cones.); mosses, (MA. They are very small plants.)

Reinforcement

2. Complete the sentences about plant sensitivity.

a. Plants can detect changes in the environment, called stimuli, and respond to them.

b. Plants are sensitive to light, gravity, water, temperature changes and sometimes to touch.

c. In general, plant responses are slower than animal responses.

d. Plant responses result in the plant growing in a particular direction.

e. Deciduous plants lose their leaves in autumn as a response to changes in light and temperature.

3. Match the sentences about plant nutrition. Then, number them in order.

a. Raw sap and carbon dioxide transform into elaborated sap through photosynthesis.

b. Plants take in carbon dioxide through stomata in the leaves.

c. Raw sap travels up from the roots through xylem vessels.

d. Sunlight is trapped by chlorophyll found in the leaves.

e. Plants absorb water and mineral salts through their roots.

f. Elaborated sap is distributed through phloem vessels.

order: 1.e; 2.c; 3. b; 4. d; 5. a; 6. f.

PAGE 11

4. Complete the diagrams of gas exchange in plants. Colour the arrows for photosynthesis in green and the ones for respiration in red. Then, label the gases.

- Through photosynthesis, plants take in carbon dioxide (red arrows) and release oxygen (green arrows) during the day.
- Through respiration, plants take in oxygen (green arrows) and release carbon dioxide (red arrows) day and night.

5. Complete the text about gas exchange in plants.

Through photosynthesis, plants take in carbon dioxide and release oxygen during the day. Through respiration, plants take in oxygen and release carbon dioxide day and night.

6. Read and write the stages of sexual reproduction. Then, number them in order.

fertilization; germination; pollination; seed dispersal.

order: 2; 4; 1; 3.

7. Label each type of asexual reproduction.

stolon; tuber; rhizome.

4. ECOSYSTEMS

PAGE 12

1. Look at the pictures. Which factors in the environment influence living things in these ecosystems?

temperature and wind; temperature; temperature and wind.

2. Match the words to complete the definitions.

a. Competition is the relationship between different species that compete with each other to survive.

b. Parasitism in the relationship between two species where one benefits while the other one suffers as a result.

c. Mutualism is the relationship between two species where both benefit.

3. Look at the pictures. Name each type of relationship.

competition; mutualism; parasitism.

PAGE 13

4. Write one example for each.

MA

a. algae; b. grasshopper; c. fox; d. eagle; e. crab; f. fungi.

5. Number the living things in this food chain in order. Then, label them.

producer; primary consumer; secondary consumer; tertiary consumer.

order: 3; 2; 4; 1.

6. Complete the table about dangers to ecosystems.

MA

environment problem	causes	consequences
pollution	accumulation of rubbish and harmful substances	global warming
deforestation	forest fires and intense tree logging	erosion and endangered species
desertification	deforestation	land turns into desert
endangered species	pollution, global warming and deforestation	risk of extinction of many plants and animals

7. Write an example of each of the 3 Rs.

a. use cloth bags instead of paper or plastic ones.

b. cardboard boxes for storage.

c. newspapers or magazines to make new paper.

Reinforcement

5. THE UNIVERSE

PAGE 14

1. Read and write which star is brighter in each situation.

a. Star A; b. Star B.

2. Complete the sentence about our galaxy. Then, make a drawing to show the location of the Solar System within the galaxy.

The Solar System belongs to a spiral galaxy known as the Milky Way.

See page 49 of the Student's Book for the location of the Solar System.

3. Complete the chart about the Solar System.

inner planets: Venus; Mars; Earth; Mercury.

outer planets: Saturn; Uranus; Jupiter; Neptune.

dwarf planet: Pluto.

PAGE 15

4. Label the following small celestial bodies. Write one characteristic for each.

asteroid, (MA) It has an irregular shape.

comet, (MA) It is a giant ball of ice and dust.

meteoroid, (MA) It is a small fragment of an asteroid.

5. Match to complete the timeline about space exploration.

order: 1957: c; 1961: a; 1969: b; 1977: d; 1981: f; 1986: e.

6. Write a sentence about life in space with each group of words.

MA

a. The first module of the International Space Station (ISS) with astronauts from several different countries was launched in 1998.
b. Daily life can be difficult because there is very little gravity and so everything floats.
c. Astronauts sleep attached to the walls and they have to eat and drink through straws.

6. THE EARTH

PAGE 16

1. Name the Earth sphere for each photograph. Write one characteristic for each sphere.

hydrosphere, (MA) This consists of all of the water on Earth.

geosphere, (MA) This is the rocky part of the Earth.

atmosphere, (MA) This is the layer of gasses that surrounds the Earth.

biosphere, (MA) This consists of all living things on Earth.

2. Label the main layers of the atmosphere. Indicate the ozone layer with an X.

top to bottom: ozone layer; stratosphere; troposphere.

Aeroplanes fly in the troposphere.

3. Complete the text about the weathering of rocks in cold temperatures.

Water accumulates in cracks in rocks. The water freezes and expands. The rocks fracture and break into smaller pieces. This happens in places with cold temperatures.

PAGE 17

4. Classify the words:

volcanoes: magma chamber; gases; lava; crater; ashes; unpredictable.

earthquakes: epicentre; tsunami; seismometer; focus; unpredictable.

5. Classify the rocks. Then, tick (✓) the rock with no crystals.

sedimentary: coal; conglomerate; limestone.

igneous: obsidian (✓); pumice; granite.

metamorphic: marble; gneiss.

6. Read the definitions and write the words.

a. sedimentary rocks; b. heat and pressure; c. igneous rocks; d. melting; e. metamorphic rocks; f. weathering and erosion.

7. THE LANDSCAPES OF SPAIN

PAGE 18

1. Name two groups of mountains in each area in the Iberian Peninsula.

a. Central Mountain Chain, Mountains of Toledo; b. (MA) Mountains of Leon, Cantabrian Chain; c. (MA) Galician Massif, Pyrenees.

2. Read the descriptions and write the words.

a. Cantabrian Chain; b. Inner Plateau; c. Baetic Mountain Chain.

3. Complete the sentences with these words. Then, match the pictures to the descriptions.

A. The Mediterranean coast is low and sandy. In the north, it begins at Cape Creus and goes south to Tarifa Point. It is the largest Spanish coast.
B. The Atlantic coast is high and rocky. It is divided in two parts: the coast of Galicia in the north and the coast of the Gulf of Cadiz in the south.

Reinforcement

PAGE 19

4. Circle the correct words and copy the sentences.

a. Most rivers in Spain flow west into the Atlantic Ocean.

b. A river basin is an area of low land drained by a river.

c. There are three watersheds in Spain. The Atlantic watershed is the largest.

5. Classify the rivers into their corresponding watershed. Then, tick (✓) the rivers that drain into the Mediterranean watershed.

Cantabrian watershed: Navia; Nervion; Nalon.

Mediterranean watershed: Segura (✓); Jucar (✓); Ebro (✓).

Atlantic watershed: Tagus; Guadalquivir; Duero.

6. Read and write *T* (true) or *F* (false). Then, correct the false sentences.

a. T; b. F; c. T; d. F; e. T.

Most mountain lakes are formed by melted glaciers.

Coastal lagoons are shallow lakes with saltwater or freshwater.

8. THE CLIMATES OF SPAIN

PAGE 20

1. Complete the table.

	definition	unit of measurement	instrument of measurement
temperature	how hot or cold it is	degrees centigrade (ºC)	thermometer
precipitation	the amount of rain, snow or hail	litres per squared metre (l/m^2)	rain gauge

2. Which has a warmer climate, the Balearic Islands or the Canary Islands? Explain.

MA. The Canary Islands have a warmer climate because they are closer to the Equator and so receive rays from the Sun more directly.

3. Complete the table. Then, answer the questions.

climate	temperature	precipitation
Continental Mediterranean	low in winter and high in summer	low and irregular
Dry Mediterranean	milder in winder and higher in summer than the Typical Mediterranean	very scarce and irregular
Typical Mediterranean	mild in winter and high in summer	scarce and irregular

- Most inland regions of the Iberian Peninsula have a Continental Mediterranean climate.
- The south-eastern areas of the Spanish Mediterranean coast have a Dry Mediterranean climate.
- The Balearic Islands, the Mediterranean coast and a few inland areas of the Iberian Peninsula have a Typical Mediterranean climate.

PAGE 21

4. Write the climate that corresponds to each description.

a. Subtropical climate; b. Mountain climate; c. Oceanic climate; d. Continental Mediterranean climate; e. Typical Mediterranean climate.

5. Write two examples of vegetation for each place.

MA

a. Mediterranean forest: holm oaks, pine trees.

b. Mediterranean shrubland: thyme, lavender.

c. Atlantic forest: meadows, chestnut trees.

d. Mountains above 2,000 metres: grasses, shrubs.

6. Classify the plants in the table.

Mediterranean vegetation: thyme, rosemary, maple tree.

Oceanic vegetation: ferns, chestnut tree.

Subtropical vegetation: palm tree, Teide violet, dragon tree.

Mountain vegetation: yellow broom, fir tree.

- The Subtropical vegetation.

9. POPULATION AND THE ECONOMY

PAGE 22

1. Complete the sentences with *more than* or *less than*.

a. When the birth rate is more than the death rate, the population increases.

b. When the birth rate is less than the death rate, the population decreases.

c. When the number of emigrants is less than the number of immigrants, the population increases.

d. When the number of emigrants is more than the number of immigrants, the population decreases.

Reinforcement

2. Look at the map and answer the questions.

a. Madrid and Barcelona are the two provinces that have a very high population density.

b. Soria and Teruel have an average population density of less than 10 inhabitants per km^2.

3. Complete the table about crop production in Spain.

type of crops	examples	Autonomous Community
dry crops; irrigated crops	(MA) grapes and olives; fruit and rice	(MA) Castile-La Mancha; (MA) Murcia

PAGE 23

4. Write sentences using only the words related to the primary sector.

MA

The primary sector is based on natural resources such as crops.

Pig farming is the most common type of livestock farming.

Most people employed in the mining sector work in quarries.

5. Complete the sentences about industry in Spain.

a. The percentage of the population working in industry is 14%.

b. The main industries are food, metallurgy, equipment and machinery and the chemical industry.

c. The Autonomous Community with the most jobs in industry is Catalonia.

6. Complete the crossword puzzle.

1. tertiary; 2. exports; 3. tourism; 4. trade; 5. domestic.

10. PREHISTORY

PAGE 24

1. Complete the sentences.

a. Prehistory started with the appearance of the first human beings.

b. Prehistory ended with the invention of writing.

c. Prehistory is divided into three periods: the Palaeolithic Age, the Neolithic Age and the Metal Ages.

2. Cross out the odd one out. Then, write the corresponding period of Prehistory.

a. sickles, the Palaeolithic Age; b. caves, the Neolithic Age; c. quern stones, the Metal Ages.

3. Circle five tools and classify them in the table. Then, tick (P) the one used for weaving.

Palaeolithic Age: spear, needle.

Neolithic Age: hoe, loom (✓).

Metal Ages: plough.

PAGE 25

4. Use each group of words to write a sentence about a period in Prehistory. Then, number them in order.

MA

In the Metal Ages some people become soldiers, traders and metalworkers.

In the Neolithic Age people became sedentary and crop farmers, and domesticated animals.

In the Palaeolithic Age people spent their time fishing, gathering wild fruits and hunting animals.

Order: 3; 2; 1.

5. Label the photographs and write the period of Prehistory. Then, number them in order.

clay pots, Neolithic Age; cromlech, Metal Ages; cave painting, Palaeolithic Age.

Order: 2; 3; 1.

6. Name an important discovery that changed people's lives in each period.

a. fire; b. crop and animal farming; c. copper.

11. ANCIENT HISTORY

PAGE 26

1. Answer the questions about the Iberians and the Celts. Use the map to help you.

a. The Iberians settled in the south and east of the Iberian Peninsula.

b. The Celts lived in the north and centre of the Iberian Peninsula.

c. MA. The Arevaci, Lusones and the Vettones were Celtic tribes. The Laietani, Contestani and the Turdetanis were Iberian tribes.

d. The Celts lived in round houses.

2. Classify the sentences about the early colonizers.

Phoenicians: They founded Malaca; They developed an alphabet.

Greeks: They built polis; They introduced coins.

Carthaginians: They came from Africa; They owned a large fleet.

The main Carthaginian colonies were in the east of the Iberian Peninsula and on the Balearic Islands.

PAGE 27

3. Write a sentence about these aspects of life in Roman Hispania.

MA

a. Society was divided into free people and slaves.

b. Entertainment was part of daily life.

c. Latin was the official language.

d. Initially people worshipped Roman gods but they were gradually converted to Christianity.

e. The main economic activities were trading and crop farming.

f. The Romans built roads made of stones to connect cities and facilitate trading.

4. Label the art objects as *Greek, Iberian* or *Celtic*.

A. Iberian; B. Celtic; C. Greek.

5. Write a sentence about each piece of art in Activity 4.

MA

a. The Iberians made sculptures in stone and bronze.

b. The Celts were experts in making objects from precious metals.

c. The Greeks made decorative pottery containers for carrying water, and for storing perfume and olive oil.

6. Name two examples of each of these Roman buildings.

MA

a. circus, theatre; b. triumphal arch, column; c. bridge, aqueduct.

12. THE MIDDLE AGES

PAGE 28

1. Complete the table about the Visigoth Kingdom.

capital: Toledo; **language**: Latin; **religion**: Christianity; **political system**: elective monarchy.

2. Look at the map of the Iberian Peninsula and answer the questions.

a. The tenth century is represented. This is when the Muslims called the territory Al-Andalus.

b. It took the Muslims seven years to conquer most of the Iberian Peninsula.

c. Cordoba was the capital of the Muslim territories.

d. The Muslims ruled the Iberian Peninsula for more than seven hundred years.

3. Write the names of these places in a medieval city.

A. crop fields; B. mosque; C. fortress (*alcazar*); D. souk; E. walls.

PAGE 29

4. Name and write a sentence about each of the social groups in the pyramid of medieval society.

MA

The king was the highest political authority.

The clergy carried out religious and cultural activities. The noblemen were responsible for protecting the king and the land.

Most of the population were peasants.

5. Complete the crossword about medieval times.

1. feudal system; 2. serf; 3. Palencia; 4. castle; 5. district; 6. monk.

6. Draw the windows. Then, write two characteristics of each style of architecture.

Romanesque window: small, narrow windows.

Gothic window: large windows with decorative stained glass.

Extension

1. LIVING THINGS

PAGE 30

1. Read the text and complete the sentences.

a. Both bacteria and viruses cause illnesses.

b. Bacteria cause tuberculosis and cholera.

c. Viruses cause AIDS, measles and the common cold.

d. Antibiotics can usually kill bacteria.

e. When a bacteria has become difficult to treat, we say it is resistant to antibiotics.

2. Search the Internet for information about how we can prevent bacteria becoming resistant. Write three examples.

Open Answer (OA)

2. ANIMALS

PAGE 31

1. Read the text and complete the sentences.

a. Nocturnal animals can find food easily because there is less competition.

b. Hedgehogs have an excellent sense of hearing.

c. The owl is a nocturnal animal. It can hunt very tiny animals in almost complete darkness.

d. Owls cannot move their eyes, so they rotate their necks instead.

2. Search the Internet to find two more nocturnal animals. Then complete the table.

OA

3. PLANTS

PAGE 32

1. Read the text and complete the table.

MA

type of climate	plant adaptation	reason for adaptation
dry	waxy leaves or no leaves at all	water is scarce
temperate	broad leaves, thick bark	protection against cold winters
cold	dark leaves	absorption of sunlight and heat
very cold	plants grow in groups	protection from wind and cold air

2. Search the Internet for information about how cacti adapt to desert conditions. Complete the card.

MA

Adaptation: grow deeper roots into sand

Reasons: to absorb more water

4. ECOSYSTEMS

PAGE 33

1. Read the text and answer the questions.

a. Oil and plastics are polluting the oceans.

b. Tiny marine organisms eat marine pollutants and poison the food webs.

c. Oil spills float on water and block out the sunlight that algae need.

d. Marine animals mistake plastics for food.

e. Garbage patches are huge heaps of debris in the water.

5. THE UNIVERSE

PAGE 34

1. Read the text and answer the questions.

a. Olympus Mons is the largest mountain in the Solar System.

b. Olympus Mons is three times higher than Mount Everest.

c. Valles Marineris is one of the largest systems of canyons in the Solar System.

d. Valles Marineris is five times longer than the Grand Canyon.

e. Mars Reconnaissance Orbiter (MRO).

2. Search the Internet for more information about the Red Planet and make an index card.

MA

Size: Smaller than the Earth

Position: 249 million km from the Sun

Description: Its surface is red; it has massive volcanoes, polar ice caps, low temperatures and weak gravity

Moons: Phobos and Deimos

6. THE EARTH

PAGE 35

1. Read the text and complete the Venn diagram.

Arctic: frozen ocean surrounded by land; tundra grows; terrestrial mammals; a population of over four million people.

Both: located at the poles of the Earth.

Antarctic: large mass of land surrounded by ocean; no vegetation; no terrestrial animals; no permanent population.

Extension

2. On a blank map of the world, colour the two polar regions. Find photos of both regions and glue them to your map. Write a description for each photo.

OA

7. THE LANDSCAPES OF SPAIN

PAGE 36

1. Read the text and answer the questions.

a. Doñana National Park is in the delta of the Guadalquivir River.

b. The Guadalquivir River flows through Doñana.

c. You can find marshes, lagoons and sand dunes.

d. Because it is one of the most important wetland reserves in the world.

e. You can find the Iberian Lynx and the Spanish Imperial Eagle.

2. Search the Internet for information about two migratory birds you can find in Doñana National Park. Then, complete the table.

OA

8. THE CLIMATES OF SPAIN

PAGE 37

1. Read the text and answer the questions.

a. The strawberry tree is an evergreen shrub or small tree.

b. It grows in Mediterranean regions, in western France and Ireland.

c. The flowers are small and pink and white. The fruits are bright red and yellow.

d. There is a famous statue of a strawberry tree in the Puerta del Sol, Madrid.

2. Search the Internet for information about another tree. Complete the index card.

OA

9. POPULATION AND THE ECONOMY

PAGE 38

1. Read the text and answer the questions.

a. Ikaria is the Greek island in a *Blue Zone* area.

b. Life expectancy is 10 years longer compared to other places.

c. The secret of Ikarian longevity is diet and lifestyle.

d. The Ikarian diet consists of olive oil, fruits, nuts, local vegetables, fresh fish, goat's cheese, goat's meat, honey and tea made with local herbs.

e. An active social life is an essential part of the Ikarian way of life.

2. Search the Internet to find information about another *Blue Zone*. Why do people live longer there?

OA

10. PREHISTORY

PAGE 39

1. Answer the questions.

a. They used fire for lighting, heating, cooking, making pottery and as protection from wild animals.

b. It improved their diet because they had new ingredients.

c. Thanks to fire prehistoric people were better fed and were warmer.

2. Search the Internet for information about how to start a fire using a piece of glass or magnifying glass. Draw a picture and write a description.

OA

11. ANCIENT HISTORY

PAGE 40

1. Read the text and answer the questions.

a. Las Medulas is a historical site in the province of Leon.

b. It was in operation for two centuries.

c. It was important because the Roman monetary system was based on gold coins, which they used for trading.

d. The Romans used a technique known as *ruina montium*.

2. Search the Internet to find information about the mining technique *ruina montium*. Draw a series of diagrams to illustrate the process.

OA

12. THE MIDDLE AGES

PAGE 41

1. Read the text and answer the questions.

a. A Roman temple was the first building on the site of the Great Mosque of Cordoba.

b. Originally it was used for religious, social, cultural and political activities.

c. Today it is a Catholic cathedral.

2. Copy and write a timeline of the different buildings which have occupied the site of the Great Mosque.

Roman temple; Visigoth church; mosque; Christian church; Catholic cathedral.

Answer keys

Culture
Investigate! & Assessment

Culture

1. LIVING THINGS

PAGE 42

1. Read the text and complete the sentences.

a. Marine algae can also be called seaweed or sea vegetables.

b. Algae are rich in calcium, iron and minerals.

c. The most popular dish made with algae is sushi.

d. To make nutritious salads, you can add nori or kelp buds.

e. Through photosynthesis, algae are a major source of the Earth's oxygen supply.

2. Search the Internet to find another way we can use algae and write about it.

OA

2. ANIMALS

PAGE 43

1. Read the text and complete the table.

India: cow; wealth.

Vietnam: whale; good fortune and prosperity.

Ancient Egypt: cat; protection.

2. Find information about another sacred animal. Write a brief description.

OA

3. PLANTS

PAGE 44

1. Read the text and answer the questions.

a. A durian is a large, heavy fruit with sharp spikes.

b. It grows on trees in hot and humid tropical climates.

c. You eat durians raw and you can use your fingers to pull apart the sections of flesh.

d. They release a strong, pungent odour.

2. Durians are rich in nutrients. Search the Internet for information and make a list of the nutrients they contain.

MA

Durians contain: vitamin C, B-complex vitamins, copper, iron, magnesium, potassium and amino-acid.

3. What is your favourite fruit? Write a few sentences to describe it.

OA

4. ECOSYSTEMS

PAGE 45

1. Search the Internet for information about the last five WED celebrations and complete the table.

MA

year	2009	2010	2011	2012	2013
country	Mexico	Rwanda	Republic of India	Brazil	Mongolia
theme	Your Planet Needs YOU. UNite to Combat Climate Change	Many Species. One Planet. One Future	Forests: Nature at Your Service	Green Economy: Does it include YOU?	Think. Eat. Save

2. In pairs, find recent news about an environmental problem in your country. Write a description of the problem and its negative effects.

OA

5. THE UNIVERSE

PAGE 46

1. Read and write *T* (true) or *F* (false). Then, correct the false sentence.

a. F; b. F; c. T; d. T.

a. The ISS is the largest artificial satellite in space.

b. It orbits the Earth once every 90 minutes.

2. Check the location of the International Space Station in real time by visiting *http://www/isstracker.com/* and complete the table.

OA

6. THE EARTH

PAGE 47

1. Read the text and answer the questions.

a. Halley VI is the first mobile research station in the world.

b. Each module can be lifted to avoid being buried by the snow.

c. You can find common areas, bedrooms, laboratories, offices, a vegetable garden and a rock climbing wall.

d. Summer in the Antarctic is from early November to late February.

e. MA. There are six months of winter in the Antarctic. There is no daylight and there are very few people.

f. The main research is on the Earth's atmosphere, including damage to the ozone layer, atmospheric pollution and climate change.

2. Imagine you spend three months in Halley VI Research Station. In your notebook, write a diary for one day.

OA

7. THE LANDSCAPES OF SPAIN

PAGE 48

1. Read the sentences. Cross out the wrong words and rewrite the sentences.

a. El Silbo was invented for faster communication on difficult terrain.

b. It consists of two whistles for vowels and four for consonants.

c. Whistles of El Silbo have different pitches and can be continuous or interrupted.

d. Today, the Silbo Gomero is an obligatory subject in primary school on La Gomera.

2. Search the Internet for videos about the Silbo Gomero and listen to them.

OA

8. THE CLIMATES OF SPAIN

PAGE 49

1. Read the text and complete the table about cork.

MA

properties	obtained from	harvested	uses
waterproof, elastic and fire resistant	the bark of cork oak trees	twelve times in the trees's lifetime	wine bottle stoppers, soundproofing

2. Find objects made of cork in your house or at school and make a list.

OA

9. POPULATION AND THE ECONOMY

PAGE 50

1. Read the text and answer the questions.

a. Indigenous peoples are ethnic groups who are native to a particular region.

b. They live all over the world.

c. MA. The Masai people, the Karaja people and the Inuits are groups of indigenous people.

d. Their lifestyle is threatened by human development that harms their natural environment.

2. Search the Internet for information about a group of indigenous people and complete the index card.

OA

10. PREHISTORY

PAGE 51

1. Read the text and complete the table about the Dolmen of Menga.

type of megalithic monument: dolmen; **construction date**: 5,000 years ago; **location**: near Antequera in the province of Malaga; **dimensions**: 25m long and 6m high; **use**: burial monument.

2. Search the Internet for information about another megalithic monument. Draw a picture and write a few sentences to describe it.

OA

11. ANCIENT HISTORY

PAGE 52

1. Read the text and write an example.

MA

a. Castro of Baroña; b. bagpipes; c. Music festival of Ortigueira; d. Celtic cross.

2. Search the Internet for information about another Celtic instrument. Write a brief description and draw a picture.

OA

12. THE MIDDLE AGES

PAGE 53

1. Read the text and answer the questions.

a. Muslims, Christians and Jews coexisted.

b. The *jizya* was a tax that Christians and Jews paid except for old people, women, children and disabled people.

c. The *muladi* were people who converted to Islam.

d. Towards the end of Muslim rule religious intolerance spread and Christians and Jews who refused to convert to Islam were exiled.

2. Find out more about the Muslim, Christian and Jewish religions. Complete the table.

MA

Muslims. holy book: the Quran; religious celebrations: Ramadan

Christians. holy book: the Bible; religious celebrations: Easter

Jews. holy book: the Torah; religious celebrations: Hanukkah

Investigate!

1. LIVING THINGS

PAGE 54

1. What are the cells of an onion like?

7. MA

Under a low power lens, students should be able to see the cells, the cell wall and the cytoplasm. Under a high power lens, they should be able to observe the cells and their nucleus, the cytoplasm, the cell wall and the membrane.

8. OA (See page 7 of the Student's Book)

2. ANIMALS

PAGE 55

1. What types of foods do ants eat?

7. MA

a. The ants will probably try all the foods.

b. They will probably like honey the most.

c. They will probably like the orange the least.

8. OA

9. Most species of ants are omnivores. They will eat almost anything.

3. PLANTS

PAGE 56

1. Which plants can grow from cuttings?

OA

Students should be able to grow house plants and herbs from cuttings.

4. ECOSYSTEMS

PAGE 57

1. Can you build an ecosystem? Make a terrarium.

OA

Students should be able to identify the terrarium as an ecosystem.

5. THE UNIVERSE

PAGE 58

1. How can you drink water in space?

7.

- OA
- No, because the water would spill all over.
- Astronauts eat and drink through straws to prevent food from floating around the spacecraft.

6. THE EARTH

PAGE 59

1. Can you simulate a volcanic eruption?

OA

7. THE LANDSCAPES OF SPAIN

PAGE 60

1. What are the points of interest along a river basin?

MA

2. River name: Saja

Source: North of Sierra del Cordel

Length: 67 km

Sea it flows into: Bay of Biscay, Cantabrian Sea

Tributaries: Diablo river, Navas del Rey, Argoza, Bayones, Besaya

Main towns it flows through: Torrelavega, Fresneda, Saja-Nansa

3. OA

4. OA

5. OA

6. OA

8. THE CLIMATES OF SPAIN

PAGE 61

1. What are the consequences of climate change in Spain?

MA

1. A particular area in Spain which is suffering some of the consequences of climate change: the glaciers in the Pyrenees. In the last few years, they have lost approximately 90 % of their glacier ice.
2. The melting of the glaciers would lead to drought, drought to desertification and desertification to erosion affecting the flora of the area.

9. POPULATION AND THE ECONOMY

PAGE 62

1. What are the traditional 'made in Spain' products?

3. MA

	produced in	products
leather goods	produced in Andalusia	handbags, wallets and belts
wicker	produced in coastal areas of Spain	baskets and furniture

Investigate!

	produced in	products
ceramics	produced in Seville	Granada and Valencia; flower pots and tiles
embroidery	produced in Toledo and Almeria	tablecloths and tapestries
guitars	produced in Cordoba	the Spanish guitar

4. OA

10. PREHISTORY

PAGE 63

1. How did prehistoric people use things from nature?

MA

4. from left to right:

Arrowhead for hunting; polished stones for grinding grains; wood for starting a fire.

11. ANCIENT HISTORY

PAGE 64

1. Which words are of Latin or Greek origin? Make an alphabet wall chart.

OA

12. THE MIDDLE AGES

PAGE 65

1. How did boys become knights during the Middle Ages?

MA

5.

a. A boy had to be seven years old to become a page.

b. A page became a squire through training and squire became a knight.

c. A page's training included learning about horses, armour and weapons. He also had to learn archery and how to use a sword. A squire was a knight's assistant. His training included learning the chivalric codes and how to use various weapons. A squire became a knight by showing bravery in battle.

Assessment

1. LIVING THINGS

PAGE 66

1. Complete the sentences.

a. The three basic life processes are nutrition, reproduction and sensitivity.

b. Cells are the basic units of life.

c. Living things can be classified into unicellular and multicellular.

d. Cells have three main parts: a membrane, a nucleus and a cytoplasm.

e. Organelles carry out different functions of the cell.

f. Chloroplasts are specialized organelles that absorb sunlight.

2. Draw a plant cell and label the main parts.

OA (See page 7 of the Student's Book.)

MA

Plant cells have chloroplasts. They are usually bigger than animal cells. Plant cells have a regular shape. They also have a rigid cell wall around the membrane.

3. Write the next four levels of organization of multicellular organisms.

Cells; tissues; organs; systems; organism.

MA

Multicelullar living things work together so that the organism functions correctly.

PAGE 67

4. Identify and label the five kingdoms of living things.

a. Protista kingdom; b. Plant kingdom; c. Animal kingdom; d. Fungi kingdom; e. Monera kingdom.

5. Write the names of the kingdoms from Activity 4 in the correct place.

a. Fungi kingdom; b. Animal kingdom; c. Plant kingdom; d. Protista kingdom; e. Monera kingdom.

6. Complete the sentences about living things.

a. Bacteria are the most abundant living things.

b. Protists and fungi can be multicellular or unicellular.

c. Plants and animals react to stimuli.

d. Unicellular means made up of a single cell.

e. Viruses are not living things, so they are not included in any of the five kingdoms.

f. Groups of systems join together to form organisms.

2. ANIMALS

PAGE 68

1. Write *V* (vertebrate) or *I* (invertebrate). Then, write the main difference between the two groups.

top row: invertebrate; vertebrate; vertebrate.

bottom row: vertebrate; vertebrate; invertebrate.

The main difference between the two groups is that vertebrates have a backbone and invertebrates do not.

2. Complete the crossword about vertebrate groups.

1. mammals; 2. reptiles; 3. birds; 4. fish; 5. amphibians.

3. Read the definitions and write the invertebrate group.

a. molluscs; b. sponges; c. echinoderms.

PAGE 69

4. Classify the invertebrates in the table.

sponges	cnidarians	worms
barrel sponge	jellyfish	earthworm
yellow tube sponge	coral	flatworm

echinoderms	molluscs	arthropods
starfish	mussel	butterfly
sea urchin	snail	lobster

5. Write the name of each arthropod group and one characteristic.

a. arachnids, (MA. They have eight legs.); b. myriapods, (MA. They have one pair of antennae.); c. insects, (MA. They have wings.); d. crustaceans, (MA. They have two pairs of antennae.)

6. Read and write *T* (true) or *F* (false). Then, correct the false sentences.

a. T; b. F; c. T; d. F.

Insects are the largest animal group.

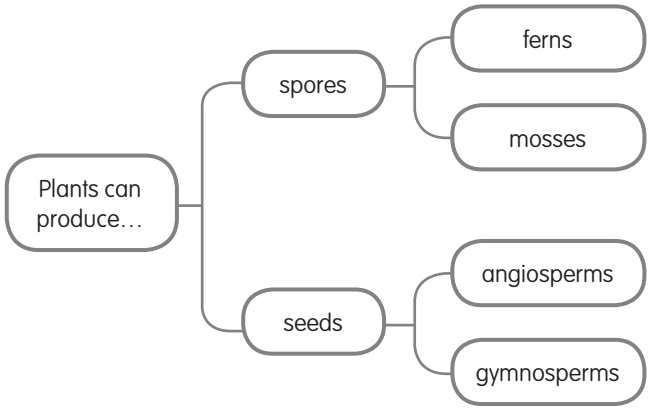
Insects, myriapods and crustaceans have antennae.

Assessment

3. PLANTS

PAGE 70

1. Complete the chart.



2. Match each plant type from Activity 1 with the corresponding picture.

angiosperms; gymnosperms; mosses; ferns.

3. Circle the words related to plant nutrition. Then, choose two to complete the sentences.

stomata; chlorophyll; elaborated sap; photosynthesis; chloroplasts.

Chlorophyll is a green substance which traps sunlight.

Chloroplasts are specialized organelles which contain chlorophyll.

PAGE 71

4. Label the parts of the plant.

top to bottom: carbon dioxide; stomata; xylem vessels; root hairs.

5. Write a sentence to describe each stage of sexual reproduction.

MA

Pollination is when pollen is transferred from the anther of a flower to the stigma of the same or another flower.

Germination is when seeds start to grow into new plants.

Seed dispersal allows plants to grow in other places.

6. Circle the plant parts that can be used to reproduce identical plants. Explain your answer.

tuber; stolon; bulb.

MA

Identical plants develop through asexual reproduction. These are the different types of asexual reproduction.

4. ECOSYSTEMS

PAGE 72

1. Look at the picture and classify the populations in this ecosystem.

Producers: ferns; oak trees.

Consumers: mice; wild boars; jays; coal tits.

Decomposers: fungi; stag beetles.

2. Look at the food web and write examples.

MA

a. wheat, clover; b. mouse, rabbit; c. fox, lizard; d. eagle, kestrel.

PAGE 73

3. Write one example of each type of relationship.

MA

Vultures and hyenas compete for food.

Bees obtain nectar and pollinate the flower.

Fleas live on cats.

4. Name the two environmental problems.

desertification; deforestation.

Desertification usually happens due to deforestation.

Deforestation happens due to forest fires or intense tree logging.

5. Make a list of four ways you can help to protect the environment.

MA

Save water by having a shower instead of a bath.

Recycle plastic, glass and paper.

Respect nature by taking rubbish home.

Save fuel by using public transport.

5. THE UNIVERSE

PAGE 74

1. Complete the sentences.

a. Different constellations are visible in different seasons because the Earth revolves around the Sun.

b. Different constellations are visible at different times of the night because the Earth rotates on its axis.

Assessment

2. Draw and describe the shape of each type of galaxy.

spiral galaxy: disk-shaped with arms; elliptical galaxy: oval-shaped; irregular galaxy: no definite shape.

3. Write the names of the planets. Then, answer the questions.

a. Pluto; b. Mercury; c. Venus; d. Earth; e. Mars; f. Jupiter; g. Saturn; h. Uranus; i. Neptune.

The asteroid belt is between Jupiter and Mars.

The Kuiper belt is beyond Neptune.

PAGE 75

4. Read and write *T* (true) or *F* (false). Then, correct the false sentences.

a. F; b. T; c. F; d. F; e. T; f. T.

a. Dwarf planets are spherical celestial bodies, much smaller than planets.

c. The asteroid belt is closer to the Sun than the Kuiper belt.

d. Meteoroids are small fragments of asteroids that fall to Earth.

5. Match. Then, write sentences about the spacecrafts.

a. Vostok I carried the first person in space.

b. Voyager I was the first space probe.

c. Apollo II was the first mission to the moon.

d. Sputnik I was the first artificial satellite.

6. Complete the information about this spacecraft.

Type of spacecraft: artificial satellite.

Uses: (MA) It is used to get information about the weather and for communication and navigation. It is also used to collect information about celestial bodies.

6. THE EARTH

PAGE 76

1. Cross out the odd word out. Then, write the corresponding Earth sphere.

a. aeroplanes, atmosphere; b. magma, hydrosphere; c. snow, geosphere; d. stratosphere, biosphere.

2. Read the definitions and write the words.

a. mantle; b. hydrosphere; c. ozone layer; d. biosphere.

3. Write the words for these definitions of external change of the Earth's crust.

a. transport; b. erosion; c. deposition; d. weathering.

PAGE 77

4. Name one similarity and one difference between volcanic eruptions and earthquakes.

MA

Similarity: Both volcanic eruptions and earthquakes are unpredictable.

Difference: Volcanoes eject materials such as magma and rock fragments. Earthquakes release energy.

5. Complete the table about rocks.

sedimentary rocks: formed when fragments of rock and the remains of living things are compacted together; limestone, coal.

metamorphic rocks: formed when rocks are exposed to heat and pressure; marble, gneiss.

igneous rocks: formed when magma cools down and solidifies; granite, obsidian.

6. Complete the diagram of the rock cycle.

Clockwise: sediment; compaction; melting; magma.

Inside the circle, left to right: heat and pressure; weathering and erosion.

7. THE LANDSCAPES OF SPAIN

PAGE 78

1. Classify the mountains in the table.

mountains of the Inner Plateau: Central Mountain Chain, Mountains of Toledo.

mountains surrounding the Inner Plateau: Iberian Mountain Chain, Sierra Morena.

mountains beyond the Inner Plateau: Basque Mountains, Baetic Mountain Chain.

2. Look at the map and write the names of the mountains.

a. Galician Massif
b. Cantabrian Chain
c. Basque Mountains
d. Pyrenees
e. Catalan Coastal Chain
f. Iberian Mountain Chain
g. Sierra Morena
h. Baetic Mountain Chain.

3. Label the archipelagos on the map in Activity 2. Then, write the names of the islands.

Balearic Islands: Menorca; Mallorca; Ibiza; Formentera.

Canary Islands: La Palma; La Gomera; El Hierro; Tenerife; Gran Canaria; Fuerteventura; Lanzarote.

Assessment

PAGE 79

4. Read and circle the five errors. Then, write the correct text.

Most rivers in Spain are short and have a low flow. Most have their source in the mountains in and around the Inner Plateau. They flow west into the Atlantic Ocean. The River Ebro is an exception.

5. Name two rivers from each watershed.

MA

a. Cantabrian: Saja; Nalon.

b. Mediterranean: Jucar; Ebro.

c. Atlantic: Duero; Tagus.

6. Look at the photos. Write *lake, lagoon* or *reservoir*. Then, write a sentence to describe each.

a. Lagoon, (MA) It is a shallow lake near the coast.

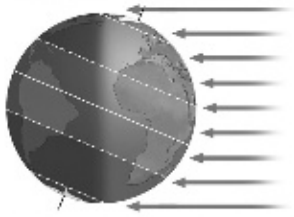
b. Reservoir, (MA) It is a man-made lake built to store water from rivers.

c. Lake, (MA) It is a natural body of still water surrounded by land.

8. THE CLIMATES OF SPAIN

PAGE 80

1. Label the world's climatic zones on the diagram.



cold zone
temperate zone
hot zone
hot zone
temperate zone
cold zone

2. What are the three main factors that affect climate?

The three main factors that affect climate are the distance from the sea, altitude and the distance from the Equator.

3. Colour the main climate areas of Spain. Use this key.

See page 79 of the Student's Book.

PAGE 81

4. Answer the questions. Then, identify the type of climate that corresponds to the climate graphs.

a. July and August are the hottest months of the year.

b. January and December are the coldest months of the year.

c. There is most precipitation in October and November.

d. Approximately 22 litres /m^2.

e. Dry Mediterranean climate because the temperatures are milder in winter and higher in summer and precipitation is very scarce and irregular.

5. Label the plants. Then, identify the type of vegetation.

dragon tree, subtropical vegetation; dwarf fan palm, Mediterranean vegetation.

6. Name two plants that grow in each place.

MA

a. oak forests, fir trees; b. pine trees, cork oaks; c. palm trees, laurel forests. d. mosses, beech trees.

9. POPULATION AND THE ECONOMY

PAGE 82

1. Read the definitions and write the words. Then, tick (✓) the factors that cause population changes.

a. birth rate (✓); b. urban population; c. death rate (✓); d. population; e. immigrants (✓); f. population density; g. emigrants (✓); h. rural population.

2. Write the provinces in order, from the lowest to the highest, according to their population density.

1. Soria; 2. Caceres, 3. Toledo; 4. Zaragoza; 5. Alicante; 6. Madrid.

3. Label the key of the pie chart of the working population in Spain. Then, write a sentence describing each sector.

a. primary sector; b. secondary sector; c. tertiary sector.

MA

The primary sector includes jobs which obtain resources from nature.

The secondary sector includes jobs which transform raw materials into manufactured goods.

The tertiary sector includes all jobs which provide services.

PAGE 83

4. Write *T* (true) or *F* (false). Then, correct the false sentences.

a. F; b. T; c. F; d. F; e. T.

a. The active population of Spain works in three sectors: the primary sector, the secondary sector and the tertiary sector.

c. Cattle farming is concentrated in regions of northern Spain.

d. Industry and construction jobs in Spain have decreased in recent years.

Assessment

5. Write the following economic activities in their order of importance for the Spanish economy.

1. services; 2. agriculture; 3. livestock farming; 4. fishing; 5. industry; 6. construction.

6. Why is the tertiary sector the most important one in Spain?

MA

Because it employs approximately 74% of the active population and the services industry is the most important sector for the Spanish economy.

10. PREHISTORY

PAGE 84

1. Complete the timeline. Then, write a sentence about each period.

MA

The Palaeolithic Age is the oldest period in history.

In the Neolithic Age people became sedentary and built permanent villages.

In the Middle Ages crop and animal farming improved due to new tools and techniques.

2. Identify the objects and the period of Prehistory. Then, number them in chronological order.

harpoon: Palaeolithic Age; clay pot: Neolithic Age; axe: Metal Ages

order 3; 2; 1.

3. Classify the words.

Palaeolithic Age: nomads, fire, flint, arrowheads, stick figures.

Neolithic Age: sedentary, villages, polished stone, hoes, looms.

Metal Ages: iron, traders, towns, sail, dolmens.

PAGE 85

4. Complete the crossword about Prehistory.

1. hoe; 2. Palaeolithic; 3. menhir; 4. Neolithic; 5. harpoon; 6. sickle; 7. wheel; 8. flint; 9. copper.

5. Write *Palaeolithic, Neolithic* or *Metal Ages* next to each sentence.

a. Metal Ages
b. Palaeolithic
c. Neolithic
d. Metal Ages
e. Neolithic
f. Palaeolithic.

UNIT 11 ANCIENT HISTORY

PAGE 86

1. Write two similarities and two differences between Iberian and Celtic tribes.

MA

Similarities: Both the Iberians and the Celts lived in hill forts and worked as crop and livestock farmers.

Differences: The Iberians lived in rectangular houses, the Celts lived in round houses. The Iberians had their own coins, but the Celts did not.

2. Use the key and colour the colonies on the map. Then, write a sentence about each colonizer.

See page 111 of the Student's Book.

MA

a. The Phoenicians came from Asia looking for minerals; b. The Greeks introduced coins for trading; c. The Carthaginians were successful merchants.

3. Read the sentences and underline the mistakes. Then, write the sentences correctly.

a. Celts made and carved objects in precious metals, iron and bronze.

b. The Doric column was simpler than the Corinthian column.

c. The Romans decorated their floors with mosaics.

PAGE 87

4. Complete the crossword about Roman Hispania.

1. Carthaginensis; 2. Christianity; 3. gladiator; 4. Via Delapidata; 5. Hispania; 6. Latin.

5. Cross out the odd one out. Then, write the corresponding period of Ancient History.

a. warriors, Phoenicians; b. coins, Celts; c. hill forts, Romans; d. Greece, Carthaginians; e. round houses, Iberians; f. Gadir, Greeks.

6. Read the definitions and write the words.

a. necropolis; b. columns; c. aqueduct.

UNIT 12 THE MIDDLE AGES

PAGE 88

1. Cross out the odd one out. Write the corresponding medieval period. Then, number them in order.

a. Islam, the Christian Kingdoms; b. emirate, the Visigoth Kingdom; c. Christianity, Al-Andalus.

Order: 3; 1; 2.

Assessment

2. Look at the map. Label the key. Which medieval period does it represent?

It represents the Christian Kingdoms.

See page 123 of the Student's Book.

3. Read and write the answer.

a. Toledo; b. the Muslim invasion; c. taifas; d. Arabic; e. the Christian Reconquest; f. peasants.

PAGE 89

4. Read the sentences and underline the mistakes. Then write the sentences correctly.

a. The Visigoths were a German tribe from the north of Europe.

b. Abd-ar-Raman III ruled Al-Andalus when it was an independent emirate.

c. Muslims were the most powerful religious group in Al-Andalus.

d. The marriage of the Catholic Monarchs united the Crowns of Castile and Aragon.

e. In the feudal system, the king was the highest political authority.

5. Answer the questions about medieval cities.

a. Medieval cities were surrounded by walls and gates which were closed at night.

b. MA. The cathedral and the city hall were two important buildings in medieval times.

c. Most of the people who lived in the city were craftsmen and merchants.

d. The universities of Salamanca and Palencia were founded in medieval times.

6. Identify the style of architecture and write *Al-Andalus, Romanesque,* or *Gothic.*

a. Romanesque; b. Gothic; c. Al-Andalus.

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