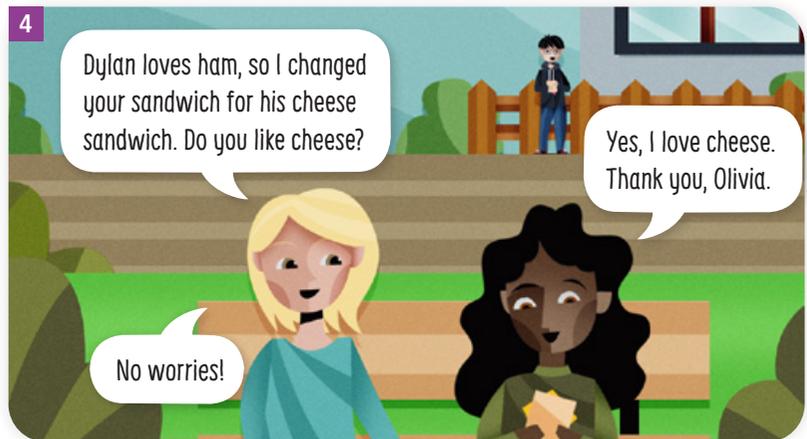
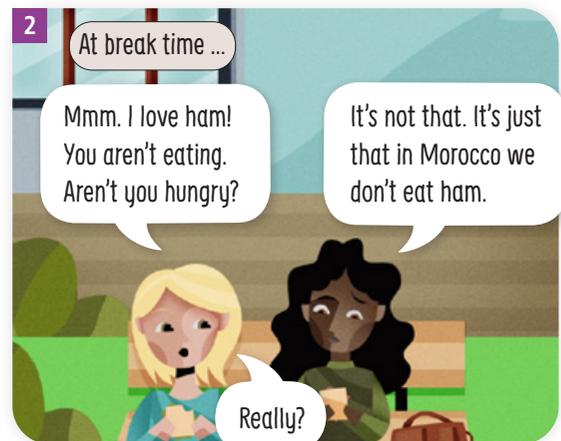


# POPULATION AND WORK

## STORY TIME

🎧 Read and listen to part 3 of the story *A welcome booklet*.



## ABOUT THE STORY

Ask and answer.

- 1 What is the problem for Salima? Why?
- 2 Is Olivia able to see the situation from Salima's perspective?
- 3 Do you find it easy to see things from others' perspective?



## READ THE WORLD

Read the newspaper article.

## Is access to education the same around the world?

In 1950, there were an estimated 2.5 billion people living on our planet, but in November 2022, the total population reached 8 billion. With more people on our planet, there is an increase in demand for resources such as food, water, housing and education. With more people in the world than ever before, we need to build more schools so that all children can attend a classroom.

But, is overpopulation the only factor to consider in access to education?

Access to education is not the same all over the world. According to UNESCO, over one-fifth of children between 6 and 11 years old are not in school in Africa. To guarantee a higher quality of education, if a family can afford it, they send their children to private schools in the city. However, for poorer families or families that live in rural areas, this is not an option. Some children also live far from schools in rural areas where there is no transport to help them travel to school.

In developing countries, it is also more difficult for girls to have access to education. In India, there was a problem with fewer girls than boys in schools. However, in 2010, a law was passed to make education free and compulsory for all children until the age of 14.

Organisations such as UNICEF work all around the world to help build schools, provide materials, and train teachers so that all children can have access to high quality education.



- 1 Read and answer the following questions.
  - a Why do some children not have access to quality education?
  - b How did India help more girls to attend school?
- 2  With your partner, discuss how you think organisations and governments can improve access to education.

## DISCUSS WHAT WE KNOW

Use the *Think-Pair-Share* thinking routine to answer these questions about the unit.

How do you classify population?

What economic activities are for each of the three economic sectors?



# Population



Population refers to the total number of people living in a specific area.



## Ways to classify population

### Geographic location

- **rural:** people living in places with few inhabitants (villages)
- **urban:** people living in places with a large population (towns and cities)

### Employment status

- **active:** people currently working or looking for a job
- **inactive:** retired people, children, students, people who do not work

The legal age to work in Spain is 16, although permission from parents is required until the age of 18.

### Age

- **children:** 0-15 years old
- **adults:** 16-64 years old
- **elderly:** over 65 years old

### Sex

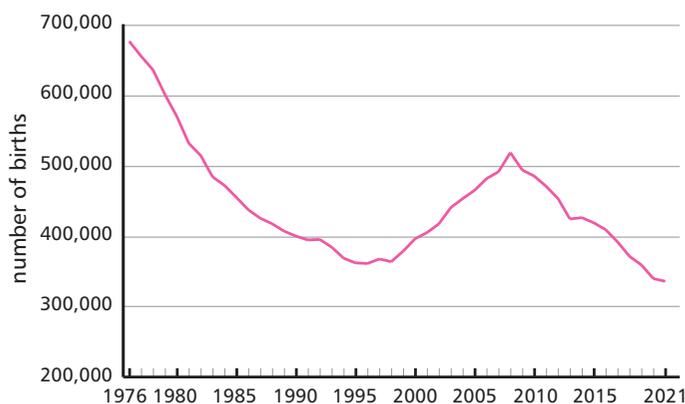
- **male**
- **female**



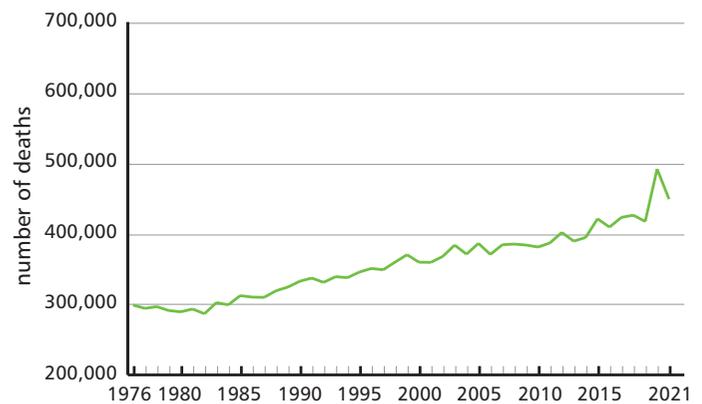
## Factors that affect population growth

The number of births and deaths and movement of people from one place to another determine if the size of a population increases, decreases, or stays the same.

- **Birth rate:** This refers to the number of babies born per year.



- **Death rate:** This refers to the number of deaths per year.





- **Migration:** This refers to the movement of people from one area to another. It can be classified into two types:
  - **immigration:** people coming to a new country to live
  - **emigration:** people leaving their own country to live somewhere else

People leave home to live in another place for different reasons, such as employment opportunities and better healthcare, access to education, war and hunger, etc.

A type of migration within a country's borders is **rural exodus**. This refers to people migrating from rural areas to urban areas.

## Population density

It is the number of inhabitants in an area per kilometre square.

Nowadays, society faces demographic challenges such as an ageing population and overpopulation. This causes unequal access to social services and resources, poverty and environmental issues. It is important that these issues are fixed so that everyone can have the same opportunities.

- 1 How old are the members of your family? Do they work? Why or why not?

My mum is ... years old;  
She (*works*) as a/an ...

- 2 Listen and identify the two ways to collect information about population in Spain. What type of information does each of them require?

$$\text{population density} = \frac{\text{total population}}{\text{area in square km (km}^2\text{)}}$$

^ how to calculate the population density





## Evolution of the economy and the economic sectors

Before the Industrial Revolution, people produced essential survival goods for local people.



The Industrial Revolution brought changes to work conditions thanks to the invention of machines.



Machines increased production significantly, replacing manual jobs.



The invention of the **steam engine** changed the way work was done, and how products were transported.



Production increased, so there was an **excess** of products and goods.



This excess of products and goods is called a **surplus**. Europe's economy changed from a survival economy to a surplus economy.



### The primary sector

This sector refers to the extraction or use of **raw materials** from nature.

The primary sector includes five different activities: arable farming, livestock farming, fishing, forestry and mining.

- 1 Listen to a journalist interview a man. Why did he come to Spain? What type of business does he have?

### Arable farming

Farmers use land to produce different types of crops.

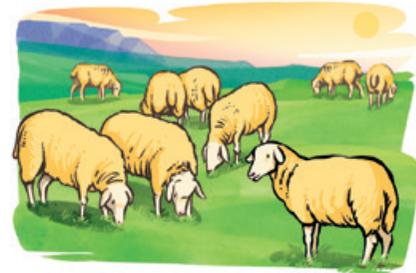
- **dry crops:** These grow well with rainwater (grapes, potatoes, olives).
- **irrigated crops:** These need more water (rice).



### Livestock farming

Farmers raise animals for food products.

- **intensive farming:** Many animals live in enclosed spaces.
- **extensive farming:** Animals spend a lot of time outside.



### Fishing

People fish in rivers, lakes but mainly in seas.

- **coastal fishing:** People fish near the coast.
- **deep-sea fishing:** They fish far from the coast, in the open sea or oceans, for long periods of time.



### Mining

This activity takes natural materials, such as minerals, from the Earth's crust.

- **underground mining:** Tunnels are made below the Earth's surface.
- **open-cast mining:** Materials are removed from the Earth's surface.



### Forestry

This refers to growing trees for their wood or other products, such as cork. Deforestation is the cutting down of trees to use the land for different purposes.



- 2 Listen to a radio talk show. What is the biggest problem in the primary sector today, according to the professor? What skills does he mention?

### The secondary sector

This sector takes raw materials and makes them into new products or transforms them into different materials to make new consumer products.

#### ▶ Ways of manufacturing products

- **industrial methods:** use of large machinery; quicker and cheaper process; uniform products
- **artisan methods:** produced manually with simple tools; slower and more expensive process; unique products

The activities from the secondary sector are diverse and varied.

#### Chemical industry

It uses raw materials, such as oil, to make new products.



#### Energy industry

It produces energy from different sources.



#### Automobile industry

It makes cars and parts for them.



#### Textile industry

It converts raw materials into new materials for clothing.



#### Food industry

It involves the manufacturing, processing and packaging of food.



#### Construction industry

It is responsible for buildings and public works, such as roads and bridges.



3 In pairs, think of a job in the secondary sector and describe a typical working day.

I work as a/an ...; I always (do) ... .

4 What types of machines do you have at home that make your life easier?

I have a (microwave). It (heats quicker).



## The tertiary sector

This sector provides consumers with many services.



^ education



^ transport



^ commerce



^ healthcare



^ financial services

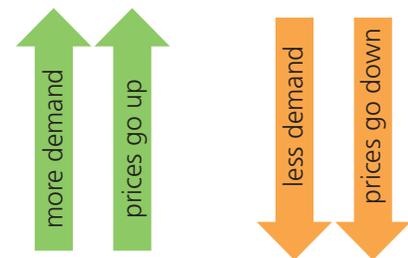


^ tourism

## Money and prices

Money is used every day for the payment of goods and services that we need. The value of money changes with supply and demand. Supply refers to the ability to produce a good or provide a service. Demand refers to the consumers' need for a product or service.

The most common way to pay for goods and services is using cash (notes and coins). Recently, more people have been using credit and debit cards, and apps on mobile phones.



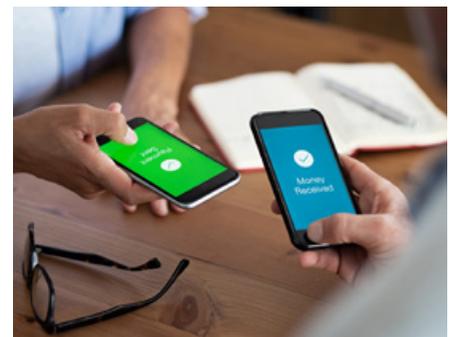
^ the law of supply and demand



^ cash



^ credit card



^ mobile payment system



## LANGUAGE CORNER



## Time to read

- 1 In your notebook, complete the text with *who* or *where*.

Amelia Earhart, (a) ..... was born in 1897 in Kansas, was the first woman to fly across the Atlantic Ocean on her own. At 11 years old, she went to a fair (b) ..... she saw one of the first planes ever invented. Her family didn't want her to be a pilot, but she didn't listen. She became a pioneer of aviation! She flew around the United States, (c) ..... she lived, to try and encourage more women into aviation. In 1928, she was the first woman to fly across the Atlantic Ocean.

She travelled with Wilmer Stultz, (d) ..... was the pilot. She later became the second person to fly alone across the Atlantic Ocean, after Charles A. Lindbergh, (e) ..... flew from New York to Paris. In June 1937, her mission was to fly around the world. However, just as she was finishing her route, her plane disappeared. There are some theories that it landed on Gardner Island, (f) ..... she lived for some time, but it was never found.

## READING TIP

Read the whole text first before choosing the correct word.



## Time to write

- 1 Look at the picture and complete the sentence in your notebook.

To become a nurse, ...

a ... Leo has to .....

b ... Leo does not have to .....

## WRITING TIP

Look at the picture carefully.



- 2 What job would you like in the future? In your notebook, write three sentences about what you have to do to work in that job.



## SCIENCE WORKSHOP

## HOW TO INTERPRET A POPULATION PYRAMID

In this workshop, you are going to look at a population pyramid and learn how to interpret it.

**Observe**

Look at the pyramid and read the questions on your own. Then, discuss them with your group and make notes in your notebook.

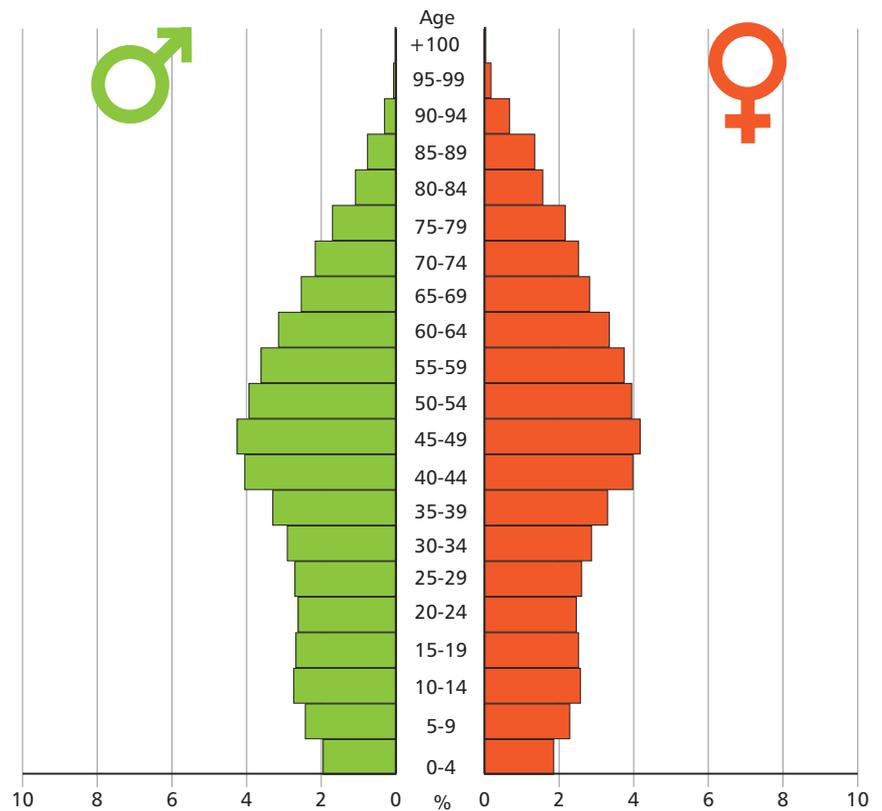
- What year is the data from?
- Where is this information from?
- On which side of the pyramid can you find information about women? And about men?
- Which age group represents the larger percentage of the population: children, adults or elderly?
- Look at the 0-4 and 95-99 age groups. Which is larger? What does this tell you?
- Look at the 95-99 age group. Are there more women or men? What does this tell you?

**Materials:**

- pencil
- downloadable template

**Population in Spain (2023)**

47,519,627 inhabitants

Source: <https://www.populationpyramid.net>**Make**

Print the template and answer questions d-f for each population pyramid.

**Share**

Compare your answers with the rest of the groups. What similarities are there? And differences? What conclusions have you reached by analysing the pyramids?

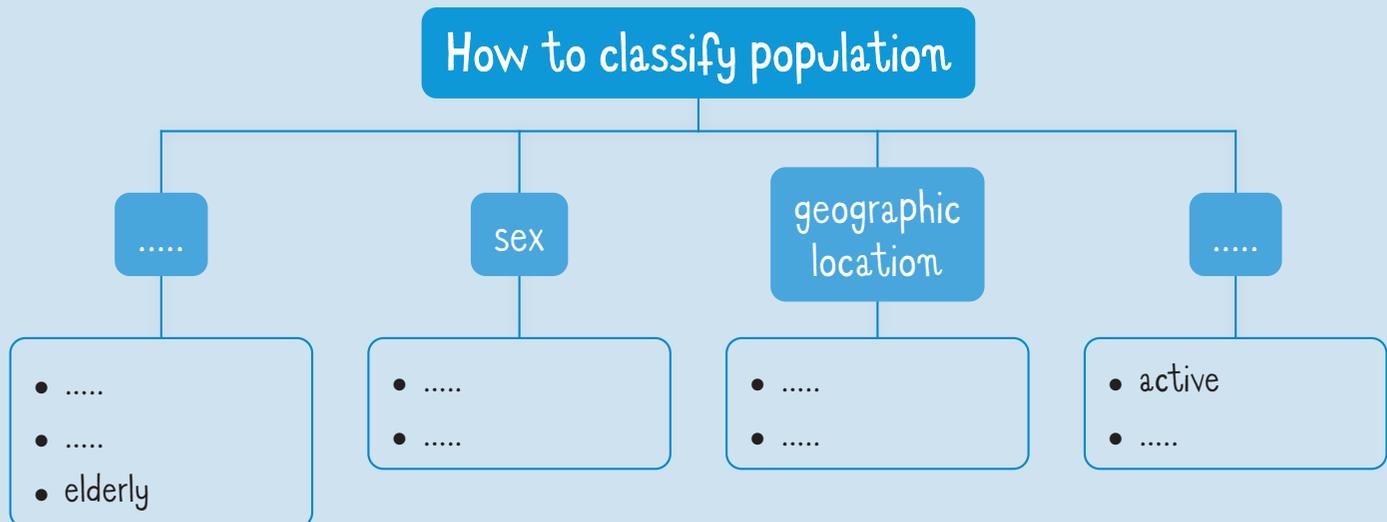
**PUBLIC SPEAKING**

Don't move about or you will distract your audience. Stand up straight and be confident.

## UNIT ACTIVITIES

## Population

- 1 Copy and complete the mind map in your notebook.



- 2 Define the words in the box in your notebook.

immigration   rural exodus   birth rate  
emigration   death rate

- 3  Listen and identify what the dialogue is about.

- a** the age to start working   **b** the age to retire   **c** the age to start studying

## The evolution of the economy and the economic sectors

- 4 Match the sentence halves in your notebook.

- |                                   |                                                                 |
|-----------------------------------|-----------------------------------------------------------------|
| <b>a</b> The primary sector ...   | <b>1</b> ... transforms natural resources into new products.    |
| <b>b</b> The secondary sector ... | <b>2</b> ... provides customers with different services.        |
| <b>c</b> The tertiary sector ...  | <b>3</b> ... extracts materials that come directly from nature. |

- 5 In your notebook, label the photos as children, adults and elderly.





6 Copy and complete the table in your notebook. Use the words in the box.

dry crop   deep sea   extensive   deforestation  
 underground   coastal   wood   open-cast  
 irrigated crop   intensive

Forestry	Mining	Fishing	Livestock farming	Arable farming
..... , .....	..... , .....	..... , .....	..... , .....	..... , .....

7 Look at the photos. Write the correct name in your notebook.



a  
energy / food industry



b  
construction / textile industry



c  
construction / chemical industry

8 In your notebook, write if the sentences are true or false. Correct the false ones.

- a Tourism and education are part of the tertiary sector.
- b Demand refers to the ability to produce a product and supply refers to the consumers' need for a product or service.
- c Cash is the only way to pay for goods or services.

9 Listen to three people talk about their profession. Which economic sector are they in? Write the answers in your notebook.

- a Mark      b Kathy      c Susan

10 Use the *Colour-Symbol-Image* thinking routine to represent the following ideas.



What colour best represents 'arable farming'?	What symbol best represents 'education'?	What image best represents 'commerce'?
.....	.....	.....

# VISUAL SUMMARY



## POPULATION

Total number of inhabitants in a place



### 1 BIRTH rate

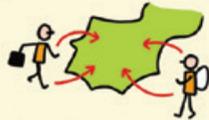


Factors that affect population growth

### 2 DEATH rate



### 3 MIGRATION



immigration



emigration



rural exodus

### Reasons to migrate



employment opportunities



better healthcare



access to education



refuge from wars and hunger

## TIPS + TRICKS

- Create unique characters by dressing each one in different clothes.
- Add accessories, such as handkerchiefs, hats, ties or different types of shoes.
- With a few simple details, you can show characters in different situations.





## UNIT REVIEW

- 1 Imagine that you are the mayor of a small village and makes a speech to attract people to come to live.

Make sure you mention:

- incentives for families
- new services
- industries
- housing

- 2 Which is the odd one out? Justify your answers in your notebook.

- a immigration    tourism    rural exodus
- b urban    active    rural
- c forestry    education    healthcare
- d notes    coins    credit card

- 3 What is a negative effect of forestry?

- 4 Look at the photos on the right and identify the activity they show.

- 5 What is the difference between each pair of concepts?

- a intensive and extensive agriculture
- b artisan and industrial methods (of manufacturing)
- c children and retired people
- d supply and demand

- 6 Search online for information about an industry from the secondary sector in your country. Write a short paragraph about it. Remember to include:

- the industry activity
- number of workers
- where it is located
- impact on the environment



### VISUAL CHALLENGE

In your notebook, draw the characters on the right in clothes that match each situation. Don't forget to add accessories and a touch of colour.



IN THE RAIN



AT THE BEACH



AT A DISCO



SLEEPING

