

3

POPULATION

YOU WILL LEARN TO...



- Analyse the world's population in terms of its distribution, evolution, the factors that affect it, migration, and politics.
- Discuss the information contained in world maps about population density and migration.
- Identify the characteristics of the Spanish population, its distribution, evolution, the factors that affect it, as well as its migration patterns.



- Do you know, approximately, how many people live on Earth?
- Which three countries do you think are the most populated? Why?
- What nationalities are the immigrants that come to Spain?

Final task

Pyramids were not only built in Egypt

One of the most common and useful graphs for learning about a country's demographic structure is a population pyramid.

A population pyramid can be regarded as an X-ray of the population of a particular place. Not only does it show if a population is young, adult or ageing, but it also informs us about the past (events that have left a mark on the population), the present (its current composition) and the future, which allows us to take preventive measures.

What are the main characteristics of the Spanish population? Is it a young, adult or ageing population? And what about the Chinese population? In this task, you will learn about several countries through the study of the characteristics that define their populations, and you will create as well as interpret their population pyramids.



1. THE HISTORICAL DEVELOPMENT OF THE WORLD'S POPULATION

A population is a group of people who live in a territory or a place at a particular moment in time.

The development of a population is the result of human history combining with each of the different geographical spaces which the people inhabit.

1.1. The world's population until the Industrial Revolution

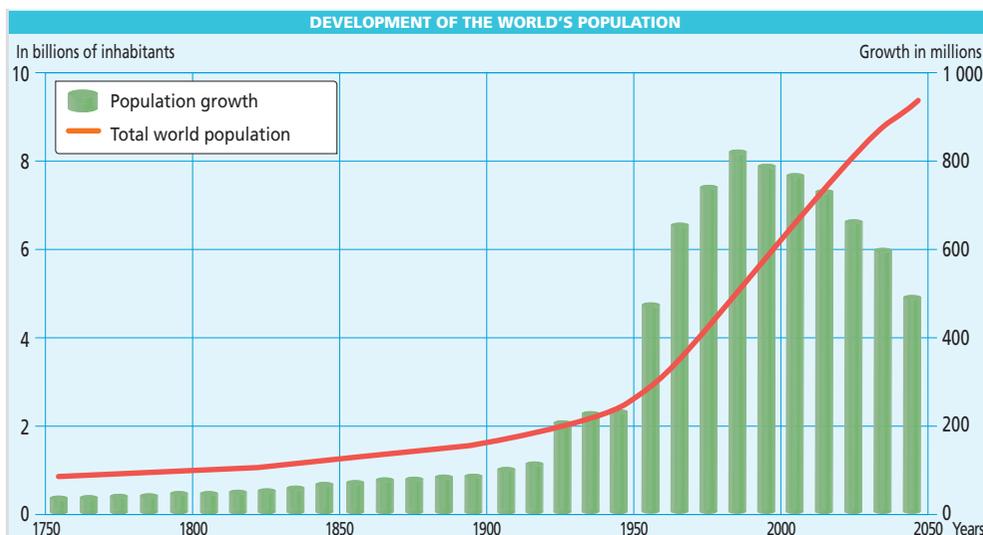
From the **Neolithic Revolution** onwards, when humans became sedentary and started to develop agriculture, livestock farming, mining, trade and a social organisation, population growth has been determined by agricultural areas (food production), the natural environment and its climate (warm or cold periods, droughts) and catastrophic events such as wars and epidemics.

The world's population grew slowly and unevenly until the 19th century. In the 1st century, the world had 256 million inhabitants, and 384 million in the year 1200. After the **Black Death** epidemic in the 14th century, which killed millions of people, the world's population slowly recovered. In 1650, there were 516 million inhabitants and in 1750, before the Industrial Revolution, 791 million.

1.2. The world's population between the 19th and 21st centuries

The **Industrial Revolution**, which began in the 18th century and developed significantly during the middle of the 19th century, was a great force for change behind the growth and transformation of human society. As the birth rate increased and the mortality rate decreased, the world's population started to grow at a faster rate. In 1800 there were 890 million people on Earth and in 1900 this figure had reached 1.2 billion. The population doubled within 100 years.

In 1950 there were 2.5 billion people in the world (even though the world population experienced two World Wars that caused many deaths and widespread destruction, and world epidemics such as the 1918–1920 flu epidemic). From then on, the rate at which the population grew rapidly accelerated and reached 6 billion people in 2000. Although the growth has recently not been so fast, the population exceeded 7.3 billion in 2015 and it is predicted to be over 8 billion in 2025.



Most populated countries (2050)	Millions of people
India	1 950
China	1 500
United States	450
Nigeria	430
Indonesia	340

SOURCE: U.N., 2010

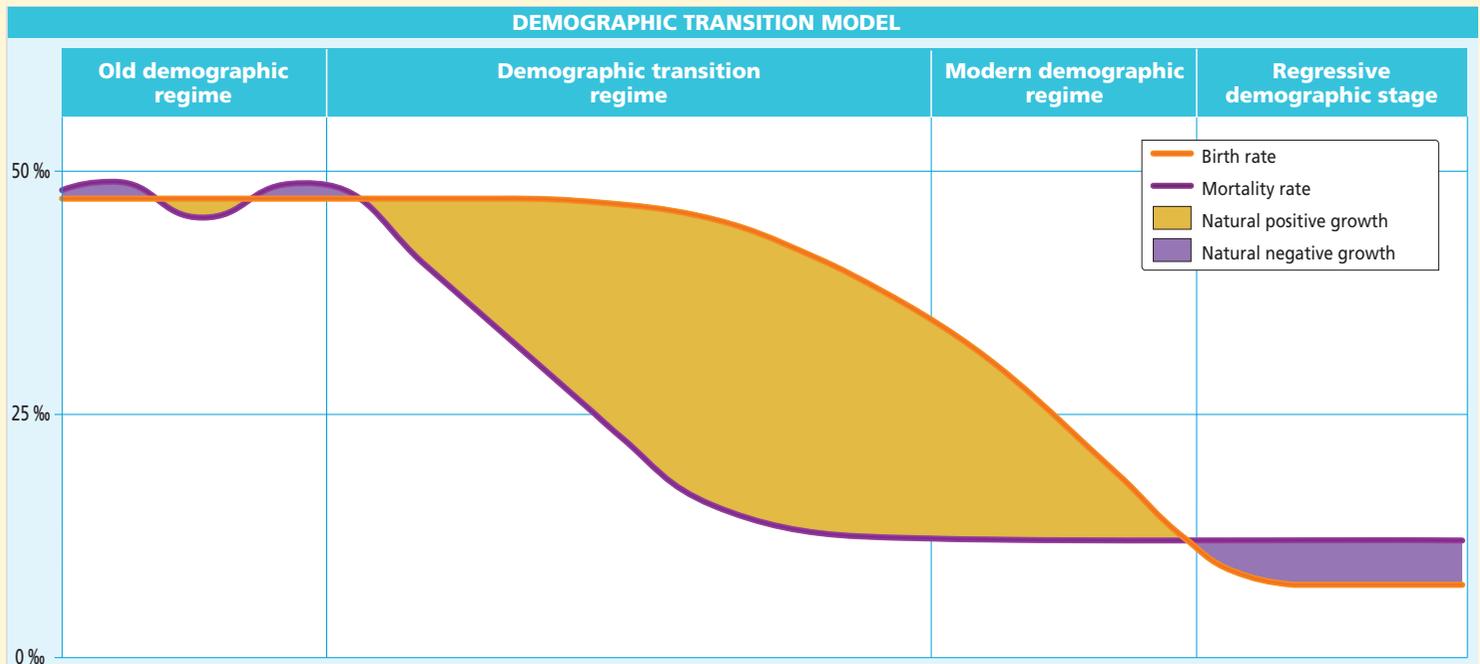


Important

Current demographic trends

- Increase in the world population.** The world population will continue to increase in the years to come: 7.2 billion (currently), 8 billion (2025), over 9.5 billion (2050).
- Ageing population.** In developed countries, the number of young people is smaller than the number of old people.
- Changes in the family structure.** Large families tend to be found in less developed countries. In developed countries, families sometimes have one child or no children at all.
- Predominance of the urban population.** The world's population is, for the first time in history, mostly urban (54% in 2014). In developed countries, the percentage has increased to 77%.
- Migrations.** International migrations have become more numerous and complex.

DEMOGRAPHIC MODELS



Throughout history, the population has behaved in different ways. In order to analyse how it has evolved we use a range of demographic models or regimes:

- **Old demographic regime:** This has **high birth and mortality rates** (sometimes catastrophic due to the effects of epidemics, famines and wars), and therefore limited natural growth. This regime is typical of **preindustrial societies** (before the 19th century).
- **Demographic transition regime:** This has **several stages**. At first, it has high birth rates, but lower mortality rates due to the availability of better foods, hygiene and health (which **increase natural growth**). At the end of the transition, birth rates decrease and the growth is smaller. This was the regime that existed in **Europe after the Industrial Revolution**. Population pyramids of this model

are progressive, they have a large base of young people and a small elderly population.

- **Modern demographic regime:** Mortality and birth rates stagnate because they are very low, leading to zero growth. This type of regime existed in Europe at the end of the 20th century.
- **Regressive demographic stage:** Nowadays, certain countries are undergoing a **natural negative growth** (due to the ageing population and the drastic reduction in birth rates). This means there are more deaths than births. Only the arrival of immigrants can slightly increase the birth rates. This model is the one found in the more **developed countries**. The population pyramid type is stagnated or regressive, with a small base and a large number of elderly people

Understand

1. Define 'population'.
2. Which factors have determined the growth of the human population from the Neolithic Revolution onwards?
3. Why was there such a large increase in the world's population from the end of the 19th century? How many people were there in the world in 2015?

Analyse

4. Look at the graph that shows the evolution of the world's population. When did the population reach 6 billion people? Which kinds of problems may we experience in the future if the population continues to increase?
5. Look at the demographic transition diagram, and create a graph that shows the types of demographic regime produced during each historical period and its characteristics.

2. DISTRIBUTION OF THE POPULATION

The world's population is distributed very **unevenly** across the globe. There are certain regions which are **truly barren** (less than 1 person/km²) and others which are **extremely populated** and which have very densely populated areas (more than 20 000 people per km²) or which are enormous cities.

2.1. High-density areas

Areas with higher population densities are located in places that provide favourable conditions for economic activity:

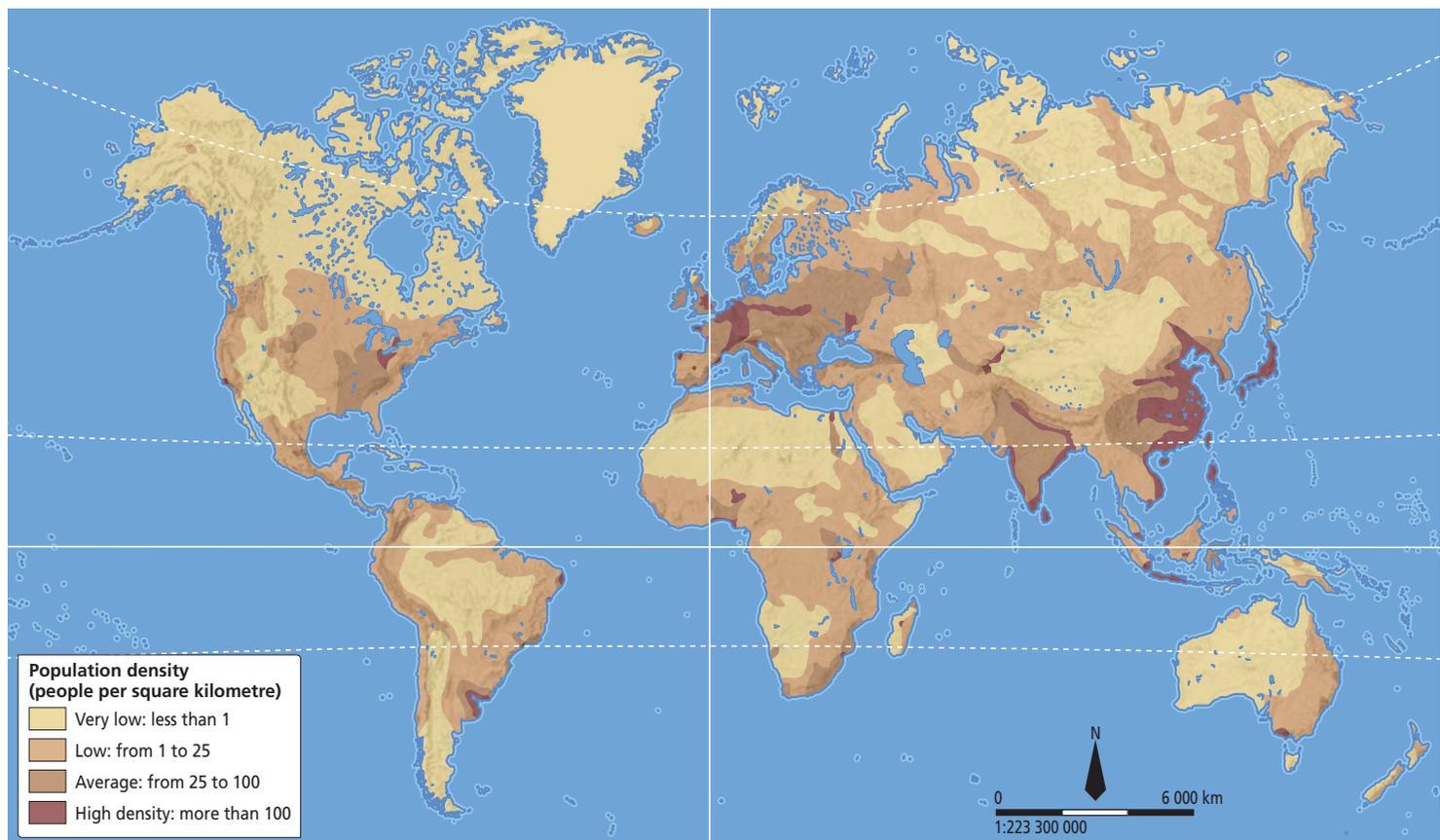
- **Intensive agriculture areas.** These areas have conditions which are suitable for the large-scale production of food, and they need many people to work in them: the Nile River valley, inland and eastern China, the Hindustan Peninsula and Southeast Asia.
- **Areas rich in mineral resources.** These areas have significant mining operations, although nowadays they have become less attractive to migrants: the Appalachian Mountains (United States), the Gulf of Maracaibo (Venezuela), the Ural Mountains (Russia), inland China, India and the northern part of South Africa.
- **Services and industrial areas.** Nowadays, these are the most populated areas: the east coast of California (United States), the Great Lakes region (between Canada and the United States), the southeast coast of Brazil, the mouth of the River Plate (Argentina), Japan, the east of China, the Caribbean islands and the Mediterranean coast.

Cities in high-density areas are very large. In certain cases, they form true urban agglomerations known as **conurbations**. They consist of a central city surrounded by other dependent cities, and they can have a population of over 10 million people. The most important ones are: Tokyo (Japan), Guangzhou (China), Mexico City (Mexico), Buenos Aires (Argentina) and Johannesburg (South Africa).



Important

In addition to conurbations, there is another model of urban conglomeration known as a **megalopolis**. This is a group of cities that are linked together by a transport network. The most important ones are: BosWash (Boston, New York, Philadelphia, Baltimore, Washington), with nearly 50 million inhabitants living in an area that is 700 km in length, and the Chipitts (Chicago, Detroit, Cleveland, Pittsburgh), both in the United States. Other important megalopolises are: São Paulo–Rio de Janeiro (Brazil) and Osaka–Kyoto–Kobe (Japan).



2.2. Low-density areas

Areas with lower population densities are located in places that provide unfavourable conditions for economic activity:

- **Deserts.** The absence of water and the extreme temperatures make it very difficult for human beings to live in deserts. Small aborigine communities live in certain areas around the Arctic (Greenland, the north of Canada and Russia). In hot deserts (Sahara, Arabia, the Australian deserts) and in cold deserts (Gobi, Atacama, Namib), certain nomadic groups of humans live, such as the Tuareg (Sahara) and Bedouins (Arabia).
- **Rainforests.** The Amazon rainforest, as well as other rainforests in the Congo, Myanmar, Borneo and New Guinea are places where populations struggle to settle due to the high temperatures and the large amounts of rainfall as well as the lack of transport links. It has only been possible to develop cities in certain areas near rivers such as Manaus (Brazil). The small populations of these cities are threatened by the abusive exploitation of the rainforests.
- **Boreal forests.** The great forests of Canada and Siberia (Russia) have very small populations. However, because they are so rich in resources, cities and factories have been built in order to profit from them.
- **Cold and hot desert areas.** Although the natural conditions are not extreme, only a small population has settled in these areas. This is because the weather conditions limit economic activity and the presence of humans because there is a lack of water. Agricultural techniques cannot be developed so there is nomadic livestock herding. This is the case in the great steppe regions (Siberia, Mongolia, Kazakhstan), the semi-deserts of Iran and Afghanistan in Asia, and the Sahel and other subtropical areas of Africa. Certain parts of Canada and the United States (north and south) and northern Mexico and Patagonia (Argentina) possess these characteristics.
- **Mountainous areas.** Mountains generally stop the development of population. Exceptions to this rule are areas where winter tourism is found, mining regions, and the Andes' highlands (Colombia, Ecuador, Peru and Bolivia).
- **Extensive agriculture and livestock areas.** These areas do not require a huge population due to mechanisation of labour (inland Canada, the United States, Argentina and Australia).



Reeinder herders

Understand

6. Make a list of the main characteristics of high-density areas and another one with the characteristics of low-density areas.
7. Explain what a conurbation and a megalopolis are. What differentiates them?

8. On a map of the world, use one colour to highlight high-density areas and another one to highlight low-density areas.

Analyse

9.  Look at the map on page 48. Then listen and answer the questions.

3. NATURAL CHANGES TO POPULATION

The **natural movements of the population** refer to the natural process of life: birth and mortality rates, as well as the difference between the two (natural increase).

Natural changes to population can be used as demographic and economic indicators of a country's development.

BIRTH RATES AND DEATH RATES

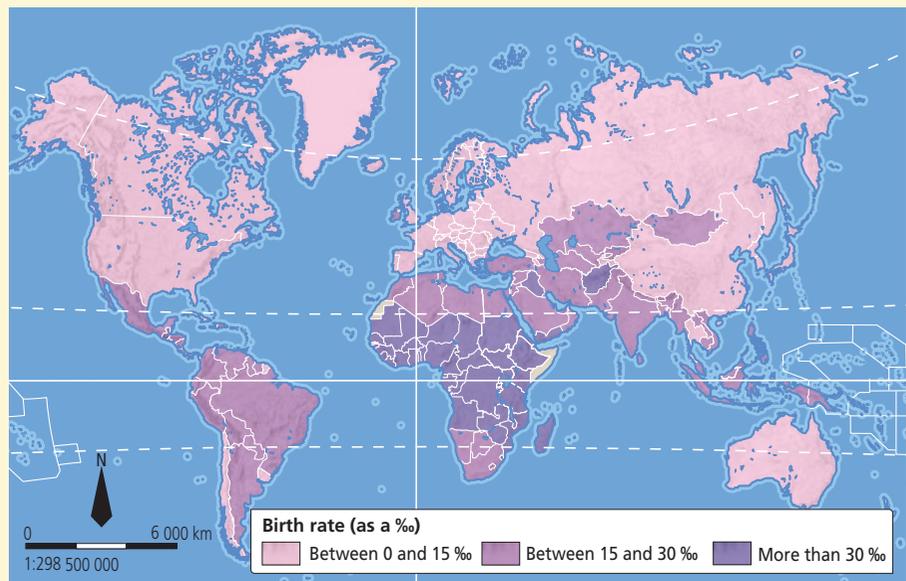
The **birth rate** is the total number of births per 1000 inhabitants (‰) that occur during a year in a particular place.

Less developed countries have a higher birth rate. In Africa, we find the countries with the highest birth rates (over 40‰).

Developed countries or those which have experienced wars or high levels of migration are in the opposite situation, and have low birth rates (less than 10‰).

Also related to birth rates, the **general fertility rate** is the number of children per woman aged 15–49.

The highest fertility rates are found in Africa and the lowest in developed countries.



SOURCE: World Bank (2013)

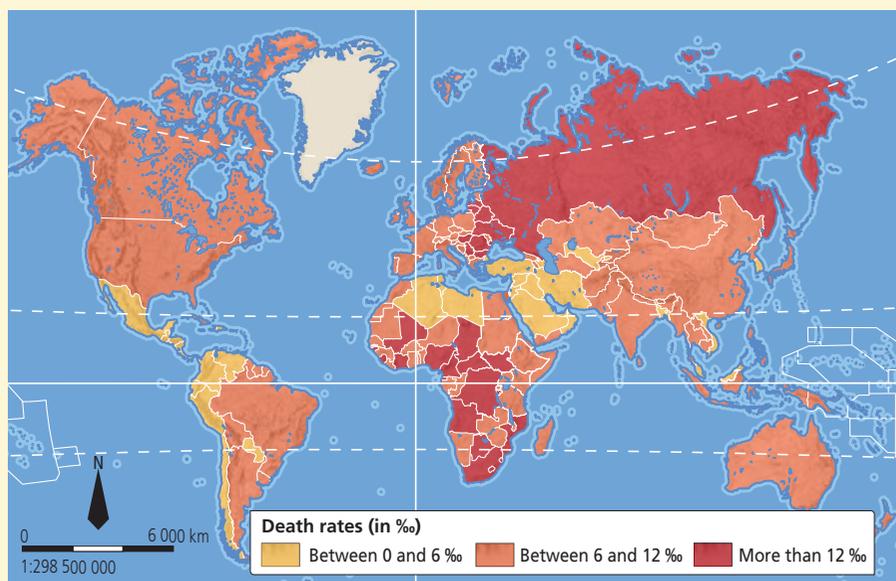
The **death rate** is the total number of deaths per 1000 inhabitants that occur in a year in a particular place.

Death rates are related to how developed a country is. Above all, they relate to ageing, nutrition and health of its population.

Generally, there is a decrease in death rates throughout the world. However, wars, famines and epidemics continue to cause catastrophic deaths.

Also related to death rates, the **child mortality rate** is the number of children in their first year of life, per 1000 inhabitants, that have died in a particular location. This is a direct indicator of the quality of life because it is strongly related to health and nutrition.

The highest child mortality rates are found in Africa and the lowest ones are found in developed countries.



SOURCE: World Bank (2013)

NATURAL INCREASE AND LIFE EXPECTANCY

The **natural increase** is the difference between births and deaths, and it is expressed as a percentage (%). This percentage shows if a population is growing, stable or decreasing in size, as well as the rate at which it does so.

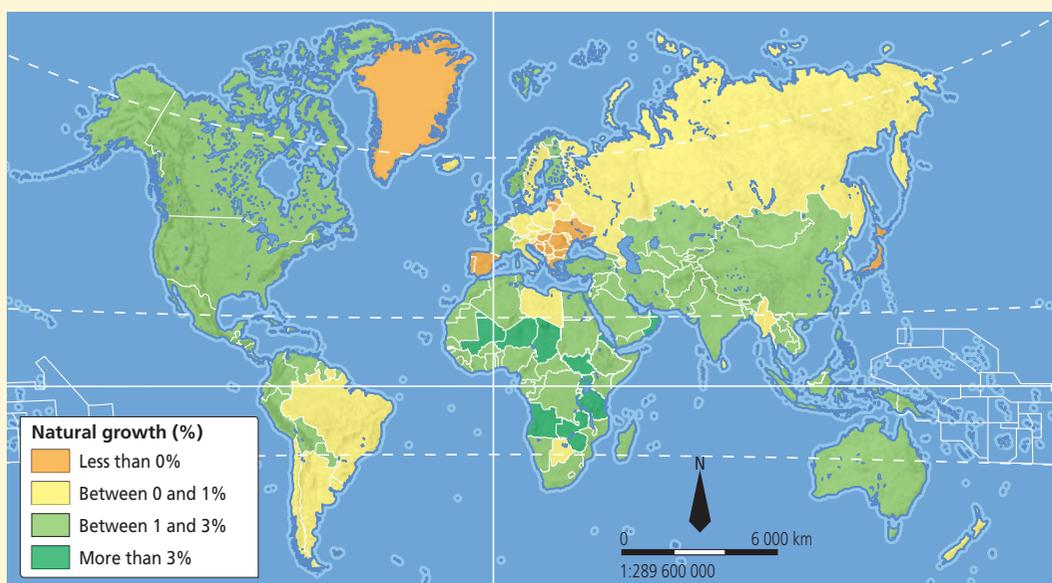
Life expectancy describes how long a person may live in years. It is an indicator of a country's quality of life and, as with many other indicators, there are great differences between the situations in different countries.

Although the global birth rate has been decreasing in recent decades, global death rates have decreased even more and at a faster rate. The population keeps on growing. However, although the population growth of certain African countries is over 2% per year, there are over 20 countries (in Europe as well as Japan) that are experiencing negative growth. This means that they have more deaths than births.

In Spain, natural population growth is barely positive, mainly because of the increase in births among immigrant groups from South America and Africa.

In developed countries that provide a free health system, preventive health measures, good nutrition and better work conditions, life expectancy is over 80 years (women are generally expected to live three or four more years than men). On the other hand, in certain African countries, life expectancy does not even reach 50 (due to illnesses such as AIDS, malaria and tuberculosis).

This great difference between countries reflects the absence of social justice and is the most widely used indicator for comparing the effects of mortality in different populations as well as the general health conditions and the developmental level of populations.



Natural growth	
Country	%
Niger	3.9
Uganda, Zambia	3.4
Chad	3.3
Spain	0.1
Romania	-0.3
Latvia, Lithuania, Hungary, Ukraine	-0.4
Bulgaria, Serbia	-0.5

SOURCE: World Bank (2013)

Understand

- 10.** Define the following concepts: *birth rate, general fertility rate, death rate, child mortality rate.*

Analyse

- 11.** Africa has a fertility rate of five children per woman (the highest in the world). What are the economic and demographic consequences of this fact?
- 12.** The highest child mortality rates are found in inland African countries. What do you think is the reason for this?
- 13.** Life expectancy is closely linked to how developed a country is. Why? What are the consequences of this fact?
- 14.** Look at the maps and explain how the situation in Spain compares to the rest of the world as regards death and birth rates.
- 15.** Carry out some research into the [Japanese population](#) by visiting [this website](#). Analyse all the demographic characteristics and explain in a report the possible demographic consequences which Japan may face.

4. MIGRATION

Migration is the movement of people from their native countries to other places. People who leave their countries are referred to as **emigrants**, and when they reach their new destinations they are called **immigrants**.

Large-scale migrations have occurred throughout history. On some occasions, these waves of migration have affected whole communities. Nowadays, most migration is related to the movement of people looking for better living conditions and aiming to escape from poverty. However, the migration of refugees is very different, as it is related to political reasons.

4.1. Migration types

Migrations can be divided into three types according to their **duration**, the underlying **causes** and the final **destination** of the emigrants:

- **Duration.** Although there is seasonal migration (people who seek work at harvest time, tourists travelling in the summer), most migration lasts a few years or is permanent.
- **Causes of the migration.** These are mostly economic causes. Although we must also remember that wars can also be a cause of migration and that, throughout history, people who are being persecuted for political, ethnic or religious reasons have often been forced to migrate.
- **Destination.** Destinations can be regional (such as migration to provincial capitals), continental (for example from Mexico to the United States) or intercontinental (nowadays there is a lot of migration of this kind due to advances in communications).



Nowadays, seasonal migration is very common.

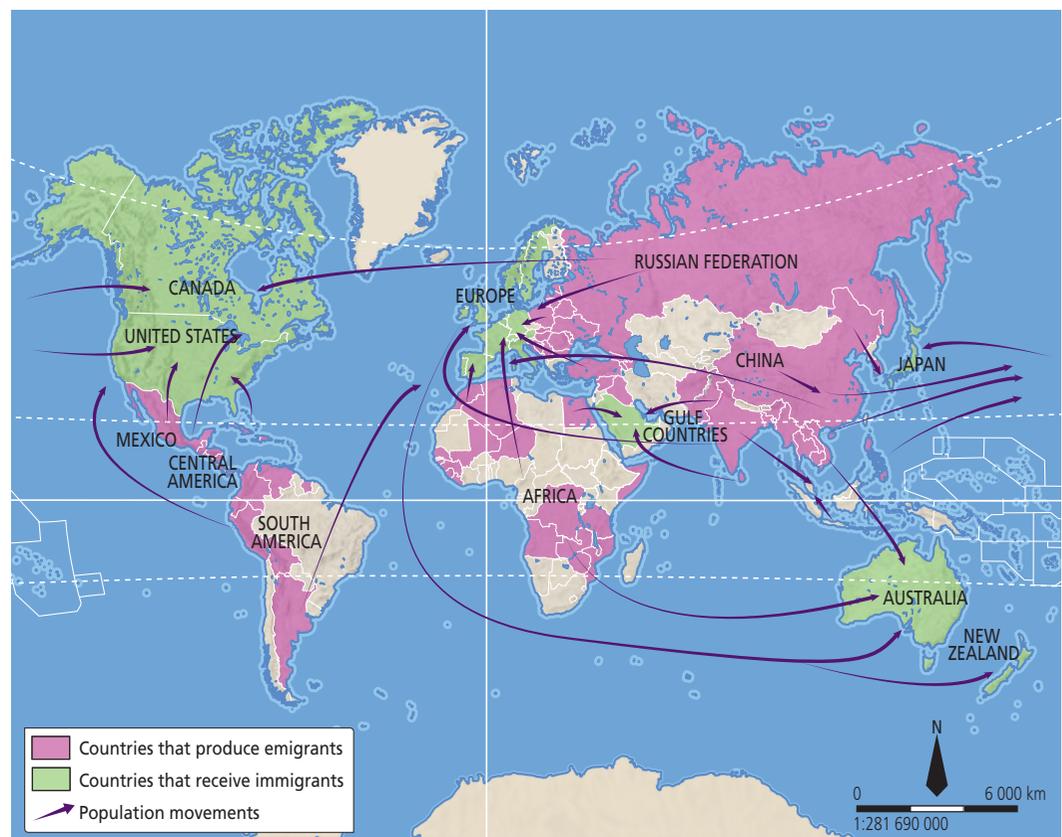
4.2. Countries of emigration and immigration

Areas which are **less developed** produce many continental and intercontinental **emigrants**. Africa, Central and South America, India, China, South-East Asia and certain European countries are the main emigration areas.

Countries that receive immigrants are the developed ones, such as the United States (East Coast, Great Lakes, California and Texas), southern Canada, Western Europe, Australia and the oil-producing countries of the Arabian Peninsula.

Internal migration is very important in China (from the rural interior to the urban areas on the coast) and in other countries (India, Brazil, Russia, Nigeria and Egypt).

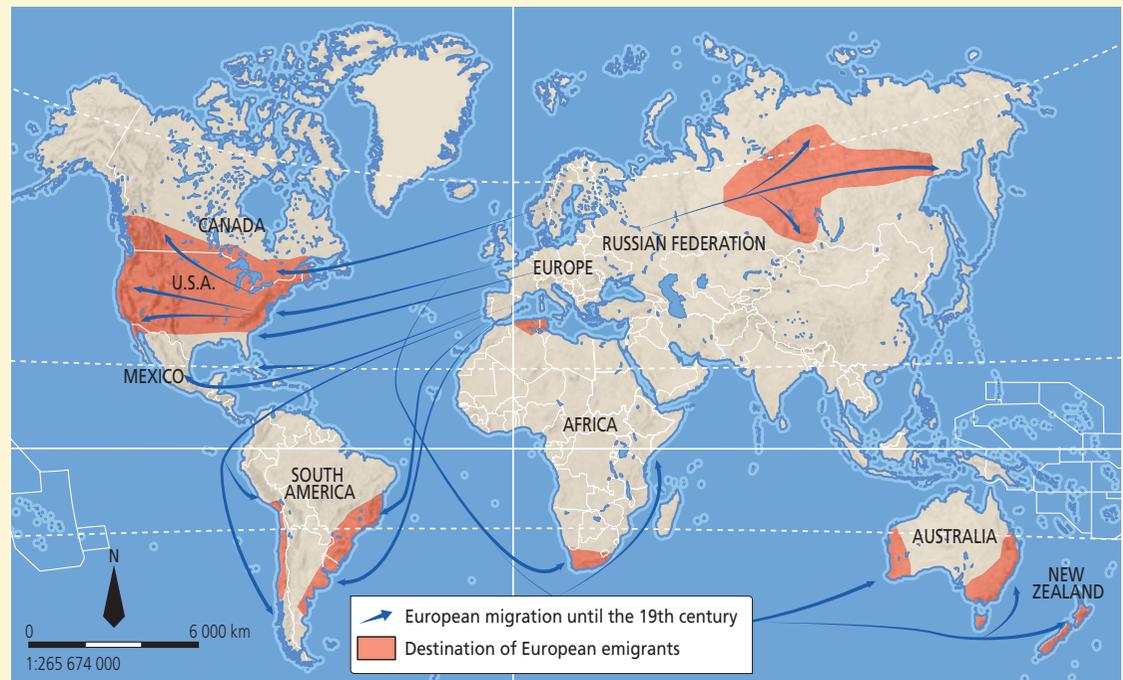
Spain has traditionally been a country of emigration (in the early 20th century to America, and in the 1960s to Europe). However, in the last 15 years, Spain has become a country of immigration.



MASS MIGRATION

During the Early Modern Age and until the 19th century, mass migrations occurred, and their main destination was America. Many Europeans travelled to the New World in search of better life conditions.

People from Spain, Portugal and Italy settled in Central and South America, whereas people from the United Kingdom, France, Germany, Italy and the Nordic countries settled in North America. This colonisation process also took place in India and Australia.



THE CONSEQUENCES OF MIGRATION

Positives. The countries that receive immigrants obtain a workforce which the economy needs and also it invigorates the demographic situation by increasing the birth rate and the percentage of the young population.

Negative. Immigrants can be victims of racism and xenophobia (hostility towards immigrants) that lead to social exclusion. Countries that produce emigrants lose their young and entrepreneurial population).



Interracial School in Mantua (Italy)

Understand

16. A person who leaves Spain to work at the harvest in France is a migrant. Say what type of migration this is according to its causes, duration and destination.
17. Explain the origin and destination of the mass migrations that took place from the Early Modern Age until the 19th century.

Investigate

18. The U.S.A. is the country that has received the most immigrants throughout history. Use the webpage [America immigration and emigration patterns](#) to find out the countries of origin of those immigrants and in which periods the migrations happened.

5. CURRENT DEMOGRAPHIC PROBLEMS

In today's world there are **great inequalities** and **unfair situations** that need to be addressed, corrected and improved on.

5.1. Disorganised population growth

The **worlds population** is currently composed of 7.3 billion people. However the growth rate has decreased from 2.1% per year in 1969 to 1.1% per year nowadays. Nonetheless, in 15 years' time, the world will have 1.2 billion more people.

The growth on each continent varies greatly:

- Africa grows by 2.5% per year.
- Asia and Oceania grow by 1% per year.
- America grows by 0.9%.
- Europe does not grow.

If we analyse the information relating to individual countries, the contrasts become even more significant, and we can see that certain countries have decreasing populations, especially in Europe.

Currently 80 million more people are born each year, of which more than 40 million births originate in Asia, 30 million in Africa and about 8 million in America. This continual increase requires a higher production of foods, services and goods, and therefore a higher consumption of raw materials and energy. The effects which this situation has on the planet are harmful (pollution, depletion of energy and water resources) unless preventive measures are taken.

5.2. Ageing and youth

In recent years, **developed countries** have displayed a more pronounced increase in **ageing** due both to very low birth rates that are unable to renew the population, as well as to increases in life expectancy. The economic consequences which this type of population entails are significant because of the increased number of pensions that must be paid as well as the medical services that must be provided for older people.

The opposite situation exists in many **African countries** where **people rarely live more than 64 years** (the elderly). In Niger, the proportion of the population that is 15 years old or less comprises 50% of the total, in Chad it comprises 49% and in Angola as well as Uganda it amounts to 48%. These high numbers of young people creates a sector of the population that does not have regular work and is dependent on others. It also means that these countries have an active and fertile population – which, in itself, has both advantages and disadvantages (the need for jobs, emigration, etc).

5.3. Famine, illnesses, wars and health deficiencies

In the last few years, there have been many **civil wars** (due to religious, political or ethnic reasons) that have caused many deaths and mass migration in the former Yugoslavia, Iraq, Syria, Libya, Nigeria and Congo.

Famines are a great tragedy because over 800 million people (deaths and malnourishment) suffer from it. It is also an extremely shameful situation because we actually produce more food than we need, and a lot of it is wasted. While one part of humanity is trying to find food to feed itself, another is fighting the consequences of obesity. It is not a problem of food production, but instead a problem of food distribution and food access. This problem also affects certain groups of people in developed countries.

Infectious illnesses (such as AIDS, Ebola or tuberculosis) constantly threaten the African population. They can also be found in other parts of the world, but on a smaller scale. The problem of infectious illnesses goes hand in hand with a **deficiency in health services** in less developed countries.



Important

Children and the elderly

Contrasts between the different age groups have demographic consequences (growth, migration) as well as economic, social and political effects.

Continent	<15 years %	>64 years %
Africa	41	4
America	24	10
Asia	25	7
Europe	16	17
Oceania	24	11



Hungere specially affects children

5.4. Forced to emigrate

Wars, illnesses or hunger have forced millions of people to abandon their countries, although there are also other reasons why people emigrate.

Political problems that occurred in the middle of the 20th century in Europe caused millions of deaths as well as mass migrations. They also had an impact in South America during the 1970s due to the growth of **dictatorships** (in Chile, Argentina, Cuba) forcing a sector of their populations to migrate, mostly to Europe. This phenomenon also occurred in Southeast Asia (Vietnam, Laos) and nowadays occurs in Africa and in the Middle East.

Lack of civil rights, religious or ethnic persecution, as well as a **lack of economic resources**, contributes to the **migration** of sub-Saharan, North African and Middle Eastern populations **to Europe**. In some cases, desperation makes some of the migrants embark on extremely perilous journeys across the sea.



5.5. Ethnic and gender discrimination

Ethnic¹ discrimination can be external or internal. The first type refers to **racism**² and xenophobia directed at individuals from other countries and can be seen in the negative attitudes certain people in Europe and North America have towards foreigners.

Internal racial discrimination happens within the population of a country where a certain ethnic group exists in superior numbers and mistreats people of other ethnicities. This happens in certain African countries, such as Nigeria, Congo and Sudan amongst others, and tends to create brutal civil wars.

People like **Martin Luther King** and **Nelson Mandela** have been key in pursuing equality for all people, no matter which race they belong to.

In addition, **gender discrimination** affects women because of their sex and it is unfortunately still widely found (differences in salaries, work opportunities), even though there have been many social changes addressing this issue in developed countries. In less-developed countries, or ones that have certain religious beliefs, women face many hardships due to their lack of economic resources, job opportunities, education or political rights. A 21st-century world should not allow discrimination against over half of its population.



Nelson Mandela



Mother Teresa of Calcutta

¹ **ethnicity**: group of people that share a culture, language and racial origin

² **racism**: discrimination towards people from other races

Understand

19. What are the main characteristics of the world's population growth? In which areas is the growth higher and in which areas is the growth lower? Why?
20.  Listen and say true or false. Correct the false statements.

Create

21. On this page two people are mentioned who were highly influential due to their pursuit of racial equality and their dedication to the poor: Mother Teresa and Nelson Mandela. Find out why they were such important figures and create a brief biographical data sheet for both of them. Mention some other people who have also been important for similar reasons.

6. A MOSAIC OF ETHNICITIES AND CULTURES

For a long period, of time continents were associated with a particular race.

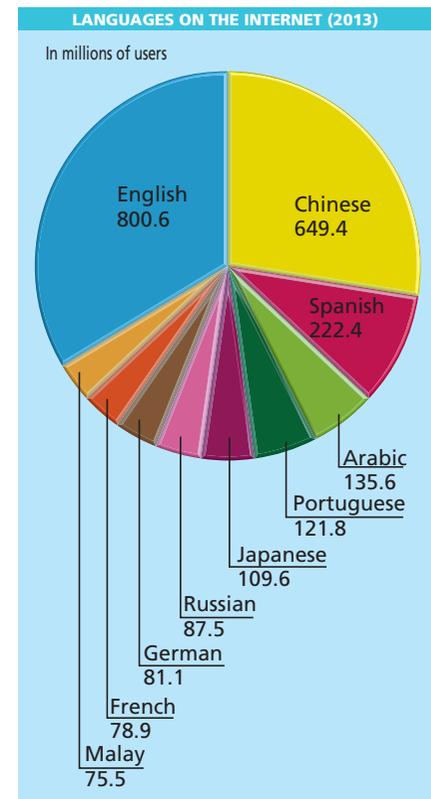
However this simplistic, discriminatory and outdated view makes no sense at all because the constant mixing of races is very important in many countries, and marriage between different cultures and races will become even more common as time goes by. We must, however, remember that there are identifying traits in certain countries and regions:

- Europe.** Although identified with a white population, Europe is one of the continents that has received many migrants from other continents. Mediterranean countries have had a close relationship with the north of Africa and certain areas of Asia, creating a **rich mix of ethnicities and cultures**. This aspect is obvious when we consider their cultural and artistic heritages, especially in Spain, Italy and Greece.
- South and Central America.** Although there are many **indigenous people** living in Central American countries, the Andes and the Amazon rainforest, mixed-race people are predominant in these areas. The indigenous population mixes with European (South America, Mexico) and African (Brazil, Central America) people. Languages such as Quechua and Aymara still survive, but the most common languages are Spanish and Portuguese.
- North America.** The United States and Canada have received many migrants in the past, and they still do today. Migrants come from all over the world (Europeans, Africans, Asians, South Americans) and as a result they have formed one of the most pluralistic and ethnically diverse societies in the world. **Aboriginal people**, Eskimos and Native Americans do not exist in huge populations, but they represent important cultural values.
- Asia.** Asia is made up of many different cultures. There has been a European presence in the west and north (Europeans in Turkey, Israel and Siberia) and Europeans have had great cultural influence in the south and southeast areas (British influence in India, Singapore and Hong Kong; French influence in Indochina; North American influence in the Philippines). The most well-known migrant population is the Chinese one, which is present in the southeastern areas of the continent.
- Africa.** South of the Sahara, black people predominate almost exclusively, except in South Africa, which has five million white people who are the descendants of British and Dutch settlers. Africa constitutes the **biggest example of ethnic diversity, cultural heritage and language richness** in the world. English and French are predominant in the former colonies, while Arabic is the common language found in the north of the continent.

Today's world is pluralistic from an ethnic and racial point of view. The advances in modes of transport as well as in communications continue to increase the complexity of our ethnic mosaic, which is becoming increasingly mixed and interconnected.



Present-day societies are mostly multicultural.



SOURCE: internetworldstats (2013)

Create

22. Create a table with the main ethnic and cultural characteristics of each continent. Which continent has the most pluralistic society?

23. Debate with other students the cultural and economic advantages of a society which is pluralistic and which hosts many ethnicities and cultures.



The historical evolution of world population

- The world's population increased slowly until the **Industrial Revolution**, and increased especially after 1950.
- In order to analyse the development of the population we use **demographic models or regimes**: old demographic regime (high birth and mortality rates, almost no natural growth), transitional regime (reduction of mortality and birth rates, and high population growth), modern (very low birth and mortality rates, zero growth), or regressive (negative natural growth).



Distribution of the population

- **High-density areas** (intensive agriculture, important industrial activity and services) contain the largest part of the world's population: Western Europe, the east coast of the US, China, and Southeast Asia. These areas have large urban agglomerations: **conurbations** and **megalopolises**.
- **Low-density areas** are deserts, rainforests, mountainous regions or regions that are dedicated to extensive farming.



Migration

- This is the movement of people from their original birthplace to other destinations.
- There are **three types** of migration which are divided according to their duration, causes or destination.
- Migration normally **occurs from developing countries to developed ones**: from Africa, South America and Asia to Europe and North America.
- The **consequences of migration** can be **positive**: countries that receive immigrants also gain a workforce, a young population and increase their birth rates. Simultaneously the countries which provided the migrants will receive money when it is sent back home to relatives. It can also have **negative consequences**: racism towards foreigners and, in the countries which produced the migrants: a loss of the young population.

The natural increase of the population

- **Birth and death rates**, as well as the **natural increase** (the difference between both rates) are important economic and demographic indicators.
- Other indicators are: **fertility** (children/woman), **child mortality** (people who die within the first year of life) and **life expectancy** (the number of years which a new-born baby is predicted to live). These indicators are related to the economic development of a country.

Current demographic models

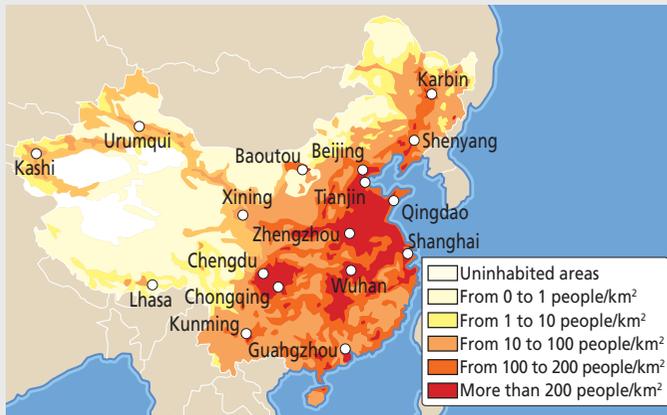
- The **rapid growth of the world's population** presents many challenges to the world as regards providing it with the resources it needs.
- There is a trend towards **ageing populations** in developed countries.
- Civil wars, due to religious, political or ethnic reasons, as well as **hunger, epidemics** and a **lack of health resources** are the main problems which humanity faces, and they affect one-third of the world's total population.
- There are **forced migrations** due to political problems, a lack of civil rights, religious or ethnic persecutions and a complete lack of economic resources.

A mosaic of ethnicities and cultures

- Although each continent has a varied ethnic and cultural identity, **the world is becoming more homogeneous** and interconnected.
- The mixing of cultures and races is a common characteristic of **South American countries**, but also of other geographical regions, such as the **Mediterranean countries**.
- **North America** (the U.S.A. and Canada) is a region mostly formed from a combination of migrants from all over the world.
- **Asia** has many cultural identities. **Africa** is the biggest example of ethnic diversity as well as linguistic and cultural richness.

24. China is the country with the highest amount of internal migration in the last few years. Look at the map and answer the following questions::

- Which areas of China are more densely populated? Which areas are less densely populated?
- Which areas do the migrants come from and to which areas do they travel? What do you think attracts them to those areas?
- What are the consequences for the areas that produce the migrants? And what about for the areas that receive them?



25. Write the following countries in your book, find them in a map and find out how populated they are and why:

- | | |
|-------------|-----------|
| ■ Namibia | ■ Chile |
| ■ Italy | ■ Canada |
| ■ Israel | ■ Nigeria |
| ■ Australia | ■ Japan |

26. The elderly population continues to increase in the developed countries:

- What are the regions of the world with the largest elderly populations? Why? What are the consequences of this?
- Which regions have a low percentage of elderly population? Why?



27. Read the text and answer the following questions:

Building walls and placing fences on the borders are not the best solutions that we can find in order to stop illegal immigrants. National and international news highlight the cases of people who try to leave their countries without worrying about risking their lives in order to find a new destination that may bring them better opportunities.

Antonio MANRIQUE DE LUNA
El País, 14/07/2014

- Explain the possible causes of this type of migration.
- What are the consequences for the countries where the migrants arrive? And what is the effect on the countries which they leave behind?

28. This photo shows a boat of immigrants:

- What is the name of this type of boat? Where are they normally found? What type of dangers do these people face?
- Are there any other ways in which these migrants could travel instead of by boat? Why don't they travel by plane or other modes of transport instead?



29. Look at the world map in Section 3 of this unit showing the natural growth of the population and answer these questions:

- Which countries have the highest population growth? Why?
- Which continents have the lowest population growth? Why?



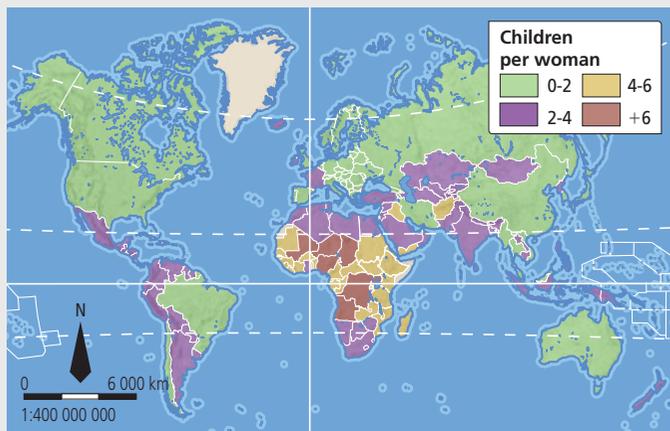
30. In Washington, on 28 August 1963, Martin Luther King led a historic demonstration and delivered his famous speech *I have a dream*:

- a) What is the dream he refers to in that speech?
- b) Do you think people still face racial problems today in the US? And how about in Europe and Spain? If you are aware of any problems, describe them



31. Study the following map that shows the general fertility rate in the world, and answer the questions:

- a) How is this particular rate measured? Which countries have the lowest rates? And which have the highest rates?
- b) Do you think there is a correlation between fertility rates and how developed a country is? Give reasons for your answer



SOURCE: World Bank (2013)

32. Look at the demographic data below about Angola (Africa) and write a short report about the population of this country that explains the causes and possible consequences of its demographic structure.

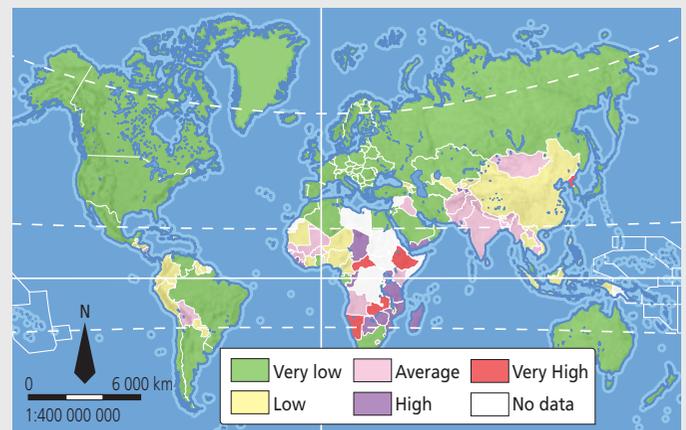
Total population	22.4 million people
Birth rate	46%
Fertility	6.2 children/woman
Death rate	14%
Child mortality	96%
Natural increase	3.2%
Life expectancy	52 years

33. Copy the following sentences in your notebook and fill in the gaps:

- The natural increase of a population is the difference between the and rates.
- Child mortality occurs during of life.
- The country with the highest population in Africa is
- Countries that produce the most migrants are countries.
- Ageing populations are characteristic of countries.

34. The map below shows the areas of the world that suffer the most from hunger and chronic malnourishment:

- a) Identify the countries where more than 35% of the population is affected by malnourishment. Why do you think this happens?
- b) Which age groups are most affected by malnourishment? What are the consequences for those age groups?



35. Copy and complete the following table in your book; find out if each of the countries below has a high, intermediate or low birth rate or if it receives immigrants or produces emigrants.

Country	Birth rate	Migration type
Nigeria		
Australia		
Egypt		
Germany		
Ecuador		
China		
France		

A country can be explored in many different ways. In this research task you will learn about different countries of the world through the creation and analysis of their population pyramids. In the final stage you will create a poster that shows the information you found.



In groups or individually

MATERIALS

- Notebook
- Graph paper or squared paper
- Computer with internet access

Preparation



Organise yourselves into groups of four students and read the example (Mexico).

Each group will carry out the same task. However each will do research on a different country. This way all of the continents will be investigated. Possible countries include Kuwait, Uganda, Spain, Germany and Brazil. The choice of countries will be agreed on before the start of the task.

Tasks



In order to complete the research task, follow the steps below.

A. Research your chosen country

- Find out about its population density, main characteristics, historical events, ethnic and cultural diversity and find pictures that will emphasise the character of the country.

B. Create a population pyramid

- Use the Internet to find percentages of each gender and age group (0–4 years, 5–9 years, and 10–14 years).
- Use graph paper and draw a vertical axis (y) and a horizontal one (x). On the y-axis place the age groups (0–4 years, 5–9 years, 10–14 years, etc). The x-axis shows the population percentages using horizontal bars. Generally, men are placed on the left side and women on the right side of the graph. The bars in the graph represent the percentage of people in each age group.
- The graph must also include the name of the population it displays as well as the date.

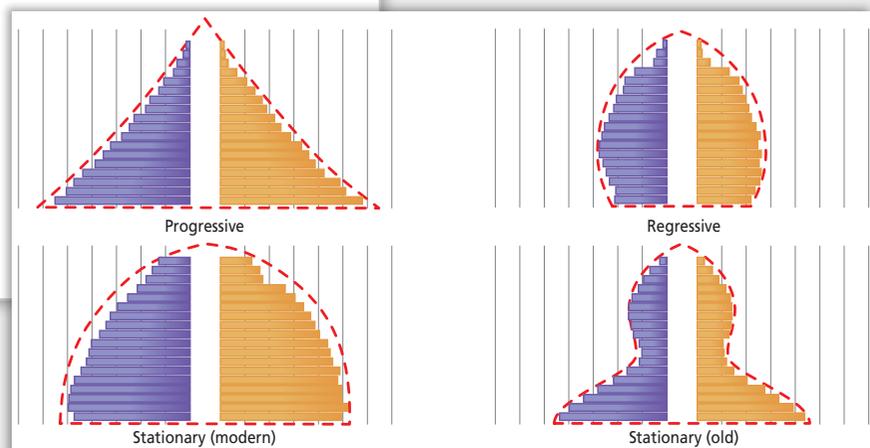
C. Analysing a population pyramid

- Look at the shape of the pyramid. It will indicate if it is a progressive population (pagoda-shaped), stagnated population (bell-shaped), regressive population (bulbous), or if it is a population with an irregular development (in the shape of an ace of spades).
- Calculate the percentage of people that corresponds to each age group (young: 0–14 years, adult: 15–64, elderly: over 65 years old).
- Identify any intervals that look irregular because they may indicate a particular event in the country's history.

Mexico's population data by age and gender

Interval (years)	% Males	% Females
0-4	4.8	4.7
5-9	5.1	4.9
10-14	5.0	4.9
15-19	5.0	5.0
20-24	4.3	4.6
25-29	3.8	4.1
30-34	3.6	4.0
35-39	3.6	3.9
40-44	3.0	3.3
45-49	2.5	2.8
50-54	2.2	2.4
55-59	1.7	1.8
60-64	1.3	1.5
65-69	1.0	1.1
70-74	0.8	0.9
75-79	0.5	0.6
80-84	0.3	0.4
85 or more	0.3	0.4

SOURCE: INEGI, Mexico



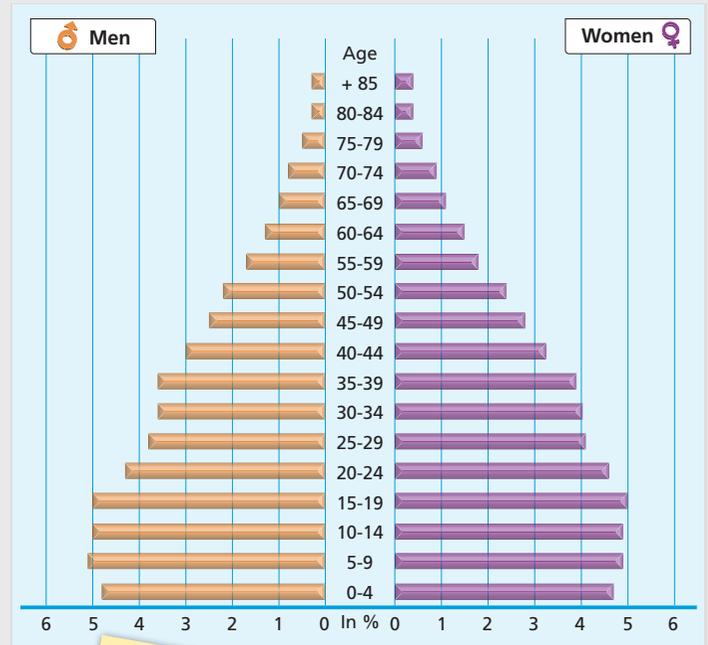
Different shapes of population pyramids



D. Obtaining conclusions from your population pyramid

From the Mexican population pyramid we can make the following observations:

- Birth rates have been decreasing during the last five years.
- The young population amounts to 29.8% of the total, with similar proportions of men and women. This high percentage will soon be part of the adult age group. As such, it will both increase the working population as well as increase the fertility rate.
- The percentage of elderly people is low (6.3%) reflecting a low life expectancy. A higher proportion of women is found in this age group, compared to men.
- The age groups between 20 to 30 years of age show a reduction in the male population, probably due to emigration (mostly to the US).



Communication and publication



In groups, collect the information you have obtained, the population pyramid which you have made, the conclusions drawn from the analysis, and the pictures you have selected. Use these materials to create a poster which you will show to the rest of the class. You can also include the stages of your investigation in your presentation.

Next, hang the posters on the wall in the classroom. If you have used a digital format, create a collective gallery and publish your results online on your class blog.



Online, you can find many resources that explain how to construct a population pyramid using a variety of digital tools.



SELF-ASSESSMENT



1. Describe the population distribution of some of the countries.
2. After completing this task, if you have the demographic profile of another country, which data will you examine? What kind of information are you looking for?
3. Explain the steps you followed in order to complete your population pyramid.
4. Which online sources did you use in order to carry out research on your chosen country?
5. Briefly explain the demographic profiles of the countries which you carried out research on during this task.
6. Which country surprised you the most? Why?
7. List some preventive measures which the countries should take after you have studied their population pyramids.
8. Identify the positive aspects of working as a team during this task. In which ways have you collaborated with each other?