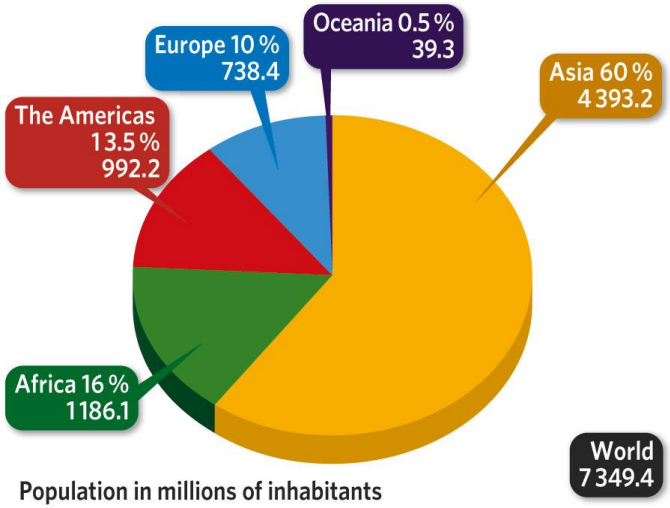
# UNITS 1 & 2
# The Population Of The World & Spain

**Definition:**

**Demography**: Study of the **population**, its structure, dynamics, changes, distribution, etc.

**HOW MANY PEOPLE ARE THERE IN THE WORLD?**
Over 7.3 billion, growing quickly (growing by 80 million every year).




# Where does the population live?

Population distributes around the World depending on:

- **Physical** factors: More people in temperate climate areas, near to water and low altitude areas.
- **Historical** factors: Areas inhabited since ancient times.
- **Socioeconomic** factors: Areas with fertile soils, industry, services and energy. resources.

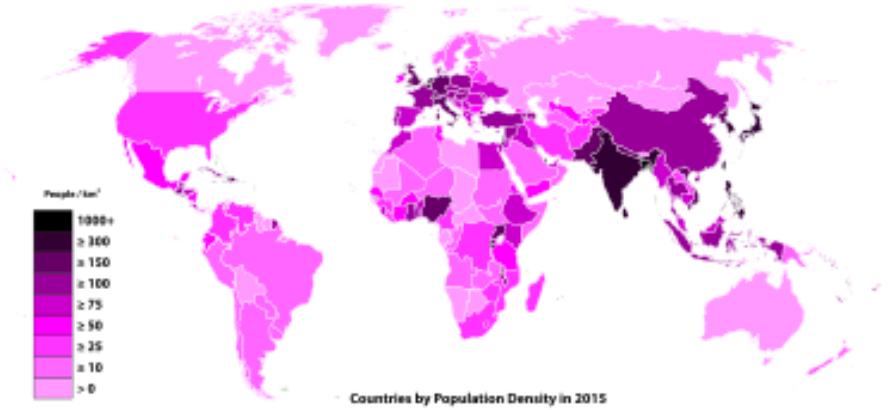
## Densities

**Very low:** Below 10 inh. / $Km^2$
**Low:** 10 to 50 inh. / $Km^2$
**Moderate:** 50 to 100 inh. / $Km^2$
**High:** Over 100 inh. / $Km^2$

- **Total population:** Number of people living in a particular place.
- **Population density:** relationship between the total population and the surface area where they live. *(Population density= inhabitants / surface area in $Km^2$)*

## MOST DENSELY POPULATED:

- More than **330 inhabitants/$km^2$**: China, India, Japan, and some big city areas in Europe, America, etc.




## POPULATION ALMOST NON-EXISTENT

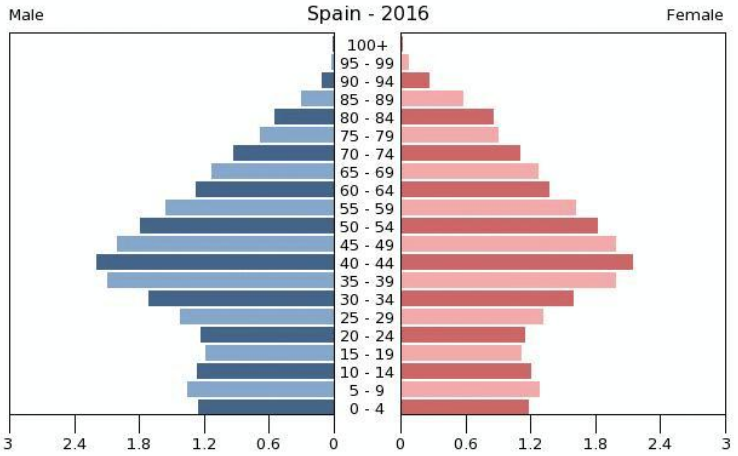
- **Below 10 inhabitants/$km^2$**: Greenland, Antarctica, deserts of Africa, Asia and Australia, jungles of South America.

# Population structure

We can classify population according to biological factors (age, sex) and economic activity:

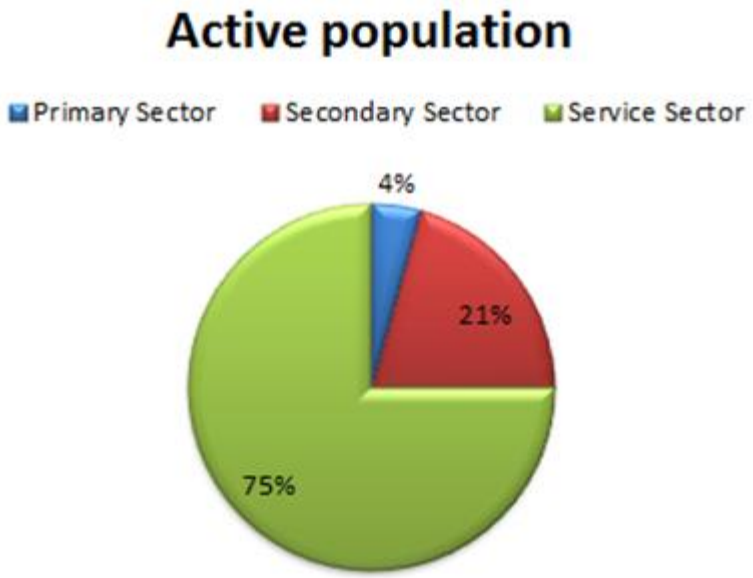
**A. Biological structure:**

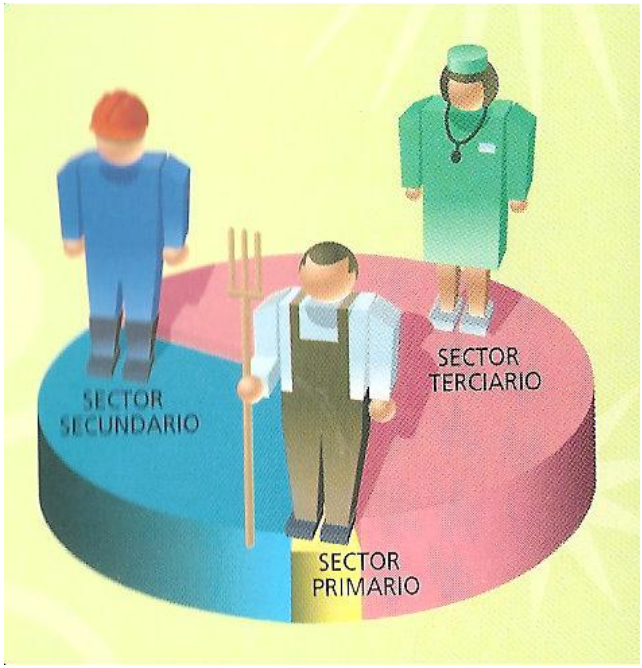
- **Age:** Three main groups: young (aged 0-14), adult (aged 15-64) and elderly (aged 65 and over).
- **Sex:** Males and females. There are more births of males than females (51%-49%), but females live longer, so there are more females in the elderly population.




## B. Economic structure:

- **Level of activity:** It consists of:
  - **Active population**: working population, unemployed people and those who look for their first job.
  - **Inactive population**: Children under 16, students, retired, people unable to work...
- **Economic sectors:**
  - **Primary sector:** Obtaining products from nature: agriculture, livestock farming, fishing, mining, exploitation of forests...
  - **Secondary sector:** It involves the transformation of natural products (industry, construction, energy production...)
  - **Tertiary or service sector:** It provides services to people (trade, health, education, tourism...)

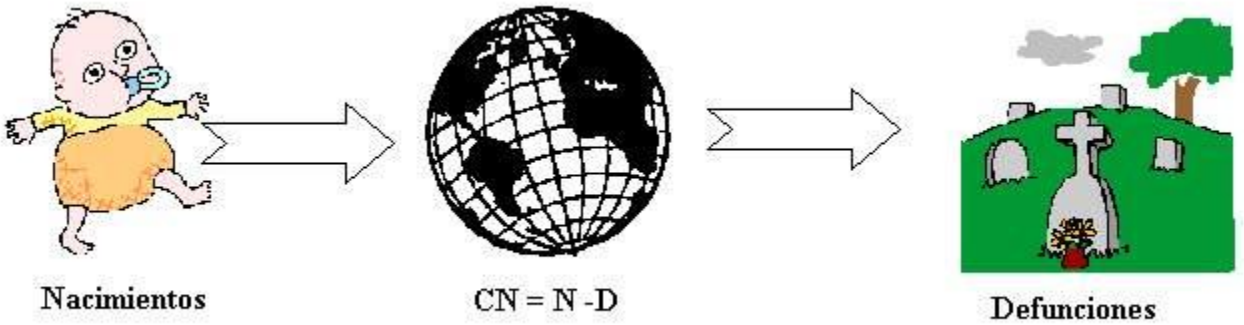


# Population dynamics and trends

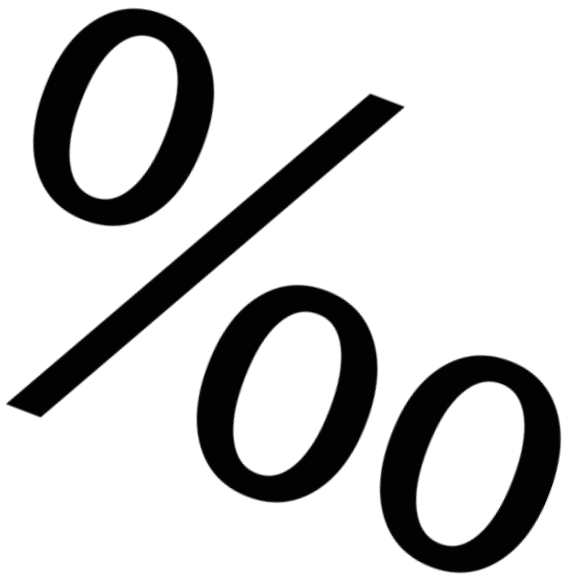
Population dynamics are different if it is increasing or decreasing.
Number of people living in a place depends on:

- **Natural population movement**: number of **births** and **deaths**.




- **Migratory movement**: It involves people moving from one place to another to live and work or study. When they leave their own country it's called **emigration** and when they arrive to a different country it's **immigration**.

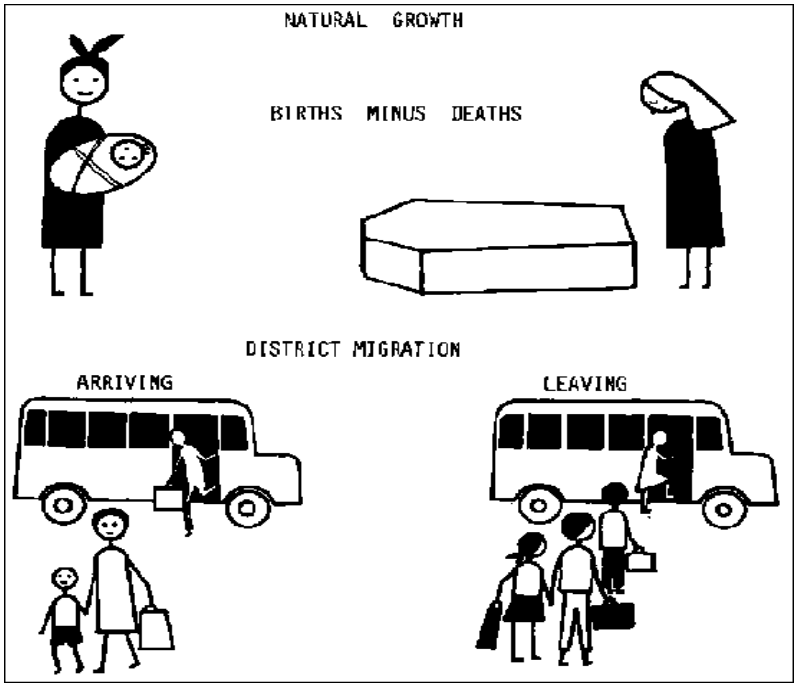
- **Natural population movement: births**
  - **Births:** Number of births in a place in a period of time (a year).
    - **Birth rate:** Number of births relative to the population of a place, during a year, expressed in per mille (‰)
    - **Fertility rate:** Number of births per women aged (15-49), expressed in per mille (‰)
    - **Average number of children per women**. If the average is 2.1 children per women or higher one generation can be replaced by another.

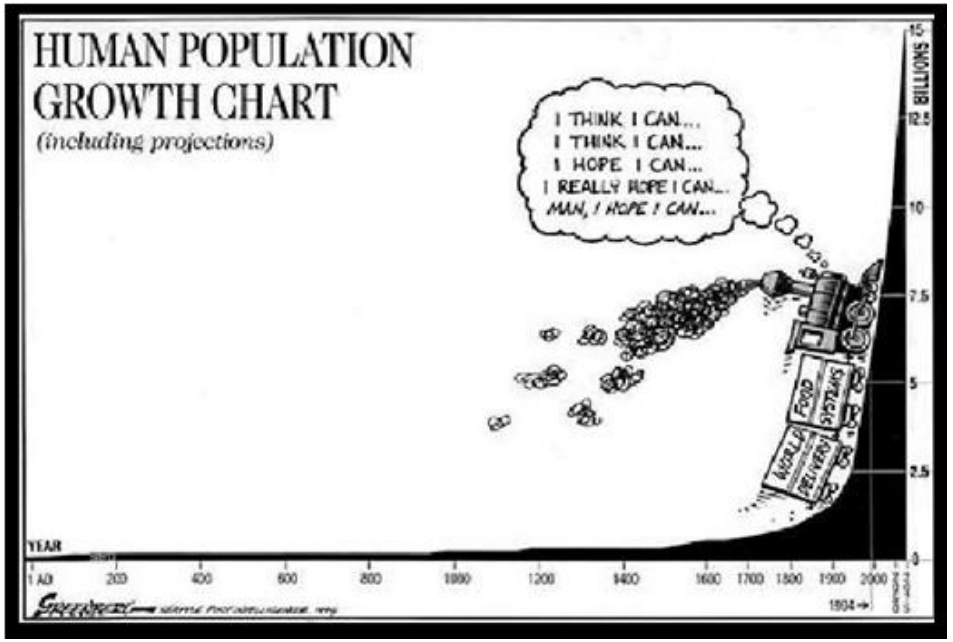


- **Natural population movement: births**
  - **Deaths:** Number of deaths in a place during a period of time (a year).
    - **Death rate:** Number of deaths relative to the population of a place, during a year, expressed in per mille (‰)
    - **Infant mortality rate:** It relates the number of babies who died before their first birthday to the births in a place. Result expressed in per mille (‰)
    - **Life expectancy:** Average age a person is expected to live at the moment of his/her birth.

‰

- **Natural population growth**
  - **Natural population growth rate:** Difference between the absolute numbers of births and deaths. It can also be calculated from birth and death rates. It is expressed in a **percentage (%)**, and it can be:
    - **Positive**: population **increases**.
    - **Negative**: population **decreases**.
    - Birth and death rates are **equal**: growth is **zero**.




# Demography rates

## Density of the earth's population

**Density of the earth's population (inhabitants/km²)** = $\frac{\text{number of inhabitants}}{\text{surface area } (\text{km}^2)}$ =

$\frac{7349472000 \text{ inhabitants}}{148940000 \text{ km}^2 \text{ surface area}}$ = 49,34 (hab./km²)

## Demographic rates

Demographic rates are numbers that allow us to compare population data for different parts of the world.

**birth rate** = $\frac{\text{number of births}}{\text{total population}} \times 1000$

**fertility rate** = $\frac{\text{number of births}}{\text{number of women between 15 and 49}} \times 1000$

**death rate** = $\frac{\text{number of deaths}}{\text{total population}} \times 1000$

**infant mortality rate** = $\frac{\text{number of deaths in children under 1}}{\text{number of births}} \times 1000$

**Rate of natural increase**[1] = **birth rate – death rate**

1. The rate of natural increase is usually expressed as a percentage (%). You get this by dividing the difference between the birth and death rates by 10.

# Population Pyramids

Population pyramids usually have three distinct profiles.

- A **triangular shape** shows a population that is growing or **expanding**. **Old demographic model = non-developed countries**
- A **pointed arch** or **bell shape** shows a population that is **stable**. **Transition model= developing countries**
- An **urn** or **bulb shape** shows a population that is **contracting** or not growing. **Modern demographic model= developed countries**