

Population

Key Idea: The human population of the planet has grown rapidly

Population: The number of 'inhabitants' of a particular place.

Birth Rate: (BR) The number of babies born per 1000 people per year.

Death Rate: (DR) The number of deaths per every 1000 people per year.

Population growth or 'natural change' (NC): calculate "BR - DR = NC"

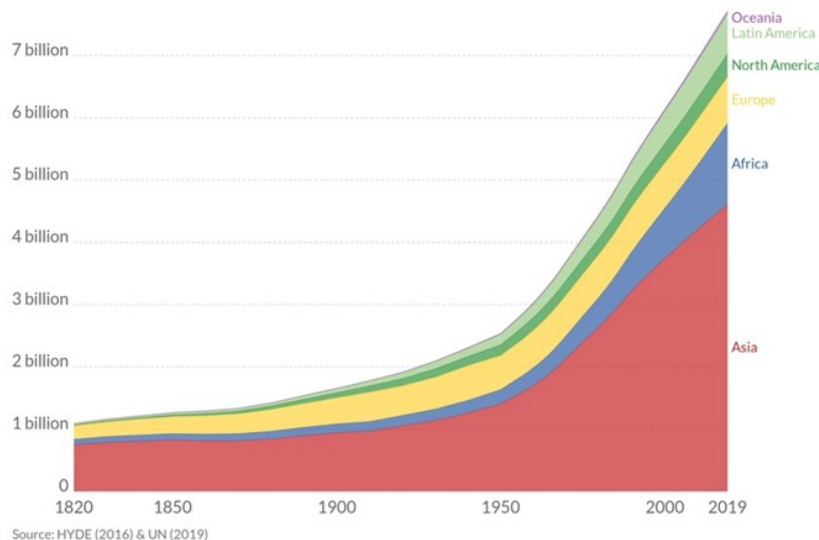
Natural Increase: when the birth rate exceeds the death rate.

Natural Decrease: when the death rate exceeds the birth rate.

Country	Birth rate	Death rate	Natural increase
UK	11	10	1

Growth was slow and steady until 1900 at which point **death rates** across the world started to fall. **Natural increase** was rapid causing a **population explosion**.

World population by region



The world population increased from 1 billion in 1800 to 7.7 billion today.

Whilst all continents show growth, some individual countries are increasing rapidly, while others are stable or even declining.

While the number of births and deaths is always a factor, other factors such as war, disease, migration, policies, and natural disasters others can affect a population's growth.

	FACTORS RESULTING IN HIGH RATES	FACTORS RESULTING IN LOW RATES
Factors affecting birth rates:	<ul style="list-style-type: none"> Children work to help the family income. Children care for grandparents Low availability/knowledge /Fear of contraception and family planning High infant mortality, many born so some survive. Certain religions encourage large families. Large families can show high status for men. 	<ul style="list-style-type: none"> Women's rights increased so can choose to not have children. Contraception/family planning available and affordable. Careers before family so fewer children Later marriage reduces childbearing years Children increasingly expensive, prefer to have more disposable income
Factors affecting death rates:	<ul style="list-style-type: none"> Lack of food/malnutrition from famine. Poor sanitation and lack of potable water. Natural disasters destroying crops/incomes. High levels of disease, eg malaria. Lack of doctors, medicines and healthcare. War and genocide. 	<ul style="list-style-type: none"> High food availability and storage Advances in medicine and technology Vaccinations against disease childhood Improved water provision and sanitation. Lower infant death rates.

Higher income countries have lower birth and death rates, (10-20 per thousand people per year), whereas **lower income countries have higher birth and death rates** (40-50 per thousand people, per

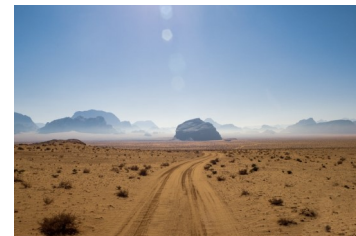
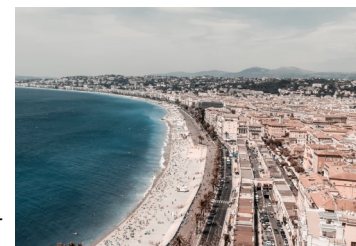
Key Idea: The world's population is not evenly distributed

Population Distribution = The pattern or 'spread' of where people live in the world.

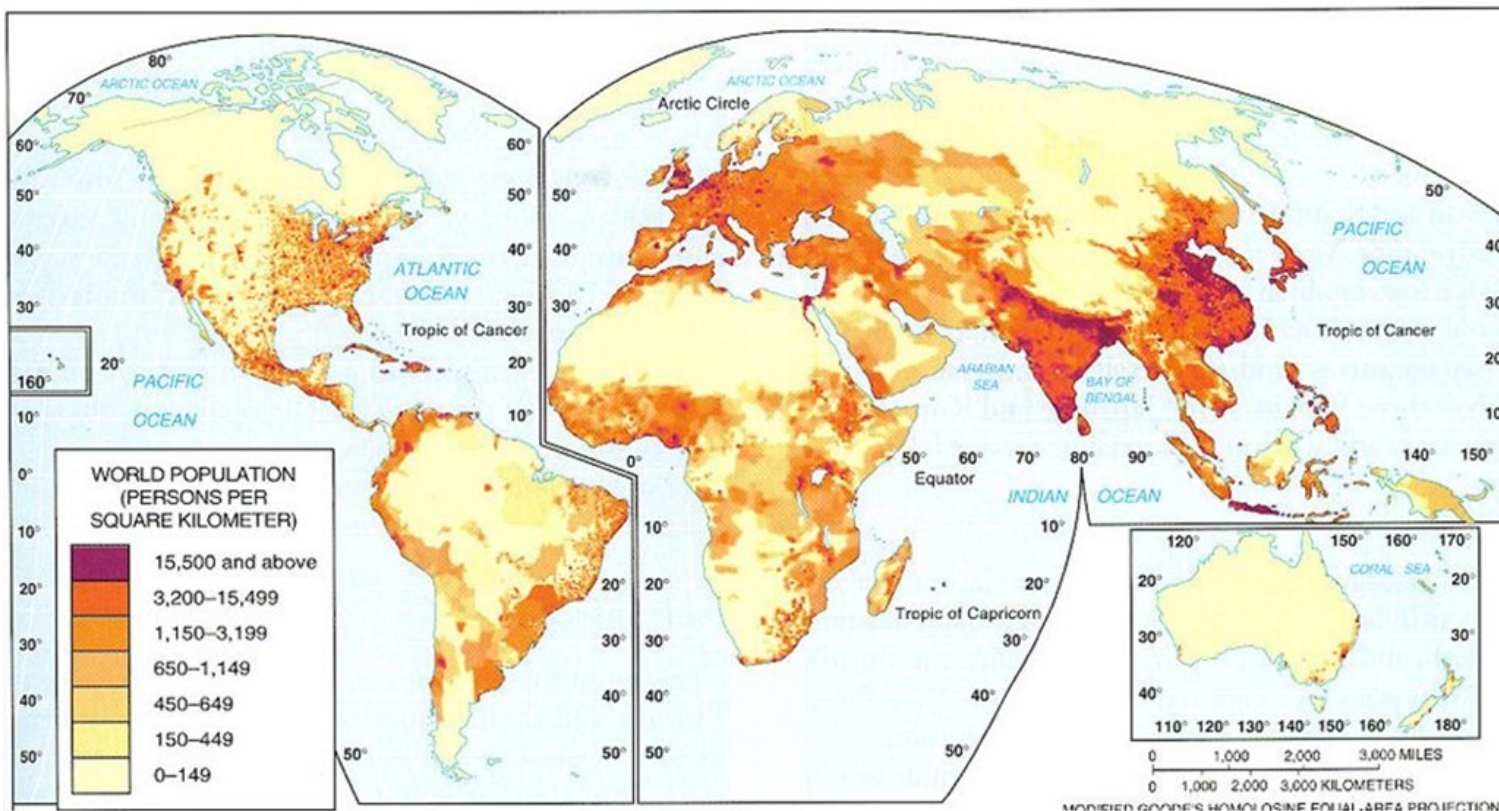
Population Density = A measurement of how many people there are per square kilometre.

Densely populated = The population is high and very close together. Typically, in the mid-latitude climates, lowlands and near coastal areas, beside major rivers, easy to develop and grow food to feed large populations.

Sparsely populated = The population is low and very spread out. Typically, in extreme climates or high-altitude locations where it is difficult to live and grow enough food to support large populations.



Population continued...

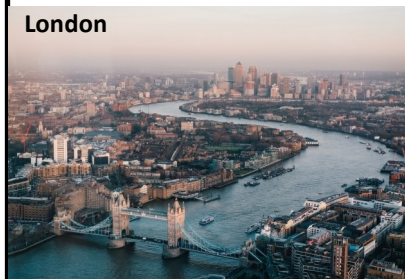


Human factors affecting population density (*may result in migration)

HIGH DENSITY REASONS	LOW DENSITY REASONS
ECONOMIC: diverse financial market, developed business infrastructure, trade links, jobs in all sectors. Important city	ECONOMIC: limited trade, unstable economy, lack of financial and business services. Rural area.
SOCIAL: good housing, school and health provision or opportunities, choice, and freedoms	SOCIAL: isolated populations with lack of infrastructure, to support employment, schooling, and services
*POLITICAL: stable fair government, good global standing, respect for law and civil rights	*POLITICAL: Unstable government, civil war, lack of personal liberty, or civil rights.

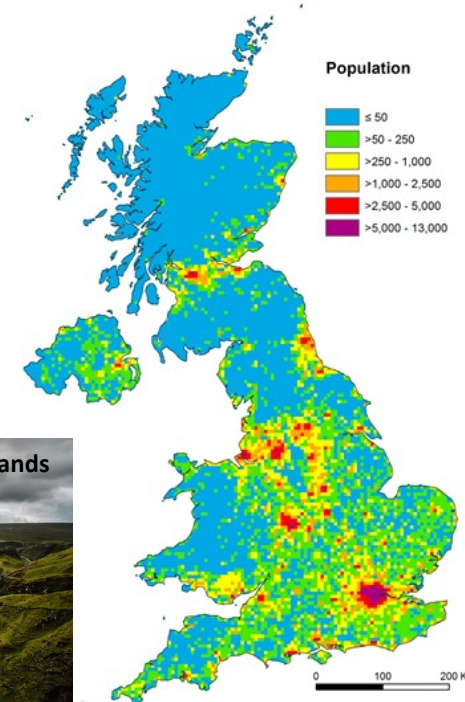
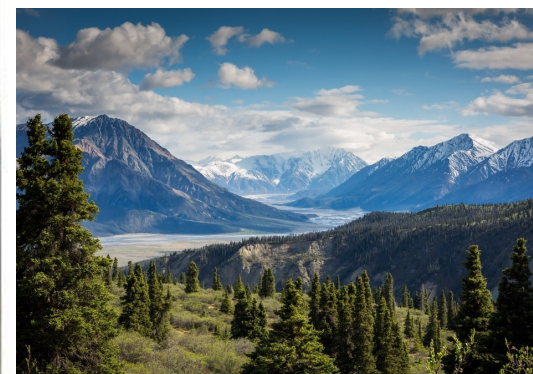
THE UK'S POPULATION DENSITY

- England is more densely populated than Scotland, Wales, and Northern Ireland.
- There are few people in all the highland areas of the UK. Dense clusters around major cities in the North of England where industry is located.
- Most dense area is London and the surrounding area.



Physical factors affecting population density

- Available water supply
- Relief
- Climate
- Nearness to coast
- Soil type (how fertile)
- Access to resources (e.g. minerals)
- Vegetation



Population continued...

Key Idea: Population size and structure is important for governments and decision makers

Underpopulation = Too few people to make best use of their resources of food, water, minerals, and energy, so it can limit the standard of living because a lack of. (Australia, Canada, and Mongolia) There can sometimes be many unfilled job positions and a need to use migrant labour to help the economy.

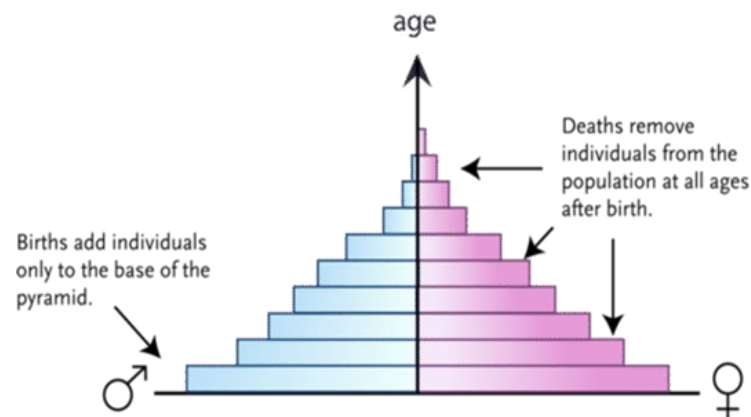
Overpopulation = The size of the population exceeds a country's own supply of **resources** (food, water minerals and energy,) and therefore puts pressure on the systems of society and **reduces the standard of living**. (Singapore, Israel, Kuwait). This is not the same as a place being 'densely populated'. The ability of a place to support the population is what determines over or under population.

Population policy a set of laws or strategies put in place by a government aimed at 'managing' the number of people in a country. A population policy may be '**pro-natal**' (encouraging births) or '**anti-natal**' (discouraging births). A famous anti-natal policy was **China's One Child Policy (OCP)**. Overall, it is estimated to **have prevented 400 million births**. This is more than the entire population of the United States of America!

China's One Child Policy (OCP).

The Issue:	The policy (OCP)	The penalties	Problems
In the early 1970s, the government feared famine, and over-population was reducing the quality of life and standard of living. Many families lived in poverty with few jobs available and no income. They felt a policy of strict population control was required.	OCP introduced in 1979. Couples should delay marriage until 25 or over. Must be sterilised after the first child or abort any future pregnancies. Would receive a 5-10% salary rise for limiting their family to one child. Reduced education and healthcare costs for family.	For disobeying the policy, a 10% salary cut Significant fines designed to be too high for most households pay for the education of both children and health care for all the family Second children born abroad were not penalised, but they were not allowed to become Chinese citizens	Forces abortions Gender imbalance due to preference for boys in society (30 million more males than females) Abandoned baby girls left in orphanages Government had too much control over people's lives Spoilt and lonely male children known as 'Little Emperors'.

Population Pyramid: A horizontal bar graph that represents the 'structure' or composition of a place's population by age and sex. They indicate the proportion of the population who are dependents (too young or old to work) or economically active (a country's eligible workforce) as this can affect a country's wealth and income.



UNDERSTANDING POPULATION PYRAMIDS:

Width of the base - indicates high or low birth rates. High birth rate is shown with a wide base.

Symmetry - pyramids should be symmetrical. Any asymmetry indicates a difference in the male and female population.

Shape of sides - Concave sides (curving inward) with a narrow top, indicate a high death rate and convex sides (bulging outward) and a wide top, indicate a low death rate.

Bumps in the sides - irregularities in the sides indicate an anomaly, bulges in the middle indicate migrants moving for work. Dents in the middle side indicate emigration. side is a sign of migrant.

High pyramids indicate - Long life expectancy. Average age in years a person lives to in an area



Population continued...

Population structures with more old people than young can lead to problems with looking after the elderly, increasing costs of healthcare and taxes and declining birth rates.

Populations with more young than old may lead to problems with economic development due to too many children to support and not enough jobs and school places. Both these situations may result in migration. People needed to work or people moving for work.

• **Migration** The movement of people from one place to another. Migrant A person who migrates from one country to another.

• **Rural-to-urban Migration** = This is when people migrate from countryside areas to towns and cities.

• **International Migration** = The act of resettling to another country.

• **Emigration** The act of leaving a country to resettle abroad. (Emigrants leaving their country)

• **Immigration** The act of moving into a country from abroad. (Immigrants entering another country)

• **Refugee** A person who is forced to migrate as a result of unsafe conditions in their home country.

To balance a population with natural population growth and migration usually requires careful knowledge of the population structure. In the UK a census is carried out every 10 years to find out who lives in the UK and their age education level and wealth. This helps with managing the economy and public services.



APPLYING YOUR KNOWLEDGE...

- Why may birth rates remain high in a country?
- How do you calculate natural population change?
- What does the terms sparsely populated mean?
- Name a country or region of the world where few people live?
- What problems are associated with over populations?
- How could having an aging population lead to population decline?
- What is the difference between an immigrant and an emigrant?
- What do we call factors that make people want to leave a place?

Now Challenge yourself even further!

- Explain why population pyramids may indicate the wealth of a country or place?
- Do you think China's One Child Policy was successful? Give reasons for your opinion.
- Countries regulate migration with policy. Why do you think this is?

OTHER RESOURCES

Interactive pyramids change over time for all countries. <https://www.populationpyramid.net/>

BBC KS3—Population & migration <https://www.bbc.co.uk/bitesize/guides/zkg82hv/revision/2>

KS3 Schoology



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Death Rate	The number of deaths per every 1000 people per year.
Densely Populated	The population is high and very close together
Emigration	The act of leaving a country to resettle abroad. (Emigrants leaving their country)
Immigration	The act of moving into a country from abroad. (Immigrants entering another country)
International migration	The act of leaving a country to resettle abroad. (Emigrants leaving their country)
Migration	The movement of people from one place to another. Migrant A person who migrates from one country to another.
Natural decrease	When the death rate exceeds the birth rate.
Natural increase	When the birth rate exceeds the death rate.
Overpopulation	The size of the population exceeds a country's own supply of resources
Population	The number of 'inhabitants' of a particular place.
Population Density	A measurement of how many people there are per square kilometre.
Population Distribution	The pattern or 'spread' of where people live in the world.
Population Growth	BR - DR = Natural Change
Population Policy	A set of laws or strategies put in place by a government aimed at 'managing' the number of people in a country
Population Pyramid	A horizontal bar graph that represents the 'structure' or composition of a place's population by age and sex.
Refugee	A person who is forced to migrate as a result of unsafe conditions in their home country.
Rural-Urban migration	This is when people migrate from countryside areas to towns and cities.
Sparsely Populated	The population is low and very spread out
Underpopulation	Too few people to make best use of their resources of food,

To test yourself Read, Cover, Write, Check OR try this quizlet
<https://tinyurl.com/KS3Population>