

THE HISTORY OF US

UNIT 1 STUDENT READING



People
and the
Planet

Lessons for a Sustainable Future

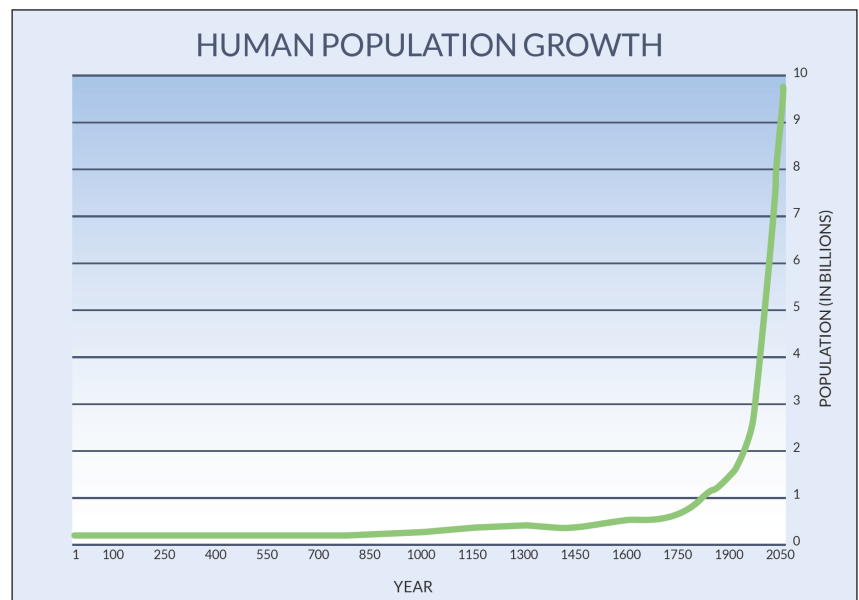
You may have heard the expression, “You’re one in a million!” With the current size of our human **population**, it might be more accurate to say, “You’re one in 7.8 billion (and growing!)” That’s a lot of people sharing our planet and its **finite** resources.

Our global family hasn’t always been so large. In fact, for most of human history, there were probably fewer than a million people alive at any given time. Modern humans evolved in Africa about 200,000 years ago and began **migrating** to other parts of the globe about 100,000 years ago. Our earliest ancestors relied on hunting and gathering their food to survive. Only a finite number of people could be supported on the wildlife in an area for a limited amount of time.

Then just 12,000 years ago, several cultures shifted from hunting and gathering to farming. Humans became the first and only species ever to control its own food supply. Civilizations grew and so did the human population. About 2,000 years ago, the estimated world population was 170 million people (about half the number of people that live in the U.S. today).¹ The largest civilizations at this point in history were the Roman Empire (which spread throughout Europe, the Middle East and Northern Africa) and the Han Dynasty in China. The next 1,700 years were marked by the growth and conquest of empires, global navigation and exploration. We had yet to understand the science behind life and death, or how to prevent and treat most diseases. As a result, many children died young. Our global population grew, but slowly, reaching about 500 million around 1500 and 1 billion by 1804.²

POPULATION AND THE INDUSTRIAL REVOLUTION

By the late 1700s, the world was embarking on the **Industrial Revolution**, a period of history in Europe and North America where there were significant advances in science and technology. The Industrial Revolution brought the invention of the steam engine and the use of electricity. During this period, there were also many inventions that promoted longer life. These included improvements in farming, nutrition, medicine and **sanitation**. Now, people were able to fight once-deadly germs, produce

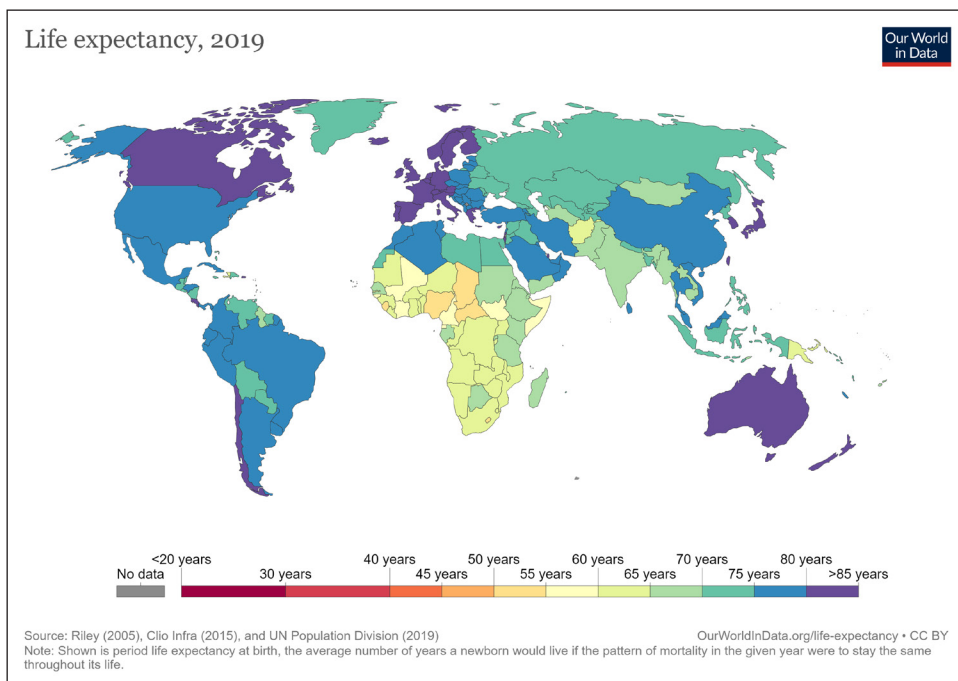


more and different kinds of food, and cure more illnesses. Before long, these new discoveries and inventions spread throughout the world, lowering **death rates**, particularly among children, and improving people's quality of life.

Now you might be wondering what happened to the **birth rates** while the death rates were decreasing. In Europe and North America, the Industrial Revolution eventually led to people having fewer children because more people were now moving to the cities. These improvements in quality of life were not enjoyed equally, however. At the same time that industrialization was enabling more goods to be manufactured in northern cities in the United States and England, slave labor in the southern U.S. states was increasing to meet the growing demand for more raw materials, especially the cotton sent to northern mills. Before slavery ended in the U.S. in 1865, 1 in 3 people in the southern states was enslaved.³

Industrialization also affected family size. On family farms, more hands were needed to work the land. For families moving to cities to work in factories and live in smaller homes, fewer children were preferred. But because most of the world was not yet **industrialized** and large families were still needed to farm the land, **birth rates** stayed higher than death rates in most of the world.

The human population started growing rapidly. By 1927, the world population had doubled to 2 billion (in just 123 years). It doubled again to four billion by 1974 (in just 48 years) This period of rapid growth has sometimes been called a "population explosion," because the population grew **exponentially**, doubling ever faster. In more recent years, the **rate of population growth** has been decreasing, but our population is still growing steadily, adding 1 billion people every 12-13 years (5th billion in 1987, 6th billion in 1999, and 7th billion in 2011).



A DIVIDED WORLD

Different populations grow at different rates around the world. This depends on how many children families tend to have and the **life expectancy** (number of years someone is expected to live) of people in different places. In wealthier, or **more developed countries** like the United States or Germany, the average family size is small (2 or fewer children) and the life expectancy

is close to 80. In poorer, or **less developed countries**, such as Guyana and India, the average family size is larger (2-3 children) and the life expectancy is lower (about 70 years). About 1 billion people (1/8 of the world population) live in the poorest, or **least developed countries**, where the average family size is even higher (4 children) and life expectancy is low (about 65 years). Among the countries in this economic group are Afghanistan, Sudan, and Niger.⁴

Why is there so much difference in family size and life expectancy around the world? These trends seem to be closely tied to a country's economy, which has been largely shaped by history. Some of the least developed countries today were colonies controlled by other countries (mostly in Europe) up until about 60 years ago. This history has left a lasting impact on wealth distribution, trade and government, which has, in turn, affected social services like health care and universal education. Countries with more resources are able to provide a higher level of health care for their residents, which leads to higher life expectancy, including high rates of child survival. Universal education (education for everyone) promotes better health and provides more employment options for men and women, leading to greater prosperity. If girls are able to stay in school into their teens and later, they tend to marry later and have fewer children.



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LOOKING TO THE FUTURE

The good news is that prosperity has been steadily growing around the world. Over half of the world's population is considered middle class or richer. About 1 in 10 people worldwide still live in extreme poverty, but this has fallen from 1 in 3 people in 1990.⁵ Most world population growth today is occurring in the least developed countries, where family size is largest. **Demographers** (people who study populations) currently expect world population to continue to grow through this century, reaching over 10 billion by 2100.⁶ In making **population projections**, demographers consider likely **fertility** trends (number of children born per woman), health trends, wars and the distribution of resources we need to survive, like food and water. They also look at national policies that could affect these trends, like the promotion of universal education and more economic opportunities for all.

Glossary

birth rates: the yearly number of births per 1,000 people.

death rates: the yearly number of deaths per 1,000 people.

demographer: someone who studies the characteristics of human populations.

exponential growth: a growth pattern which numbers double (multiplied by 2).

fertility: producing offspring.

finite: having limits.

Industrial Revolution: a period in history (mid 1700s through late 1800s) when there was a surge of new advances in science and technology.

industrialized: describes a country or region with built-up industries and a more modern infrastructure.

least developed countries: the poorest countries (about 48 according to the United Nations in 2016) with low incomes and poor indicators of human development (health, education, etc.)

less developed countries: poorer countries that do not produce as many goods and services as more developed countries.

life expectancy: the average number of years someone is expected to live based on current health trends.

migration: the movement of people from one geographic region to another.

more developed countries: countries with greater overall wealth. These countries tend to be more industrialized, bringing in money from producing more goods and services.

population: the number of people in a country or region.

population projection: the estimated size of a population in the future.

rate of population growth: the percentage by which a population size changes each year.

sanitation: the prevention of disease and promotion of good hygiene by maintaining clean conditions and safe drinking water.

¹McEvedy, C. and Jones, R. (1978). *Atlas of World Population History*. New York: Facts on File.

²Maddison, A. (2007). *The World Economy: Historical Statistics*, Paris: OECD Publishing.

³History.com Editors (2021, April 20). Slavery in America. Retrieved from <https://www.history.com/topics/black-history/slavery>

⁴Population Reference Bureau. (2020). *2020 World Population Data Sheet*. [Wall chart]. Retrieved April 28, 2021 from <https://interactives.prb.org/2020-wpds/>

⁵World Bank. (2021). World Development Indicators. Poverty headcount ratio at \$1.90 a day. Retrieved April 28, 2021 from <https://data.worldbank.org/indicator/SI.POV.DDAY?view=chart>

⁶United Nations Department of Economic and Social Affairs. (2019). *World Population Prospects 2019*. Retrieved April 28, 2021 from <https://population.un.org/wpp/>