Are you interested in knowing more about the other people in your community, your country and the world? Maybe learning about how many of us there are or about the many characteristics that can define us? This might include our age, gender, ethnic heritage, religion, education, political views, or jobs. Then, you probably want to learn more about demography.

Demography is the **quantitative** study of human populations. The word demography comes from two ancient Greek words, demos, meaning “the people,” and graphy, meaning “writing about or recording something” — so literally demography means “writing about the people.” A **demographer** is someone who studies a human population’s size, structure, distribution, characteristics, and changes over time.

**GATHERING DATA**

To study a population, a demographer must gather data. One of the ways this is done is through a **census**. The United States government conducts a census every ten years. Most other countries also have regularly scheduled censuses. People are surveyed by mail and in person about the size of their households, ages and other demographic information. The first known census was conducted nearly 6,000 years ago by the Babylonians. The information gathered from a census can be used to determine political representation and to assess a region’s needs for government services and facilities (think schools, hospital beds, and roads).

While data gathering can offer a snapshot of the current population, it can also help demographers make predictions about how that population might change in the future. To determine changes in population size, demographers consider the number of births and the number of deaths in a region. When the **birth rate** is higher than the **death rate**, the population grows. When the death rate is higher than the birth rate, the population shrinks. The greater the difference between the birth rate and death rate, the higher or lower that population’s growth rate will be. In most countries of the world, the birth rate is higher than the death rate, resulting in a growing population.
Our global population is growing by 1.2 percent a year, which might seem like a small amount. But, because we had over 7.4 billion people (7,400,000,000) in 2016, that 1.2 percent increase adds 80-90 million people to our global family every year.

Key indicators that demographers look at when trying to predict population growth trends are fertility and life expectancy. The fertility rate is the average number of children a woman has in her lifetime. That varies a lot around the world from a low of about one child (1.2 in Romania) to a high of over seven (7.6 in Niger). For a country to maintain the size of its current population, it must be at replacement-level fertility (roughly 2 children replacing 2 parents). A number of factors can affect how many children people choose to have, including economics, cultural traditions, education and public health. Life expectancy also varies widely from a low of 50 years (Democratic Republic of the Congo) to a high of 84 years (Japan). To predict how long people might live, demographers consider trends in overall health, disease outbreaks and wars.

LIMITS TO GROWTH
Demographers also look at where we live. Did you know that more than half of the world’s population lives in cities? Our global family of 7.4 billion isn’t evenly spaced around the globe. Instead, we cluster in areas like cities or areas with needed natural resources, like good farmland. In fact, demographers often use maps to show population density. Large, densely populated areas need lots of resources to support so many people – energy, food, water, and all sorts of services. Cities can continue to grow because resources are brought in from other places.

But what about our global population? Is there a limit to how large it can grow? Demographers collect and analyze the data on population trends, but other researchers (those who study the environment and society) consider the impacts that a growing population might have and whether there are limits to this growth. We know there are limits to the life-sustaining resources Earth can provide. In other words, there is a carrying capacity for human life on our planet.

Carrying capacity is the maximum number of a species an environment can support indefinitely. Every species has a carrying capacity, even humans. However, it is very difficult for ecologists to calculate human carrying capacity. We do not all use resources the same way. The individual decisions of every person will ultimately determine how many people the Earth can support – from the foods we eat, to our transportation habits, size of our homes, and the sources of all the goods and services we use.
Glossary

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

**carrying capacity**: the maximum number of a species an environment can support indefinitely.

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

**demographer**: someone who studies the characteristics of human populations.

**demography**: quantitative study of human populations

**ecologists**: scientists who study the interrelationships between organisms and their environments.

**fertility rate**: the average number of children a woman has in her lifetime.

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

**population density**: a measurement of population per a unit of area.

**quantitative**: relating to, measuring, or measured by the quantity of something rather than its quality.

**replacement-level fertility**: the average number of children born per woman—at which a population exactly replaces itself from one generation to the next. This rate is roughly 2.1 children per woman for most countries, although it may vary a bit depending on rates of child survival.