



TEACHER GUIDE



Four geographical regions: Where do people live?

This exercise gives students an understanding of how the world's population is distributed today and how it will be in the future. This knowledge can help students to understand matters such as the global business market and sustainable development.

Step 1 (5 min)

Explain the four geographical regions to the students.



Step 2 (20 min)

Students work in groups to learn where the world's population live today and where they will live in 2040 and 2100.



Step 3 (20 min)

Students discuss the four geographical regions and what they have learned about where people live now and where they will live in the future.



Ages: Young to adult learners

Requirements: Printed handouts so there is one per group of 5 students; 11 small props (e.g. Lego blocks) per group

Preparation time: 20 minutes

Exercise duration: Around 45 minutes (depending on the number of groups)

Subjects: Geography, sustainability, economics



About

The four geographical regions

Gapminder has simplified the world map by dividing the 197 countries (and territories) into just four regions: The Americas, Africa, Europe and Asia. Each of these regions cover a roughly equal land area (even if it does not look like it on an ordinary map).

Population pin-code

An easy way to remember where the world's population live is to memorize the numbers as a phone pin-code. For the current global population of 7 billion people the pin-code is 1-1-1-4. That means (going from west to east): 1 billion in the Americas, 1 billion in Europe, 1 billion in Africa and 4 billion in Asia.

Goal of the exercise

Introduce a simple framework that gives students an understanding of how the world's population is distributed and how this will change up to the year 2100. This knowledge can help students better understand issues such as the global business market and sustainable development. By knowing about the distribution of the world's population, they should be able to easily understand where consumption takes place and how decisions about sustainability are made.

Students will learn:

- Where the world's population live now.
- Where the world's population will live in 2040 and in 2100.

Preparation

- Read the background information section at the end of this Teacher Guide
- Watch Hans Rosling's explanation of where the people of the world are distributed today and will be in the future: www.gapminder.org/answers/where-do-people-live
- Have enough small props (e.g. Lego blocks) so that groups of around five students can each be given 11. Each prop will represent one billion people.
- Print copies of the handout so there is at least one per group.

Exercise

Step 1: Explain the four geographical regions to the students.

- A. Explain that they may already recognize the world's regions as being divided into seven continents: Africa, Antarctica, Asia, Australia, Europe, North America and South America. But that Gapminder's world map has just four regions: The Americas, Europe Africa and Asia. Each of these regions cover a roughly equal land area (even if it does not look like it on an ordinary map). This concept of four regions is a simplification designed to aid students' understanding of where people live in the world.

Step 2: Students work in groups to learn where the world's population live today and where they will live in 2040 and 2100.

Part 1: where the world's population live today

- A. Ask the students to sit in small groups. Give each group the printed handout and seven props (eg. Lego blocks). Let the students discuss where they think the seven billion people live and ask them to place the seven props on the four regions of the map.
- B. Let the groups show each other where they have placed their prop.
- C. Present the correct answer. Show on a map what it looks like in reality and let the groups that had wrong answers change on their maps so all seven props are in the right places. Tell the students that they can remember this by learning the pin code 1-1-1-4. That means (going from west to east): 1 billion in the Americas, 1 billion in Europe, 1 billion in Africa and 4 billion in Asia.
- D. Comfort them. If the groups got the answer wrong (which is likely), you can comfort them with the knowledge that they are far from alone. When Gapminder surveyed 12,000 people in 14 countries, only 28% of people got the answer right. Many of those surveyed put a billion too many people in Africa.

Part two: where the world's population will live in 2040

- A. The United Nations estimate that the world population will have grown to be 9 billion by 2040.
- B. Where will those additional 2 billion people live? Give each group two more of the small props and ask them to guess and place them on their maps.
- C. Let the groups show each other where they have placed the two billion new people.
- D. Present the correct answer. Show on a map where the United Nations experts predict the world population will live in 2040. Tell the students the new pin code for the world in 2040 is: 1-1-2-5. That means: 1 billion in the Americas, 1 billion in Europe, 2 billion in Africa and 5 billion in Asia. Let the groups that were wrong change on their maps.

Part three: where the world's population will live in 2100

- A. The United Nations estimates that the world's population will be 11 billion by the year 2100. Give every group two more props and ask them to guess and place them on their world maps.
- B. Let the groups show each other where they have placed the two additional props.
- C. Present the correct answer. Show on a map where the United Nations experts predict where the world population will live in 2100. Tell the students the new pin code for the world in 2100 is: 1-1-4-5. That means: 1 billion in the Americas, 1 billion in Europe, 4 billion in Africa and 5 billion in Asia. Let the groups that were wrong change on their maps.

Step 3: Students discuss the four geographical regions and what they have learned about where people live now and in the future.

- A. Now the students know where people live today and are predicted to in the future. Ask them to discuss in groups: Why is it important to know where people live today? Why is it important to know where people will live in the future? If they need some help to get the discussion started, ask them to think about issues like the global economy, trade and sustainable development.
- B. Bring the whole class together to share their concluding thoughts and reflections, before summing up what they have learnt and why in a few sentences.



Watch Hans Rosling explain where people live

Show the students the film of Hans Rosling explaining where people live in the world today and where they are most likely to live in the future. In this 2-minute film, he also details why it is important for people to know this information. www.gapminder.org/answers/where-do-people-live

The four regions of the world



Background Information

Why did Gapminder divide the world into four regions?

We are trying to make the world easier to understand. It makes sense that organizations like the United Nations and World Bank divide the world differently. Schools often teach students the seven continents, of course. But for our purposes, having just four colour-coded regions is simple and easy to remember. Using the same colors for the four regions in all our visualizations also helps students to understand regional similarities and differences quickly.

The population of the world in 2019 is 7 billion people. What's the pin-code Gapminder uses as an easy way of remembering where the world's population live?

1-1-1-4. That means: 1 billion people in the Americas, 1 billion in Europe, 1 billion in Africa and 4 billion in Asia. All of the pin codes use that same order, starting west at the Americas and moving east to Asia. All numbers are rounded for simplicity.

The pin-code will change every time the world's population increases by a billion people. That will happen four times before 2100. What years will the pin-codes change and what they will be?

- 2020: 1-1-1-5
- 2025: 1-1-2-5
- 2050: 1-1-3-5
- 2073: 1-1-4-5

Why is it important to know about the changing pin-code?

Where people will live will affect:

- where the center of the world business market will be located.
- what languages to learn.
- the demand for resources.
- where the majority of decisions and actions in relation to sustainable development, probably will take place in the future.
- where investment should be targeted.

Description of the United Nations population forecasts up to 2100.

The United Nations forecast that by 2100 the population will increase to 11 billion from the current 7.6 billion. It's not because women will have more babies. The average number of babies per woman is actually expected to drop to 2. And most of the predicted population increase won't be because of more old people either.

Only 1 billion of the extra 4 billion will be because of people living longer lives, the United Nations experts say. Most of the expected population growth will come from today's children becoming adults. It's called the fill-up effect. Hans Rosling explains more here: www.gapminder.org/videos-page/the-fill-up

The United Nations says that population growth will slow down as we reach the end of the century. Of course, forecasts aren't a 100% guarantee of something happening in practice, but these population forecasts have proven to be very reliable in the past.

Why should we have any confidence that United Nations population forecasts that look 50 years into the future will be correct? Weather forecasts and stock market predictions that look only one week ahead are often completely wrong.

The reliability of forecasts depends on how uncertain the variables are. The stock market is volatile and moves quickly. One bad set of results from a company or even one unusual trade can set off a rapid, unpredictable chain of events. There is a huge number of variables when it comes to predicting the weather as it moves over a continent and changes according to air pressure, temperature and moisture.

Population forecasts are way more certain because they depend on three things: age, births and deaths. During a fifty year period, a demographic model only has to be roughly correct in predicting: how old people will be, which is extremely predictable; how many children parents will choose to have, which is quite predictable and what share of people will die at different ages, which is also very predictable.

Additional material

- If you would like to dig into this subject further, Gapminder has more information you can access via our website, www.gapminder.org
- Hans Rosling's short video explainers: www.gapminder.org/answers
- Interactive tools: www.gapminder.org/tools
- Videos of our talks, interviews and TV documentaries: www.gapminder.org/videos
- The original source of material is the United Nations and its World Population Prospects, which you can explore here: population.un.org/wpp



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