

GCSE Geography A – J382

Population change – opportunities and challenges

Instructions and answers for teachers

These instructions should accompany the OCR resource 'Population change' activity which supports OCR GCSE Geography A.

Name of issue	Description of change	Opportunities and challenges
Ageing population		
Fewer dependents for people of working age		
More dependents for people of working age		
Population change by continent		
Most populated country?		
Declining populations		
Fast growing populations		

The Activity:

This lesson element focuses on the topic of Population Change, and the impacts it can have. The resource provides suggestion of activities to support students in developing their data handling skills.



This activity offers an opportunity for English skills development.



This activity offers an opportunity for maths skills development.

Associated materials:

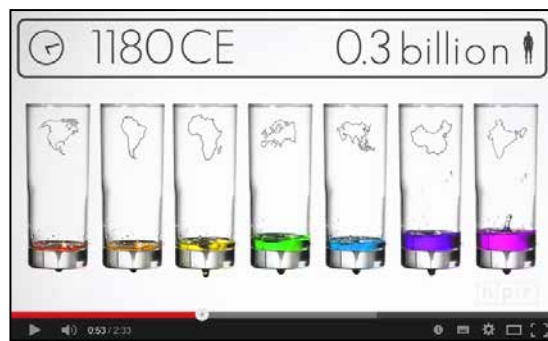
'Population Change' Lesson Element learner activity sheet.

Introduction

This lesson element focuses on the topic of Population Change, and the impacts it can have. The resource provides suggestion of activities to support students in developing their data handling skills.

Starter

Introduce the topic of world population growth with either of these videos



<https://www.youtube.com/watch?v=d1dIAtvSFLM> or <https://www.youtube.com/watch?v=VcSX4ytEfcE>

Introduce new information

There are a number of ways in which population could change between now and 2050. Display around the classroom the “[Population Change](#)” information cards. Ask the students to complete the “Description of change” column on the activity sheet “[Population Change – opportunities and challenges](#)”.

Big picture link

Introduction to “Issues in our fast changing world – population change”, p.23 of OCR Geography A J382 specification (<http://www.ocr.org.uk/Images/82576-specification.pdf>)

Development

Working in groups, students use the different “Population Change” information cards, the internet and any existing resources the school has, to research and produce an infographic on their population issue. Give/show students the provided below information sheet “[What is an Infographic](#)”.

When producing the infographic students should include:

- The title of your issue
- A short description of the population change in your issue
- What opportunities might this issue create in the future?
- What challenges might this issue create in the future?

Once completed, each group's infographic can be peer assessed. Ask students what assessment criteria would be appropriate?

Consolidation

Students look at each infographic and use these to complete the last column on the learner activity sheet "[Population Change – opportunities and challenges](#)".

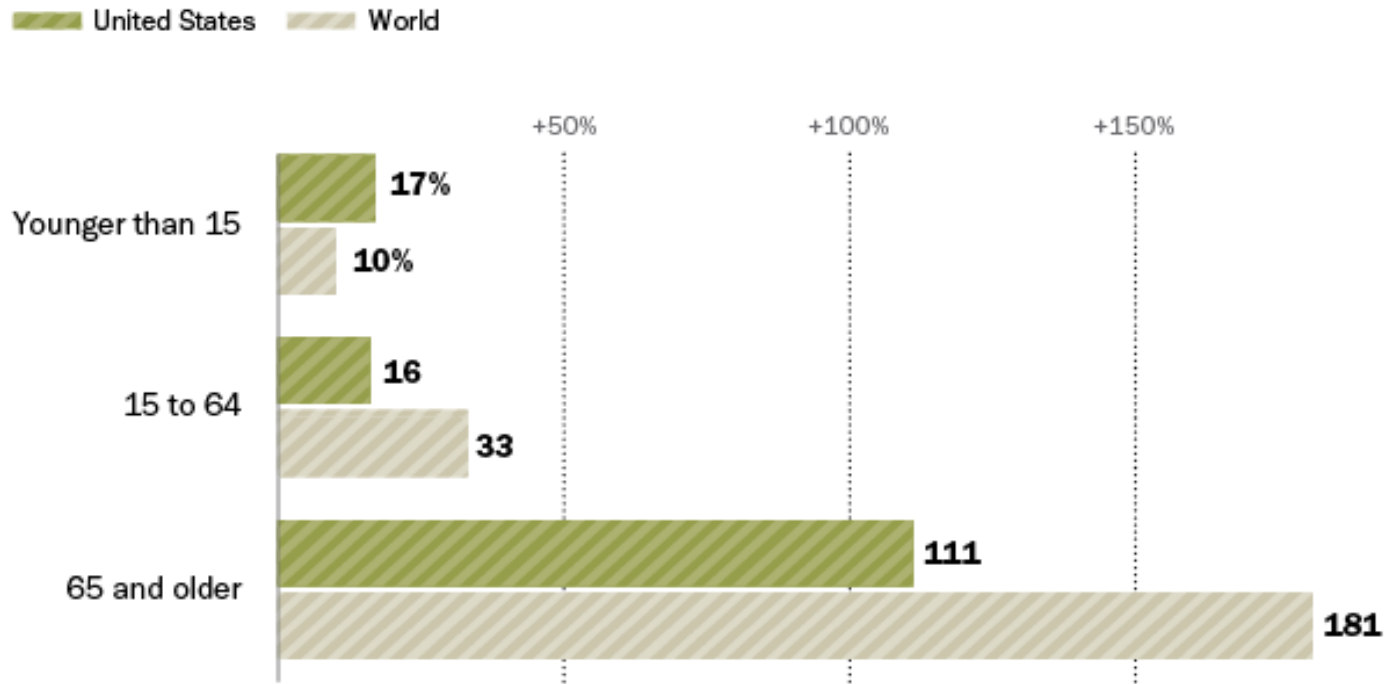
Plenary

Students could look at the enquiry questions on p.23 of the specification. In groups students decide which of the population issues they have researched will allow them to explore these in more detail – each group has to justify their choice.

Population Issue – ageing population

The global population is getting older: The number of people 65 and older is projected to triple by mid-century, from 531 million in 2010 to 1.5 billion in 2050. In the U.S., the population of seniors is expected to slightly more than double, from 41 to 86 million.

Estimated percent change in population, 2010 to 2050, by age, in the world and the U.S.



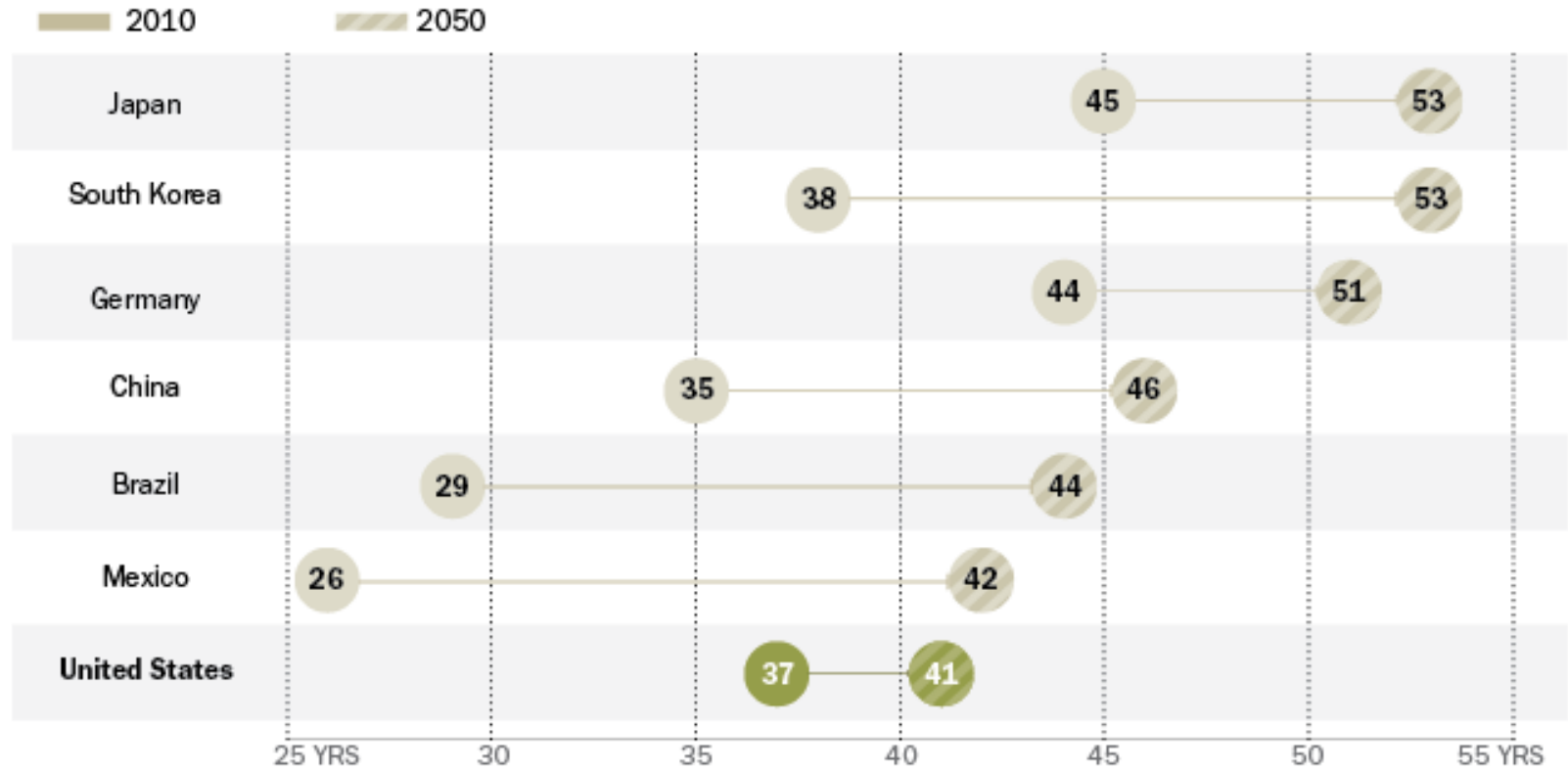
Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, <http://esa.un.org/unpd/wpp/index.htm>

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Who will be among the oldest?

By 2050, the majority of people in Japan, South Korea and Germany are expected to be older than 50. Some Latin American countries, which are now younger than the U.S., will likely be older than the U.S. by 2050.

Estimated median age in selected countries, 2010 and 2050



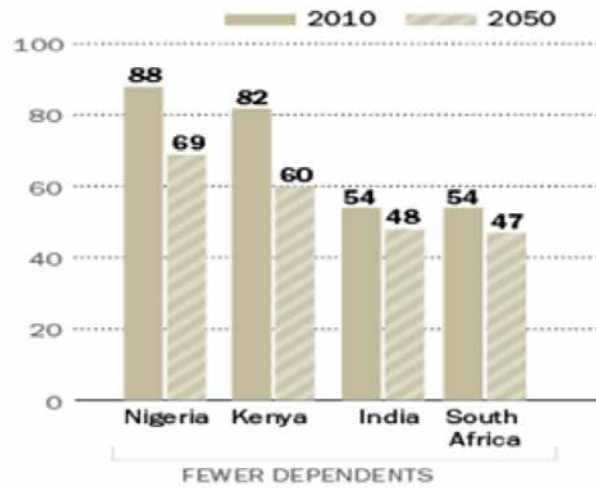
Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, <http://esa.un.org/unpd/wpp/index.htm>

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Population issue – fewer dependents for people of working age

Workers in countries such as India and several major African nations will likely have to support fewer dependents and the birth rates in these countries is falling.

Number of dependents (younger than 15 and 65 and older) for every 100 people of working age (15-64)



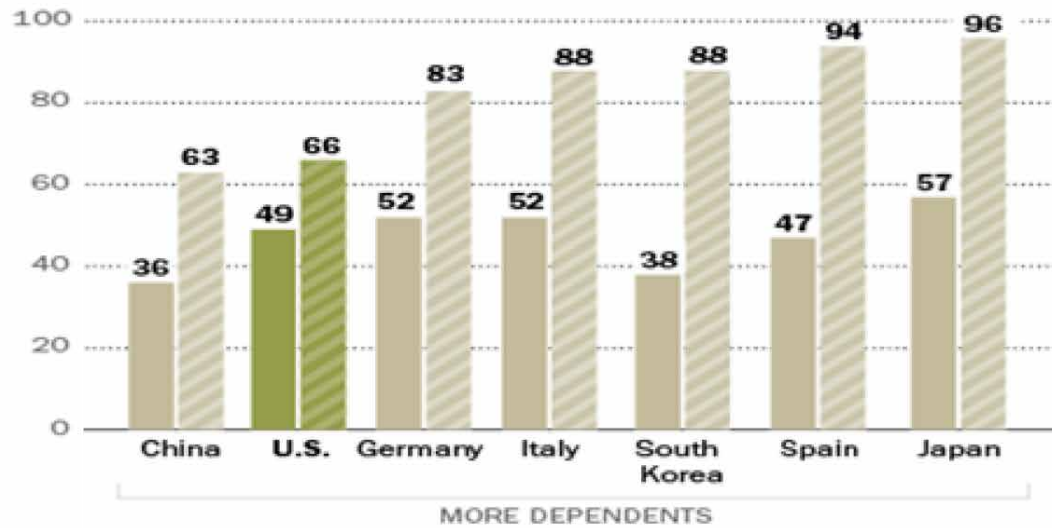
Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, <http://esa.un.org/unpd/wpp/index.htm>

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Population issue – more dependents for people of working age

As populations in some countries age, age, working-age people in the developed world may have to support more dependents.

Number of dependents (younger than 15 and 65 and older) for every 100 people of working age (15-64)



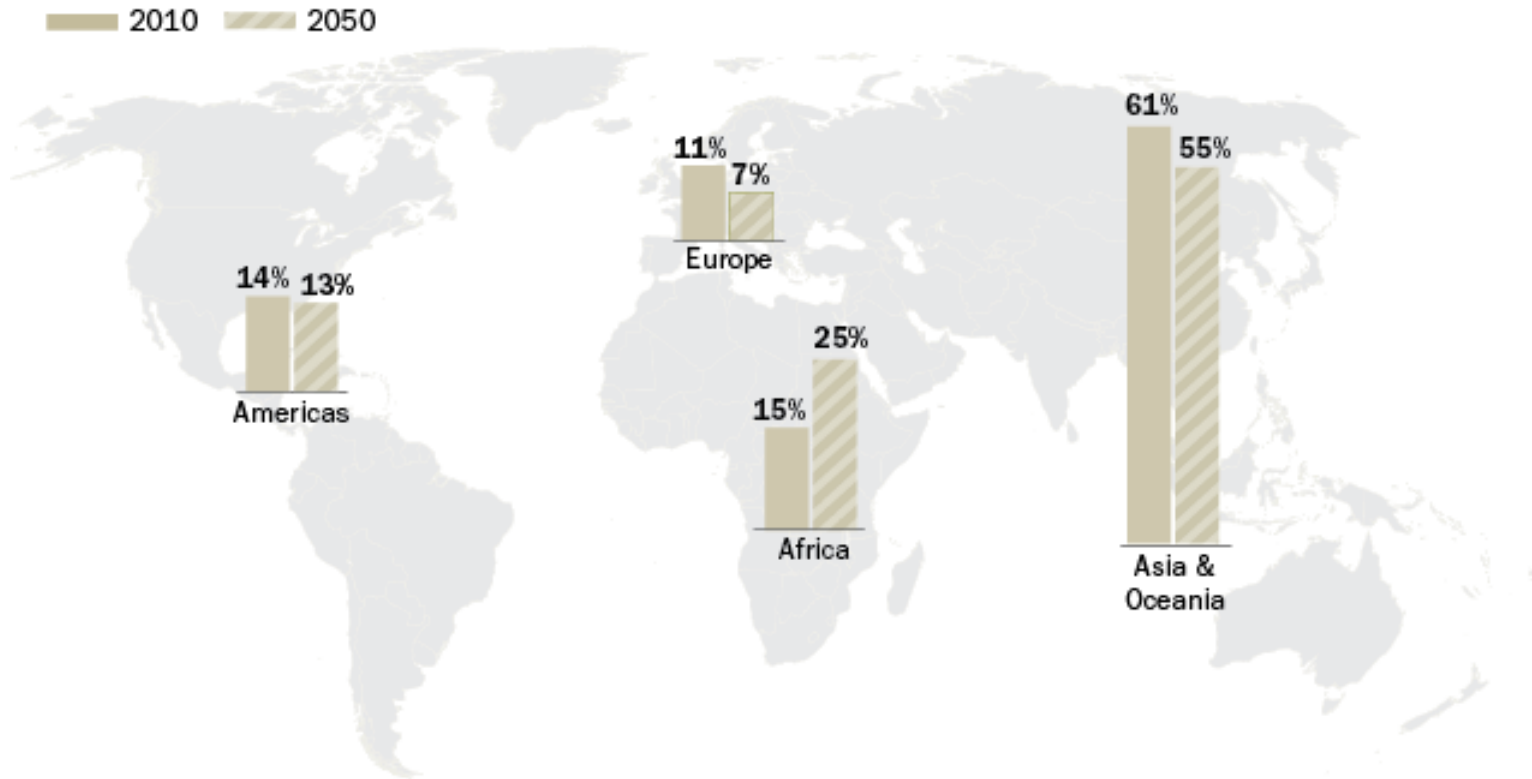
Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, <http://esa.un.org/unpd/wpp/index.htm>

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Population change by continent

A population shift to Africa: Africa's population is projected to increase the most and make up a greater share of the global population by 2050. The shares of Europe and Asia in the global population are expected to decrease, while the Americas will hold steady.

Regional distribution of global population by region, 2010 and 2050



Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, <http://esa.un.org/unpd/wpp/index.htm>

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Most populated country?

India replaces China as the world's most populous country: India's population is expected to increase by 400 million by 2050. Its projected population of 1.6 billion will be almost equal to the populations of the U.S. and China combined. China is projected to add only 25 million residents.

Estimated population of U.S., China and India, 2010 and 2050



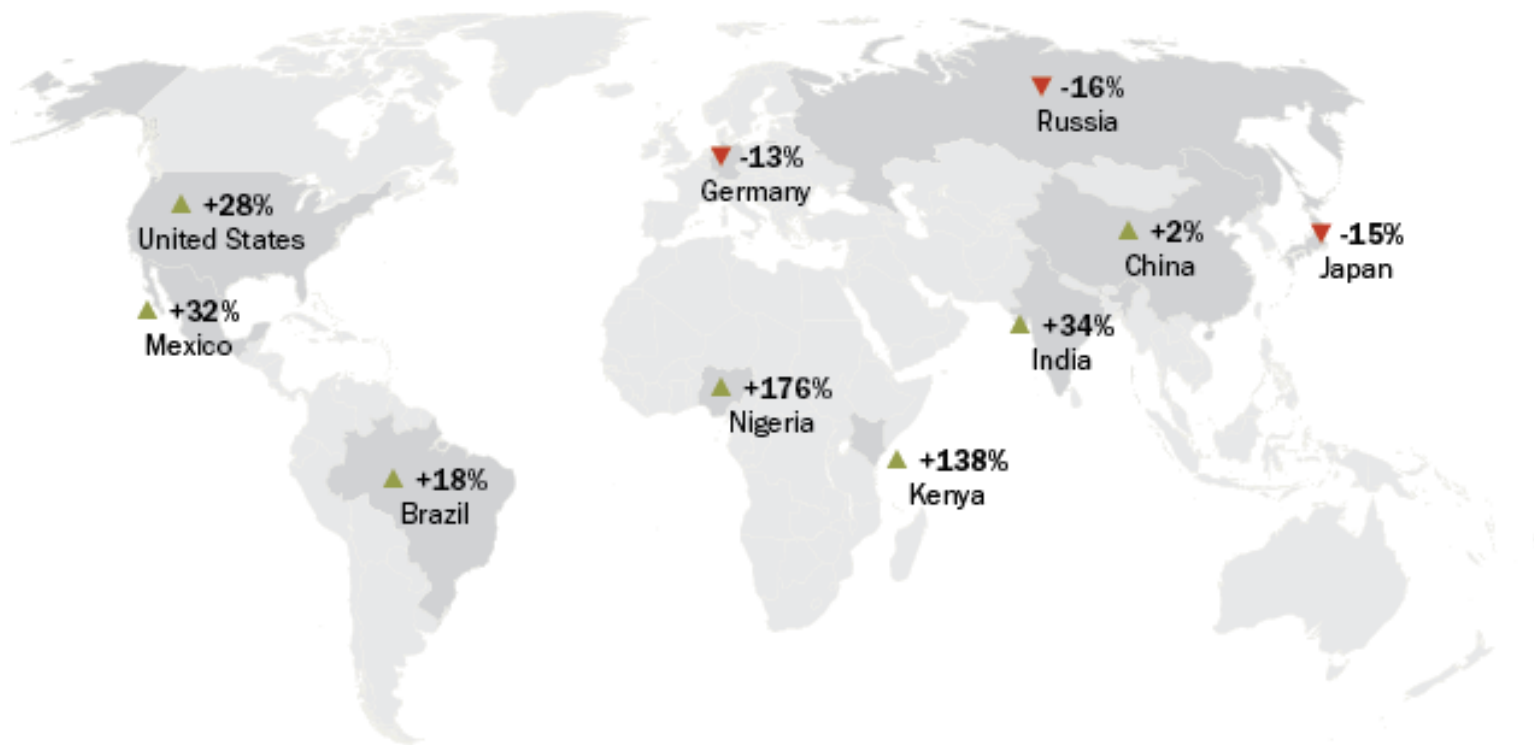
Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, <http://esa.un.org/unpd/wpp/index.htm>

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Declining populations

Population losers: The populations of Japan, Russia and Germany are expected to decrease by more than 10% by 2050. For Japan, this means a loss of 19 million residents; for Russia, 23 million; and for Germany, 10 million.

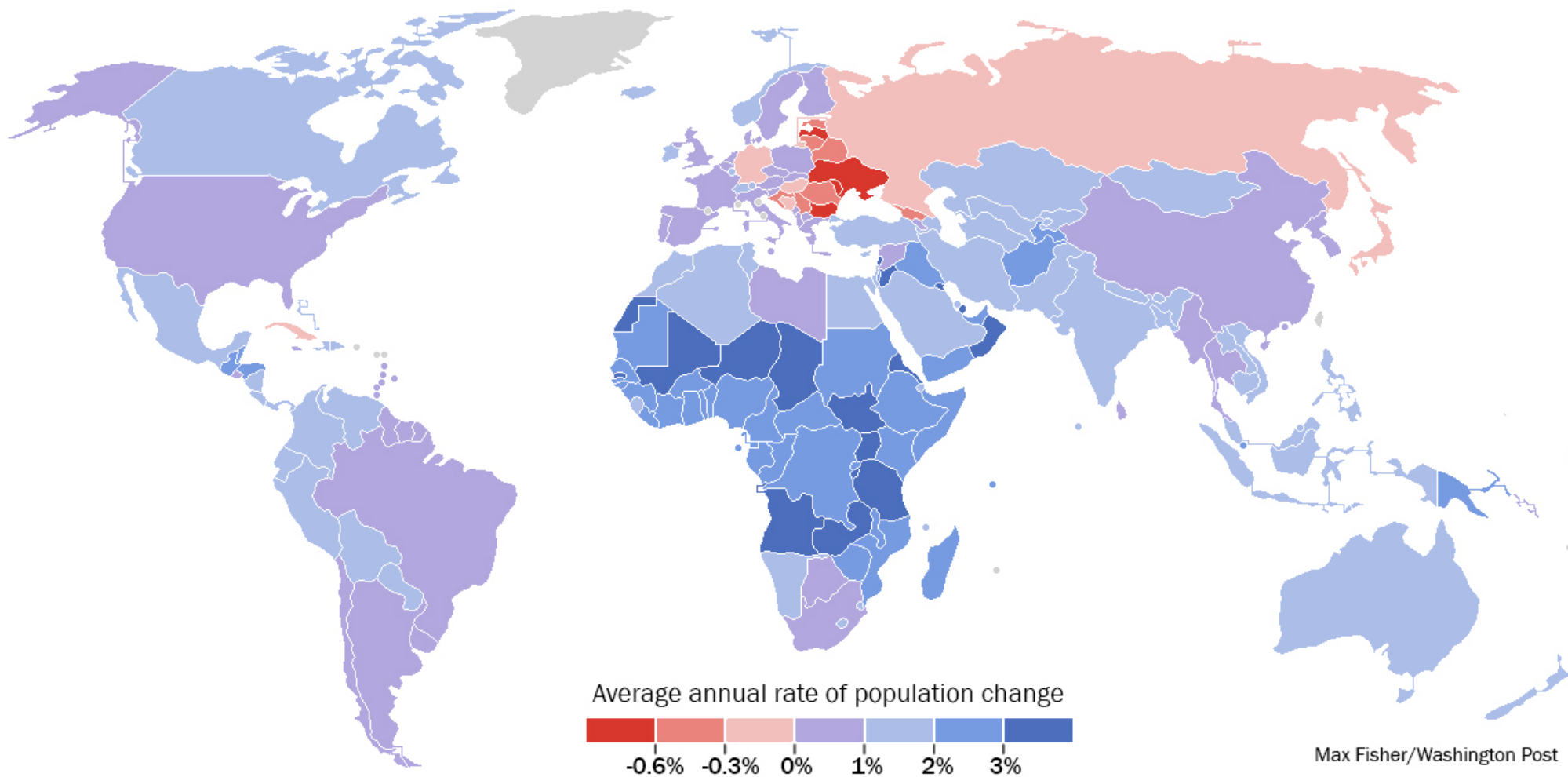
Estimated change in population for selected countries, 2010 to 2050



Source: United Nations, Department of Economic and Social Affairs, *World Population Prospects: 2012 Revision*, June 2013, <http://esa.un.org/unpd/wpp/index.htm>

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Fast growing populations



How to make an infographic

How to Make an Infographic

What is an Infographic?

Infographics are visual representations of knowledge, concepts, and data that are used to present information quickly and clearly.

Brainstorm

Think about your intended viewers and the things they find interesting.



An infographic (or “information graphic”) is a visual representation of knowledge, concepts, data, or just general stuff. Infographics are used to **present information quickly and clearly**, in an appealing visual format.



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