Introduction

What is geography?

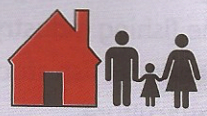
You might think that geography is just about learning the names of countries, the highest mountains and the longest rivers. These things are useful to know, but geography includes much more than that!

Geography looks at the **relationship between humans and their physical environment**. We can divide the subject into two parts:

PHYSICAL GEOGRAPHY

- landscape and vegetation
- climate and weather
- water (seas, oceans, lakes, rivers and glaciers)
- natural hazards, including volcanoes and earthquakes

HUMAN GEOGRAPHY

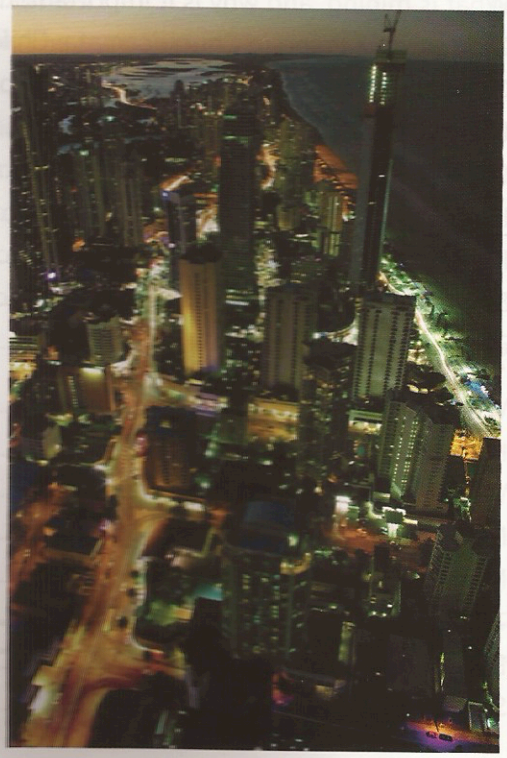


- where people live
- how people live
- human cultures and societies
- economics
- demographics (the study of population and migration)

Nevertheless, human geography and physical geography are **not two completely different subjects** - they are **related in lots of ways**. You will find out much more about these relationships in this book. We will look at:

- how **physical factors** like climate, water supply and landscape affect where people live and where they choose to build towns and cities
- how human societies are organised in **states**, and the **international relations** between these states
- the **economy** and the **impact of economic activity on people and the environment**; agriculture, fishing, forestry, mining, manufacturing, construction and services all affect where towns are built and how people live, as well as changing the landscape, causing pollution and using up natural resources
- **population and migration**, and how the world's growing population is increasing pressure on the natural environment
- **globalisation** and the **challenges** facing us in the world today

Throughout the book, we will focus on **the effects on people's lives and the natural environment**. To do this, we will look at various **case studies** (see the box below).



Gold Coast, Australia

CASE STUDIES

Geographers often study a specific example of a process or situation. This is called a **case study** – it allows us to study the example in detail, and look at all of the issues involved. We can apply what we learn from the case study to other similar situations.

Exercise 1

1 3 5 7

One of the most important parts of geography is studying **landscapes**. Landscapes include **natural elements** and **human elements**.

Look at the picture above of the gold coast:

- What natural element(s) can you see?
- What human element(s) can you see?

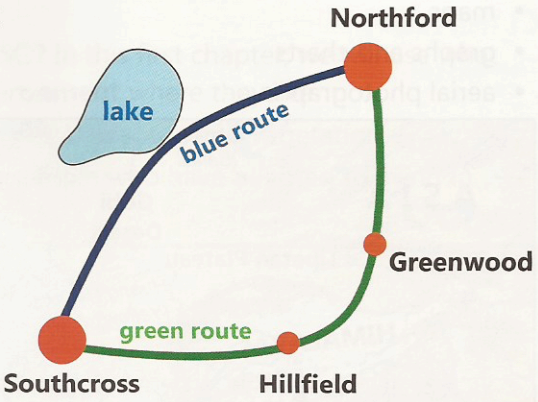
Do the same thing for the pictures on the front and back covers of this book.

What do geographers do?

You might not realise it, but **geographers are everywhere**. For example, they analyse data on earthquakes, prepare weather forecasts, organise emergency aid after a natural disaster, plan for the impacts of climate change and advise governments on economics.

Let's look at an example of **how geography is used**. The government wants to build a **new road** between Southcross and Northford. There are two possible routes for the road. The government needs to decide **whether to build the road** and, if so, **which is the best route**. It receives specialist reports on:

- **geology:** how the soil and rock types will affect the construction of the road
- **town planning:** how the new road will affect the towns and villages that it will go through
- **freshwater lake ecosystems:** the environmental impact of the road on the lake
- **other environmental impacts:** the impact of the road on the landscape and on wildlife habitats
- **traffic impacts:** how much traffic will use the road and what journeys people will make
- **economics:** an assessment of the economic benefits of the road and whether it is good value for money



In order to make a decision, the government needs to **use geography**: it looks at all of the information from the specialist reports, and takes into account all of the human and physical factors. This allows it to decide **which is the best option overall:** whether the road should be built, and, if so, which is the best route.

New Road - Reports

Geology: the blue route is easier and cheaper to construct because the soil type is better.

Town planning: the green route would be very bad for the villages of Hillfield and Greenwood, due to extra traffic. The blue route is better.

Freshwater lake ecosystems: the blue route would cause pollution in the lake and kill fish.

Other environmental impacts: both routes would affect the landscape and wildlife.

Traffic impacts: the blue route is faster - more people will use it.

Economics: as more people will use the blue route, it has greater economic benefits. It is also cheaper to build, so it is better value for money.

Exercise 2 1 3 5 8

Work in pairs. Look at the reports on the impacts of the two possible routes for the new road.

What would you recommend to the government? Why?

You can either: recommend the blue route; recommend the green route; or recommend that neither route is built.

VICKY AND JOHN

This book covers many quite complicated issues. Luckily we have **Vicky** and **John** to help us. Vicky and John both studied geography, but they have very different careers, as you can see from their CVs.

CV - Vicky

Nationality: British
Current address: Brussels, Belgium
Education: MA in Economic Geography
Current employment:
Economic consultant
Previous jobs:
Chief economist at a solar power company
Economic advisor to an oil company
Economic advisor to an agricultural association

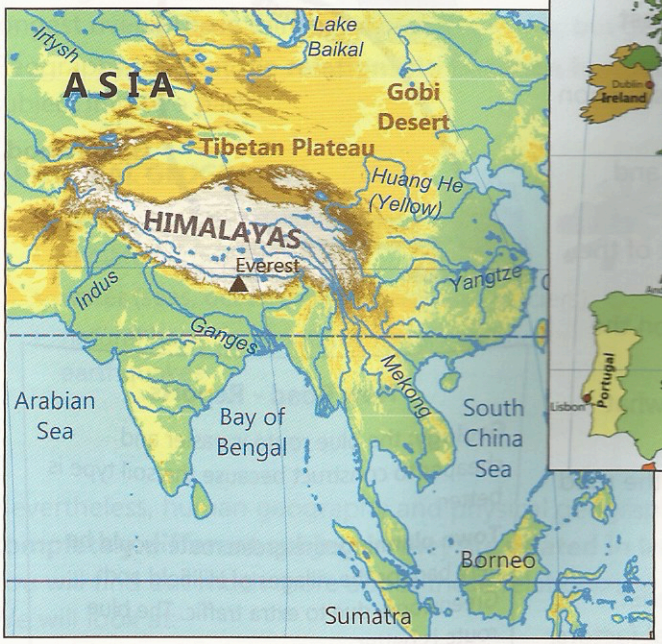
CV - John

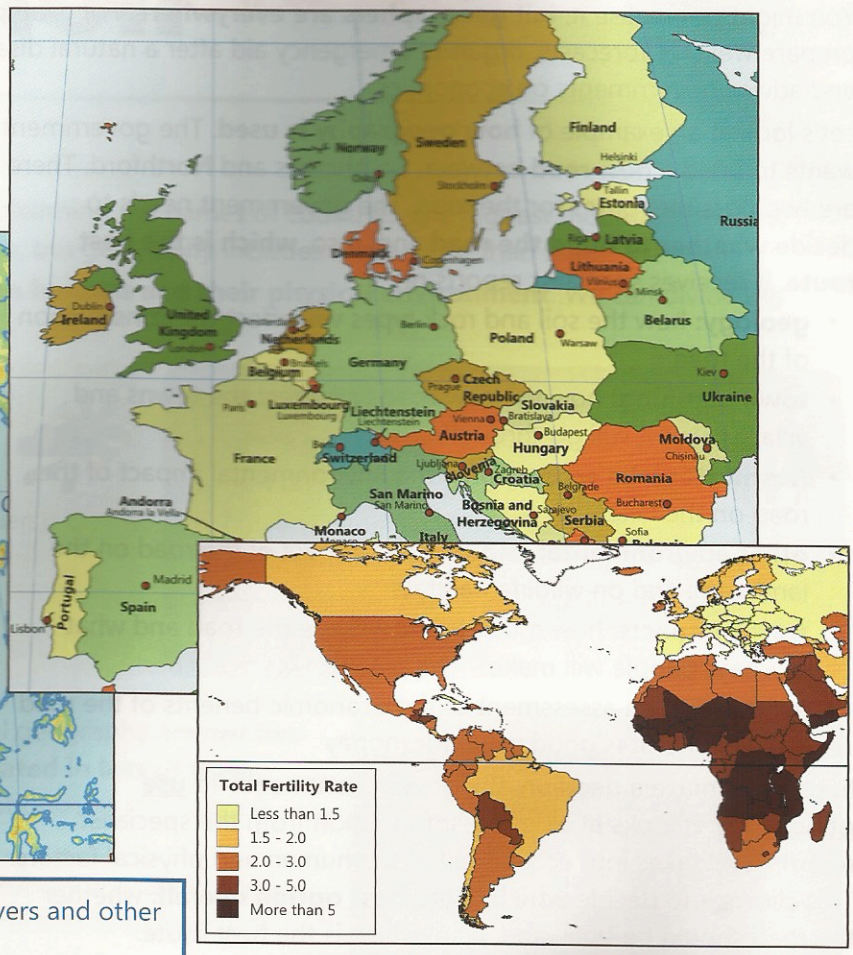
Nationality: Australian
Current address: Geneva, Switzerland
Education: MA in Environmental Geography
Current employment:
International development specialist
Previous jobs:
Sustainable development officer
Environmental officer
International aid worker

Tools of the geographer

Geographers use various **tools** to help them study human activity and the physical environment. The most important ones are:

- maps
- graphs and charts
- aerial photographs

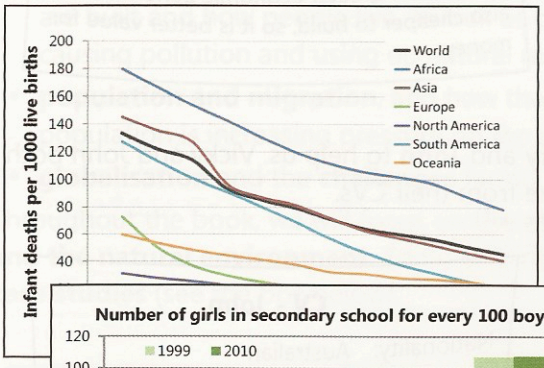


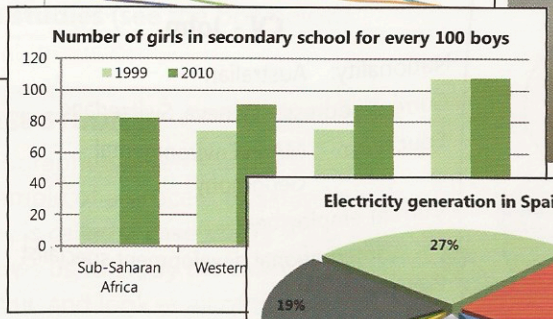


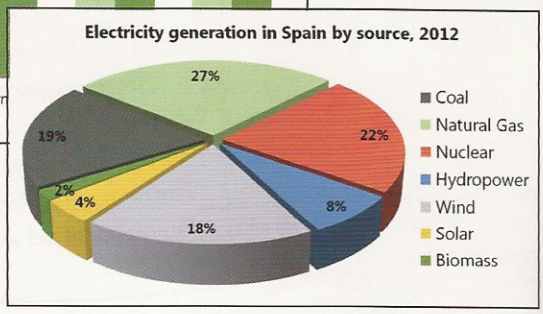
Physical maps show altitudes, mountains, rivers and other physical features (see above).

Political maps show features that are created by humans, such as country boundaries and cities (see top right).

Thematic maps show how the values of specific indicators change with location. For example, the map on the right shows the total fertility rate for different countries.







Aerial photos, including satellite photos, can show the impact of humans on the landscape. These examples show the impact of deforestation (above) and mining (left).

Graphs and charts can be used to:

- compare different things
- look at changes through time

The most common types are **bar charts**, **line graphs** and **pie charts**.