

CONTENTS

HOW TO USE THE STUDENT BOOK	vi	5.5	Mass movements	102
HOW TO USE THE TEACHER COMPANION	viii	5.6	Mudslides	104
DIGITAL RESOURCES	x	5.7	Avalanches	106
GEOGRAPHICAL SKILLS AND TOOLS	xi	5.8	Living in areas of risk	108
ACKNOWLEDGEMENTS	xiv	5.9	Investigating a geomorphic hazard	110
<hr/>				
PART A				
GEOGRAPHY'S TOOLS AND SKILLS				
CHAPTER 1 Geography's tools and skills	2			
1.1 What is Geography?	4			
1.2 Types of environments	6			
1.3 Types of maps	8			
1.4 Elements of maps	10			
1.5 Grid and area references	12			
1.6 Topography and relief maps	14			
1.7 Topographic maps	16			
1.8 Drawing cross-sections	18			
1.9 Latitude and longitude	20			
<hr/>				
PART B				
LANDSCAPES AND LANDFORMS				
CHAPTER 2 Landscapes and landforms	22			
2.1 Landscapes and landforms explained	24			
2.2 The changing earth	26			
2.3 Rocks and the rock cycle	30			
2.4 Mountain building	32			
2.5 Weathering, erosion and deposition	34			
2.6 Valuing landscapes	38			
2.7 Landscapes and national identity	40			
2.8 Indigenous explanations of landscapes	42			
CHAPTER 3 Landscape change, management and protection	46			
3.1 Landscapes—human impacts	48			
3.2 CASE STUDY: Coastal landscape degradation	52			
3.3 Protecting landscapes	56			
3.4 Indigenous land management	58			
3.5 Australia's national parks	60			
3.6 Australia's alpine national parks	64			
3.7 World Heritage listing	66			
3.8 CASE STUDY: Machu Picchu	70			
CHAPTER 4 Coastal landforms	72			
4.1 Processes shaping coastlines	74			
4.2 Erosional landforms	78			
4.3 Depositional landforms	80			
4.4 Managing coastal landscapes	82			
4.5 IN THE FIELD: Investigating coasts	86			
CHAPTER 5 Geomorphic hazards	90			
5.1 Earthquakes	92			
5.2 CASE STUDY: Asia's tsunamis	94			
5.3 Volcanoes	96			
5.4 Volcanoes transforming landscapes	98			
<hr/>				
PART C				
PLACE AND LIVEABILITY				
CHAPTER 6 Liveability	112			
6.1 Deciding where to live	114			
6.2 Liveability of places	116			
6.3 Sense of place	118			
6.4 Perceptions of liveability	122			
6.5 Attachment to Country	124			
6.6 Environmental quality and liveability	128			
6.7 Access to services	130			
6.8 Social connectedness	132			
6.9 Measuring liveability	134			
6.10 IN THE FIELD: Investigating neighbourhoods	136			
6.11 Urban, rural or remote	140			
6.12 CASE STUDY: Barangaroo	142			
6.13 CASE STUDY: Gerringong	144			
6.14 CASE STUDY: Paraburdoo	148			
CHAPTER 7 Enhancing liveability	150			
7.1 Methods of enhancing liveability	152			
7.2 Taking action	154			
7.3 Better cities	156			
7.4 Urban housing densities	160			
7.5 Urban consolidation	162			
7.6 Transport and cities	164			
7.7 Better shopping centres	166			
7.8 Better recreational spaces and schools	168			
<hr/>				
PART D				
WATER IN THE WORLD				
CHAPTER 8 Water: A renewable natural resource	172			
8.1 The importance of water	174			
8.2 Weather and climate	176			
8.3 The water cycle	180			
8.4 Precipitation	182			
8.5 Distribution of water	186			
8.6 Catchments	188			
8.7 Groundwater	190			
8.8 Water use	194			
8.9 Water footprint	196			
8.10 Virtual water	198			
8.11 CASE STUDY: The importance of water: Indigenous communities	200			
8.12 CASE STUDY: The importance of water: Sayan village, Bali	202			

CHAPTER 9	Australia's water resources	204
9.1	Australia's weather and climate	206
9.2	IN THE FIELD: Measuring weather	210
9.3	Water in Australia	214
9.4	Water supply in Australia	216
9.5	Water management in Australia	218
9.6	CASE STUDY: The Murray–Darling Basin	220

CHAPTER 10	Water scarcity and management	224
10.1	Water scarcity	226
10.2	Access to clean water	228
10.3	Africa: Managing water resources	232
10.4	Increasing water supply	234
10.5	Big dam projects	238
10.6	Reducing household water use	240

CHAPTER 11	Atmospheric and hydrological hazards	242
11.1	Hazards and disasters	244
11.2	Severe storms	248
11.3	Tropical cyclones	252
11.4	Tornadoes	256
11.5	Flooding	260
11.6	Heatwaves	264
11.7	Drought	266
11.8	CASE STUDY: Drought in Australia	268
11.9	Responding to hazards	272
11.10	Investigating an atmospheric or hydrological hazard	274

PART E INTERCONNECTIONS

CHAPTER 12	Personal connections	276
12.1	Perception and use of places	278
12.2	Place making	282
12.3	Places and identity	284
12.4	Impact of people on places	286
12.5	Cultural diffusion and adaptation	288
12.6	Travel: Expanding personal geographies	292
12.7	Australia's tourism industry	296
12.8	Impacts of tourism on Bali, Indonesia	300
12.9	Sport	302
12.10	Sporting events and places	304

CHAPTER 13	Technology connecting people and places	308
13.1	Staying connected via transport	310
13.2	Staying connected via ICTs	312
13.3	Real space versus virtual space	316
13.4	Accessing goods and services	318
13.5	CASE STUDY: Using ICT in developing countries	320

CHAPTER 14	Production, consumption and trade	322
14.1	The changing geography of production	324
14.2	Global production and consumption	328
14.3	Patterns of production and consumption	332
14.4	Trade: Connecting people and places	334
14.5	Australia's trading connections	336
14.6	Electronic consumer goods	340
14.7	Silicon Valley	342
14.8	CASE STUDY: Designing for the world —Cupertino, USA	346
14.9	CASE STUDY: Apple Inc.	348
14.10	CASE STUDY: Shenzhen: The world's factory	350
14.11	Fast fashion's global reach	352
14.12	Exploitation of workers	356
14.13	The hazards of electronic waste	358

ONLINE CHAPTERS

CHAPTER 15	Alpine landforms	362
15.1	Alpine landscapes	364
15.2	Glacial landforms and processes	366
15.3	Alpine ecosystems	370
15.4	Managing Australia's alpine environments	372
CHAPTER 16	Riverine landforms	376
16.1	Rivers	378
16.2	Types of riverine landforms	382
16.3	IN THE FIELD: Investigating rivers	386
16.4	People's impact on rivers	390
16.5	CASE STUDY: Bow River catchment	394

CHAPTER 17	Desert landforms	398
17.1	Deserts	400
17.2	Desert landforms	404
17.3	CASE STUDY: The Sahara	406
17.4	Australian deserts	410
17.5	Desertification	414

CHAPTER 18	Geoskills	416
18.1	Photographs	418
18.2	Satellite images	420
18.3	Climate graphs	422
18.4	Weather maps	424
18.5	Landscape photos	426
18.6	Population pyramids	428

CHAPTER 19	Extension tasks	430
-------------------	------------------------	------------

INDEX	437
--------------	------------

How to use the Student Book

Pearson Geography New South Wales is fully aligned to the BOSTES NSW Syllabus—Geography. Units combine content and geographical tools. The following information outlines the features of the Student Book.

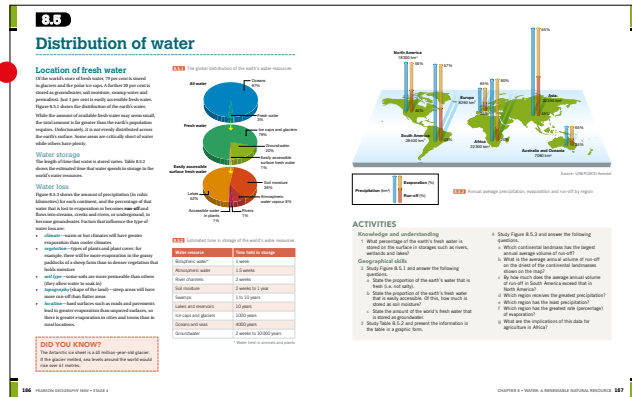
Chapter opener

The chapter opener image is designed to engage students and provide a visual stimulus to the chapter themes. Also included are an introduction to the chapter and inquiry questions that link the chapter to the BOSTES NSW Syllabus—Geography. A glossary provides a ready reference for students to the key concepts and terms in the chapter.



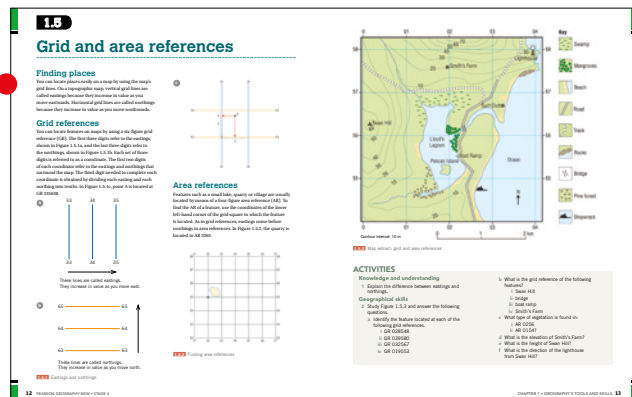
Units

Each chapter of the Student Book is divided into units. Units have been written to develop students' knowledge and understanding of the concepts, skills and processes central to the study of Geography at this level. 'Knowledge and Understanding' and 'Inquiry and Skills' are interrelated, as specified by the BOSTES NSW Syllabus—Geography.



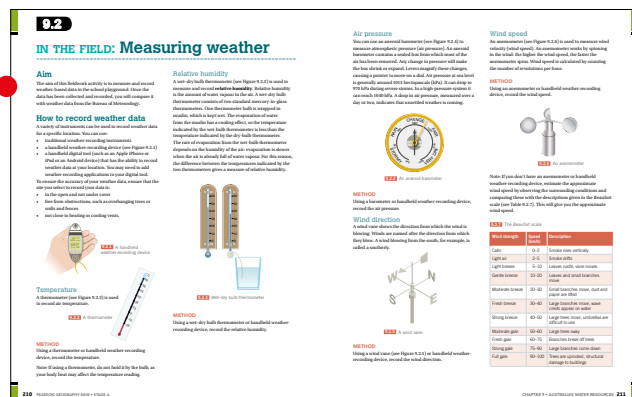
Geographical tools and skills

Units are designed to improve students' geographical skills. These skills relate to the tools in the BOSTES NSW Syllabus—Geography.



In the field

'In the field' units provide a step-by-step guide to undertaking and evaluating fieldwork. 'In the field' units have been written as a guide and are not tied to a specific location.



How to use the Teacher Companion

Pearson Geography New South Wales Stage 4 Teacher Companion is designed to support the implementation of the new BOSTES NSW Syllabus—Geography. Key features include the following:

- pages from the Student Book with wraparound notes
- teacher notes, hints, ideas and learning strategies
- pre-planning and programming advice
- tailored support for EAL/D students
- answers to questions and activities
- links to teacher and student support
- multiple intelligences identification.

A wide range of teaching and learning strategies is provided in each unit. Features have also been categorised according to the strand they primarily support (note that some features may support more than one strand):

- Geographical knowledge and understanding
- Geographical inquiry and skills
- Geographical values and attitudes.

Features also support teachers integrating ACARA and BOSTES NSW:

- Learning across the curriculum: general capabilities, cross-curricular priorities and identified important learning areas
- Geographical concepts and tools.

Chapter opening

Each chapter opens with a 'Chapter overview', which includes the following sections.

- 'What's coming up' provides a snapshot of the chapter and looks ahead to the content covered, the chapter's central points and how the practical activities fit into the unit.
- 'Using the image' provides ideas for using visual stimuli to promote greater understanding and interest or active engagement in content.
- 'Pre-quiz' with answers serves as an introductory activity for teachers to test students' prior knowledge of some key concepts that will be covered within the chapter.
- 'Getting started' provides tips and ideas on introducing the main themes and topics in the chapter by suggesting a starter activity.
- 'EAL/D support' gives ideas and suggestions on how to support EAL/D learners.
- 'Resource boxes' outline the resources that are available in the Pearson Geography NSW eBook 3.0 and Product Link web page.

CHAPTER OVERVIEW

What's coming up
Innovations in transport and information and communication technologies are transforming the way people work, shop, communicate and connect to other parts of the world. This chapter examines the groups that benefit from increasing interconnectivity and some of the inequalities and controversies associated with greater interconnectivity. Students explore the significance of virtual space on places in the real world.

Using the image
The opening photograph shows two young Kyrgyz men using a mobile phone. Using Google Earth or a map of Kyrgyzstan, students examine the physical geography of this Asian country. Students discuss why traditional forms of transport or communication might be difficult. Using evidence from the image, students describe whether they think Kyrgyzstan is a developed or developing country.

Pre-quiz
Students respond to the following questions.

- 1 List five methods of transport used to move people or goods from one country to another.
Answers could include freight train, tanker, aeroplane, cruise ship, car, passenger train, boat, ship and coach.
- 2 Using at least two examples, describe how the world is becoming more interconnected.
Examples could include the spread of music, films, global corporations, fashion, migration, goods, affluence, communication technologies such as smart phones, email and social media.
- 3 Explain what is meant by the term 'social media'.
Social media refers to websites and applications used for social networking.
- 4 Compare the communication technology that was available to your parents as teenagers to the technology you use to communicate today.



Technology connecting people and places

Advances in transport and communications technology have transformed the way humans live, work and travel. Today, information flows almost instantaneously around the globe. For most of human history, however, the exchange of ideas between people in one place and those in another was limited by the speed at which people could travel. In the sixteenth century, the ability to spread information improved dramatically with the invention of the printing press, and by the seventeenth century the first modern newspapers were beginning to appear in Europe. In the nineteenth and twentieth centuries, the invention of the telegraph, followed by the telephone, radio, television, computer and most recently the internet, transformed the way people communicate, making individual connections more immediate and access to news and other information more efficient than ever before. Recent decades have seen a trend toward developing increasingly compact electronic devices that are affordable and convenient for an increasing share of the world's population. Transport technologies have also developed rapidly. Large, fuel-efficient jet aircraft, high-speed trains, and ever-larger cruise ships have greatly reduced the real cost of travel. This has made travel available to a larger proportion of the world's population. People's personal geographies have expanded greatly.

© Pearson Education, Inc. Young Kyrgyz men using a mobile phone.

CHAPTER 13

INQUIRY QUESTIONS

- How have developments in transportation and information and communication technologies enhanced people's connection with goods, services, information and people in other places?
- What are the impacts of increasing global connectivity on people and places?

GLOSSARY

e-commerce the buying or selling of products or services using the internet

hotspot an area surrounding a place that is linked to that place through lines of exchange or interaction

social media communication technologies through which users create online communities to share information, ideas, personal messages and other forms of content (e.g. videos)

virtual community a community of people sharing common interests, ideas and feelings over the internet or using other collaborative technologies

virtual space a computer environment that can simulate a physical presence in places in the real world or imagined spaces

Getting started
Students create a diagram to map all the ways they are connected to different parts of the world. Their links could be cultural, places they have travelled to, countries where they have family, or the source of goods, services or entertainment that they consume.

EAL/D support
Vocabulary assistance
When learning the words in the glossary list, students use the Look, Say, Cover, Write, Check method.

- 1 Look at the word.
- 2 Say it out loud.
- 3 Cover the word with your hand.
- 4 Write the word down without looking at it.
- 5 Check that you spell it correctly.

In addition, students break down each word into syllables so that the spelling can be learnt in smaller chunks. For example, globalisation can be broken down into 'glo-bal-i-sa-tion'.

eBook 3.0 resources

Document
Test: Technology connecting people and places

Interactive activities
Improved transport
ICT
Goods and services
ICT in the developing world

Templates
Graphic organisers
Blank outline maps

Supporting the Student Book pages

Vocabulary builder

The vocabulary builder focuses on and defines the important terms that students are required to know.

Geoskills

This section provides additional activities to further develop and reinforce skills that are part of a chapter.

Homework

This section provides suggested homework activities that can be completed more effectively out of class time. Teachers generally use this feature to consolidate learning or for forward preparation/understanding for upcoming content.

Answers

Suggested answers to unit questions are supplied. The answers are structured under the relevant Bloom's heading.

Spotlight support

This section provides additional support and lesson ideas to help teachers take the Spotlight activities further.

Alternative assessment/Extension tasks

These sections provide creative and interesting assessment tasks that can be used to assess student understanding of the chapter content.

Evaluate understanding

This section contains strategies for teachers to evaluate student understanding of the chapter content through stimulus questions, short revision quiz ideas or other activities.

Quick five

This section provides teachers with tasks that relate to the content within the chapter. The term 'Quick five' indicates that it is a short task that can usually be completed in five minutes.

Geographical knowledge and understanding

143 Electronic consumer goods

Alternative assessment

Student-generated quiz

Electronic of home

Declining costs of electronics

Purchasing electronic goods

World cycle of the electronics industry

Geographical inquiry and skills

Geoskills

Group investigation

Activities

Answers

Geographical skills

Knowledge and understanding

Geographical concepts and skills change

Helpful hint

This section addresses misconceptions and provides helpful advice relating to content or classroom management.

EAL/D support

Specific EAL/D (English as an additional language or dialect) support has been provided to assist teachers with the diverse needs of EAL/D students within their classroom. While the central focus of this feature is EAL/D students, the content could also be used to assist teachers in developing learning activities for other students who require additional support.

Skills builder support

This section includes helpful hints and advice for teachers in relation to engaging students with the Skills builder or other important information in relation to the Skills builder feature.

Geographical knowledge and understanding

142 CASE STUDY: Barangaroo

Vocabulary builder

Public spaces

Geographical inquiry and skills

Geoskills

Group work

EAL/D support

Activities

Answers

Geographical skills

Knowledge and understanding

Geographical concepts and skills change

Geographical knowledge and understanding

144 Topography and relief maps

Vocabulary builder

Topographic maps

Geographical inquiry and skills

Geoskills

Group work

EAL/D support

Activities

Answers

Geographical skills

Knowledge and understanding

Geographical concepts and skills change