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### PART A

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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.
Case studies
Case study units relate to a specific event or location. The units are written to extend students’ knowledge and understanding. Case studies include examples from Australia and the world.

Spotlight
Spotlight boxes focus attention on a place, an issue or a concept relating to the unit.

Skills builder
Skills builders are embedded in selected units and concentrate on key geographical skills.

ONLINE RESOURCES

Extra content (online)
Chapters 15, 16 and 17 refer to the BOSTES NSW Syllabus—Geography unit ‘Landscapes and landforms’, providing choices of landscape and landform to investigate—alpine landforms, riverine landforms and desert landforms.

Geoskills
A chapter on skills is designed to improve students’ geographical skills: mapping, graphing, interpreting satellite images and interpreting photos. These skills relate to the geographical tools in the BOSTES NSW Syllabus—Geography.

Extension tasks
Extension tasks enable students to revise key geographical concepts, tools and skills developed in the text, and to complete higher order inquiry skill tasks.
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
- 'Resource boxes' outline the resources that are available in the Pearson Geography NSW eBook 3.0 and Product Link web page.

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 travel, shop, communicate and engage with others around the world. This chapter examines the groups that benefit from improved transportation and communication and explores the inequalities and controversies associated with them. Students examine the physical geography of Kyrgyzstan and gain an understanding of the rapid changes that have taken place in the world.

Using the image

Kyrgyzstan is a developing country. Students discuss why traditional forms of transport or communication are still important in some regions and compare these to the developed forms of transport or communication that today’s students are used to. Students explore the significance of virtual space on people’s ideas of places in the real world.

Pre-quiz

Students respond to the following question:

1. List five methods of transportation and communication people or governments use on a daily basis.

EAL/D support

Vocabulary assistance

When learning the words on the glossary list, students use the Look, Say, Cover, Write, Check method:

1. Look at the word.
2. Say it out loud.
3. Write the word down without looking at it.
4. Check that you spelt it correctly.

Students break down each word into syllables and learn about how the sounds are articulated.

BESTES NSW SYLLABUS

Terms

- Goods and services
- Improved transport
- ICT

Getting started

Technology connecting people and places

The development of transport and communication technologies has transformed the way humans connect people and places around the world. How does this impact our daily lives?

Example:

Students create a diagram to map all the ways people move around the world using current methods of transport.

Example:

Kyrgyz men using a mobile phone. Using the image, students discuss how mobile phones are transforming the way people communicate today.

Example:

Kyrgyzstan has one of the lowest mobile phone penetration rates in the world. It has been difficult for Kyrgyz people to access the internet and communicate with others. A developing country is a country where many people are poor. What does this mean for the future of communication in Kyrgyzstan?

Example:

Kyrgyzstan is a landlocked country. How does this affect the transportation of goods, people and information in Kyrgyzstan?

Example:

Kyrgyz men using a mobile phone. Using the image, students discuss how mobile phones are transforming the way people communicate today.

Example:

In the past, people travelled by horse and carriage or boat, ship and coach. Today, information flows almost instantaneously around the globe. For most of human history, people’s personal experiences of other places were limited by the speed at which people could move from place to place. Travel was expensive and time-consuming. People could not move as easily between different parts of the world as they do today. Now, we can communicate with people who live on the other side of the world on a daily basis. How are communication technologies changing people’s ideas about places in the world?

Example:

Kyrgyzstan is a landlocked country. How does this affect the transportation of goods, people and information in Kyrgyzstan?

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Example:

Kyrgyzstan is a landlocked country. How does this affect the transportation of goods, people and information in Kyrgyzstan?
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.

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.
Digital resources

The Pearson Geography New South Wales series includes a wide range of resources are available to use for both teachers and students. Access to resources is via:

- eBook 3.0
- Teacher / Student Product Link.

**eBook 3.0**

Teacher and student resources accessed via the eBook include:

- interactive activities
- interactive case studies
- quizzes and games
- tests and answers
- weblinks
- directive verbs.

**Teacher and Student Product link**

Teacher and student resources for the Pearson Geography NSW series can be found online at:

Pearson Digital
Browse and buy at pearson.com.au.
Access your content at pearsonplaces.com.au.

Student resources online include:

- blank outline maps
- graphic organisers
- flowcharts
- concept maps
- compare and contrast poster
- AVD—annotated visual display
- KWL chart—What I know, What I would like to know, What I learnt
- PMI—Plus, Minus, Interesting
- storyboard
- T-chart
- timeline
- Y-chart
- Venn diagram.

Teacher resources include:

- teaching programs
- answers to all Activity Book questions.
Geographical skills and tools

Maps

A variety of maps are used in the Pearson Geography New South Wales series:

- choropleth map—uses colour or shading to show patterns
- climate map—shows average weather conditions at a particular location
- flow map—shows a sequence of interlinked events
- gazetteer map—also known as a reference map, shows both human and natural features
- landuse map—shows how land is used at a particular location

- physical map—shows physical features such as mountains, rivers, oceans, height of land and major landforms
- political map—shows countries, states, boundaries, capital cities and other major cities
- précis map—shows the main features of a topographic map
- thematic map—focuses on one dataset, such as annual average rainfall
- topographic map—features contour lines and shows the shape of the land.

For maps to be accurate they must follow these conventions.

The Great Rift Valley in eastern Africa was formed through the rifting (tearing apart) and separation of the African, Arabian and Indian tectonic plates.

Source: USGS
Topographic maps

Topographic maps show the shape of the land and the different features of the land, as outlined below.

Graphs

A variety of graphs are used in the Pearson Geography New South Wales series:

- bar/column graph—two different ways to present statistics; a bar graph uses horizontal bars, while a column graph uses vertical columns
- divided bar graph—divided proportionately (100 per cent) compared to other divided bar graphs
- line graph—uses lines to show information
- pie graph—circle graph divided proportionately
- climograph—two climate elements for a particular location plotted against each other, for example temperature and rainfall
- multiple bar graph—groups of two, three or more columns or bars used to compare data
- scatter graph—two different types of data graphed against each other that change in value
- synoptic chart—also known as a weather map; shows air movement and associated weather conditions.
For graphs to be accurate they must follow these conventions.

### Glossary of key words

- **alphanumeric grid**: letter and number grid source
- **altitude**: height above sea level
- **area**: surface measurement
- **cardinal points**: four main directions: north, south, east, west
- **contour interval**: distance between contour lines
- **contour line**: line on a map joining points that are equal height above sea level
- **cross-section**: transect of a topographic map
- **Equator**: line of latitude at 0 degrees
- **gradient**: steepness of a sloping surface
- **grid reference**: number reference designed to locate places on a map
- **hemisphere**: half a sphere, for example the Northern and Southern hemispheres divided by the Equator
- **International Date Line**: located at longitude 180 degrees; divides the Eastern and Western hemispheres
- **isobars**: lines on a weather map that join locations with equal air pressure
- **large-scale map**: map that shows a large amount of detail
- **latitude**: lines that run horizontally around the earth; divided into north and south latitudes
- **line scale**: also known as a linear scale; shows scale on a map
- **linear pattern**: shows whether the correlation or relationship of the data is linear or non-linear on a scatter graph
- **local relief**: difference between the highest and lowest areas in a local area
- **longitude**: lines that run vertically around the earth; divided into east and west longitudes
- **physical environment**: non-built environment
- **population pyramid**: graphical representation of age and sex structure of a population
- **Prime Meridian**: line of longitude at 0 degrees
- **ratio scale**: scale represented as a ratio, for example 1:100 000
- **scale**: relationship between distance on a map and distance on earth
- **small-scale map**: map that shows a small amount of detail, for example an A4 size map of Australia that only shows the main political and physical features
- **spatial perspective**: use of maps to show an understanding of the human and physical world
- **spot height**: exact height of a location on a map
- **statement scale**: scale written as a statement, for example ‘1 cm represents 10 km’
- **transect**: representation of something that has been divided by cutting it crossways, for example a transect of a tropical rainforest showing the different layers
- **vertical exaggeration**: degree to which the slope on a cross-section is exaggerated compared to the feature on the earth’s surface