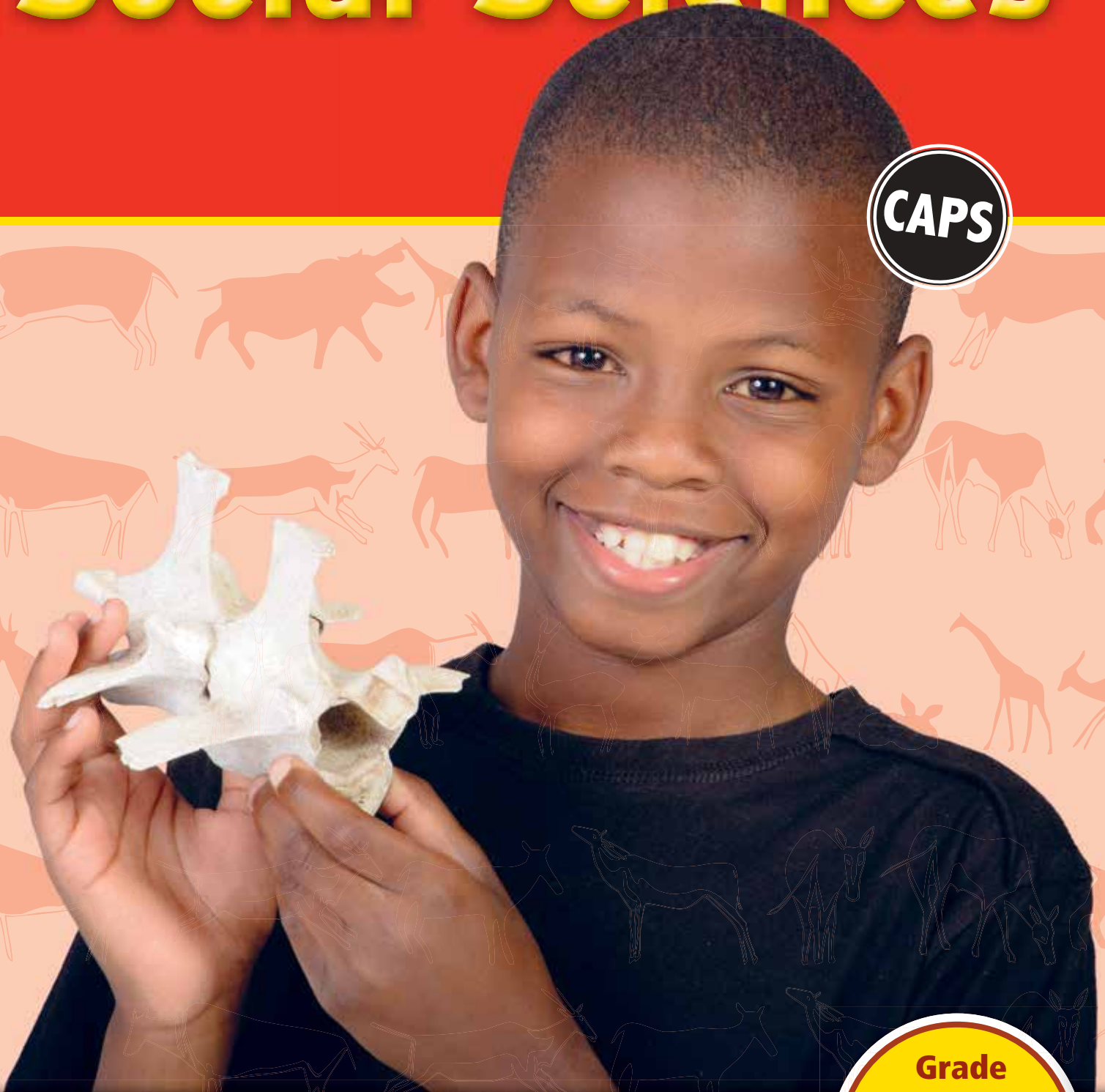


*Study & Master*

# Social Sciences

**CAPS**



**Teacher's Guide**

**Grade**

**5**

Inga Norenus

*Study & Master*

# **Social Sciences**

## **Grade 5 Teacher's Guide**

Inga Norenus



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# Introduction

*Study & Master Social Sciences* closely follows the National Curriculum and Assessment Policy (CAPS) for Social Sciences. All the necessary content is covered and assessed in this Teacher's Guide and the Learner's Book, and there are also lots of extra ideas and resources to make Social Sciences come alive in the classroom.

Social Sciences consists of Geography and History, which are taught separately, but given the same amount of teaching time each term. Both should be taught and assessed as separate subjects during every term of the school year. Although Geography and History are taught separately, the curriculum is designed so that you can make links between the two in terms of content, skills and concepts.

Social Sciences									
Who?	Where?	What?	Why?	When?	How?	Should?	Could?	Is/Are?	(If?)
History					Geography				

## The Social Sciences curriculum

The general aims of the Social Sciences curriculum are to:

- Encourage learners to ask questions: Who? What? Where? When? Why? How? Should? Could? Is/Are? (and If? in Senior Phase).
- Provide opportunities for learners to look at their own worlds in new ways.
- Create opportunities for learners to develop a critical perspective.
- Introduce learners to a world beyond their everyday life and reality.
- Provide access to knowledge that learners might not otherwise be able to access.
- Develop expertise and confidence in learners as a result of in-depth learning (suggested time for each topic is stated).
- Facilitate learning through different forms of text (oral, written and visual).
- Train learners to speculate, to debate, to make connections, to select, to prioritise, and to tackle real issues and important issues.
- Provide opportunities for learners to write regularly, with a clear progression in length and complexity through the grades (evidence of learner's work should be kept in the learner's notebook, folder or file).

## Resources for teaching and learning Social Sciences

Each learner should have:

- A quality textbook that is suitable for the grade, context and language level of the learner, for example *Study & Master Social Sciences*.
- A notebook (for writing in), which should be covered with paper (and plastic, if possible), kept neat, and looked after – this is an important record of the learner's work.

- Access to wall maps (World map, Africa map and South Africa map).
- Access to a globe.
- Access to a set of atlases and dictionaries.
- Access to books about the History and Geography topics.
- Access to visual material about the History and Geography topics.

In Social Sciences learners should read and write often, starting with sentences and paragraphs and building up to longer pieces of work. A lot of this writing work can be achieved by working through the activities provided in the Learner's Book of *Study & Master Social Sciences*. Other reliable and relevant sources of information that enrich the curriculum should also be used – carefully selected and reviewed by the teacher.

#### **Additional resources:**

- Magazines and newspapers with articles relevant to the topics.
- Access to a TV/DVD and/or CD player to present appropriate visual and audiovisual material.
- Access to the Internet and appropriate educational websites.
- Map/s of the learner's local area.

The MapPack Project will give free maps and additional information to schools.

Contact them at The MapPack Project, Private Bag X10, Mowbray 7700, Phone: 021 658 4300, Email: [ngi@ruraldevelopment.gov.za](mailto:ngi@ruraldevelopment.gov.za).

## **Teaching and learning History**

History is the study of change and development in a society over time. History is also a process of enquiry that involves asking questions about the past: what happened?, when?, why?, etc. The teaching of History should encourage learners to be interested in and enjoy the study of the past and how it was shaped. Learners should develop an understanding of historical concepts, including historical sources and evidence.

### **The specific aims and skills of History**

The specific aims and skills – summarised in the table on the next page – are met through the teaching of content, skills and concepts. The table lists the specific aims, and examples of skills.

Specific aims of History	Examples of skills involved
Find a variety of kinds of information about the past	<i>Use and bring together different sources of information</i>
Select relevant information	<i>Decide about the importance and relevance of information to choose and use for different purposes and contexts</i>
Decide whether information can be trusted	<i>Investigate where information came from, whether it is accurate, and what point of view is represented in the information</i>
See something that happened in the past from more than one point of view	<i>Contrast information and compare points of view about the same person or event</i>
Explain why events in the past are often interpreted differently	<i>Recognise and understand how and why different sources and people come to different conclusions</i>
Debate about what happened in the past on the basis of the available evidence	<i>Debate and discuss own and others' points of view about aspects of history, based on evidence</i>
Write history in an organised way, with a logical line of argument	<i>Write history texts which have an introduction, which set out relevant information in a structured way, and which come to a conclusion</i>
Demonstrate understanding of the importance of heritage and conservation	<i>Explain how and why people and events are publicly remembered and commemorated</i>

The study of History should also support democratic citizenship through:

- Explaining and encouraging the values of the Constitution.
- Encouraging civic responsibility and responsible leadership.
- Promoting human rights and peace.
- Preparing young people for local, regional, national, continental and global responsibility.

### Concepts in History

History is in sources and in evidence, and it is also in the way sources and evidence are interpreted. There are many ways of looking at the same thing in the past. It may involve:

- Different points of view of people in the past with different positions in society.
- Different ways in which historians write about people and sources.
- Different ways in which people today see the lives of people in the past.

This requires a **multi-perspective** approach.

Other important concepts in History that learners should understand are:

- **Cause and effect:** The reasons for events and the results of these events, and the way that humans behave in the events and as a result of those events.
- **Change and continuity:** Over a period of time it is possible to compare and contrast what has changed and what has remained the same.
- **Time and chronology:** History is studied and written in order – it is important to be able to place events in the order in which they happened in time; a timeline is useful to develop this concept.

## Teaching and learning Geography

Geography is the study of the human and physical environment. Geography examines both physical (environmental) and human processes over space and time. Everything in Geography has a spatial aspect to it and happens in an environment that is always changing.

### The specific aims and skills of Geography

The specific aims and skills – summarised in the table below – are met through the teaching of content, skills and concepts. The table lists the specific aims, and examples of skills.

Specific aims of Geography	Examples of skills involved
Develop curiosity about the world we live in	<i>Ask questions, identify issues, listen and discuss with interest; and collect and refer to different types of information</i>
Acquire a good general knowledge of places and the natural forces at work on Earth	<i>Read and use sources for information; and use information to describe, explain and answer questions about people and places</i>
Understand the interaction between society and the natural environment	<i>Consider, synthesise and organise information; make links between cause and effect; acknowledge and appreciate diverse lifestyles and world views</i>
Think independently and be able to support ideas with knowledge	<i>Use geographical knowledge to solve problems, to discuss and debate issues, to recognise bias, to develop own ideas, and to suggest solutions to problems</i>
Care about our planet and the well-being of all who live on it	<i>Engage in an informed and sensitive way with issues relating to the planet, its people and resources</i>
Understand and work with a range of sources – including maps, data and photographs	<i>Use and draw maps; identify and extract information from texts, atlases and other sources; work with data and statistics; cross-reference information</i>
Observe and engage with phenomena in the local environment	<i>Observe, interview and record; apply social skills; process, interpret and evaluate data</i>
Find out about places, people, events and issues using different sources (e.g. books, people, photographs, the Internet)	<i>Devise and frame questions; develop and apply research skills; analyse, process and present information</i>
Communicate ideas and information	<i>Speak in a clear and informed way; write in a structured and coherent way; draw maps and visual information; provide reasoned explanations</i>
Make informed decisions and take appropriate action	<i>Work co-operatively, and independently; plan and evaluate actions systematically and critically</i>

### Map skills

The study of Geography requires learners to interpret and present different types of visual information, for example: maps, graphs, globes, photographs, aerial views and drawings. This visual literacy is an essential type of literacy for learners to practise and develop.

In the CAPS curriculum there is special focus for one term of each grade on aspects of using and making maps and other visual sources. These topics aim to achieve focused and systematic development of visual skills. However, learners should work with maps during the whole year and map use should be integrated into topics throughout each grade.



## Concepts in Geography

The following are key concepts for learners to know and understand in Geography:

- **Space and spatial patterns and trends:** The location of people and places in the world.
- **Similarity and difference:** How environments and lifestyles compare and the reasons for similarities and differences.
- **Movement:** How and why people, goods, water, land and air move and change.
- **Planet Earth:** Land, air and water.
- **Human settlement:** Where people live and why.
- **Human activities:** What people do, how the environment affects them and how people affect the environment.
- **Interdependence:** The links between climate, vegetation, wildlife, resource distribution, and human settlement and activity.
- **Change:** The changing nature of people and places.

## Overview of topics for Intermediate Phase Social Sciences

The following tables show an overview of all the topics for Geography and History Intermediate Phase, organised per term. These topics are then broken up into sub-topics for teaching – topics and sub-topics are organised into units in the *Study & Master Social Sciences* books.

### Geography content overview

Term	Grade 4 topics	Grade 5 topics	Grade 6 topics
1	Places where people live (settlements)	Map skills (focus: Africa)	Map skills (focus: World)
2	Map skills	Physical features of South Africa	Trade (focus: South Africa and the world)
3	Food and farming in South Africa	Weather, climate and vegetation of South Africa	Climate and vegetation around the world
4	Water in South Africa	Minerals and mining in South Africa	Population: Why people live where they do (focus: South Africa and the world)

### History content overview

Term	Grade 4 topics	Grade 5 topics	Grade 6 topics
1	Local history	Hunter-gatherers and herders in southern Africa	An African kingdom long ago in southern Africa: Mapungubwe
2	Learning from leaders	The first farmers in southern Africa	Explorers from Europe find southern Africa
3	Transport through time	An ancient African society: Egypt	Democracy and citizenship in South Africa
4	Communication through time	A heritage trail through the provinces of South Africa	Medicine through time

## Time allocation and weighting of topics

Both Geography and History should be taught and assessed in every term of the school year. The teaching time for Social Sciences in the Intermediate and Senior Phases is 3 hours per week (e.g. 1,5 hours for Geography and 1,5 hours for History). A term of 10 weeks should have 30 hours of contact time. The total time allocation for History is about 15 hours per 10-week term, and the same for Geography. In order to plan the total time available, suggested time allocation (and weighting) is given for each topic/unit.

## Assessment in Social Sciences

Assessment is a planned and continuous process of identifying, gathering and interpreting information about the performance of learners. Teachers should use the information they gain from evidence of achievement to improve the process of learning and teaching. Assessment should be both informal (assessment *for* learning) and formal (assessment *of* learning). Giving feedback to learners must always be a part of any assessment process.

Geography and History must be assessed separately, and learners must complete formal assessment tasks each term for Geography and for History. Assessment marks for each subject should also be shown separately in school reports: a score for Geography and a score for History. The scores should then be added together and divided by two to give an average score or mark for Social Sciences.

## Types of assessment

Informal assessment is the daily or lesson-by-lesson monitoring of learners' progress. Learners can be informally assessed through:

- observation of learner
- discussion with learner
- demonstration with learner
- learner-teacher meetings
- informal classroom interaction.

**Informal assessment** should be used to provide feedback to the learners and to inform planning for teaching. Teachers don't have to record informal assessment, but they can choose to record some or any of it. The results of informal assessment are not used for promotion and certification purposes, but it is nevertheless useful to have a record of learners' progress throughout the year.

**Formal assessment** tasks are part of a formal programme of assessment for a particular grade and year. Formal assessment tasks are marked and the mark is recorded by the teacher for progression and certification purposes. Formal assessment provides teachers with a systematic way of evaluating how well learners are progressing in a grade and in a particular subject. Examples of formal assessment include tests, examinations, and all types of written work, practical tasks, projects, oral presentations, demonstrations and performances.



This logo in the Learner's Book indicates a Formal Assessment Task.

As part of formal assessment, learners are required to complete *one* project in Social Sciences in each grade. They therefore do a project in either Geography or History in a given year. Projects should be started towards the beginning of a term, and learners must be given a reasonable due date to hand in the final work. Teachers should make sure they have enough time for assessing the projects, and the learners' progress must be monitored regularly.

In the Intermediate Phase the CAPS curriculum divides the projects between the two subjects as follows.

Grade	Term	Subject
4	1	History project
5	3	Geography project
6	3	History project

Learners are required to write an end-of-year examination in both Geography and History. You may wish to set this examination yourself, based on the needs of your learners, and the work you have covered through the year.

However, we have provided an examination for both aspects of Social Sciences, as well as marking memoranda, for your convenience. The sample examination papers can be found in the extra resources section of this Teacher's Guide. There is also a useful record sheet for recording marks for the FAT component of assessment.

You will find the Geography project for Grade 5 on page 66 of the *Study & Master Social Sciences* Learner's Book and page 41 of this Teacher's Guide (Module 3, Unit 2: Observing and recording the weather). A rubric for assessing the project is in the Extra resources section of this Teacher's Guide.

### Steps in assessing

Assessment can be achieved in four main steps or stages.



In assessing knowledge, teachers will be assessing the learner's ability to achieve the aims and demonstrate the skills outlined in the Curriculum and Assessment Policy Statement (CAPS). Teachers will need to collect and evaluate evidence of a learner's achievement, and to record the evidence, if appropriate to that type of assessment. The aims and skills for Geography and History must be applied in the content knowledge as well as in the activities, tasks, projects, tests and examinations.

### **Assessing writing**

Assessment usually involves writing – this means that learners should be taught writing skills in Social Sciences and should be helped to practise those skills. For writing longer texts, especially essays, learners need to be trained to:

- Select the information they want to include – only choose what is relevant.
- Arrange the information – put it together with other information and integrate it.
- Connect information – to make a logical order, or a developed argument.

As well as all types of written work, other ways of showing evidence of achievement should also be used for assessment, for example: oral work, discussion, debate, role plays, visual work, presentations and drama.

Plagiarism (using some else's work *and pretending it is your own*) is a problem in many institutions of learning. Whether the plagiarism involves copying from a book, copying another learner's work, or cutting and pasting from the Internet, it is wrong – like 'stealing' someone else's work.

Learners must be trained to show in their work whenever they quote something from a source, and to give their references for the source. Learners should also be trained not to rely too much on sources and references, but rather to show their understanding by re-writing or re-phrasing source information in their own words.

### **Planning assessment**

Setting good assessment tasks can be very challenging and teachers are encouraged to use carefully selected textbooks as a guide, and to share good assessment tasks with other teachers.

The following steps were followed in the planning and design of assessment tasks for *Study & Master Social Sciences*.

1. Clarify the purpose of the assessment. (Why?)
2. Decide on the task or activity to be assessed. (Which?)
3. Decide on the content, concepts and skills to be assessed. (What?)
4. Select a format for learner presentation – how will the learner show evidence or demonstrate achievement? (How?)

## Programme of assessment

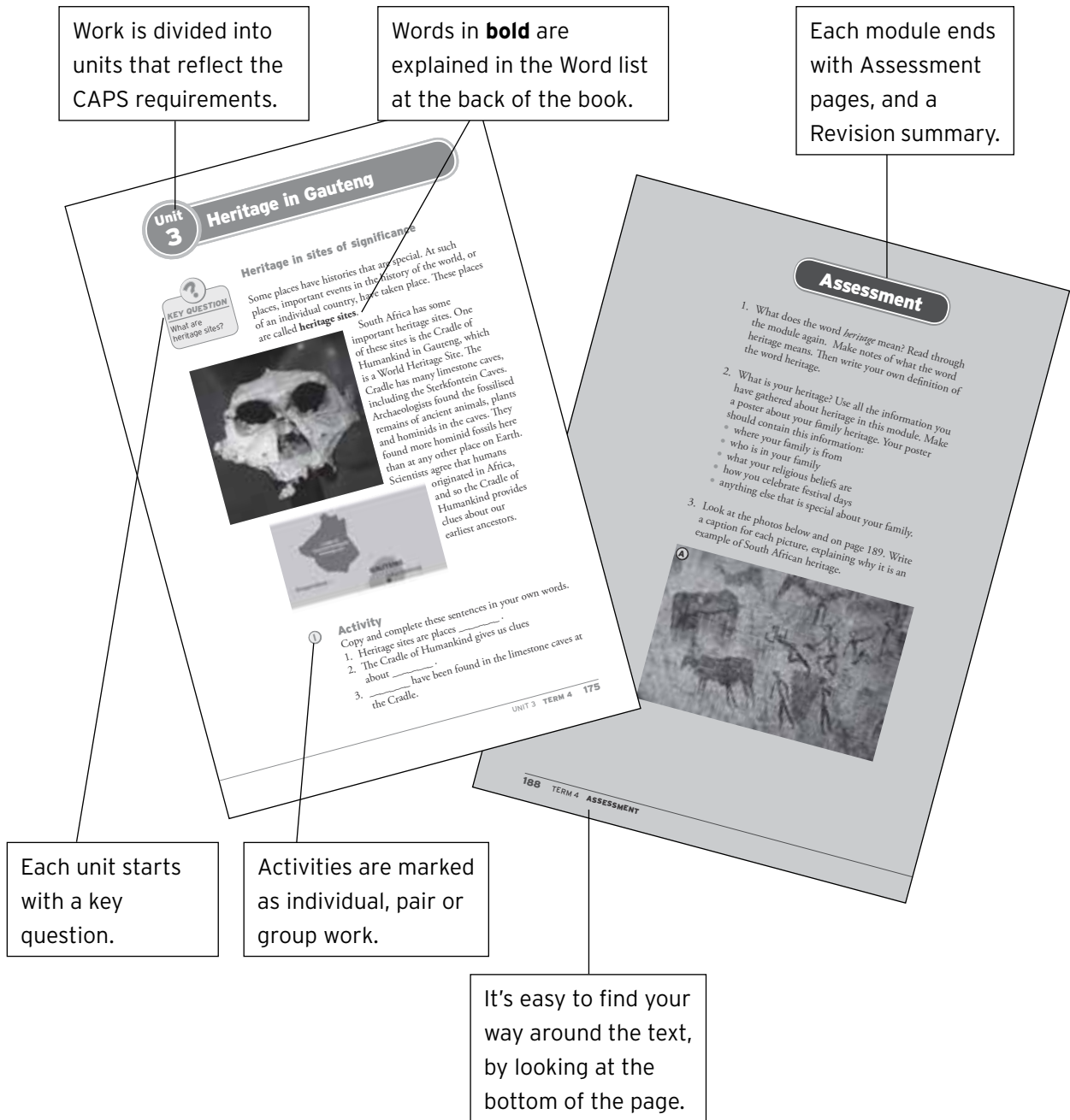
In Grade 5 the programme of assessment is structured as follows.

Term	Subject	Assessment	Continuous/End-of-year
1	History	Project	Continuous Assessment 75%
	Geography	Task	
2	History	Task/Test	
	Geography	Task/Test	
3	History	Task	
	Geography	Task	
4	History	Test/Exam	End-of-year Assessment 25%
	Geography	Test/Exam	

# How **Study & Master Social Sciences** works

*Study & Master Social Sciences* Learner's Book and Teacher's Guide work together like this.

## The Learner's Book



Work is divided into units that reflect the CAPS requirements.

Words in **bold** are explained in the Word list at the back of the book.

Each module ends with Assessment pages, and a Revision summary.

Each unit starts with a key question.

Activities are marked as individual, pair or group work.

It's easy to find your way around the text, by looking at the bottom of the page.







## Map skills

### Content and time

The suggested teaching time for Geography is approximately 15 hours per 10-week term (that is, approximately 1½ hours per week of contact time).

### Term 1

Week	Unit	Main content and concepts	Time
1–2	1	<b>World map and compass directions</b> Position of Equator, north and south poles on a globe; seven continents; eight compass points; eight directions from fixed point on world map.	2 hours
3–5	2	<b>Africa our continent</b> Position of Africa; oceans round it; countries and borders; big cities; neighbours	4 hours
6–8	3	<b>A physical map of Africa</b> Features; showing height on a physical map; location of mountains, lakes, waterfalls, deserts; physical features as borders between countries	3 hours
9–10	4	<b>Images of Africa</b> Photographs of scenes and landscapes; using grid references to determine location	3 hours
<b>Ongoing and informal assessment, feedback and revision</b>			2 hours
<b>Formal assessment</b> (end of term/Week 10)			1 hour

### Recommended resources

- World map (Note: an organisation called The MapPack Project will give free maps to schools. Contact them at The MapPack Project, Private Bag X10, Mowbray 7700, phone: 021 658 4300)
- Compass
- Globe
- Political and physical maps of Africa (may be combined into one map)
- Pictures of places and people in Africa (urban and natural environments)

### Additional resources

- Photocopies of world map and Africa map (see Extra resources section)
- World atlas (book and/or in digital form on CD/DVD)
- Old copies of *National Geographic* and *Africa Geographic* magazine (these will be a useful resource for most of the modules this year)
- Websites: <http://www.google.com/earth/index.html>  
<http://www.nationalgeographic.com/earthpulse/>  
<http://www.sasi.group.shef.ac.uk/worldmapper/index.html>  
<http://www.thetalkingdrum.com/cities.html>

**Curriculum content and concepts**

- Position of Equator, North and South Poles on a globe.
- Seven continents (from Grade 4).
- Eight points of the compass: N/S/E/W/NE/NW/SE/SW.
- Eight directions from a fixed point on a world map.

**Teaching notes**

You will need: a compass and an up-to-date world map (classroom map) and/or a globe of the Earth

- Start this module with the pair activity in 'What do you know already?' (Learner's Book page 5) – give learners 20 minutes to work on the activity before talking about the questions with the class. This activity will give you a good sense of what learners know and remember about map work, map features, and the geography of Africa.
- Show the learners the compass you brought to class. Ask learners to tell you what they know about direction and the use of a compass. If learners don't know or are uncertain, remind them of the definition on page 7 of the Learner's Book: *a compass is a piece of equipment that gives the direction between places. There are eight main compass points that you use for direction.*
- Try to find or borrow and bring more than one type of real compass to class for learners to look at and use.
- If you have an accurate, working compass, take learners outside the classroom and walk in different directions – show them how direction changes, and what the compass points are for different directions.
- Read page 6 of the Learner's Book out loud and talk about the questions with the learners, then let them read page 7 on their own and do the activity. Discuss the answers to the activity in class. Are learners confident about direction and the compass points? Can they correctly point in the directions of the four main points, knowing which direction is east, west, south and north from the classroom?
- Talk about the maps on pages 6 and 8-9 with the learners – they need to understand the concept of a flat representation of the round globe. If you have other examples of world maps show them to the learners.
- Ask learners to complete the pair activity on page 8 and then swap with another pair to check their answers. Go around the class while they are working to informally assess their work.
- Ask learners to complete the activity on page 9 on their own – go around the class to informally assess work and help where necessary.

- Photocopy the outline of the world map showing continents (Extra resources section) and give one to each learner to colour and label. This can be used for informal assessment, or for homework.



### **BRIGHT IDEA!**

#### **Make your own compass**

If you can't get a real compass, make your own cardboard compass – use a protractor to get the angles correct for the direction lines. You will need: a large piece of cardboard with eight lines and points correctly drawn, and a split-pin to move directional arrows or hands cut out of cardboard.

## **Answers to activities**

*Individual* Learner's Book page 7

1. Learners to draw and label a compass – copy from Learner's Book page 7 or from another clear example of a compass.
2. a) west b) east c) west d) south east e) south west

*Pair and Individual* Learner's Book page 8–9

1. Africa, North America, South America, Europe, Asia, Australia, Antarctica
2. a) Northern Hemisphere b) Southern Hemisphere c) Southern Hemisphere
3. Africa
4. Southern Hemisphere
5. a) east b) west c) north d) north west

### **Informal assessment**

- Monitor progress in discussions and activities.
- Photocopy the outline of the world map showing continents (Extra resources section) and give to each learner to colour and label.

### **Additional resources**

- A world atlas (book and/or on CD) for the classroom or to share between classes.
- <http://www.google.com/earth/index.html>  
<http://www.nationalgeographic.com/earthpulse/>  
<http://www.sasi.group.shef.ac.uk/worldmapper/index.html>

### **Remedial and extension activities**

Ask learners to draw a map of their house and home area, or to draw a map of the school and the area around the school. You will need to tell learners how much information their maps should include.

**Remedial:** Learners should draw and label the school buildings and the street/s next to the school.

**Extension:** Learners should write directions for a person visiting their home – this visitor will be travelling from somewhere the learner knows, for example, a shop or shopping centre, school, place of worship or public building.

**Curriculum content and concepts**

- Position of Africa on a world map and globe.
- Oceans around Africa (names and locations).
- Concept of countries and borders in Africa.
- Countries of Africa:
  - location of country (note that learners need to know this for map reading skills, not for rote learning of countries)
  - landlocked or coastline (also for map reading, not for rote learning)
  - N, S or Equator; Madagascar (a country *and* an island)
  - Zanzibar (an island of the country Tanzania).
- Important cities of Africa: Cairo, Lagos, Johannesburg, Nairobi (you must at least teach these cities in your lesson).
- Other African cities learners should know about include: Harare (Zimbabwe), Maputo (Mozambique), Gaborone (Botswana), Windhoek (Namibia), Mbabane (Swaziland), Maseru (Lesotho), Luanda (Angola), Lusaka (Zambia), Lilongwe (Malawi), Kampala (Uganda), Kinshasa (DRC), Tripoli (Libya).

**Teaching notes**

You will need: a world map and/or a globe of the Earth, and large format (for the classroom) political and physical maps of Africa (political and physical geographies may be combined into one map)

- Rote learning of country names and other features on maps is not required.
- If you don't have an up-to-date large map of Africa for the classroom, make sure that each learner has a correctly labelled and coloured-in copy of the map of Africa in the Learner's Book on page 192, and that they keep this map carefully as a resource.
- Start the lesson by asking learners to point to Africa on the world map (in their Learner's Book or on the classroom wall map). If you have a globe, ask learners to identify Africa on the globe.
- Check learners' understanding of the different types of maps, for example, political and physical maps – ask learners to explain the difference. Help them to understand this concept and the different types of information that can be shown on different maps.
- Read page 10 of the Learner's Book out loud (or ask learners to read quietly on their own) and talk about the photographs, and about other countries that learners know of. Then let them read page 11 on their own, and do the activities on page 11 (individual) and page 13 (pair). Discuss the answers to the activities as a class. Ask for volunteers to read their paragraphs about what it is like to live in their city/town/area.

- Talk about and explain the map in the Learner's Book on page 15. Ask learners to identify countries on the map. What else can they identify on the map?
- Ask learners to work on their own to complete the activity on page 14 of the Learner's Book in their notebooks. Take in the books or mark them in class. This will give you a chance to informally assess each learner's progress in this module.
- If there is time, introduce and talk about the five main regions of Africa with the class.



### **BRIGHT IDEA!**

Countries on the continent of Africa are commonly grouped into the following five regions:

*Note that non-independent countries/territories in Africa are included within the five main regions (that is, you will find more countries/territories listed in the regions below than are labelled on the political map in the Learner's Book, which only includes independent self-governing African countries).*

- **Northern Africa:** Algeria, Canary Islands, Ceuta, Egypt, Libya, Madeira, Melilla, Morocco, Sudan, Tunisia.
- **Western Africa:** Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Saint Helena, Senegal, Sierra Leone, Togo.
- **Central Africa:** Angola, Cameroon, Central African Republic, Chad, Republic of the Congo, Democratic Republic of the Congo, Equatorial Guinea, Gabon, São Tomé and Príncipe.
- **Eastern Africa:** Burundi, Comoros, Djibouti, Eritrea, Ethiopia, Kenya, Madagascar, Malawi, Mauritius, Mayotte, Mozambique, Reunion, Rwanda, Seychelles, Somalia, Tanzania, Uganda, Zambia.
- **Southern Africa:** Botswana, Lesotho, Zimbabwe, Namibia, South Africa, Swaziland.

## **Answers to activities**

*Individual* Learner's Book page 11

1. a) South Africa b) Swaziland c) Cairo d) Nigeria e) Swaziland
2. Learners should write a paragraph of 6–10 sentences in which they describe the daily life in their home city, town or other settlement area. The paragraph should show that learners are aware of at least two similarities and at least one difference between their life and life in Cairo.

*Pair* Learner's Book page 13

1. Any 3 countries and capital cities located above the equator, for example: Morocco (Rabat), Cameroon (Yaoundé), Niger (Niamey), Ethiopia (Addis Ababa), Sudan (Khartoum), Mali (Bamako)
2. Any 3 countries and capital cities located below the equator, for example: Tanzania (Dodoma), Angola (Luanda), Madagascar (Antananarivo), Malawi (Lilongwe), Zimbabwe (Harare), South Africa (Pretoria/Tshwane)

3. a) south b) north c) western, eastern d) Atlantic Ocean e) Indian Ocean f) north
4. a) South Africa b) Tunisia c) Madagascar d) Lesotho
5. Zanzibar
6. a) north b) north c) north east d) north west
7. Niger
8. Somalia
9. Algeria
10. a) Abuja b) Cairo c) Nairobi d) Accra
11. Democratic Republic of the Congo (Kinshasa), Tanzania (Dodoma), Malawi (Lilongwe), Mozambique (Maputo), Zimbabwe (Harare), Botswana (Gaborone), Namibia (Windhoek), Angola (Luanda)
12. Gabon, Republic of the Congo, Democratic Republic of the Congo, Uganda, Kenya, Somalia
13. The following capital cities are around the whole coast of Africa: Djibouti (Djibouti), Mogadishu (Somalia), Dar es Salaam (Tanzania), Maputo (Mozambique), Luanda (Angola), Libreville (Gabon), Porto-Novo (Benin), Accra (Ghana), Monrovia (Liberia), Freetown (Sierra Leone), Conakry (Guinea), Bissau (Guinea Bissau), Banjul (The Gambia), Dakar (Senegal), Rabat (Morocco), Algiers (Algeria), Tunis (Tunisia), Tripoli (Libya)

*Individual Learner's Book page 14*

1. Namibia, Angola
2. Moving north: Mozambique, Madagascar, Tanzania
3. and 4. Six countries share borders with South Africa: Namibia, Botswana, Lesotho, Swaziland, Zimbabwe, Mozambique
5. and 6. Angola
7. Limpopo River
8. uKhahlamba-Drakensberg range
9. Lake Malawi (also known as Lake Nyasa)
10. The sea, because Madagascar is an island.
11. South Africa and Namibia
12. Lesotho, Swaziland, Zimbabwe, Zambia, Malawi and Botswana are all landlocked.
13. a) Lesotho, west, Atlantic b) Angola, Zambia, Zimbabwe, Mozambique; Zambia; Indian
14. Maputo (Mozambique), Luanda (Angola), Dar es Salaam (Tanzania)

**Informal assessment**

Use the individual activity in the Learner's Book on page 14.

### **Additional resources**

- <http://en.wikipedia.org/wiki/Africa>
- <http://www.thetalkingdrum.com/cities.html>
- <http://www.worldatlas.com/webimage/countrys/af.htm>
- <http://www.schoolnet.na/games/map/africa.html>
- Copies of old maps of the continent of Africa (for example, try to find maps made around the years 1700, 1800, 1900 and 2000)

### **Remedial and extension activities**

Photocopy the outline of the African continent for learners (Learner's Book page 192 or use the map in the Extra resources section).

**Remedial:** Ask learners to write in the names of countries in Africa on the outline map (learners should write as many names as they can remember, before checking the countries on the map in the Learner's on Book page 12; then they should fill in the names they couldn't remember).

**Extension:** Ask learners to find out any older, historical names of countries in Africa that are different to their names now, for example colonial names. Write in the old names of countries on the outline map.

**Curriculum content and concepts**

- Features on a physical map: high and low areas, mountains, rivers, lakes.
- Ways of showing height above sea level on a physical map (include shading and spot heights used on small scale map, such as map of Africa; do not include contours).
- Location on a map (including basic information about each feature) of the following:
  - Africa's highest mountains: Kilimanjaro and Mount Kenya
  - Southern Africa's highest peak: Thabana Ntlenyana in the uKhahlamba-Drakensberg range
  - Africa's three largest lakes: Victoria, Tanganyika, Nyasa (Malawi)
  - Africa's great rivers: Nile, Niger, Congo, Zambezi, Limpopo, Gariep-Orange
  - Southern Africa's famous waterfalls: Victoria, Maletsunyane, Augrabies
  - Africa's great deserts: the Sahara and the Namib
  - Physical features as borders between countries – focus on rivers and lakes.

**Teaching notes**

You will need: a large format (for the classroom) physical map of Africa (political and physical geographies may be combined into one map)

- Learners should have a clear understanding of the different types of maps, for example, political and physical.
- Ask learners to identify any of the features they can see or know on the classroom map and/or on the map in the Learner's Book on page 20. For example: identify lakes, rivers, and mountains.
- Introduce (or revise) the idea that land features are measured by their height above (or below) sea level. Talk about how the height above sea level is shown by shading or colours on a physical map. Note that ways of showing height above sea level (altitude) will be covered in more detail in Unit 1 of the next module, in relation to the physical features of South Africa.
- Ask learners to work in pairs to read and discuss the information in the Learner's Book on pages 17–19, and to find all the features mentioned in the text on the physical map on page 20.
- Talk about the pictures in the Learner's Book with the class (Mount Kilimanjaro, Thabana Ntlenyana, Namib Desert, Nile River, Lake Victoria and Victoria Falls), and show any other pictures you have of these features.
- Ask learners to work in pairs to complete the activity in the Learner's Book on page 21 in their notebooks, and then to team up with another



pair to check their answers. The pairs should swap their notebooks and mark each other's work as they talk about each question.

- After you have made sure that everyone knows the correct answers to the questions, take in the notebooks or look at them in class. This will give you a chance to informally assess progress.
- Use any of the points in Bright Idea box below to have a discussion with learners about why people climb high mountains, or the effects of ice caps melting (both on high mountains and in the Poles), or the effects of climate change on important physical features in Africa.



### **BRIGHT IDEA!**

Ten interesting points about Mount Kilimanjaro

1. Mount Kilimanjaro is the fourth highest mountain in the world, and the tallest freestanding mountain in the world (it rises 5 895 metres into the sky).
2. Mount Kilimanjaro is actually a massive stratovolcano. It has three volcanic cones which form the peaks: Shira, 3 962 m, Mawenzi, 5 149 m, and Kibo 5 895 m. Mawenzi and Shira are extinct, but Kibo, the highest peak, is dormant and could erupt again. The most recent activity was about 200 years ago.
3. There are 6 ecological systems on the mountain: cultivated land, rainforest, heath, moorland, alpine desert and finally the arctic summit. Coffee is grown on the lower slopes and is a major export.
4. Approximately 25 000 people attempt to summit Mount Kilimanjaro annually, that is, they attempt to climb to the top of a peak. Approximately two-thirds of the people who attempt to climb to the top are successful.
5. The first successful documented summit was in 1889. The climb took 6 weeks. Today the average climber can do it in 5 or 6 days.
6. The fastest verified ascent of Mount Kilimanjaro occurred in 2001 when Italian Bruno Brunod summited Uhuru Peak (the highest point on Kibo's crater rim) in 5 hours 38 minutes 40 seconds. The fastest roundtrip was in 2004, by local guide Simon Mtuy who went up and down the mountain in 8 hours 27 minutes.
7. South African Bernard Goosen was the first person to summit Mount Kilimanjaro in a wheelchair. He did it twice, first in 2003 (9 days), and then again in 2007 (6 days).
8. Altitude-related problems are the most common reason climbers turn back. Altitude sickness is a hazard of mountain climbing – it occurs when a person goes up too quickly to acclimatise to higher altitudes, and mild symptoms include headaches, lethargy and insomnia. Slow ascents are therefore recommended.
9. Out of every 1 000 tonnes of water that trickles down the mountain, about 400 tonnes come directly from the ice caps. Kilimanjaro's glaciers are essential to the survival of the local villages, supplying their drinking water, the water to irrigate their crops and, through hydroelectric production, their power.
10. The snow caps are rapidly melting, having lost over 80 per cent of their mass since 1912. The ice fields have lowered by at least 17 metres since 1962 (that's an average loss of about a half-metre in height each year); this is probably due to climate change. The ice caps could be entirely gone (melted) by 2020.

### Sources:

- <http://www.climbmountkilimanjaro.com/about-the-mountain/the-glaciers/climate-change-and-kilimanjaro/index.html>
- <http://www.wwfblogs.org/travel/2010/02/19/ten-interesting-facts-about-mt-kilimanjaro/>
- <http://www.algonquincollege.com/africa2009/Documents/25%20fun%20facts.pdf>

### Answers to activity

*Pair* Learner's Book page 21

Mountains and deserts

1. The Rwenzori range
2. Mount Kilimanjaro – 5 895 m above sea level
3. Africa's highest mountain 5 895 minus the highest mountain peak in southern Africa 3 482 m equals a difference in height of 2 413 m.
4. Atlas Mountains
5. Kalahari Desert or Namib Desert
6. Northern Hemisphere

Rivers, lakes and waterfalls

1. South to north
2. Mediterranean Sea
3. Lake Victoria
4. Lake Malawi, or Lake Nyasa
5. Congo River
6. Major rivers: Limpopo, Zambezi; lesser rivers: Save, Rufiji, Jubba
7. Okavango (also known as Okavango Delta)
8. Zambezi River
9. Vaal River (largest tributary of the Gariep-Orange River)

### Informal assessment

- Use the pair activity in the Learner's Book on page 21 (peer assessed, and checked by you).
- Photocopy the outline of Africa in the Learner's Book on page 192 and give to each learner to colour and label.

### Additional resources

- Pictures of all the features covered in this Learner's Book unit (for example, pictures from *National Geographic* and *Africa Geographic* magazines).
- <http://www.maplibrary.org/stacks/Africa/index.php>
- <http://www.geographicguide.com/africa-map.htm>
- Satellite and 3-dimensional maps (and models) are a useful resource for teaching about high and low areas on land, and height above sea level (most of the websites listed for this module will have online satellite maps).

## **Remedial and extension activities**

Read aloud the ten interesting points about Mount Kilimanjaro.

**Remedial and Extension:** Ask learners to research and find out about any of the following features and then write five (remedial) to ten (extension) points – interesting facts – about the feature: Sahara Desert, Niger River, Congo River, Zambezi River, Lake Malawi or Lake Tanganyika. Remind learners to state sources of information.

Put the lists up on the classroom wall for all learners to read and share information.

**Curriculum content and concepts**

- Photographs of a range of scenes and landscapes in Africa – such as physical features, settlement types, buildings and human activities (note that you need to provide grid references for each photograph so that the approximate location of the photograph can be found on the map in the Learner's Book on page 20).
- Using grid references to give approximate location.

**Teaching notes**

You will need: a physical map of Africa, and pictures of places and people in Africa (good sources of pictures are *National Geographic* and *Africa Geographic* magazines, as well as travel magazines, such as *Getaway* – try to find cheap old copies of these magazines at second-hand bookshops)

- This unit has three connected aspects:
  - One aspect is learning to get information from a photograph. This is part of visual literacy – ‘reading’ and interpreting photographs.
  - The second aspect is applying and practising skills in reading a map grid – these two aspects are closely linked in the Learner's Book content and activities. Being able to work with map grids is an important skill in Geography. Grid references should have been learned in Grade 4: the concept of an alphanumeric grid and reading and giving grid references on a map.
  - The third aspect of this unit is viewing and discussing images of Africa that show ordinary African places, and African people living their lives in an ordinary way. Many of the images of Africa that we see in the news show negative and abnormal things in African societies. Although the photographs in the Learner's Book are realistic and honest, they do not focus on poverty, suffering, starvation or war. Learners need to be aware that there are many ways to show people and places, and that apart from the sad and unjust things that happen in Africa, happy, positive and ordinary things also happen. This tends to be true of all places in the world!
- Start the unit by showing learners how to read the grid on the map in the Learner's Book on page 20 to identify each place shown in the photographs.
- Once each place is identified, ask learners to look carefully at the photograph and tell you what they see happening and what they notice about the environment.

- Ask learners to work in pairs to read and discuss the information, activity and photographs in the Learner's Book on pages 22 and 23. Go around the class to informally assess work and help where necessary.
- As a class, discuss and answer the questions around the photographs. Learners should be able to give a reason or explanation for their answers.
- Ask learners to work in groups of 4 to do the activity on page 24. Go around the class to informally assess work and help where necessary. Tell the groups that one or two learners from each group will report back to the class – each group should choose their own reporters and the photographs that she or he will talk about.
- Ask the learners who report back to the class to share the group's answers to the questions in the activity. Learners should be able to explain their answers.
- If there is time, give learners other pictures of places and people in Africa, including grid references for the pictures, and ask them to:
  - identify the place on the map on page 20 of the Learner's Book
  - talk about the photograph – what information can they see or find in the picture?



### **BRIGHT IDEA!**

When viewing and interpreting a photograph it is useful to remember a range of question words to ask about the photograph:

- **What?** for example, 'What is that person doing?'; 'What might happen next?'; 'What can you tell about the place from the photograph?'
- **Why?** for example, 'Why is he or she doing that?'; 'Why are some people left out of the photograph?'; 'Why did the photographer take this photograph?'
- **Who?** for example, 'Who has the most interesting clothes?'; 'Who is/Who is not looking at the camera/photographer?'; 'Who are these people?'
- **Which?** for example, 'Which picture is most similar to something in your life?'; 'Which person looks the happiest?'; 'Which place would you like to visit?'
- **How?** for example, 'How old do you think the photograph is?'; 'How do the captions help you to understand the pictures?'; 'How are people relating to each other in the photograph?'
- **When?** for example, 'When was this photograph taken?'; 'When will things in the picture change?'; 'When is the best time to visit this place?'

Asking and answering these types of questions will help learners to develop and reinforce good visual literacy.

## **Answers to activities**

*Pair* Learner's Book page 22

1. Learners discuss the photograph they have chosen.

*Group Learner's Book page 24*

Photograph E4

- a) Darfur, western Sudan. (Read map with learners.)
- b) No other people in the photograph, but there are others living in the small settlement behind him, and hopefully he lives with his family.
- c) A few trees in the distance.
- d) Grass shelters/huts.
- e) The boy's clothing; the bicycle tyre.
- f) Desert. (Discuss prior learning for this climate region.)
- g) Probably very hot, dry and dusty! (There's no right/wrong answer, depends on learners' subjective response and reasons.)

Photograph C4

- a) Lagos, Nigeria. (Read map with learners.)
- b) Several people in foreground of the photograph, and crowded settlement in the background of the photograph.
- c) Difficult to see any natural features; perhaps some trees in the distance.
- d) Informal urban settlement.
- e) Table, 'braai' and cooked food, ball, clothes, mini-bus.
- f) From the photograph we can see that the weather is warm (from the clothing), and it looks overcast. (Recap any details about weather and climate in Nigeria.)
- g) (There's no right/wrong answer, depends on learners' subjective response and reasons.)

Photograph E5

- a) Bugarama, Rwanda. (Read map with learners.)
- b) No signs of other people.
- c) Dense tree vegetation and a river. Hills/mountains.
- d) None visible.
- e) The boys' clothing.
- f) Weather looks warm; we also know some details about rainforest weather and climate. (Discuss the details.)
- g) (There's no right/wrong answer, depends on learners' subjective response and reasons.)

Photograph E7

- a) Northern Botswana. (Read map with learners.)
- b) Difficult to see – but signs of settled life suggest at least about 5–8 people living there.
- c) A few trees and small bushes; grassland.
- d) Kraal; grass, reeds, wood.
- e) Donkey cart, washing on line, donkeys, cows.
- f) Semi-desert/grassland (Discuss the details.)
- g) (There's no right or wrong answer, depends on learners' subjective response and reasons.)

## Informal assessment

Monitor progress in discussions and activities.

### Additional resources

- <http://en.wikipedia.org/wiki/Africa>
- <http://www.worldatlas.com/webimage/countrys/af.htm>
- <http://www.thetalkingdrum.com/cities.html>

### Remedial and extension activities

Read aloud the question words and examples in the Bright Idea box on page 13 of this Teacher's Guide.

**Remedial and Extension:** Ask learners to think of six of their own questions about any two photographs in Unit 4 (that is, Learner's Book pages 22–25). They should use each question word at least once. Learners should write their questions in their notebooks, and then swap with another learner and try to answer each other's questions.

# 1

## Assessment

Learner's Book pages 26-27

3 hours

- The equator is an imaginary line dividing the world into the Northern Hemisphere and Southern Hemisphere – A.
  - The North Pole is the most northern point on Earth – B.
  - The South Pole is opposite the North Pole and the most southern point on Earth – C.
  - An ocean is a large body of salt water between continents – D.
  - A continent is a large land mass, often separated from another continent by an ocean – E.
- Refer to the map on page 12 of the Learner's Book. Learners can trace the outline map (Learner's Book page 15) on a page in their notebooks, or on a blank sheet of A4 paper. The drawn map should be accurate and neat.
- Refer to the map on page 20 of the Learner's Book. Learners can trace the outline map (Learner's Book page 192) on a page in their notebooks, or on a blank sheet of A4 paper. The drawn map should be accurate and neat.
- If you feel that four 'photographs' (pictures) are too much for learners to do, you can ask them to 'draw' only 2 'photographs'. Learners do not need to be good at drawing, as long as they try to show a scene with some details (a place, an environment, with or without people) in their pictures. If learners are better at describing in words than at drawing, they can write a paragraph describing the 'photographs' they would take to show people in other countries what Africa is like.

### Formal assessment task

- north
  - west
  - landlocked
  - east

(2)
- (18)

Feature	Definition (1 mark each)	Examples (2 marks)
Island	A body of land that is surrounded by water	Madagascar Zanzibar
Mountain peak	Highest part or point of a mountain (also known as 'the summit')	Thabana Ntlenyana Kibo (Mt Kilimanjaro)
River	Water flowing in a specific direction across the land, usually from a high point (e.g. mountain) to a low point, such as an ocean, sea, another river, or lake	Nile Niger
Lake	A large body of usually fresh water in a basin or hollow, and surrounded by land	Tanganyika Malawi
Waterfall	A place in a river or stream where the flowing water suddenly drops from a higher to a lower point as it flows over a cliff or other rock formation	Victoria Augrabies
Desert	A desert is an area of land that gets very little or no rainfall, and has a harsh environment, a very dry climate, and very little vegetation or wildlife	Sahara Namib

[Total: 20]



# Physical features of South Africa

## Content and time

The suggested teaching time for Geography is approximately 15 hours per 10-week term (that is, approximately 1½ hours per week of contact time).

## Term 2

Week	Unit	Main content and concepts	Time
1–2	1	<b>South Africa from above (physical map)</b> Physical map; high and low places; coastal plain, escarpment, plateau; places and names	2 hours
3–4	2	<b>Physical features</b> Mountains, valleys, rivers, coastlines etc.; location of features in provinces; selected South African features; place names	3 hours
5–6	3	<b>Rivers</b> Where rivers begin and end; concept of river systems; main rivers of South Africa	3 hours
7–10	4	<b>Physical features and human activities</b> Links between physical features and human activities; how human activities change landscape; impact of dams on the environment; road building	4 hours
<b>Ongoing and informal assessment, feedback and revision</b>			2 hours
Formal assessment (end of term/Week 10)			1 hour

## Recommended resources

- Political and physical classroom maps of South Africa (may be combined in one map)
- Pictures (for example, photographs from magazines and newspapers) of rivers, mountains, coastlines and other landscapes in South Africa
- Pictures to show human activity in different human environments (e.g. from magazines and newspapers, or if you have a computer and an Internet connection you can source appropriate images from the Internet and show these to learners as a slide show)

## Additional resources

- Photocopies of blank maps of South Africa (see Extra resources section)
- A world atlas (book and/or on CD) for the classroom or to share between classes
- Atlas of South Africa
- Ingredients for salt dough recipe and paints for relief model (see Unit 3 Bright Idea!)

- Websites: <http://geology.com/below-sea-level/>  
<http://earthobservatory.nasa.gov>  
<http://www.southafrica.info/>  
<http://www.geographicguide.com/africa/south-africa.htm>  
<http://www.southafrica.co.za/>  
<http://www.environment.gov.za/>  
<http://www.riverhealth.org/>  
<http://www.wrc.org.za/> (Water Research Commission)  
<http://www.dwaf.gov.za/> (Department of Water Affairs and Forestry) <http://www.statssa.gov.za/>  
<http://sanral.co.za> (South African National Roads Agency)

**Curriculum content and concepts**

- Physical map.
- High places and low places (review 'sea level' and 'height above sea level').
- Coastal plain, escarpment, plateau (concepts and location of features in South Africa).
- Location of the Highveld, Lowveld, Great Karoo, Little Karoo, Kalahari and Namaqualand.

**Teaching notes**

You will need: a physical map of South Africa (preferably a large format classroom map as well as the maps in the Learner's Book)

- Start this module with the group activity in the Learner's Book on page 29. Photocopy the outline of the map of South Africa (with provincial borders, Extra resources section) and give one copy to each group of four learners. Let the groups work for 20 minutes to fill in the blank map, and then compare their maps. This activity will give you a good sense of what learners know and remember about map work and the geography of South Africa.
- Use the classroom wall map or the map on page 35 of the Learner's Book to discuss what the learners know about the map of South Africa.
- Ask learners to remind you what they already know about 'sea level' and 'height above sea level' from Unit 3 of Module 1. Tell learners that they will be revising these concepts in this unit, and also learning more about high and low areas.
- Ask learners to quietly read the text on pages 30–33 (except the activity text). Then read the key sentences or main ideas from the Learner's Book text and use the pictures to introduce and explain the content and concepts for this unit.
- Ask learners to read the activity in the Learner's Book on page 33, and then talk about questions 1 to 3 as a class. Learners should then work on their own to write the answers to question 1 in their notebook, and to complete question 4 of the activity. They should hand in the answers to question 1 and the filled-in map of South Africa for you to assess informally.
- Use the classroom or Learner's Book map of South Africa to point out the places listed in the Bright Idea box on the next page of this guide. Or read each point and ask learners to point to the place on the map.



### **BRIGHT IDEA!**

#### **Ten interesting points about high and low South Africa**

- The largest feature of South Africa's landscape is a high plateau in the interior of the country. A plateau is an area of mostly level high ground. The perimeter of this inland plateau rises into a series of mountain ranges, known as the Great Escarpment.
- The biggest sub-region within the plateau is the grassy Highveld (1 200 m to 1 800 m above sea level). The Highveld stretches from the Western Cape Province to the north-eastern part of the country, including the Free State. In the north, the Highveld rises into a ridge of gold-bearing rock formations known as the Witwatersrand.
- The Great Escarpment – which includes the uKhahlamba-Drakensberg range – lies mainly across South Africa and Lesotho, but also extends into Zimbabwe, Namibia and Angola.
- The mountains of the Great Escarpment rise between 2 000 m and 3 300 m above sea level. The highest point in South Africa is the peak of Mafadi Mountain, which is 3 450 m above sea level. (Another name for it is Ntheledi Mountain.)
- In the west and the south west of South Africa are the Cape mountain ranges.
- The north to south Cape mountain ranges (on the Atlantic coast side of South Africa) include the Cedarberg Mountains, and have peaks nearly 2 000 m high.
- The east to west Cape ranges include the Swartberg Mountains and the Langeberg Mountains, and are around 2 200 m above sea level.
- The Cape ranges are separated from the interior plateau by a semi-desert known as the Great Karoo. The Great Karoo is between 450 m and 750 m above sea level, and is crossed by rivers that have eroded canyons and valleys as they run down (south) to the ocean.
- The Lowveld is the narrow coastal strip between the Great Escarpment and the ocean, and this sub-region varies in width from about 60 kilometers to more than 200 kilometers. This coastal plain is the most fertile region in South Africa.
- The lowest point in South Africa is sea level – 0 m.

### **Answers to activity**

*Class and Individual* Learner's Book page 33

1. a) having high and low areas b) the higher, flatter area in the inside part of a country c) the low area along the coast d) an area where the land rises steeply, for example as a mountain, between the coastal plain and the plateau
2. Check that all learners understand and follow the instructions.
3. Check that all learners understand and follow the instructions.
4. Refer to the map on page 32 of the Learner's Book (map showing the relief of South Africa). Learners can trace the outline map (Learner's Book page 192) on a page in their notebooks, or on a blank sheet of A4 paper. The drawn map should be accurate and neat.

### Informal assessment

- Use the individual activity in the Learner's Book on page 33 (questions 1 and 4).
- Photocopy the blank map of South Africa with provincial borders (Extra resources section) for the group work, and for remedial/extension work.

### Additional resources

- Blank map of South Africa with provincial borders (Extra resources section).
- Satellite and 3-dimensional maps (and models) are a useful resource for teaching about high and low areas on land, and height above sea level (most of the websites listed for this module will have online satellite maps. See also: <http://earthobservatory.nasa.gov/>).
- <http://geology.com/below-sea-level/>
- <http://www.southafrica.info/>
- <http://www.geographicguide.com/africa/south-africa.htm>

### Remedial and extension activities

Photocopy the blank map of South Africa with provincial borders for learners (Extra resources section).

**Remedial:** Learners should label and colour the map with the places and features that have been covered in the units so far (they can check in the Learner's Book to make sure all the required information is included).

**Extension:** Learners should label and colour the map with the places and features that have been covered in the units so far, and then find out about 10 more interesting or important places or features in South Africa (that are not in the Learner's Book) and add them to the map. Learner should write a sentence about each new place or feature added.

**Curriculum content and concepts**

- Mountains, mountain ranges, valleys and hills, rivers, waterfalls, coastlines – capes and bays (note that selected physical features should include a range of types of feature across South Africa).
- Location of main physical features in own province.
- Location of selected physical features in South Africa – such as Table Mountain, the uKhahlamba-Drakensberg, Waterberg, Lake St Lucia, Augrabies Falls, Cape Point, Algoa Bay.
- Place names – how a selection of three places/areas in South Africa got their names (note that the places must be associated with physical features).

**Teaching notes**

You will need: a physical map of South Africa, and pictures of natural features in South Africa

- If learners do not know much about aeroplanes and flying, you will first need to explain the idea of an aerial view from an aeroplane flying over South Africa.
- If learners have flown locally, ask them to describe to the class what they saw from the aeroplane window.
- Read Learner's Book pages 34–35 with the learners (read out loud or get learners to volunteer to take turns to read out loud). They should be familiar with the type of information that is shown in a physical map. Let them complete the activity on page 35 on their own.
- Read Learner's Book pages 36–38 with the learners. Ask everyone to point to: the uKhahlamba-Drakensberg mountain range; Lake St Lucia; and Blyde River Canyon in their Learner's Books. Show learners these places on the classroom wall map of South Africa.
- Ask learners to work on their own to complete the activity on page 38 and write the table in their notebooks. When they have completed the activity, ask them to swap books and mark each other's work (or to mark their own work) while you read each question and the answer. Each learner should get a mark out of 18 for this question (that is, they should write 2 physical features for each province). The marks should help learners to assess their own progress (informal assessment).
- After learners have marked the text (physical features) in the table, they can add the names of other features they didn't have to their table.

## Answers to activity

*Individual* Learner's Book page 38

Province	Physical features
Western Cape	Table Mountain Robben Island Cape Point Little Karoo Swartberg Mountains Breede River Saldanha Bay False Bay
Northern Cape	Augrabies Falls Gariep-Orange River Great Karoo (also Western Cape) Kalahari Desert Namaqualand coastal region Nuweveld Mountains
Eastern Cape	Algoa Bay Addo Elephant National Park Valley of Desolation Great Fish River Tsitsikamma National Park
KwaZulu-Natal	uKhahlamba-Drakensberg mountains Lake St Lucia Tugela River (or the uThukela River) Mfolozi River Lebombo Mountains (extends into Limpopo)
Limpopo	Limpopo River Waterberg Mountains Letaba River
North West	Vredefort Dome Magaliesberg Mountains Pilanesberg National Park
Gauteng	Vaal Dam Witwatersrand Basin (gold deposits)
Mpumalanga	Blyde River Canyon Kruger National Park Eland Falls
Free State	Golden Gate National Park Gariep Dam Bloemhof Dam Caledon River

### **Informal assessment**

- Use the individual activity in the Learner's Book on page 38 (question 3, mark out of 18).
- Photocopy the blank outline map of South Africa (map without provincial borders; Extra resources section) for learners to fill in and colour the natural features on the map.

### **Additional resources**

- Blank outline map of South Africa (map without provincial borders; Extra resources section).
- Atlas of South Africa.
- <http://www.southafrica.info/>
- <http://www.info.gov.za/aboutsa/index.htm>
- [http://www.environment.gov.za/Maps/Maps\\_content.html](http://www.environment.gov.za/Maps/Maps_content.html)
- <http://earthobservatory.nasa.gov>



**Curriculum content and concepts**

- Where rivers begin and end – directions of flow from high areas to the sea.
- Concept of river systems – tributaries and catchment areas.
- Main rivers of South Africa – identifying the sources, major tributaries and directions of flow (map).

**Teaching notes**

You will need: physical map of South Africa, and pictures of South African rivers (especially different parts of river systems)

- Read Learner's Book page 39 with the learners. Also talk about other rivers in South Africa and Africa that learners know about: where do those rivers begin and end?
- Read Learner's Book page 40 with the learners – use the diagram and information to talk about the parts of a river system. If you have pictures of parts of South African river systems, show them to the class to further explain and reinforce the concepts and terms.
- Ask learners to work on their own to complete the activity on page 41 in their notebooks. (They should hand in their labelled map of a river system and answers to question 3 for you to informally assess, along with questions 4 and 5 on page 43 of the Learner's Book.)
- Check learners' map-reading skills by asking them to point to rivers and dams on the map on page 42 as you say the river/dam names. Or ask for volunteers to point out the rivers and dams on the classroom wall map of South Africa.
- Remind learners that there are high areas and low areas in the South African landscape, and that rivers usually flow from high land to low land. Remind the class about mountains in South Africa by looking at the map on page 35 again.
- Ask learners to work in pairs to complete questions 1–3 of the activity on page 42 of the Learner's Book. When they have finished, draw the table (question 2) on the board and ask for volunteers to fill in the information so learners can check and mark their own answers.
- Ask learners to work on their own to complete questions 4 and 5 of the activity on page 43 in their notebooks, and to hand in their notebooks for you to assess informally.



### **BRIGHT IDEA!**

#### **Make a relief model**

A relief model of a country shows the landscape in three dimensions with raised and lower areas of the model showing the high and low features. Using salt dough (salt clay), you and/or learners can make a simple relief model of the South African map. Once the completed relief model is dry, it can be painted and labelled with the physical features learned.

1. First make the salt dough (recipe below), and then roll it into a big ball.
2. Put the dough ball in the middle of a thick piece of cardboard; the cardboard should be big enough so that you can roll the ball into a flat rectangular shape a bit bigger than an A4 page.
3. Roll the dough ball flat with a rolling pin or the side of a bottle – the rolled piece of dough should be about 2 cm thick. The flat piece of dough should be about the size of an A4 page, or bigger.
4. Photocopy the South Africa map (map without provincial borders; Extra resources section) and cut out the outline of the country (that is, along the border with the sea).
5. Put the paper outline of South Africa on the flat piece of dough. Press lightly on the paper with both hands. Use a butter knife to cut around the paper outline. Carefully cut the dough along the whole outline. Gently pull away the strip of dough that you cut around the outline. Shape the edges of the dough outline so that they match the paper outline.
6. Carefully pull up the paper outline – you should have a flat piece of dough in the shape of South Africa. Now you are ready to add features.
7. Add features to the South Africa outline using leftover dough – for example, make mountain ranges by shaping the dough into small cones and gently blending the base of the cone into the flat dough. Lines for rivers can be made by lightly cutting into the flat dough with a blunt knife, the edge of a ruler or a sharp pencil. Dams and lakes can be made by gently pushing your thumb or a teaspoon into the flat dough to make a dent or hollow space.
8. When you have finished shaping and modelling the features, leave the relief model to dry out. The drying time needed for each piece will be different depending on size and thickness. An average time for natural drying is 30–48 hours (up to 2 days). Note: if you are making the model/s at school, try to leave them to dry in a room where they will be safe from the curiosity and fingers of other learners!
9. Once the relief model is dry, paint the rivers, dams and lakes with blue paint (e.g. poster paint, acrylic paint, powder paint). The paint should not be very watery; it should be quite thick. Paint the mountain ranges brown. Depending on the detail of the relief model, you might use yellow paint for areas 400–2 000 m above sea level, and green paint for areas 0–400 m above sea level. (If you make a bigger relief model – e.g. double the quantity of dough – you can show more detail and levels of land.)
10. Write labels for features on small strips of paper or cardboard. Push a pin through each label and then push the pin into the feature on the model.

#### **Salt dough recipe**

2 cups of plain flour

1 cup of table salt (can increase to 2 cups of salt)

1 cup of water (can increase to 1½ cups of water)

#### **What to do to make the dough:**

1. Mix the flour and the salt together in a bowl and then stir in the water.

2. Use your hands to knead the dough together – the dough must be smooth and well blended, so add more water if you need to. Add water in drops so you don't add too much at once.
3. Put the dough onto a clean table and knead it for about 5–10 minutes – the dough should be warm, quite soft and easy to make shapes with. Shape the dough into a ball.
4. If possible, it is best to let the dough stand for about 20 minutes before using it. (This dough can be stored for up to a week in the fridge, in an airtight container or cling film.)

Note: A few drops of vanilla essence (from the baking section in a supermarket) will stop the dough from growing mould once it is dry.

Reference for how to create a salt dough map: [www.youtube.com/watch?v=95CccPVpQjY](http://www.youtube.com/watch?v=95CccPVpQjY)

## Answers to activities

*Individual* Learner's Book page 41

1. and 2. Learners should copy the map onto a page in their notebooks, or onto a blank sheet of A4 paper. The drawn map should be accurate and neat, with correct labelling.
3. A) river mouth B) lake

*Pair* Learner's Book page 42

1. Learners should be able to point to named rivers on map.
- 2.

	Orange River	Vaal River	Great Fish River
Source (province or country)	Drakensberg, Lesotho/ KwaZulu-Natal	Drakensberg, Mpumalanga	Sneeuberg, Eastern Cape
Direction river flows	West	West	South, then east
Ocean where river ends	Atlantic	Tributary of the Orange River (Atlantic)	Indian
Dams and other features on the river	<ul style="list-style-type: none"> <li>• Gariiep Dam</li> <li>• Vanderkloof Dam</li> <li>• Augrabies Falls</li> <li>• Boundary between South Africa and Namibia</li> <li>• Starts as the Senqu River in Lesotho</li> </ul>	<ul style="list-style-type: none"> <li>• Vaal Dam</li> <li>• Bloemhof Dam</li> <li>• Joins the Orange in Vredefort Crater</li> </ul>	<ul style="list-style-type: none"> <li>• Elandsdrift Dam</li> <li>• Egerton Dam</li> </ul>

3. a) Orange River (cross from South Africa at Vioolsdrif or at Onseepkans) b) Limpopo River (cross from South Africa at Beit Bridge/Messina)

*Individual* Learner's Book page 43

4. east, Indian, west, Atlantic, uKhahlamba-Drakensberg
5. Tributaries of the Orange River include: Caledon River, Berg River, Vaal River, Molopo River, Hartbees River, Brak River, and Fish River (Namibia).

## Informal assessment

Monitor progress in discussions and activities.

### Additional resources

- <http://www.riverhealth.org/>
- <http://www.wrc.org.za/> (Water Research Commission)
- <http://www.dwaf.gov.za/> (Department of Water Affairs and Forestry)
- Ingredients for salt dough recipe and paints for relief model (see Bright Idea box)
- Satellite maps are a useful resource for showing whole river systems. Most of the websites listed for this module will have online satellite maps, and see also: <http://earthobservatory.nasa.gov/>
- <http://wessa.org.za>

### Remedial and extension activities

Photocopy the blank map of South Africa with provincial borders (Extra resources section).

**Remedial:** Learners should draw in and label the rivers, lakes and dams covered in the units so far (they can check in the Learner's Book to make sure all the required information is included, as well as water features in the learner's home province).

**Extension:** Learners should draw in and label the rivers, lakes and dams covered in the units so far; and then drawn in and label any other rivers, lakes and dams in their province and in the closest neighbouring provinces.

**Curriculum content and concepts**

- Links between physical features, where people live and what they do (human activities).
- Ways in which human activities change physical landscapes – case studies to include:
  - impact of dams on the physical environment
  - road building.

**Teaching notes**

You will need: physical map of South Africa, and pictures showing human activities in different physical environments in South Africa

- Ask learners to quietly read the information on pages 44–45 of the Learner's Book, and then to close their books and tell you what they remember. For example, ask learners to tell you examples of human activities, and the links between those activities and the environments where people live and work.
- Show and talk about the pictures showing human activity in different human environments. Help learners to make the links between physical features and human activities, especially human settlements.
- Ask learners to work in pairs to complete the activity on page 46. Go around the class to informally assess work and help where necessary. When the pairs have completed the activity, draw the table on the board and talk about the answers with the class.
- Ask learners to tell you examples of where human activity, for example mining or farming, changes the natural environment, and what those changes are. Then focus on changes that damage the environment – for example, changes which use up or pollute natural resources.
- Read Learner's Book page 47 with the learners. Ask them to identify examples in their own environment of any of the points from the list.
- Talk about the maps on page 48 and ask learners to point out changes they see between the years 1910 and 2010. Ask them to think about and explain why the changes happened and the impact on the environment.
- Ask learners to work on their own to complete the activity on page 49 of the Learner's Book, and then to swap notebooks and mark each other's work while you read the answers. Take in the notebooks to informally assess progress.
- Read aloud and explain the text in the Bright Idea box. Ask learners to identify any changes in the local, natural environment that they know about. Then ask them to tell you about changes

which have caused damage to the environment, and which cause or add to climate change.

- The curriculum requires learners to look at two case studies about the impact of particular human activities – road building and dams. The activity on page 49 of the Learner’s Book looks at the impact of road building, and there is a case study about dams on pages 50–51. Ask learners to read the case study (‘Dams: How do they impact on the environment?’) on their own, and then ask questions and discuss in class to check their understanding.
- When you are confident that all learners have read and understood the information about dams, ask them to work on their own to complete the activity on page 51.
- Ask for volunteers to read the captions to the photographs on pages 52–53. Read through and discuss the answers to the activity on page 51 of the Learner’s Book.
- Use the map on pages 52–53 to revise – remind learners of content from Units 3 and 4, and also ask learners to tell you what information they can see or read from the map.



### **BRIGHT IDEA!**

The following text is an extract from an article in *The Star*, a Gauteng newspaper. The article makes a strong point about how human activity can destroy the environment, adding to the information in the Learner’s Book on page 47.

#### **Action is needed to tackle global threat**

Climate change is defined as changes in climate caused, directly or indirectly, by human activity which alters the composition of the atmosphere.

Key to that definition is ‘by human activity’.

It’s a change beyond the natural and normal, caused by the burning of fossil fuels, releasing millions of tons of carbon dioxide into the atmosphere that otherwise never would have been there.

It’s not a hoax or conspiracy theory invented by scientists to cheat developing nations of economic growth.

The climate is warming up. It’s real.

The effects of climate change are already noticeable. Extreme droughts. Heat waves. Tropical cyclones. And yes, the melting of the ice caps.

While we can’t look at every weather phenomenon and immediately point to climate change, the increased frequency and intensity of these events on a global scale is an indicator [sign] that climate change is happening.

South Africa is not immune to the effects of climate change.

According to the models [theories], our country will become increasingly vulnerable to droughts and flooding over the next 50 years.

The western parts of the country will become dryer. The interior will become hotter. Rainy seasons will become shorter. And when it does rain, it will come with increased risk of flash flooding and hence disease.

Tourism, agriculture, fishing, health, food security, water security – it will all be affected.

South Africa is one of the biggest emitters of greenhouse gases in the world. We are by far Africa’s worst offender.

**Source:** ‘Action is needed to tackle global threat’ by Kristen Van Schie, page 3, *The Star* 28-11-2011 (extracted and adapted)

## Answers to activities

*Pair* Learner's Book page 46

1. to 3.

	Suitable place to build a settlement?	Reason why, or why not
1. Swamp	✗	Will not provide foundation for building
2. Fertile plain	✓	Will provide food from farming
3. River	✓	Will provide water
4. Mountains	✗	Will be very difficult to build on steep land
5. Hills	✗	Same difficulty as mountains; but could be suitable if gentle hills and nearby resources
6. Minerals	✓	Will provide raw materials for making things
7. Oil reserves	✓	Will provide energy
8. Bay	✓	Will provide shelter from rough weather

*Individual* Learner's Book page 49

- 100 years' difference.
- farming and fishing; their water; horse and cart and walking; mining, farming, factory work and services; mining, factories; cars, boats and trains
- Some of the impacts of road building are:
  - Landscapes are changed to make the course of the road – this can include cutting down trees, blasting through mountains and hills, and disrupting or damaging any natural habitats where the road will be built.
  - More people settle around roads, so these areas become crowded and more resources are used.
  - The activity of building the roads causes pollution (e.g. from materials and machinery used for building, and also in producing waste).
  - Vehicles on the road cause pollution (carbon emissions from engines).

*Individual* Learner's Book page 51

- Map reading skills.
- a) Alexander Bay, Upington, Douglas b) Gariep Dam, Vanderkloof Dam
- energy generation (hydroelectricity), irrigation for farming, mining diamonds (at the mouth), tourism
- Dams need a lot of land space that could be used for farming or other human settlement. Damming a river can mean that there is less water for people further down the river.

### Informal assessment

Use the individual activity in the Learner's Book on page 49 for informal assessment.

### **Additional resources**

- <http://www.southafrica.co.za/>
- <http://www.statssa.gov.za/>
- <http://www.info.gov.za/aboutsa/index.htm>
- <http://www.environment.gov.za/>
- <http://sanral.co.za> (South African National Roads Agency)
- <http://saweatherobserver.blogspot.com/> (weather and disaster information)
- <http://wessa.org.za>
- <http://sanparks.org.za/parks>
- <http://www.environment.gov.za>
- <http://www.dwa.gov.za>
- <http://www.seed.org.za>
- <http://www.sanbi.org>

### **Remedial and extension activities**

**Remedial:** Continue to revise and reinforce map-work skills by drawing and labelling blank maps, and identifying places on maps.

**Extension:** Ask learners to find out more about climate change, what it is, its effects on Africa and South Africa, and what they – the children – can do to help the efforts to slow down climate change and save the Earth.



1. Learners should copy the map on a page in their notebooks, or on a blank sheet of A4 paper. The drawn map should be accurate and neat, with correct features and labelling.

### Formal assessment task

You can choose to score each answer out of 4, for a total of 20 marks, or use the rubric on the next page.

1. *Reading map and information.*

#### Site A

Who the dam will help: Village A and nearby farmland.

Who/what the dam will affect badly: Everyone below (south of) site A will be affected badly, as they will no longer have the benefits of a river – that is, the nature reserve, the school, village B and lower farmland.

#### Site B

Who the dam will help: A dam at this site will also benefit village A and nearby farmland, but the water will have to be transported further than from site A.

Who/what the dam will affect badly: The nature reserve might be cleared and flooded to create the dam, destroying ecosystems and leaving animals homeless. A dam at this site would certainly change the nature reserve. Village B and the lower farmland will no longer have the river.

#### Site C

Who the dam will help: Lower farmland; possibly also to some extent, village B.

Who/what the dam will affect badly: If the dam is close to the school, learners must be aware of water safety especially when swimming. Water will have to be transported further to reach the upper farmland.

#### Site D

Who the dam will help: Lower farmland and village B.

Who/what the dam will affect badly: Water transportation will be further and require more effort to reach the upper farmland and village A.

2. Building a dam will result in roads and more infrastructure to the site. This can be positive, as the area will develop, there may be some economic growth, and the area will be more accessible generally. The negative result of building roads means that natural environments are disrupted or destroyed, and it can lead to rapid urbanisation before there are proper services to support the population.

	1 Not achieved	2 Elementary (Almost achieved)	3 Moderate (Not yet all achieved)	4 Adequate (All achieved)	5 Substantial (Achieved and more)	6 Meritorious (Very well achieved)	7 Outstanding (Excellent)
<b>ACHIEVEMENT</b> In assessing the work, you will need to see evidence that the learner has mastered geographical skills and is able to:							
Gather information from written and visual sources							
Consider, synthesise and organise the information							
Make links between cause and effect, change and continuity							
Develop his/her own ideas based on an assessment of all the information collected							
Put forward his/her results logically, in a clear, and organised fashion							
Provide reasoned explanations for his/her opinions							
Language use is correct – spelling and grammar							

# Weather, climate and vegetation of South Africa

## Content and time

The suggested teaching time for Geography is approximately 15 hours per 10-week term (that is, approximately 1½ hours per week of contact time).

## Term 3

Week	Unit	Main content and concepts	Time
1–2	1	<b>Weather</b> Elements of weather; precipitation; measuring temperature and rain; wind direction; weather maps; how weather affects the life of people	3 hours
3	2	<b>Observing and recording the weather</b> (Note that learners will need to work on this independent project mainly on their own.) Report on weather; observe weather patterns, note how weather affects people	2 hours
4	3	<b>Rainfall</b> Distribution and rainfall patterns	2 hours
5–7	4	<b>Climate</b> Difference between weather and climate; kinds of climate in South Africa; climate of own area – summer and winter	3 hours
8–10	5	<b>Natural vegetation</b> Concept of natural vegetation; links between vegetation and climate; case study of savannah grasslands	3 hours
<b>Ongoing and informal assessment, feedback and revision</b>			1 hour
<b>Formal assessment (end of term/Week 10)</b>			1 hour

## Recommended resources

- Rain gauge (and materials for making a rain gauge, see Learner's Book page 66)
- At least one weather thermometer (ideally several thermometers for the class to share)
- Wind sock or wind vane (and materials for making a wind sock, see Learner's Book page 67)
- Atlas of South Africa (that is, with temperature, rainfall and other climate maps of South Africa)
- Pictures of different kinds of natural vegetation in South Africa (e.g. photographs from magazines and newspapers, in books, or from the Internet)

- Rainfall statistics/graphs (to write or draw on board or piece of paper, or photocopy for learners)

### **Additional resources**

- At least one compass
- Cut out the weather report from a local newspaper for several different days (try to get a range of examples)
- If you have a TV and recorder, record a few episodes of the nightly weather report to show learners on a TV or computer at school. Alternatively, record examples of weather forecasts from the radio (or play them directly from the radio at school)
- Eight to ten pictures showing different types or states of weather, in urban and rural environments, anywhere in the world (for example, photographs from *National Geographic*, *Africa Geographic* and other magazines)
- Websites: <http://www.weathersa.co.za/web/> (South African Weather Service)

Most websites listed in the Additional resources for Module 2 will also be useful for this module.

**Curriculum content and concepts**

- Elements of weather – temperature, wind, cloud cover, rainfall.
- Precipitation – rain, hail and snow (note that this is included to cover the concept of different kinds of precipitation; it is not necessary to include how different types of precipitation form).
- How temperature and rain can be measured (instruments and units of measurement).
- Determining and describing wind direction.
- Weather maps in the media (newspaper and television).
- How weather affects the daily lives of people.

**Teaching notes**

You will need: a weather thermometer, a rain gauge, and examples of weather reports (from newspaper, TV or radio)

- Start this module with the individual activity on page 57 of the Learner's Book. Learners should write the answers in their notebooks. Then as a class, talk about the questions and answers.
- Ask learners to work on their own to read the definition of weather at the start of Unit 1, Learner's Book page 58 and to write it in their notebooks.
- Ask learners to complete the activity in the Learner's Book on page 58, and then in groups to share and talk about the drawings. While the groups are discussing, go round to help and to informally assess progress.
- Talk about and explain the information on the weather chart on page 58 – make sure learners understand the symbols and units of measurement used. If you have examples of newspaper weather reports, show and talk about the use of symbols and units of measurement.
- Also show learners examples of instruments used to measure the weather, for example a thermometer and rain gauge.
- Read and explain the content on pages 59–62 of the Learner's Book: temperature, wind, cloud cover and precipitation. Ask learners to write the definitions in their notebooks, and to tell you their experiences of these different types of weather.
- When you are confident that all the learners have read and understood the content on pages 59–62, ask them to quietly read the information on page 63, look at the pictures, and then work on their own to complete the activities on pages 59 and 63 in their notebooks. Take in and mark their work (including the definitions they have written) to assess informally.

- Use whatever resources you have – newspaper cut-outs, recording from TV or radio – and the map on page 65 to show learners examples of weather reports and to talk about the content of weather reports.
- Ask learners to work in pairs to complete question 1 of the activity on page 65 of the Learner’s Book writing the answers in their notebooks. When a pair is finished they should join up with another pair to share their answers and check their work. While the groups are discussing, go round to help and to assess progress informally.
- When everyone in the class has completed question 1 of the activity on page 65, ask learners to work on their own to write the answers to question 2 in their notebooks.
- Take in and mark the activities (Learner’s Book pages 59, 63 and 65) in the notebooks (including the definitions they have written) to assess learners’ progress informally.



### **BRIGHT IDEA!**

#### **Make a weather report record** (classroom chart)

- Start with a big piece of blank paper (or stick four sheets of A4 paper together to make one big sheet).
- Decide on the time period for the record – at least four weeks, ideally for this whole term. With a ruler and pencil draw a grid on the piece of paper to make a calendar outline. The grid should be a row of five or seven blocks across the page (days), and at least four rows of blocks down the page (weeks).
- Fill in the days Monday to Friday across the top of the grid, and a date in each square of the grid (you don’t have to include Saturday and Sunday unless you want to). Each square of the grid (i.e. day of the week) should be big enough to stick the weather report cut out from the newspaper.
- Ask for different volunteers to cut out the weather report from the newspaper each day for your city or town (or the nearest city or town). Remind learners to check that their parents have finished reading the newspaper before they cut out the weather report!
- A newspaper weather report is usually made up of a map of the whole country, as well as a symbol and a temperature (and a word or phrase) to describe the weather for specific places. You don’t need the whole map for this record, just the symbol and temperature (and word) that describes the weather for your city/town (or nearest).
- A learner should stick the day’s report (symbol and temperature) next to the correct date.
- For each day’s report ask learners: is the newspaper report accurate for that day? If the class agrees the report is correct, put a tick next to the symbol. If the class agrees that the weather outside is different to the report, put a cross next to the symbol.
- At the end of 4–8 weeks talk about the completed weather report record with the class. For example, ask learners to tell you whether the reports for this period were usually correct or not correct (and why they think that is so).
- Also look at the rows of symbols and temperatures – what information do we get from these symbols and temperatures recorded over a period of time? Help learners to identify and talk about the patterns in the weather.

## Answers to activities

*Individual* Learner's Book page 58

1. and 2. The drawings should show that the learner understands and can correctly interpret the two different descriptions of the weather in Johannesburg in the morning and afternoon.

*Individual* Learner's Book page 59

1.

Temperature	Description
< 5 °C	Very cold
6–10 °C	Cold
11–17 °C	Mild
18–27 °C	Warm
28–32 °C	Hot
> 33 °C	Very hot

*Individual* Learner's Book page 63

1. The wind stopped blowing (dropped). It's cloudy weather (overcast). The weather is clear, sunny and warm (fine). The rain was very heavy (torrential). The temperature is very high (scorching).
2. Learner's answer should show awareness of how the weather affects the daily lives of people. Note that this is the effect of ordinary day-to-day weather, not natural disasters or extreme (unusual) weather. An example of the effects of rainy and wet weather is that it is difficult and uncomfortable to get to school or work if one uses public transport or walks, and generally the roads are busier and driving more difficult and dangerous. Other effects of rainy and wet weather might be a leaking roof, washing that doesn't dry, sports events cancelled, or getting wet if you have to go outside.
3. Good weather is especially important for building and construction, for farming, and for tourism. All these jobs require planning and depend on the weather state. Farming depends on getting rain in the right season. Concrete and building materials require dry weather to dry and settle properly. A tour guide will have to change an outdoor tour to an indoor tour if rain is forecast; or if the weather is very hot, a tour guide will have to make sure that tourists have hats, water and sun protection cream.

*Pair* Learner's Book page 65

1. a) 14 February  
b) Cape Town  
c) Pretoria  
d) Port Elizabeth and Durban  
e) Cape Town  
f) Cape Town and Port Elizabeth

2.

City	Temperature	Cloud cover	Wind direction	Wind speed	Precipitation
Port Elizabeth	10 °C (cold) – 28 °C (hot)	Cloudy	South east	15 km/h	Rain
Durban	10 °C (cold) – 28 °C (hot)	Sunny	North east	15 km/h	Thunderstorm

### Informal assessment

- Use the individual activity in the Learner's Book on page 59 and page 63; and question 2 of the individual activity on page 65.
- Check the learners' definitions of: weather, temperature, wind, cloud cover and precipitation.

### Additional resources

- Several different days' weather reports cut out of local newspapers (try to get a range of examples that show a variety of the symbols used).
- If you have a TV and DVD recorder at home, record a few episodes of the nightly weather report. Try to get examples from different TV stations. You can show the weather reports on a TV or laptop at school if you have those resources.
- Alternatively, record examples of weather forecasts from the radio (or learners can listen to a live radio weather broadcast at school).
- Eight to ten pictures (for example, photographs in magazines) showing different types or states of weather, in urban and rural environments, anywhere in the world.

### Remedial and extension activities

Ask learners to share and look at the pictures showing different types or states of weather. (Number the pictures for reference.)

**Remedial:** Ask learners to choose any five pictures and to write one to two sentences in their notebooks to describe the weather state in the picture. They should also write a caption for each picture. Each caption should use at least one word from this list: hot, warm, cold, cool, cloudy, partly cloudy, clear, dry, wet and windy.

**Extension:** Ask learners to choose any five pictures and to write a paragraph about the weather conditions in the picture (in their notebooks). They should include any other relevant information about that type of weather state, for example, how it is caused, what the effect is on people, what other effects are, how it might change.



**Curriculum content and concepts**

- Observe and record the daily weather over a two-week period (independent project for formal assessment).
- Report on temperatures, cloud cover, precipitation and wind, using terms such as hot, warm, cold, cool, cloudy, partly cloudy, clear, dry, wet and windy.
- Include observations of wind direction and weather patterns over the period of observation.
- Observe and comment on how weather affects the daily lives of people.

**Teaching notes**

You will need: materials for making a rain gauge (see Learner's Book page 66) and materials for making a wind sock (see Learner's Book page 67), at least one weather thermometer (ideally several thermometers for the class to share), and at least one compass

- This independent study is a project for formal assessment. Introduce the project early in the term to be completed before the end of term (that is, give learners from Week 3 to Week 8 of the term to work on the project, and they must submit it at the end of Week 8, or in Week 9 of the term).
- Learners should mostly work on their own for this project, but you will need to allow some time to explain the project and assessment, and also to monitor (ongoing while learners are working).
- Read the introduction to Unit 2 (the text before the activity), and talk about why people observe and record weather and the value of that information for different purposes.
- Then explain to learners their objectives or goals for the project:
  1. Make instruments to help you observe and record the weather (a rain gauge and a wind sock).
  2. Observe and record local temperatures, cloud cover, precipitation and wind direction. Use terms such as hot, warm, cold, cool, cloudy, partly cloudy, clear, dry, wet and windy.
  3. Observe and comment on the weather patterns during the period of observation.
  4. Observe and comment on how weather affects the daily lives of people.
- Read question 1 a) to c) of the activity in the Learner's Book on pages 66–67.
- Demonstrate to the class how to build a rain gauge and how it works; and then demonstrate how to make a wind sock and how it works.

- If possible, go outside the classroom with learners to decide where north, south, east and west are. Check that they know how to find the directions north, south, east and west of the school.
- Ask learners to draw their charts in class (the chart should show two weeks of time).
- Ask learners to draw a key with symbols for the chart – that is, the weather symbols that they might use while observing and recording the weather.
- Read question 2 a) to d) of the activity in the Learner’s Book on page 68. Check that learners understand what they need to do, and know what work they need to hand in and when.
- If you only have one weather thermometer for the class, then let the learners take turns to go outside in groups of 4–5 to use the thermometer to measure the temperature. Two to three learners in each group should check the thermometer, and report back to the class. Learners should record the temperature on their own.
- If necessary, remind or show learners how to draw a bar graph with a vertical axis and horizontal axis, and to plot the points on the horizontal and vertical lines so that they can record temperature over two weeks. (See the graph in the Learner’s Book on page 75 for reference – temperature is shown in the bar graph and rainfall is shown in the line graph.)
- Monitor learners’ progress throughout the project. Where possible, use some lesson time each week (e.g. 15 minutes at the end of a lesson) for learners to report to you on their progress with the steps in the project.

### **Formal assessment task**

Use the rubric in the Extra resources section to assess each learner’s project work. Mark the project out of 100. Make sure every learner gets a copy of the rubric (Extra resources section pages 5–6), so they know exactly how they will be assessed.

### **Remedial and extension activities**

Ask learners who struggle to pair with learners who do well so that the stronger learner can be a peer resource for co-operative learning. The stronger learner must not do the work for the learner who struggles, but rather help with explaining, demonstrating and reinforcing. (This should reinforce your explanation and demonstration to the class. Only choose stronger learners who know the content well enough.) You will need to monitor the pairs to check that they are working well. The stronger learner should feel challenged by the experience of ‘teaching’ or ‘facilitating’, while the learner who struggles should feel confident about using a peer as a resource or reference for learning.

**Curriculum content and concepts**

- Rainfall in South Africa (distribution map).
- Rainfall patterns – summer/winter/all year (maps; bar graphs for selected places).

**Teaching notes**

You will need: rainfall statistics/graphs (to write or draw on the board or piece of paper, or photocopy for learners), and temperature and rainfall map/s of South Africa

- Remind learners of the definitions of 'weather' and 'climate'. Ask them to tell you what the seasons are, and in which months each season is. Then ask them in which months the most rain falls in your part of South Africa.
- Ask learners to work in pairs to complete the activity in the Learner's Book on page 69. Go around the class while learners are working and ask each pair to tell you their answer/s to questions 1, 2 or 3, or at least to explain how they will answer the question. This will enable you to informally assess learners' progress.
- Once the pairs have finished, go through the answers to the questions with the class.
- Explain what a rainfall distribution map is (Learner's Book page 71) and what information it gives us. Introduce and explain the rainfall distribution map in the Learner's Book.
- Ask learners to work on their own to write the answers to the activity on page 71 and the activity on page 72 of the Learner's Book in their notebooks.
- Once learners have finished, put up the answers to the two activities (e.g. write on an overhead transparency, on the board or flipchart, or type for a Powerpoint slide). Ask learners to mark their own work and then hand in their notebooks for you to check and informally assess.

**BRIGHT IDEA!**

Place temperatures recorded: City (Province)	Average daily January temperatures	Average daily July temperatures	Highest (H) and lowest (L) recorded temperatures
Port Elizabeth (Eastern Cape)	18 °C to 25 °C	9 °C to 20 °C	41 °C (H) to -1 °C (L)
Bloemfontein (Free State)	15 °C to 31 °C	-10 °C to 17 °C	39 °C (H) to -20 °C (L)
Johannesburg (Gauteng)	15 °C to 26 °C	4 °C to 17 °C	35 °C (H) to -9 °C (L)
Durban (KwaZulu-Natal)	21 °C to 28 °C	11 °C to 23 °C	40 °C (H) to 3 °C (L)
Polokwane (Limpopo)	17 °C to 28 °C	4 °C to 20 °C	37 °C (H) to 4 °C (L)
Mbombela (Mpumalanga)	19 °C to 29 °C	6 °C to 23 °C	40 °C (H) to -2 °C (L)
Mafekeng (North West)	18 °C to 31 °C	4 °C to 20 °C	40 °C (H) to -6 °C (L)
Kimberley (Northern Cape)	18 °C to 33 °C	3 °C to 19 °C	40 °C (H) to -8 °C (L)
Cape Town (Western Cape)	16 °C to 26 °C	7 °C to 18 °C	41 °C (H) to -1 °C (L)

Place rainfall recorded: City (Province)	Average summer rainfall	Average winter rainfall
Port Elizabeth (Eastern Cape)	36 mm	47 mm
Bloemfontein (Free State)	83 mm	8 mm
Johannesburg (Gauteng)	125 mm	4 mm
Durban (KwaZulu-Natal)	134 mm	39 mm
Polokwane (Limpopo)	82 mm	3 mm
Mbombela (Mpumalanga)	127 mm	10 mm
Mafekeng (North West)	141 mm	3 mm
Kimberley (Northern Cape)	57 mm	7 mm
Cape Town (Western Cape)	15 mm	82 mm

**Answers to activities***Pair* Learner's Book pages 69–70

- a) eastern half b) summer c) coastal regions d) See Bright Idea box.
- a) City C b) City A c) City D
- 

A	Cape Town
B	Johannesburg
C	Durban
D	Upington

*Individual* Learner's Book page 71

- a) western coast b) eastern half
- Map should be accurate and neat; for reference for shaded areas (over 500 mm) rainfall see maps in the Learner's Book on page 69 and 71. See colour used in key for 501–1 000 mm rainfall.

*Individual* Learner's Book page 72

- a) eastern half  
b) higher rainfall – more water for settlements

### **Informal assessment**

Use the pair activity in the Learner's Book on page 69, and the individual activities in the Learner's Book on pages 71 and 72 for informal assessment.

### **Additional resources**

- <http://www.weathersa.co.za/web/>
- <http://saweatherobserver.blogspot.com/> (weather and disaster information)

### **Remedial and extension activities**

Photocopy examples of weather charts, graphs and stats related to rainfall. You will find these in any newspaper.

**Remedial:** Ask learners to write two sentences in their notebooks about each graph: what information can they read in the graph? What does the graph 'tell' us?

**Extension:** Ask learners to choose four graphs and find out the same rainfall information about any other country in Africa. They should then draw the graphs for that country.

**Curriculum content and concepts**

- Difference between weather and climate.
- Different kinds of climate in South Africa (hot, warm, cold, cool, dry, wet, humid).
- Climate of own area – summer and winter.

**Teaching notes**

You will need: atlas with climate maps of South Africa

- By this stage of the module learners should have a clear understanding of the difference between 'weather' (what the atmosphere or air is like at a specific time, for example, cloudy and warm) and 'climate' (the general pattern of weather over a long period of time, for example, this place has a humid climate with high summer rainfall).
- Different climate regions have vegetation suited to that climate (the next unit will cover the natural vegetation regions in South Africa). Without spending a lot of time on this now, ask learners to look at the map on page 77 of the Learner's Book and to tell you what type of climate they would probably find in each vegetation region. Remind learners to include these words when talking about different climates: hot, warm, cold, cool, dry, wet, humid.
- Then ask learners to work quietly to read the information on page 73, and then write the answers to the activity on page 74 in their notebooks.
- Once learners have finished the activity, get them to mark their own work and also write a short comment at the end of the work about their achievement, for example, 'I am happy with all my answers', or 'I don't understand the temperature maps', etc. Take in their notebooks to check and informally assess.
- Read the last page of the unit (Learner's Book page 75), making sure that learners know how to read the two types of information combined in the graph for Bloemfontein.
- Let the learners work in pairs to answer question 1 in the activity on page 75. Ask learners to work on their own to do the short summaries for question 2, and then ask for volunteers to read their summaries to the class (for feedback or comments from other learners).



### **BRIGHT IDEA!**

The following is a Letter to the Editor, written to *The Star* newspaper (Gauteng). Read the letter to learners (if you want to photocopy the text and give it to learners to read, it is in the Extra resources section). Ask learners to identify what the writer says we can do to reduce the impact of climate change. Which things apply to learners and other children?

Remind learners that climate change happens naturally anyway – the climates and weather patterns of the Earth change over time. But the key factor that is causing climate change to happen faster is human activity that causes carbon emissions (e.g. as a result of burning and mining fossil fuels).

Ask learners to work in groups to write their own letter to the editor of the local newspaper. In the letter they should say:

- what they think or know about climate change
- which changes in climate or weather they know about
- what children can do to take better care of the natural environment
- what children can do to respond to the effects of climate change.

#### **Dear Editor**

Climate change is the increasing temperatures that have led to floods, tornados and droughts. Scientists believe that human behaviour contributes to climate change. Three people died due to thunderstorms and lightening in rural KwaZulu-Natal and this means it affects us all, especially the poor.

The public can do something to reduce the impact of climate change. Stop cutting down trees and instead plant more of them. Trees provide us with oxygen, shelter and food. People must recycle cans, papers and plastic for re-use. We must all take care of our environment and be responsible citizens.

Water shortages are also a serious threat to our country and the world. By saving water now you are creating a better future for our children. People should also stop littering in our streets. Make sure that you save energy and switch off unused lights at your home and at work [or school].

The South African government has produced a White Paper on climate change – please read it. We all want to save tomorrow today.

#### **From**

Sidwell Tshingilane (Soweto)

**Source:** *The Star* 28-11-2011, Letters to the Editor, page 9.

*Note: White Paper: government document for parliament and the public to read and comment before it can become a law.*

## **Answers to activities**

*Individual* Learner's Book page 74

1. a) winter  
b) Free State, Eastern Cape  
c) North West, Northern Cape
2. Learners complete their own table.

3. a) Western Cape
- b) Eastern Cape, rainfall
- c) Mpumalanga, summers, dry
- d) rain
- e) Free State

*Pair Learner's Book page 75*

1. cold, low, warm, high, February
2. *For example:* East London summer climate: East London has its rainfall during summer, with highest rainfall in March and November, and lowest in June/July. Being coastal, generally the temperature is mild throughout the seasons, without extremes, ranging from about 10 °C to 25 °C.

*For example:* Polokwane winter climate: Polokwane is generally quite dry with rainfall for a short period during summer; and the cooler winter months have little to no rain. Temperatures can get hot in summer, but on the whole there is a moderate range in temperatures. Summer averages of about 27 °C and winter averages around 5 °C.

### **Informal assessment**

Use the individual activity in the Learner's Book on page 74.

### **Additional resources**

- Additional resources for the last unit and for Module 2 Unit 2 will also be useful for this unit.

### **Remedial and extension activities**

Use any extra time in class for learners to talk to you about their project work (see Unit 2).



**Curriculum content and concepts**

- Concept of 'natural vegetation'.
- Links between natural vegetation and climate – examples of plants and adaptations to climate around South Africa.
- Case study – savannah and grasslands:
  - location in South Africa
  - links between climate, natural vegetation and wildlife.

**Teaching notes**

You will need: pictures of different kinds of natural vegetation in South Africa (e.g. photographs from magazines and newspapers, in books, or from the Internet)

- Start the lesson by showing the class pictures of natural vegetation – in the Learner's Book page 76 and/or pictures from magazines, especially natural vegetation from the learners' home and school environments. Ask learners to tell you what they know about the plants and plant life around and in their home town or city. Check that learners clearly understand the difference between 'natural vegetation' and farmed or cultivated (planted) vegetation.
- If possible, plan and arrange a class visit to the nearest national park or botanical gardens.
- Talk about the map on page 77. Ask learners to identify the vegetation type for their region. Make sure that learners understand the different types of vegetation and can identify at least one plant from each type.
- Talk about the links between natural vegetation and climate in the learners' home or school environment.
- Ask learners to work on their own to complete the sentence in question 1 of the activity on page 77. Then ask learners to work in groups of 3–5 to talk about question 2. Try to spend about 5 minutes with each group during their discussion. Each group should prepare to report back to the whole class and/or to write the answers in their notebooks.
- Ask learners to read the information on pages 78–79 of the Learner's Book and to ask questions if they are uncertain about anything in the text. They should then work on their own to complete the activity on page 79 in their notebooks.
- Ask learners to work in pairs to read the information on pages 80–81, and to talk about the questions in the activity.
- Then as a class, discuss the text and pictures about savannah and grasslands, and the answers to the activity on page 81. Make sure that learners know the location of the savannah and grasslands. From this activity learners should be able to recognise the links

between climate, natural vegetation and wildlife in a particular place or places.

- Learners should work on their own to do the activity on page 81 in their notebooks.



### **BRIGHT IDEA!**

Children can get involved in looking after and finding out more about local plant and animal life by joining the WWF South Africa (World Wide Fund for Nature, Southern Africa). The Wildlife and Environment Society of South Africa (<http://wessa.org.za>) publishes an interesting and activity-filled magazine for children, called *EnviroKids*. For schools activities see: <http://wessa.org.za/what-we-do/eco-schools/school-activities.htm>

Useful organisations for learners to find out about for this unit:

- Department of Environmental Affairs and Tourism (<http://www.environment.gov.za>)
- South African National Parks (<http://sanparks.org.za/parks>)
- Department of Water Affairs and Forestry (<http://www.dwa.gov.za>)
- Schools Environmental Education and Development (<http://www.seed.org.za/>)
- National Biodiversity Research Institute (<http://www.sanbi.org>)

Learners should find out about the work done by any of these organisations, and their roles in maintaining and preserving natural vegetation in South Africa.

## **Answers to activities**

*Individual* Learner's Book page 77

1. Natural vegetation is the plants and trees that grow naturally in an area.

*Group* Learner's Book page 77

2. Discuss the two questions, focusing on places around the school and other local areas that children know.

*Individual* Learner's Book page 79

1. The leaves of Fynbos plants in the Western Cape are adapted to a dry, hot environment. Their leaves are waxy or spiky and have tiny hairs or spikes. These waxy or spiky leaves lose very little water, helping the plant to survive extreme heat and drought. The leaves of succulent plants in the Northern Cape can store water. These fleshy leaves supply water to help the plant survive dry desert conditions.

*Individual* Learner's Book page 81

1. Learners should be able to point to the correct regions on the map in the Learner's Book, page 77.
2. Savannah: Limpopo, North West, Northern Cape, Mpumalanga, KwaZulu-Natal

3. Grassland: Mpumalanga, Gauteng, Free State, Eastern Cape, North West, KwaZulu-Natal, Limpopo
4. A warm, wet summer climate and cold, dry, frosty winter climate suits grassland.
5. Veld fires are common in grasslands, and few trees survive these conditions.
6. Grassland provides good grazing for buffalo and various types of buck. Their predators would be lions, leopards and hyenas.

### **Informal assessment**

Use the individual activities in the Learner's Book on pages 79 and 81.

### **Additional resources**

- <http://wessa.org.za>
- <http://www.environment.gov.za>
- <http://sanparks.org.za/parks>
- <http://www.dwa.gov.za>
- <http://www.seed.org.za>
- <http://www.sanbi.org>

### **Remedial and extension activities**

Use any extra time in class for learners to finalise their project work (see Unit 2).

1.

	Photo 1	Photo 2
Temperature	Cold, wet	Hot, sunny
Cloud	Cloudy, overcast	No clouds – clear
Wind	Gale force winds	Calm, no wind
Precipitation	Lashing rain, storm	No precipitation

2. a) to c) Learners should be able to accurately describe the weather for a particular day, using the appropriate weather symbols. Learners should also be able to give a plausible, reasoned prediction of the next day's weather, including likely temperatures and wind speed. Learners should also comment on the accuracy of her/his forecast.
3. Look at the tables in the Bright Idea box for Unit 3 to remind you of winter and summer climates in different provinces.
4. a) A cold winter climate means that people dress in warm clothes, for example, coats, jerseys, scarves, hats and gloves. The colder the climate, the more warm clothing is needed. A hot summer climate means that people dress in cool clothes, for example, clothes made from light material, short-sleeved tops and shorts, light trousers or skirts. In a sunny climate hats or other types of head cover would be useful to protect skin from the sun.  
b) Depending on how cold and severe winter is – for example, snow – people may have to stay inside during the winter season, and only go outside for very short periods of time. Generally, the seasons influence the activities that can be done outside, for example, usually people don't swim in winter. Also, winter is often a time of shorter daylight, with summer having longer daylight hours and people spending more time outside.
5. a) Waterproof clothing (e.g. raincoat) and mostly warm clothes.  
b) Some warm clothes.
6. Learners can choose any natural vegetation region covered in the unit, but they must at least know about savannah and grassland – i.e. where these regions are located in South Africa, and how the vegetation in those places is influenced by the climate.

# Minerals and mining in South Africa

## Content and time

The suggested teaching time for Geography is approximately 15 hours per 10-week term (that is, approximately 1½ hours per week of contact time).

## Term 4

Week	Unit	Main content and concepts	Time
1–3	1	<b>Mineral and coal resources of South Africa</b> Minerals as renewable resources; main minerals in South Africa and their uses; coal formation and uses; how location of coal mines affects settlement patterns	4 hours
4–7	2	<b>Mining and the environment</b> Concept of mining; ways of mining, impact of mining on the environment	5 hours
8–10	3	<b>Mining and people</b> Challenges of mine work; health and safety for miners; rules to protect miners	3 hours
<b>Ongoing and informal assessment, feedback and revision</b>			2 hours
Formal assessment (end of term/Week 10)			1 hour

## Recommended resources

- Map of South Africa showing the main minerals across provinces (that is, the main mineral deposits in the country)
- Pictures showing any aspects of minerals and mining in South Africa, for example, mine locations and structures, mining machinery, miners, mining pollution, and minerals (as raw resources, and their uses/products)

## Additional resources

- A few pieces of coal in a small box or clear plastic bag
- Examples of any minerals or products made from minerals – for example, tin, iron, copper
- Photocopy the blank South Africa map with provincial borders (Extra resources section)
- Photocopy of article extract 'Wonderfonteinspruit catchment area still a concern' (Extra resources section)
- *Gold and Workers 1886–1924*, Luli Callinicos, 1985, Ravan Press, Johannesburg
- Websites: [http://www.eia.gov/kids/energy.cfm?page=coal\\_home-basics](http://www.eia.gov/kids/energy.cfm?page=coal_home-basics)  
(all about coal)  
<http://www.parliament.uk/documents/post/postpn268.pdf>

[http://www.tabj.co.za/associations/mining\\_health\\_and\\_safety\\_in\\_sa.html](http://www.tabj.co.za/associations/mining_health_and_safety_in_sa.html)

<http://www.mhsc.org.za/> (Mine Health and Safety Council)

<http://www.miningweekly.com>

<http://www.ilo.org/safework/about/lang--en/index.htm> (workplace safety programme)

**Curriculum content and concepts**

- Minerals as non-renewable resources.
- Main minerals mined in South Africa and their uses – including gold, platinum, diamonds, iron ore, chrome, copper, silver and manganese.
- Coal as a non-renewable resource:
  - how coal is formed (note that coal is formed from organic plant remains and is therefore not a mineral)
  - uses of coal
  - location of mineral and coal mines and links to settlement patterns (map).

**Teaching notes**

You will need: pictures showing any aspects of: minerals and their products or uses, coal resources and uses, including pictures of mines where minerals and coal are dug, and a map showing the main mineral deposits in the country

- Start this module by reading the text about gold mining (see Bright Idea box), then showing and discussing the pictures related to minerals and coal. Ask learners to tell you what they already know or think about mining and the work that miners do.
- Ask learners to tell you what they know about minerals that are mined in South Africa. Write the names of the main minerals on the board.
- Ask learners if they have heard of 'natural resources' – if they have, ask for an explanation or definition of 'natural resources' – what are South Africa's main natural resources?
- Write 'non-renewable resources' on the board and check that all learners understand this term and what it refers to. Then ask learners to work in pairs to read the information in the Learner's Book on page 86 and to do the activity on the same page.
- When pairs have compared their notes, discuss the answers with the class.
- Read through the information and look at the pictures on pages 88–89 with the class. Ask learners to close their books and tell you the names of any non-renewable resources they have just read about. Then ask them to tell you what they can remember about minerals, and about coal. If you have pieces of coal and examples of products made from minerals, pass them around the class (in a box or clear plastic bag) for learners to look at.
- Make sure that learners understand the difference between renewable and non-renewable resources (including examples of both).

- Ask learners to discuss the activity on page 89 in groups of 3–4. Groups should then join in twos and compare their answers. While the learners are working in groups, spend some time with each group.
- Read the text on page 90 out loud, explaining any new or difficult words. Then ask for volunteers to answer the questions about the map – discuss as a class. Let learners write the answers in their notebooks on their own.



### **BRIGHT IDEA!**

#### **Gold mining in South Africa**

One summer's day in 1886, two prospectors discovered gold on a Transvaal farm called Langlaagte. The gold discovered there ran for miles and miles underground. Langlaagte became part of a big new mining town called Johannesburg. Other mining towns sprang up as well, and together these towns formed a curved line along a ridge – this was called the Witwatersrand.

Only twenty years after the first mine was started, gold had become the most important industry in South Africa, bringing much money into the country.

In the early days gold was not difficult to mine – it was near the surface of the ground. But soon miners found that they had to dig deeper and deeper to find the gold – 100 metres, 500 metres, a kilometre underground and even deeper. This type of mining became known as deep-level mining. Although the reef of gold runs very deep, it is also very thin, so a lot of iron ore and rock has to be dug up from the ground and crushed in order to get very little gold. The ore in South Africa is poor in gold and is known as low-grade ore. Deep-level mining of low-grade ore is very expensive, dangerous and difficult. To get approximately 21 grams of gold, miners must blast and chop out two tons of underground ore.

#### **How gold is mined**

1. First, at least two shafts are sunk by machines. These shafts go three or four hundred meters underground.
2. Then passages are excavated (dug out), leading off from the shaft. These passages cut across the thin strips of gold or reefs that run deep underground.
3. Miners find the ore that contains the tiny particles of gold – so tiny that they are invisible to the naked eye. Miners drill holes in the rock around the ore before blasting a small tunnel into the rock.
4. The tunnel has to be cleared of the blasted rock. Men dig the pieces of ore and rock and then load them into trucks.
5. The ore and rock are taken up to the surface and then loaded into trucks and taken to another part of the mine works. There, as much gold as possible is separated from the crushed ore. Machines and chemicals are used in this process.
6. There is still some gold left in the ore so the gold is melted. The hot, liquid gold runs out into trays, where it cools and becomes solid.

**Source:** *Gold and Workers 1886–1924*, Luli Callinicos, 1985, Ravan Press, Johannesburg (extracted and adapted)



## Answers to activities

*Pair* Learner's Book pages 86–87

1. Wind: renewable – air/wind is constantly renewed. Oil: non-renewable – finite fossil fuel. Metal: non-renewable – they take a very long time to form underground; Plastic: renewable – synthetic, human-made material. Diamond: non-renewable – humans can't yet create the conditions to make a real diamond. Water: renewable – as long as source is not polluted. Wood: renewable – as long as new forests are planted to replace the trees that are harvested.

*Group* Learner's Book page 89

1. The list should include: fuel, electrical power, cars, engines, generators, heat; and it is used to make tar, paints and plastics.
2. When coal burns it is reduced to ash, and finally nothing remains of the coal. It takes so long to form that it will not be available to humans again once the current coal is mined and used.
3. Coal is not a mineral because it was formed from living (organic) material – rotting trees and plants turned into coal as a result of the pressure of the soil and heat of the Earth. Minerals are formed from inorganic (non-living) material or substances.

*Individual* Learner's Book page 90

1. Northern Cape
2. Western Cape
3. Mpumalanga
4. Most industries that manufacture with metals: you'd find the industries near mines that can supply them.
5. Free State – as well as its own coal deposits, it also has a good source of coal from neighbouring provinces KwaZulu-Natal and Mpumalanga.

### Informal assessment

- Monitor progress in discussions and activities.
- Photocopy the blank South Africa outline (map with provincial borders; Extra resources section) for learners to fill in and colour settlements, mineral deposits, and coal-burning power stations.

### Additional resources

- A few pieces of coal in a box or a clear plastic bag (so that learners can look at the coal without getting dirty hands).
- Examples of any minerals or products made from minerals, for example, tin, iron, copper.
- Photocopy the blank map of South Africa with provincial borders (Extra resources section); see Remedial and extension activities below.
- [http://www.eia.gov/kids/energy.cfm?page=coal\\_home-basics](http://www.eia.gov/kids/energy.cfm?page=coal_home-basics) (all about coal)

## **Remedial and extension activities**

Give all learners the blank map of South Africa with provincial borders (Extra resources section).

Without looking at their Learner's Books, ask learners to fill in the main city of each province, and then to write on the map the names of any minerals mined in each province.

They can also draw in the symbol for coal-burning power stations if they remember it.

When they have finished filling in the map they can check – and correct – their answers from the Learner's Book, page 90.

This map activity can be continued in the next unit.

**Curriculum content and concepts**

- Concept of mining.
- Ways of mining:
  - open pit/surface mining
  - shaft and deep level mining.
- Impact of mining on the environment – examples to include:
  - pollution (water and air)
  - destruction of vegetation and wildlife
  - waste and waste disposal.

**Teaching notes**

You will need: pictures showing any aspects of mines, mining, miners, mining pollution

- Ask learners to tell you what they know about mining activities and the different types of mining, and to think of the effects of mining on the environment. Discuss this as a class to share as many ideas as possible.
- Ask learners to work quietly on their own to read the main information on pages 91–96 of their Learner's Books. (They should not read the activity texts, or any text in boxes – e.g. the news article and the case study. They should only read the main text in the book.) When everyone has finished reading, write these headings on the board and ask learners to work in pairs to write 2–3 key sentences in their own words under each heading: 'Surface mining and deep-level mining', 'Water pollution from mining', 'Air pollution from mining', 'Destruction of vegetation and wildlife'. The sentences should sum up the information under each heading. Ask for volunteers from the pairs to read their sentences out loud. Write up the key sentences you think best reflect or summarise the headings. The sentences should show that learners have understood what they have read.
- Ask learners to work in pairs to complete the activity in the Learner's Book on page 92, and then share their work with another pair. This is an ideal point to end the lesson (continuing with the same unit in the next lesson – focusing on 'Impact of mining on the environment').
- Ask learners to work in small groups to read the news article 'Asbestos diseases stalk Northern Cape communities' (Learner's Book page 94) and then answer the questions. Ask the groups to report back to the class so that everyone knows which statements are true or false.
- Ask learners to work on their own to read the case study 'Sand mining destroys area' and complete the activity on page 95 of the

Learner's Book. Ask for volunteers to read their summaries to the class to decide which summaries best sum up the report.

- Ask learners to work in pairs to read the report about pollution in Wonderfonteinspruit and do the activity on page 96. Each learner in a pair should write the letter in their notebooks for you to take in and read. Remind learners to write the names of both people in the pair at the end of the letter.
- If there is time, talk about the concept of a 'carbon footprint' in relation to the impact of mining on the environment. Read the text from the Bright Idea box. Talk about the possible carbon footprints of different sources of energy that are used to generate electricity, for example, coal, gas, water and wind.



### **BRIGHT IDEA!**

#### **Which electricity-generating system has the biggest carbon footprint?**

A 'carbon footprint' is the total amount of carbon dioxide (CO<sub>2</sub>) gas and other greenhouse gases emitted over the full lifetime of a process or product. For example, we can speak about the carbon footprint of a vegetable – that is, the total amount of carbon dioxide and other gases that were produced/emitted during the growing and farming, transporting and displaying of that vegetable.

Nearly everything we do leaves a carbon footprint. If something requires energy to make or do, some CO<sub>2</sub> gas was probably emitted during the making or doing.

Some processes have very high carbon footprints – for example, mining minerals and burning coal require a lot of energy and result in a lot of carbon and greenhouse gases being produced. Coal burning power systems have the largest carbon footprint of all the electricity generation systems mentioned here.

Electricity generated from wind energy has one of the lowest carbon footprints. As with other low carbon technologies, nearly all the emissions occur during the manufacturing and construction phases, arising from the production of steel for the tower, concrete for the foundations and epoxy/fibreglass for the rotor blades.

All electricity generation systems emit CO<sub>2</sub> at some point during their life cycle – none of these technologies are entirely 'carbon free'.

To compare the impacts of these different technologies accurately, the total CO<sub>2</sub> amounts emitted throughout a system's life must be calculated. Emissions can be direct – arising during operation of the power plant, and indirect – arising during other non-operational phases of the life cycle.

Fossil fuelled technologies (coal, oil, gas) have the largest carbon footprints, because they burn these fuels during operation. Non-fossil fuel based technologies such as wind, photovoltaics (solar), hydro, biomass, wave/tidal and nuclear are often referred to as 'low carbon' or 'carbon neutral' because they do not emit CO<sub>2</sub> during their operation. However, they are not 'carbon free' forms of generation since CO<sub>2</sub> emissions do arise in other phases of their life cycle such as during extraction, construction, maintenance and disposal/removal.

**Source:** <http://www.parliament.uk/documents/post/postpn268.pdf>  
(extracted and adapted)

## Answers to activities

*Pair* Learner's Book page 92

1. and 2. Photo on left: Miners at the head gear, in their protective clothing; Photo on right: Miners in a cart travelling underground

*Group* Learner's Book page 94

1. a) False – mesothelioma is a non-curable cancer b) False – asbestos mining stopped in South Africa in the mid-1980s c) True d) True e) False – studies say the number of ARDs in the Northern Cape mining areas is as high as 50 per cent of the population.

*Individual* Learner's Book page 95

2. In the Dinokeng area illegal sand miners have changed the flow of two local rivers so they can mine sections of the riverbed. The miners have damaged the local environment, used up natural resources, and destroyed vegetation. The water in some parts is so polluted that local residents cannot use it and rely on boreholes. [The summary can be written in the learner's own words, as long as she or he picks up and summarises the three main points in the first three sentences of the case study.]

*Pair* Learner's Book page 96

1. If you would like to give learners more information about this issue, photocopy and explain the article extract 'Wonderfonteinspruit catchment area still a concern', Extra resources section.
2. Learners should spend some time talking about what it would be like to be a famer living in the Wonderfonteinspruit area, and think of words and phrases that describe their feelings about the problem of waste and waste disposal. The letter should be properly structured as a formal letter, and after a brief introduction, there should be at least one paragraph per bulleted point (explaining why there is a problem, and what action the farmers want). The letter should end with a short conclusion.

In the content of the letter the learners should show evidence of some of the specific geographical aims and skills:

- Understand the interaction between society and the natural environment (consider, synthesise and organise information; make links between cause and effect)
- Think independently and support their ideas with sound knowledge (use geographical knowledge to solve problems; discuss and debate the issue; suggest solutions to problems)
- Care about their planet and the well-being of all who live on it (engage with issues relating to the planet, its people and resources with knowledge and sensitivity; act responsibly towards people and the environment).

### **Informal assessment**

Monitor progress in discussions and activities – particularly the letter written for the activity on page 96. (Note that learners are required to write a letter for the assessment at the end of this module.)

### **Additional resources**

- <http://www.parliament.uk/documents/post/postpn268.pdf>
- Photocopy, read and explain the article extract: ‘Wonderfonteinspruit catchment area still a concern’, Extra resources section.

### **Remedial and extension activities**

Ask **advanced** learners to find out about any other electricity generators or power stations in South Africa that generate electricity and have a low carbon footprint (that is, few carbon emissions). They should decide on a symbol for low-emission power stations and fill in the symbols at the correct places on the map of South Africa from the last unit.

Ask learners to put their maps on the wall for class discussion.

**Curriculum content and concepts**

- Challenges of working in a deep gold mine – such as ventilation, heat, rock falls, dust.
- Health and safety risks for miners – including silicosis.
- Rules to protect health and safety of miners.

**Teaching notes**

You will need: pictures showing any aspects of mines, mining, miners, mining pollution

- Ask learners to tell you what they think it is like to work in a deep mine; ask them how it might feel to be a miner working underground. Then ask learners to suggest health and safety risks that miners might have to deal with in their work.
- Read through pages 97–98 of the Learner's Book with the class. Encourage learners to ask questions to clarify meaning and to check their understanding. Then you should ask questions to check that learners have understood the information (including the newspaper reports).
- Ask learners to work on their own to complete the activity on page 98 and write the letter in their notebooks. Remind them to structure the letter properly (with an address, greeting, and ending).
- Once learners have completed the letter, they should work in pairs to read the information and complete the activities on pages 99–101.
- After each member of the pair has written the letter (activity on page 101) in their notebooks, take in the books for informal assessment.

**BRIGHT IDEA!****Mining health and safety legislation in South Africa**

Mining health and safety in South Africa is governed by Act 29 of the 1996 Mine Health and Safety Act. The Act aims:

- To ensure owner responsibility for health and safety through (amongst other activities) the creation of codes of practice, training, identifying potentially hazardous factors, investigating factors, and founding methods of medical attention and recording for the site.
- To safeguard the rights of employees to refuse or move away from areas which are unsafe or potentially unsafe.
- To create the Inspectorate of Mining Health and Safety.
- To establish the three-party Mine Health and Safety Council.

### **The spread of disease**

A paramount concern within the South African mining industry is the rising infection of tuberculosis and other diseases. Continual exposure to silica dust in mine shafts has resulted in a high prevalence of silicosis. Similarly, continued cramped, hot and poorly ventilated working conditions coupled with the spread of HIV infection has also exacerbated tuberculosis infection. Asthma is also a similar concern.

The South African government has estimated that the TB infection rates in their mines are amongst the highest in the world. TB and malaria are already a problem within the communities in which the mines are situated, and as a result mining environments can provide breeding grounds for an already rooted problem.

The mining industry within these regions can also attract mass-migration as people desperate for work seek to gain employment in the mines. This leads to further cramped, sub-standard living conditions and again encourages the potential spread of these diseases.

As the number of men working in a mining area grows, so does the number of commercial sex workers, and with that the threat of HIV and Aids.

### **Acid mine drainage (AMD)**

One hundred years of mining has of course impacted upon the subterranean environmental structure of South Africa. You're mining for gold in the region, the groundwater has to go somewhere, so you set about pumping it out of the mine site. But in doing so this muck and mire mix of water and natural heavy metals has to be brought out above ground.

When it's time to finish operations and this slurry can re-enter the mine, it reacts with exposed pyrite and creates sulphite, which then reacts with the water and you have sulphuric acid, which dissolves those heavy metals while the water rises back up above ground.

That's acid mine drainage. A recognised problem in various spots around the globe, yes, but in South Africa, the 'single most significant threat to South Africa's environment' according to Mining Weekly on 8 May 2009.

**Source:** [http://www.tabj.co.za/associations/mining\\_health\\_and\\_safety\\_in\\_sa.html](http://www.tabj.co.za/associations/mining_health_and_safety_in_sa.html) (extracted)

## **Answers to activities**

*Individual* Learner's Book page 98

2. Although the letter should reflect real-life dangers and problems in mining, this is more of a creative writing exercise than a factual account. Encourage learners to think about how miners might feel about their work and working conditions. Also remind learners that the miners might only see their faraway families once or twice a year because the miners live in the mine buildings (accommodation).

*Pair* Learner's Book page 99

2. a) a lung disease caused by breathing in mineral dust in mining  
b) silica dust from sand and rocks  
c) Silicosis is difficult to prevent, but with a combined approach it is possible to greatly reduce the number of people who get the disease.



There is no effective specific treatment of silicosis, so the only way to protect workers' health is to control their exposure to silica dusts. The successful prevention of silicosis is the result of a range of preventive measures, including laws and regulations for work safety; a system of workplace standards inspection and reporting; the collective involvement of NGOs, industry and trade unions; the use of engineering methods of dust control; monitoring workers' health to detect early stages of silicosis; use of personal protective equipment (e.g. masks to filter the air); as well as health education, information and training.

*Pair* Learner's Book page 101

1. Health and safety rules and regulations are necessary for any work or school environment to make sure that the people in the environment are safe. Knowing and following health and safety rules is especially important in dangerous workplaces, such as mines.
2. b) The letter should be properly structured as a formal letter, and after a brief introduction, there should be at least one paragraph expressing general concern about mining practices related to health and safety, and one paragraph about illnesses and deaths caused by different aspects of mining. The letter should end with a short conclusion which suggests a way to deal with the problems.

In the content of the letter learners should show evidence of some of the specific geographical aims and skills:

- Have a general knowledge of places and the natural forces at work on Earth (read and use sources to assimilate information; use information to explain and answer questions and to describe people, places and the relationship between the two)
- Think independently and support their ideas with sound knowledge (use geographical knowledge to solve problems; discuss and debate the issue; suggest solutions to problems)
- Care about their planet and the well-being of all who live on it (engage with issues relating to the planet, its people and resources with knowledge and sensitivity; act responsibly towards people and the environment)
- Communicate ideas and information (write in a structured and coherent way; provide reasoned explanations).

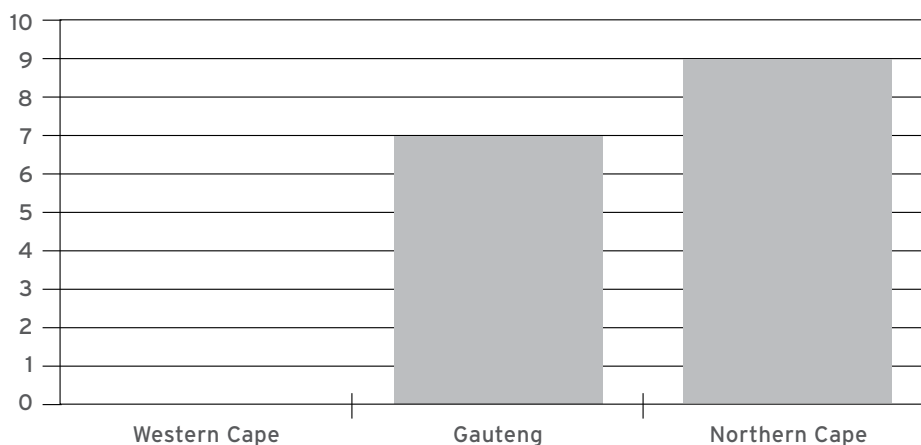
### **Informal assessment**

Use the individual activity in the Learner's Book on page 98, and the pair activities on pages 99 and 101 for informal assessment. (Note that learners are required to write a letter for the assessment at the end of this module.)

### **Additional resources**

- <http://www.ilo.org/safework/about/lang--en/index.htm>  
(International Labour Organisation workplace safety programme)

1. a) Western Cape b) Northern Cape c) Western Cape  
d)



Percentage of people employed in mining in three provinces.

2. a) Coal is a non-renewable energy source because it takes millions of years to create. The energy in coal comes from the energy stored by plants that lived hundreds of millions of years ago, which are converted to peat and then coal by geological processes that take place over a long period of time. Any resource that cannot be produced by humans is a non-renewable resource, and will run out at some point.
- b) Jobs for people in mining and related industries.
- c) Open pit or surface mining is used when the minerals are close to the surface of the ground, and miners can cut open the surface making a large pit from which the minerals are dug. Open pit mining is used because the coal is close to the surface.
- d) Problems include: the large pits take up land that could be used for human settlement and farming; coal from the mine gives off a fine dust which causes health problems in people and animals, and pollutes plants; the coal dust can also get into rivers and groundwater making them too polluted for humans or animals to use.
3. Report structure:  
(*Heading or title*) Report on the negative effects of mining  
Introduction  
(*Short introduction to the subject of the report – what is being reported – and how the subject will be discussed*)  
Physical effects of mining on the body  
(*Learner should write at least one paragraph with at least three relevant points from the previous units*)  
Diseases related to mining  
(*Learner should write at least one paragraph with at least three relevant points from the previous units*)

### Dangers of mining

*(Learner should write at least one paragraph with at least three relevant points from the previous units)*

### Conclusion

*(Short paragraph concluding the report and briefly re-stating the main points that were made in the report)*

4. a) Acid mine drainage (AMD) is poisoned groundwater from an unused mine – the mine fills up with water which is poisoned by chemicals trapped in the rocks
- b) 1. Mine is closed > 2. Hole fills up with water > 3. Water is poisoned by chemicals left by mining > 4. Poisoned water flows underground and into lakes and rivers > 5. Lakes and rivers are polluted
5. Progress in writing the other letters for this module should help learners with this assessment letter. Learners should plan the structure of the letter, write a draft, check the draft and then give you the final version.

#### **FAT LETTER**

Mark the letter out of 10, using this checklist:

- Correct structure (2)
- Correct language, grammar etc. (2)
- Can link cause and effect (2)
- Can think independently (2)
- Shows s/he cares about the environment (2)

[10]

6. a) Deep level mining is when a long tunnel or shaft is dug underground, with passages dug out from the main tunnel to reach rocks containing minerals or coal.
- b) Miners travel down the main tunnel or shaft in lifts. From the shaft they travel along the passages in carts.
- c) The air is polluted and dusty. Drilling is very noisy and can damage the ears (hearing). It is very hot underground. Rocks can fall in – trapping, hurting or killing miners. Working with explosives is very dangerous.
- d) There are laws about work conditions in mines – See Learner's Book page 100 (Rules and safety regulations). Learner must know at least three points.

### **Formal assessment task**

It's time now for the end-of-year examination. You can set your own examination, or use the one in the Extra resources section of this Teacher's Guide. There is also a marking memorandum that goes with the examination.

# Hunter-gatherers and herders in southern Africa

## Content and time

The suggested teaching time for History is approximately 15 hours per 10-week term (that is, approximately 1½ hours per week of contact time).

## Term 1

Week	Unit	Main content and concepts	Time
1–2	1	Finding out about hunter-gatherers and herders (stories, objects etc.)	2 hours
(2–7) 2–3 4–5 6–7 8	2	San hunter-gatherer society in the Later Stone Age <ul style="list-style-type: none"> <li>• Living off the environment</li> <li>• Invention of the bow and arrow; Social organisation</li> <li>• Plant medicines; San beliefs and religion</li> <li>• Rock art</li> </ul>	(8 hours) 2 hours 2 hours 2 hours 2 hours
9–10	3	Khoikhoi herder society in the Later Stone Age Pastoral way of life; Khoi and San sharing the landscape	2 hours
Ongoing and informal assessment, feedback and revision			2 hours
Formal assessment (end of term/Week 10)			1 hour

## Recommended resources

- English dictionary and other language dictionaries

## Additional resources

- Timeline of World History (for example a timeline from Ice Age people in 20 000 BCE to new millennium people in 2000 ACE – this type of synchronous timeline can be in the form of a book or wall chart/poster, and it shows events and developments during specific periods of time, as they occurred on different continents or other geographical regions). World History Timelines can be bought at or ordered from most educational bookshops, or ordered online. For example, *The World History Book and Wall Chart* (from: [www.learningthroughhistory.com](http://www.learningthroughhistory.com))
- South African maps – especially historical maps, but a geographical map is also fine – to show learners the general areas of southern Africa that are discussed in the Learner's Book
- *National Geographic Concise History of the World: An Illustrated Time Line* (illustrated book)
- *History: The Definitive Visual Guide*, by Adam Hart-Davis, published by DK Adult (illustrated book)
- *Discovering Southern African Rock Art* by David Lewis-Williams, published by David Phillips Publishers

- *People of the Eland* by Patricia Vinnicombe, published by Wits University Press
- *All About South Africa*, published by Struik in 2001
- For pictures of San and Khoikhoi people and their way of life go to the Google website and click on 'Images' and type in 'Khoikhoi' or 'San' (or, type the address <http://www.google.co.za/imghp?hl=en&tab=wi> and then type in 'Khoikhoi' or 'San')
- Websites: <http://www.krugerpark.co.za/pre-history-late-stone-age-kruger-national-park.html>  
<http://khoisan.org/>  
<http://www.britannica.com/EBchecked/topic/556618/Southern-Africa/43785/Southern-Africa-before-the-15th-century>  
<http://www.sahistory.org.za/>

### **Background information**

- This module focuses on the life of the hunter-gatherers and herders – the earliest inhabitants of southern Africa.
- The content for this module applies to the last 10 000 years of the Later Stone Age.
- Older Stone Age periods go back over thousands of years.
- Farmers entered southern Africa about 1 700 years ago.
- Hunter-gatherers shared the southern African farming landscape with farmers over much of the last 1 700 years.
- Please note that in this book the abbreviations BCE (Before the Common Era) and ACE (After the Common Era) are used, rather than BC (Before Christ) and AD (*Anno Domini* – In the Year of the Lord), because the newer historical terms include all religions and are not specific to Christianity.

**Curriculum content and concepts**

- How we find out about hunter-gatherers and herders in South Africa during the Later Stone Age:
  - stories
  - objects
  - rock paintings
  - books
  - in the present we find out about them by observing living societies (ethnography).

**Teaching notes**

You will need: pictures of Later Stone Age hunter-gatherer and herder people, and pictures of any examples of their tools, building materials, pottery, jewellery, cooking pots, and other objects from that time

- If you can find or make a World History Timeline it will help learners to get an overall global sense of what was happening on each landmass or continent during specific periods of time (i.e. a synchronous timeline).
- Start this module with the group activity in the Learner's Book on page 105 – give learners 20 minutes to work on the activity before talking about the three questions with the class. This activity will give you a good sense of what learners know and remember about southern African history and early people there.
- Explain that this lesson will focus on the methods that historians use to find out about people living long ago – the first two methods of finding out are through stories and by looking at objects. Show learners pictures of Later Stone Age hunter-gatherer and herder people, and pictures of their tools, building materials, pottery, etc.
- Read page 106 of the Learner's Book out loud (or ask learners to read quietly on their own). Ask for volunteers to read the captions to the pictures of 'Objects' and then talk about the pictures.
- Ask learners to work in groups of 4–6 to discuss question 1 of the activity on page 107, and then to work in pairs for question 2 of the same activity. After about 20 minutes for discussion, members from the groups and pairs should report back to the whole class to share answers.
- Three other methods or ways of finding out about people living long ago are: by understanding their rock paintings, through reading books by historians who study old societies, and by observing and researching similar societies that might still exist

today. Read Learner's Book pages 108–109 and talk about the pictures.

- If you are using the photocopiable mind-map – see Remedial and extension activities – give it to learners to fill in now (after Unit 2 they can also add other information they have learned).
- Ask learners to work in pairs to discuss and write the answers to the activity on page 109 in their notebooks. Take in the notebooks to informally assess the pairs' progress.



### **BRIGHT IDEA!**

#### **Where are we in history?**

Using clues left behind over the millennia, we can trace our history in southern Africa from the very beginnings of human development, some 2,5 million years ago, to the present.

The Stone Age spans a lengthy period – from about 2 million years ago to about 1 800 years ago – and gets its name from the use made of simple stone tools. Divisions into Early, Middle and Later Stone Age exist, according to the complexity of the tools used. Bows and arrows were used for the first time during the Later Stone Age.

During the Later Stone Age, from about 40 000 years ago, a wide range of bone and wooden tools was in use and plants were used for making rope, string, nets, mats, etc. Personal ornamentation, such as beads and pendants made of ostrich eggshell, shells, ivory, wood and bone, were also common. Ochre and other mineral pigments were used for body painting as well as for painting on rock.

#### **The first people**

The San are the oldest inhabitants of southern Africa, where they have lived for at least 20 000 years. The term San is commonly used to refer to a diverse group of hunter-gatherers living in southern Africa who share history and language connections.

The San are descendants of Early Stone Age ancestors, and are not related to the Bantu-speaking groups. Clans and loosely connected family groups followed seasonal game migrations between mountain range and coastline. They made their homes in caves, under rocky overhangs or in temporary shelters.

These migratory people did not domesticate animals or cultivate crops, even though their knowledge of both flora and fauna was vast. The San categorised thousands of plants and their uses, from nutritional to medicinal, mystical, recreational and lethal.

#### **Rock art**

San rock paintings are found in rocky areas of Mpumalanga, KwaZulu-Natal, and the Eastern Cape and Western Cape provinces. The San mainly used red, ranging from orange to brown, white, black and yellow in their paintings. Blue and green were never used. Red was derived from haematite (red ochre), and yellow from limonite (yellow ochre).

Manganese oxide and charcoal were used for black; white, which does not preserve well, was probably obtained from bird droppings or kaolin. The blood of an Eland, an animal of great religious and symbolic significance, was often mixed into the colour pigments. Animal fat and plant juices were also used in the paints.

Human figures are stylised and depicted as having long strides and the animals are galloping or leaping, or flicking a tail or twisting a neck. Most of the paintings have an underlying spiritual theme and are believed to have been representations of religious ceremonies and rituals.

**Source:** [http://www.krugerpark.co.za/africa\\_bushmen.html](http://www.krugerpark.co.za/africa_bushmen.html)

**Source:** <http://www.krugerpark.co.za/pre-history-late-stone-age-kruger-national-park.html>

## Answers to activities

*Group* Learner's Book page 107

1. Most learners should know a story that has been passed down from one generation to the next – especially a story about their family history. Different learners may also know similar stories about historical events or people. Recording and remembering stories about our older family members, ourselves and our lives is one way of exploring history. After talking about this question, learners should write answers in their notebooks.

*Pair* Learner's Book page 107

2. This is an interesting and fun task, with each learner thinking of five objects, and then talking about the objects in pairs. Encourage each learner to think creatively about any five objects that would give clues about her/his life now to a future historian, for example in 100 years' time (or more). After discussion, ask learners to write the name or a description of each object in their notebooks, and then write a sentence explaining what information each object gives about them. Take in the notebooks to informally assess this activity.

*Pair* Learner's Book page 109

1. San hunter-gatherers
2. stories, books, objects and artefacts, rock art, observing living societies
3. If they were able to find work to support themselves and somewhere acceptable to live in the city, hunter-gatherers might enjoy the comforts of modern life such as: electricity and other forms of power for cooking and heating; water from a tap and other plumbing; permanent shelters (homes); supermarkets for all food; transport systems; Western clothing; 21st century technology and entertainment.

### Informal assessment

Monitor progress in discussions and activities in the Learner's Book on page 107 (group and pair discussion, individual writing).



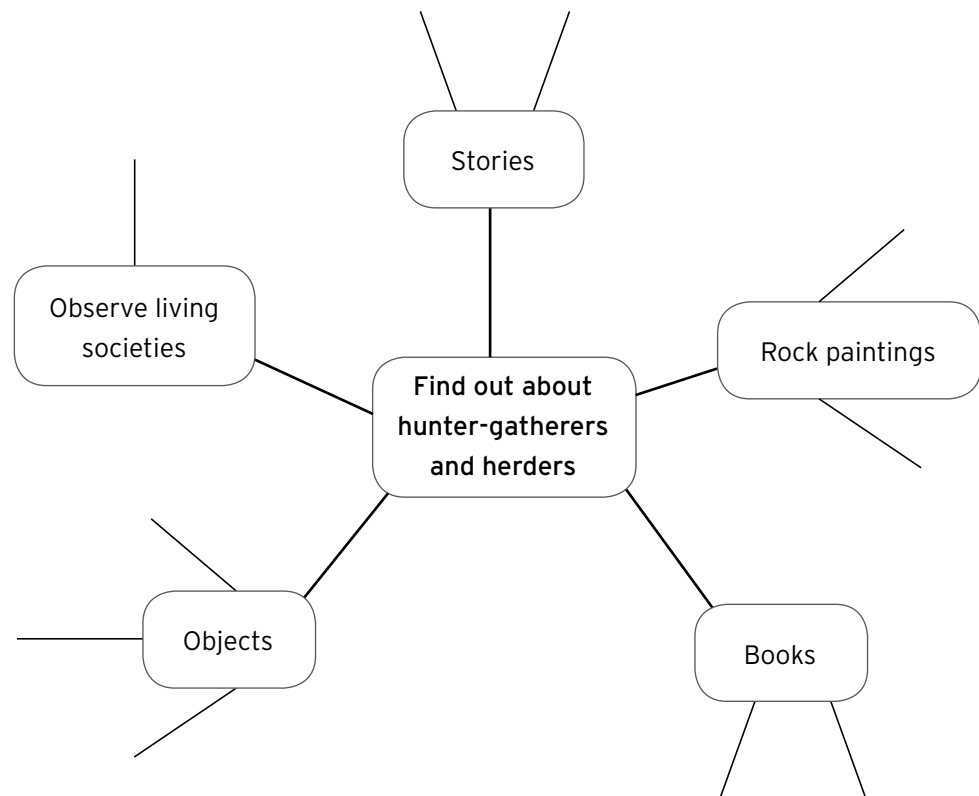
### Additional resources

- Blank mind-map, Extra resources section, photocopied for each learner.
- Timeline of World History (this type of synchronous timeline can be in the form of a book or wall chart/poster, and it shows events and developments during specific periods of time, as they occurred on different continents or other geographical regions). World History Timelines can be bought at or ordered from most educational bookshops, or ordered online.
- Map of South Africa – historical map and/or geographical map – to show learners the general areas of southern Africa that are discussed in the Learner’s Book.

### Remedial and extension activities

Photocopy the mind-map for learners to use to make notes about ways we can find out about hunter-gatherers and herders in South Africa during the Later Stone Age (Extra resources section). It will be useful if you write on a copy of the mind-map yourself so you can then guide learners with writing in the spaces.

Using Units 1 and 2 you should find enough information to fill in key words and phrases at the end of the mind-map lines coming from each outer circle (i.e. each method of finding out about history). You may also find extra information to add, or ask stronger learners to find out extra information, for example titles of books about this subject; known oral legends; or names of well-known sites of rock art. The mind-map can be started in this unit and completed in unit 2.



**Curriculum content and concepts**

- Lived off the environment. (A deep knowledge of the environment meant the San knew when wild resources were seasonally available. They moved to coincide with that availability.)
- The invention of the bow and arrow, which contributed to hunting effectiveness.
- Social organisation: all things were meant to be shared equally within a group.
- Plant medicines.
- San beliefs and religion.
- Rock art:
  - where, when, how and why it was created
  - interpretations of rock art
  - South African Coat of Arms and the Linton Rock Art Panel.

**Teaching notes**

You will need: pictures, especially historical pictures of hunter-gatherer (San) and herder (Khoikhoi) people and any aspects of their lives in the Late Stone Age that we know about – pictures include rock art, other drawn/painted artworks, and later, photographs from the colonial period; modern, post-colonial and contemporary pictures and photographs of hunter-gatherers and herders, e.g. from modern museums

- Start by showing the historical pictures and modern photographs (if you haven't already shown and discussed these with learners in the first unit). Ask learners to work on their own to quietly read the information on pages 110 and 112 of the Learner's Book, and if they need to, to ask you for help with understanding the text. Remind learners to use a dictionary to look up new and unfamiliar words.
- Then ask learners to work in pairs to do question 1 of the activity on page 111, using the information they have just read. After discussing the picture, learners should work on their own to answer the second question, writing the sentences in their notebooks.
- Ask for volunteers to read out sentences from their notebooks, and on the board write a list of any 10 points from the class explaining how the people in the picture on page 111 are using their environment.
- Ask learners to work on their own to read the information on pages 113–115, including the individual activity text, and then to work in pairs to complete the activity on page 115.

- Ask each pair to join with another pair to talk about their answers to the activity – go around the class to informally assess while learners are discussing.
- **Suggested lesson break:** For the next lesson ask learners to work on their own to read the information on page 116, and for homework, to complete the activity on the same page. In the next lesson they will need to report back on what they read about plant medicines, and what they found out about traditional remedies used by their families.
- **Continue with the content for this unit:** Start with learners reporting back on what they read and know about plant medicines and traditional remedies. Then ask learners to work in pairs to complete the activity on page 117, writing the answers in their notebooks. Remind learners that the knowledge of plants that is described in the Learner’s Book is part of the San’s indigenous knowledge system. (The topic of indigenous knowledge systems is covered in the final module.)
- Read the first paragraph on page 118 out loud while learners follow in their books. Then ask learners to read the paragraph on their own, before discussing the questions as a class.
- After the discussion, read through and explain the rest of the information on page 118. If you feel that you do not agree with or approve of the San’s beliefs and worldview, please remember that you still need to respect the San’s right to their beliefs, and that having different beliefs is part of being human. Learning about history will always involve coming across people and lives that are very different to our own – but we need to learn to study people and lives without judging them from our own worldview and time.
- **Suggested lesson break:** For the next lesson ask learners to read the information on page 119 and to write four sentences in their notebooks about rock art.
- **Continue with the content for this unit:** Start with learners reporting back on what they read and know about rock art. If you have additional pictures of rock art, show them to learners and ask them to talk about what they see. Try to show several examples of rock painting and drawing to learners – talk about the different aspects of the pictures.
- Ask learners to work in pairs to read and talk about the text and picture on page 120. Encourage learners to ask questions if they need help.
- After the pairs have discussed the page, read through page 120 again and then ask the class a few questions to check understanding, for example, ‘What do the elephant tusks in our Coat of Arms symbolise (mean)?’, ‘Why are there wings on our Coat of Arms?’, ‘Where is the writing on the Coat of Arms and what does it mean?’

- Ask learners to change to different pairs for the activity on page 121, and write the answers to the questions in their notebooks.
- Take in the notebooks to informally assess any of the work for this unit.



### **BRIGHT IDEA!**

#### **World's most ancient race traced in DNA study**

*By Steve Connor, Science Editor*

Friday 1 May 2009

The San people of southern Africa, who have lived as hunter-gatherers for thousands of years, are likely to be the oldest population of humans on Earth, according to the biggest and most detailed analysis of African DNA. The San, also known as Bushmen, are directly descended from the original population of early human ancestors who gave rise to all other groups of Africans and, eventually, to the people who left the continent to populate other parts of the world.

A study of 121 distinct populations of modern-day Africans has found that they are all descended from 14 ancestral populations and that the differences and similarities of their genes closely follows the differences and similarities of their spoken languages.

The scientists analysed the genetic variation within the DNA of more than 3 000 Africans and found that the San were among the most genetically diverse group, indicating that they are probably the oldest continuous population of humans on the continent – and on Earth.

The study, published in the journal *Science*, took 10 years of research involving trips to some of the most remote and dangerous parts of Africa to collect blood samples. The project found modern Africans had the most diverse DNA of all racial groups in the world, confirming the idea that Africa is the birthplace of humanity, said Sarah Tishkoff of the University of Pennsylvania.

The scientists also found genetic 'markers' in the DNA of the present-day inhabitants of East Africa living near to the Red Sea, which indicated that they belonged to the same ancestral group who migrated out of Africa to populate Asia and the rest of the world. West Africans speaking the Niger-Kordofanian language were found to share many genetic traits with African-Americans, indicating they were the ancestors of most of the slaves sent to the New World.

One of the main findings to emerge was the genetic similarity between groups who shared similar languages despite living many thousands of miles from one another. The Sandawe and Hadza of Tanzania shared common ancestors with the Khoisan speakers of southern Africa: all three groups speak 'click' languages.

**Source:** <http://www.independent.co.uk/news/science/worlds-most-ancient-race-traced-in-dna-study-1677113.html> (extracted)

### **Answers to activities**

*Pair* Learner's Book page 111

1. Give learners 8–10 minutes to discuss the picture in pairs.

*Individual* Learner's Book page 111

2. Learners' sentences can include any of the following points and examples, as long as four different points are made in the four sentences.
  - The people are using the environment to find their food, for example, melons, bulbs and roots, berries, ostrich eggs, tortoises and other wild meat.
  - They also got liquid from the environment – water, melon juice, roots.
  - They used the environment to store and keep water, for example in ostrich eggshells.
  - People used the environment for living in – for temporary places to stay, to find shelter, and to sleep.
  - The environment also gave people the material for clothes – animal skins – and sticks and grass for shelters.

*Individual* Learner's Book pages 114–115

1. Learners should read the text and look at the pictures quietly on their own.

*Pair* Learner's Book page 115

1. Learner's answers will differ according to their personal history. For example:

How a hunter-gatherer lived	How I live
The group moved to a new place every few weeks.	
Each group was about 12-40 people.	
Each person in the group had a job to do, and each job was important.	
The group shared most of their food with other groups near them.	
All the adults in the group made decisions and solved problems together.	
People had very few belongings and could move easily from place to place.	

*Individual* Learner's Book page 116

2. If learners' families don't use any traditional remedies/medicines, ask them to look at a Health Shop to see if there are traditional herbal (or other) remedies they recognise.

*Pair* Learner's Book page 117

2. a) Between local San communities and a pharmaceutical company.  
b) They want to develop and market a stress-relief product with an extract of the kanna plant in it. c) 'kanna' and 'kougoed' d) At least as long ago as the 1600s.

*Pair* Learner's Book page 121

- 2 a) elephant (tusks) and a secretary bird b) The elephant represents wisdom, strength and eternity (forever); the secretary bird

- represents growth, speed and protection of the nation. c) The figures are greeting each other – shaking hands. d) unity
3. See some examples of questions in Teaching notes on page 75 of this guide.

### **Informal assessment**

Any of the work for this unit that is written in the learners' notebooks can be used for informal assessment.

### **Additional resources**

- <http://khoisan.org/>
- *Discovering Southern African Rock Art* By David Lewis-Williams, published by David Phillips
- Photocopy Coat of Arms with label lines (Blank Coat of Arms, Extra resources section).
- Map of southern Africa or South Africa to show learners the general areas that are discussed in the Learner's Book.

### **Remedial and extension activities**

Photocopy the Coat of Arms with label lines for all learners (Blank Coat of Arms, Extra resources section). It will be useful if you write on a copy of the Coat of Arms yourself so you can then guide learners as they write the labels. Learners who struggle can refer to their Learner's Books, but they should not just copy the label text – they should try to use their own words to show understanding. Stronger learners can read through page 120 of the Learner's Book again, but then they should close their books and fill in the label text from memory.

**Curriculum content and concepts**

- Pastoral way of life.
- How San and Khoikhoi shared the same landscape.

**Teaching notes**

You will need: pictures, especially historical pictures of herders (Khoikhoi) and of any aspects of their lives

- Ask learners to take turns reading a sentence out loud from the Learner's Book pages 122–123. (Please remember that the purpose here is not to pick on any learner or make anyone feel shy about reading out loud! The purpose is to encourage readers.)
- Then ask the class to listen (with their Learner's Books closed) while you read the same text out loud (pages 122–123). Then ask pairs to draw mind-maps using the information from their Learner's Books. Pairs should then join into groups of four to discuss and combine their mind-maps.
- Each group of four should then make one mind-map to put on the classroom wall, for other groups and you to compare and comment on.
- Read the text on page 124 to learners while they follow in their Learner's Books. Discuss the text and then ask learners to work in pairs to complete the activity on page 125.
- If there is time, read the text from the Bright Idea box to the class and discuss any questions about it.

**BRIGHT IDEA!****Khoikhoi herders**

Whereas the San hunter-gatherers adapted to local environments and were scattered across southern Africa, the Khoikhoi herders sought out grazing lands between modern-day Namibia and the Eastern Cape. Khoikhoi is a general name which these herding people of the Cape used for themselves. The word can be translated to mean 'the real people' or 'men of men', meaning 'we people with domestic animals'.

The Khoikhoi were nomadic herders who moved around to find water and grazing for their animals (initially sheep and later cattle) – settling in a place for as long as it met their needs. Their huts were made of a framework of wooden poles covered with reed mats, and the settlement would be a circle of about 30 to 50 huts, all with entrances facing inward to where the livestock would be kept in the centre. When the animals needed new grazing lands, or if someone died, the herders would pack up the settlement and set up in another suitable place.

The loosely organised herders expanded rapidly, driven by their need for fresh grazing areas. These new groups of herders and farmers transformed the hunter-gatherer way of life. Along with a pastoral way of life came other signs of change: domestic dogs, changes in stone tool kits, altered settlement patterns, larger ostrich-eggshell beads, and the appearance of marine shells in the interior, which suggests the existence of long-distance trade.

When people from Europe first rounded the Cape of Good Hope, they encountered herding people who called themselves Khoekhoe. At that time they inhabited the fertile southwestern Cape region as well as its more arid hinterland to the northwest, where rainfall did not permit crop cultivation, but they may once have grazed their stock on the more lush central grasslands of southern Africa.

The Khoikhoi traded cattle and sheep with the Dutch and some Khoikhoi lost their livestock to the settlers; others found that they were not allowed to graze their livestock near to the Dutch settlement, and so many of the herders had to move away from Table Bay. There was also fighting between the Dutch and the Khoikhoi, and Khoikhoi men were killed and women and children taken as slaves of the Dutch. Foreign (European) diseases also killed many Khoikhoi people, for example a smallpox epidemic in 1713.

The Khoikhoi language has given us some well-known South African place names, for example: Tsitsikamma, Keiskamma, Outeniqua, Garies and Keimoes.

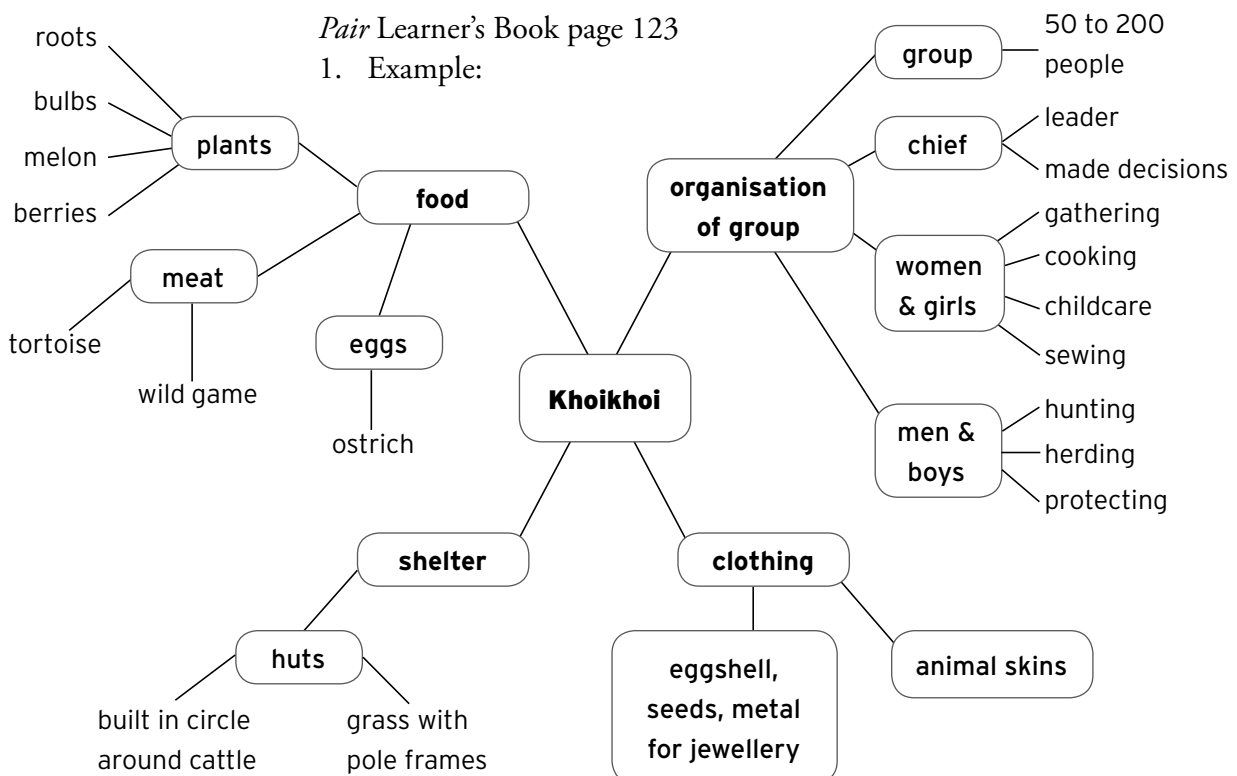
**Source:** *All About South Africa*, page 15, published by Struik in 2001 (extracted and adapted)

**Source:** <http://www.britannica.com/EBchecked/topic/556618/Southern-Africa/43785/Southern-Africa-before-the-15th-century> (extracted and adapted)

## Answers to activities

Pair Learner's Book page 123

1. Example:





Example:

Question	San	Khoikhoi
What did they eat?	Melons, bulbs and roots, berries, ostrich eggs, tortoises, other wild meat	Milk, beef, sheep, as well as melons, bulbs and roots, berries, eggs, and wild meat
How did they get their food?	Hunting and gathering	Herding and keeping animals, hunting and gathering
How big were their groups?	About 12 to 40 people in a group	About 50 to 200 people in a group
Who was important?	Everyone	The chief and senior men
Who made decisions?	All the adults in the group	Senior men in the group
How did the group live in the settlement?	Huts and shelters from sticks and branches covered with grasses and animal skins	Huts with pole frames covered by grass. Huts set out in a circle, with cattle in the middle
What did they wear?	Animal skin	Animal skin

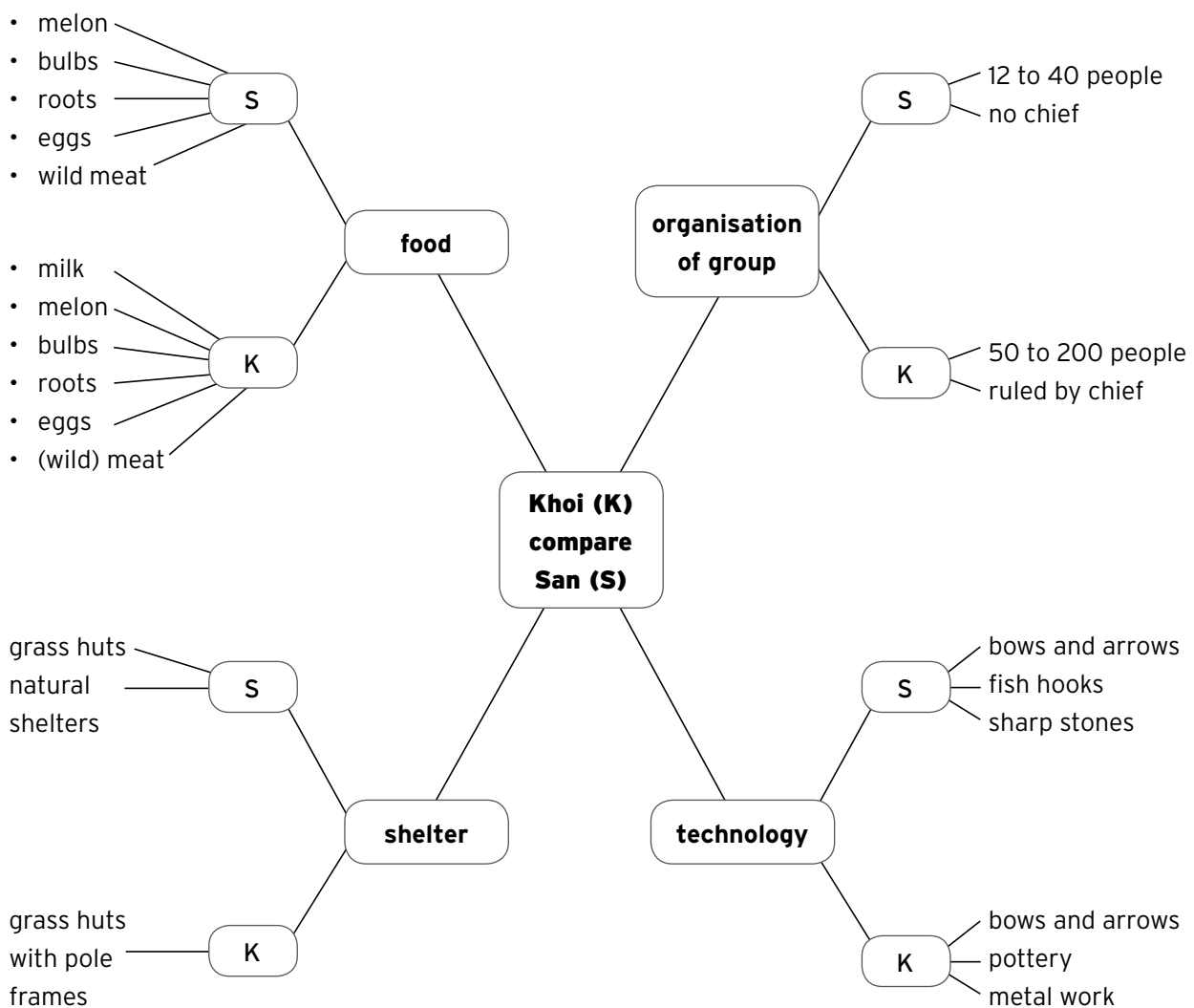
### Informal assessment

Monitor progress in discussions and activities.

### Additional resources

- <http://khoisan.org/>
- *All About South Africa*, page 15, published by Struik in 2001
- Map of South Africa to show learners the general areas that are discussed in the Learner's Book.
- For online pictures of Khoikhoi people and their way of life go to the Google website and click on 'Images' (<http://www.google.co.za/imghp?hl=en&tab=wi>) and type in 'Khoikhoi'.

1. Stories; objects; rock paintings; books; and in the present, observing living societies.
2. a) San b) natural, food, shelter, clothing c) migratory people (or, hunter-gatherers) d) bows, arrows, fish hooks
3. a) true b) false c) false d) true
4. water, land, wild animals
- 5.



## Formal assessment task

Please remember that learners should always be allowed to use an English or other language dictionary during assessment.

1. **Beliefs and religion:** (*for example*) only take from environment what is needed; all living things are equal; animals have spiritual importance; praying mantis and eland are most important spiritual animals; shamans can communicate with the spirits; men dance trance dances to connect with the spiritual world.  
**Living as a close group or clan:** (*for example*) 12 to 40 people in a clan; everyone co-operates for the survival of the group; the clan depends on the environment and each other; the group moves with the seasons; everyone in group has a role; men and women have different roles – men hunt, women gather; the clan shares food and shelter.  
**Technology:** bows and arrows made from wood; arrowheads made from stone; fish hooks made from bones; needles made from bones; cutting tools made from stones; ostrich eggshell and tortoise shells as containers; good knowledge of medicinal plants.
2.
  - a) Grasses and reeds; sticks and wood; animals (skin, meat and bone); eggs (food and shells); stones/rocks; plants.
  - b) Used these resources for: food, shelter, clothes, hunting, protection, warmth/cooking, playing and decoration (e.g. jewellery).
  - c) Tools: animal bone; stone; wood. (And with tools the ability to: make fire, make clothes, make hunting equipment, cook food, make shelters, make clothing, and make play things, and adornments – for example, necklaces.)
3. This is a creative and interesting writing task. Make sure learners know that they should first write a draft of the essay, and check spelling and grammar, and ask for your help if they need to. Then they should write a second draft and check again before deciding whether they can hand in the essay as completed.

**Use the rubric in the Extra resources section to assess each learner's essay. Mark the task out of 70. Give the learners a copy of the rubric, so they know exactly how they will be assessed.**

# The first farmers in southern Africa

## Content and time

The suggested teaching time for History is approximately 15 hours per 10-week term (that is, approximately 1½ hours per week of contact time).

## Term 2

Week	Unit	Main content and concepts	Time
1–2	1	<b>When, why and where the first African farmers settled in southern Africa</b> Attitudes to land; interaction with Khoisan	2 hours
(3–10) 3–4 5–6 7–8 9–10	2	<b>How early African farmers lived in settled chiefdoms</b> <ul style="list-style-type: none"> <li>• Homesteads and villages; Agriculture</li> <li>• Social, political and economic structures</li> <li>• Role of the chief; Role of cattle</li> <li>• Tools and weapons; Pottery</li> <li>• Trade; medicine and healing; hunting</li> </ul>	(10 hours) 3 hours 2 hours 2 hours 3 hours
<b>Ongoing and informal assessment, feedback and revision</b>			2 hours
<b>Formal assessment</b> (end of term/Week 10)			1 hour

## Recommended resources

English and other language dictionaries

## Additional resources

- Timeline of World History
- Maps of South Africa (historical and/or geographical)
- Map of Africa (to show movement of groups from other regions of Africa)
- Books listed as resources for Module 5 will also be useful for this module
- Websites: <http://www.info.gov.za/aboutsa/history.htm>  
<http://www.mapungubwe.com/cultural.htm>  
<http://www.sahistory.org.za/>  
[http://www.mongabay.com/reference/country\\_studies/south-africa/HISTORY.html](http://www.mongabay.com/reference/country_studies/south-africa/HISTORY.html)

## Background information

- This module focuses on the way of life of the first farmers of southern Africa and how we find out about them.
- The term 'Iron Age' is a useful label for this period, as people made tools from iron, but it is also important to know about all other aspects of the Iron Age societies. People from this time were usually farmers or agriculturalists of some type.

- Most historians use the name 'Bantu-speakers' to describe the first farmers in southern Africa. Tools and other objects found by archaeologists show that Bantu-speaking people moved into southern Africa between 2 000 and 1 700 years ago.
- The study of Iron Age archaeology gives us a history for most of present-day South Africans.
- The arrival of farmers in southern Africa did not mean that the hunter-gatherers left the area. The farmers and hunter-gatherers shared the landscape; sometimes there was conflict, sometimes there was co-operation.
- Cultural mixing and inter-marriage also happened between hunter-gatherers and farmers. All the clicks in the Nguni languages, for example isiZulu and isiXhosa, are from San and Khoikhoi languages.
- The term 'chiefdom' describes the Iron Age societies, which were flexible and changing, and people could change loyalty and groups if they weren't happy. (The term 'tribe' describes a more fixed and unchanging society.) Chiefdoms were fluid and flexible – political power and group membership could change, depending on what people wanted for themselves.
- Change happened more slowly long ago, whereas today change is usually more rapid. Between 900 and 1 300 ACE, chiefdoms became bigger, more organised and more complex – learners will study these changes in Grade 6.
- It is important to remember that hunter-gatherers, herders and farmers all created their own innovative, technological, organised, political societies long before the colonial period. The fact that these societies did not have writing systems doesn't mean that they were 'primitive' or 'simple' compared with colonial societies.
- Please remember that in this book the abbreviations BCE (Before the Common Era) and ACE (After the Common Era) are used, rather than BC (Before Christ) and AD (*Anno Domini* - In the Year of the Lord).

**Curriculum content and concepts**

- When, why and where the first African farmers settled in southern Africa.
- Attitudes to land.
- Interaction with Khoisan – principles of generous acceptance of other people. (In Iron Age society it was important for political power that leaders accepted strangers and integrated them into their own societies.)

**Teaching notes**

You will need: pictures – drawn, painted, photographs – of people from this historical period, as well as pictures of their tools, building materials, jewellery, cooking pots, and objects from that time; maps of Africa and/or South Africa

- Start this module with the classroom maps of Africa and/or South Africa – remind learners where the San moved from and where they moved to on the continent; where the Khoikhoi moved from and where they settled; where the first (Bantu-speaking) farmers moved from and where they settled.
- Ask learners to work in groups of 4–6 to do the group activity on page 129 of the Learner's Book – give learners about 20 minutes to discuss the questions before sharing their answers with the class. Learners will bring different levels of background knowledge to these questions, depending on what they know about agriculture, and whether they are from rural/farming or urban areas. Learners should remember climatic regions in South Africa from Geography (and some of the plants and crops that grow in the different climatic regions). See also the Bright Idea box on the next page.
- Ask learners to work in new groups of four to read the information in the Learner's Book on page 130 and do the activity on the same page. Then they continue reading on pages 131–132 and do the activity on page 132 as a role play. (They should not do the pair activity on page 131 yet). Finally, the groups should close their Learner's Books and do the activity on page 133: write the question on the board: 'Discuss and list ways in which you think the Khoisan and the farmers may have co-operated'.
- While the groups are reading and discussing, go around the class to help and to assess informally. There is a lot of co-operative work for this unit and the groups will have to stay focused on their own work, and also try not to make too much noise (and disturb other groups).

- If you have pictures of people and objects from this time period, give each group a few pictures to look at and pass on (or show the pictures as you move around the groups).
- As a whole class, discuss responses to the group activities (pages 130 and 132). For the activity on page 132, choose the best role plays you saw and ask those groups to perform for the class.
- Then read the speech bubbles on page 133. Write any new speech bubbles (from learner discussion) on the board.
- Ask learners to work in pairs to complete the activity on page 131 in their notebooks.



### **BRIGHT IDEA!**

#### **Agriculture in South Africa today**

Because we have such a range of climatic regions we can cultivate a variety of fruit, vegetables and field crops in different parts of the country. Here is a brief overview of farming in South Africa today.

- Maize is the largest locally produced field crop, and South Africa is the main maize producer in the Southern African Development Community (SADC). It is estimated that more than 8 000 commercial maize producers are responsible for the major part of the South African crop, while the rest is produced by thousands of small-scale producers. Maize is produced mainly in North West, the Free State and Mpumalanga.
- Wheat is produced in the Western Cape and the Free State.
- South Africa is the world's 12th-largest producer of sunflower seed.
- There are about 35 000 sugar-cane growers in South Africa, the majority of whom are small, medium and micro-enterprises (SMMEs) and who collectively farm 391 483 ha of sugar cane. Sugar-cane farms vary in size and subsistence farms average 1,7 ha, while family-owned farms average 186 ha.
- South Africa is the leading exporter of protea cut flowers, which account for more than half of proteas sold on the world market.
- Deciduous fruit is grown mainly in the Western Cape and in the Langkloof Valley in the Eastern Cape. Smaller production areas are found along the Orange River and in the Free State, Mpumalanga and Gauteng.
- Citrus production is largely limited to irrigation areas and takes place in Limpopo, Mpumalanga, the Eastern Cape, KwaZulu-Natal, the Western Cape and the Northern Cape.
- Pineapples are grown in the Eastern Cape and northern KwaZulu-Natal. Other subtropical crops, such as avocados, mangoes, bananas, litchis, guavas, papayas, granadillas, and macadamia and pecan nuts are mainly produced in Mpumalanga and Limpopo and in the subtropical coastal areas of KwaZulu-Natal and the Eastern Cape.
- South African organic farmers produce a large variety of produce. These include various cereals, vegetables, roots and tubers, herbs and spices, fruits, nuts and Rooibos tea. The largest fruit crops in terms of hectares are bananas, avocados and mangoes, while the largest vegetable crops are cucurbits, tomatoes, asparagus, brassicas and potatoes. Organic wine and olive oil are also produced and organic dairy farming has started in some provinces.

**Source:** <http://www.info.gov.za/aboutsa/agriculture.htm> (extracted)

## Answers to activities

*Group* Learner's Book page 130

Learners' answers should reflect that until people started farming, they lived a nomadic lifestyle and moved around to find food. With farming they settled in one place, planted crops, and domesticated animals for meat and milk. In this way farmers cultivated and changed the natural environment. The social environment also changed. Farming and the ownership of animals – especially cattle – meant that the society was organised differently to hunter-gatherer society. The more cattle a man had, the more power and authority he had in the group.

*Pair* Learner's Book page 131

1. Any two of the following: Fields of crops were planted (in place of natural vegetation, often replacing natural vegetation); New plants were introduced which were not indigenous to the environment; Animals were domesticated and used for human resources; Grazing cattle meant that areas of natural vegetation were damaged; A simple road infrastructure developed.
2. Learners' answers should reflect that the Khoikhoi and particularly the San had no concept of land ownership – i.e. land belonged to the group and was used by the whole group, but no single person or family 'owned' land. The Khoikhoi and the San adapted to the environment and did not make long-lasting changes. In contrast, the farmers felt that the land where they settled and farmed became their land, to pass on to their children.

*Group* Learner's Book page 132

1. The group should role play the three questions – that is, they should pretend to be four members of a Khoikhoi or San group and respond to the news that a group of farmers have moved into their area. The group should decide on what choices they have and what they will do next.

*Group* Learner's Book page 133

1. The speech bubbles on page 133 give examples of the ways that Khoisan and farmers may have co-operated – you and the learners may think of more examples to add.

### Informal assessment

Assess the group work and discussions.



**Curriculum content and concepts**

- Homesteads and villages.
- Agriculture: crops and livestock.
- Social, political and economic structures:
  - Roles of men, women, boys and girls. (Children were economically active from an early age and took pride in contributing to the well-being of the community. In their teens they were initiated and educated into the responsibilities of adulthood.)
  - A culture of co-operation, e.g. communal work parties during the ploughing season, helping a newcomer by lending calves for a year or two. This ensured the well-being and good social relations of the community as a whole.
  - The role of the chief.
  - The role of cattle.
- Tools and weapons from iron and copper:
  - Division of labour: gender-based activity: men.
  - Metal working (iron, smelting and fire technology, smithery).
- Pottery:
  - Division of labour: gendered activity: women.
  - Day-to-day use.
  - Use in ceremonies with the Lydenburg Heads as an example.
- Trade.
- Medicine and healing.
- Hunting.

**Teaching notes**

You will need: pictures of tools, weapons and pottery from this historical period

- Ask learners to work in pairs to read the text on page 134 of the Learner's Book, and to complete the activity by writing the sentences in their notebooks.
- Read through the information on pages 135–136 with learners, and then ask questions to check their understanding.
- Ask learners to work in pairs to complete the activity on page 136; and then to work on their own to complete the activity on page 135. You may need to explain what a 'floor plan' drawing is. Show the learners an example – such as a floor plan of the classroom, or of the whole school, or of 'an average' one-bedroom house (with bathroom and toilet, kitchen, and lounge/eating area).

- **Suggested lesson break:** Take in the learners' notebooks to assess their work for this lesson informally.
- **Continue with the content for this unit:** Ask for six volunteers to read aloud – those learners should read the speech bubbles on page 137 while the rest of the class listens. Then ask learners to work in pairs to decide whether each piece of information applies to the Khoisan as well, and to report back to the class with their answers.
- Ask learners to work on their own to read the information and look at the pictures on pages 138–139, and then complete the activity on page 139 in their notebooks. After everyone has completed this, ask the class whether they think the roles of men and women and girls and boys in society today are the same or different as in early African farming society – and to explain their answers.
- As a class, read the information and look at the pictures on pages 140–141, and then discuss the first question in the activity on page 141. Ask learners to work on their own to complete the activity.
- **Suggested lesson break:** Take in the learners' notebooks to assess their work for this lesson informally. In preparation for the next lesson ask learners to read the information on page 142.
- **Continue with the content for this unit:** Check that all learners have read the information on page 142; those who haven't will have to read quietly while the pairs discuss. Ask learners to work in pairs to discuss the activity on page 142, and to write the sentences in their notebooks.
- As a class, discuss the answers to the activity on page 142 – which way of making decisions do most learners think is the better way, and why?
- As a class, read the information and look at the pictures in the Learner's Book on pages 143–144. Ask learners to work in pairs to write the list for question 1 of the activity on page 144, and then ask each pair to team with another pair to form a group of four to discuss question 2. Finally, discuss question 2 as a class.
- **Suggested lesson break:** Ask learners to find out what the difference is between the 'Stone Age' and the 'Iron Age'. They should be able to explain the difference for the final lesson of this Unit.
- **Continue with the content for this unit:** As a class, read the information and look at the pictures in the Learner's Book on pages 145–146, then ask learners to work in pairs to complete the activity on page 146 in their notebooks.
- Ask pairs to continue with the reading on page 147, and then to complete the activity on page 147 in their notebooks.
- Once all the pairs have finished, as a class discuss the answers to the activities on pages 146 and 147.
- If there is extra time in any lesson during this unit, read the Bright Idea box on page 91 to the class.



## **BRIGHT IDEA!**

### **Mapungubwe: the archaeological site**

Since the site was discovered in 1933, numerous research and news reports have told the story of Mapungubwe, a flourishing Iron Age metropolis on the Limpopo ruled by an African king almost a thousand years ago. Mapungubwe and K2 are a national monument and therefore the cultural objects from these sites have been proclaimed as part of a specifically declared heritage collection.

The remains of this ancient society, now known as the Kingdom of Mapungubwe, lay forgotten for more than seven centuries until, in the early 1930s, a local resident revealed their existence to the University of Pretoria. Today, the Mapungubwe Museum at the University of Pretoria promotes the largest archaeological gold collection in sub-Saharan Africa.

The Iron Age sites at K2 and Mapungubwe were inhabited between ACE 1000 and ACE 1300. Archaeologists believe that both sites were once capitals of African kings. Unfortunately the inhabitants' identity remains a mystery since this part of history goes back before the written record and no known oral traditions can be recorded over a period of a thousand years, therefore the inhabitants are merely known as the 'Mapungubweans'.

### **Settlements**

Mapungubwe is the site of three royal graves and was the centre of a terraced settlement. Stone walls buttressed the slopes and homesteads were scattered about. The king and his soldiers lived near the top of the hill and were supported by the people on the lower levels. The neighbouring village of K2 indicates that the inhabitants were subsistence farmers, raising both stock and crops. A valuable feature of K2 is the large central refuse site, from which archaeologists have been able to glean a store of information. Human remains from various graves indicate that these communities enjoyed a healthy, varied diet. People were prosperous and kept domesticated cattle, sheep, goats and dogs. The charred remains of storage huts have also been found, showing that millet, sorghum and cotton were cultivated.

### **Technology and trade**

Findings are typical of the Iron Age. Smiths created objects of iron, copper and gold for practical and decorative purposes – both for local use and for trade. Pottery, wood, ivory, bone, ostrich eggshells and the shells of snails and freshwater mussels indicate that many other materials were used and traded with cultures as far away as East Africa, Persia, Egypt, India and China.

It seems foreign trade was an important part of life in the area and large quantities of glass beads were obtained in exchange for gold and animal skins. At K2, numerous garden roller beads were made from imported glass beads.

### **Objects**

The gold objects from the Mapungubwe graves, such as the rhinoceros, sceptre and bowl, were originally gold sheet or foil covering wooden carvings. The gold sheet was folded around the wooden core and held in place with tacks. In some cases, the gold cover was decorated with punched indentations or incised lines.

Many objects were made of fired clay, or pottery. They were used for various purposes, some still unknown. Human figurines, usually with an elongated body and stumps for heads, arms and legs, were common at K2. They are often decorated with incisions or rows of dots. Some are highly

simplified, like the conical figurine found at Mapungubwe.

Animal figurines, mostly from K2, include cattle, sheep and goats. At Mapungubwe, a giraffe figure was also found. Some everyday practical items include spoons, whistles, a funnel and spindle whorls used in the production of cotton cloth.

The Iron Age villagers adorned themselves with numerous beads made of ostrich eggshell, large land snails, bone and ivory. They wore bracelets made of ivory, decorated their clothes and hair with pins made of bone and ivory, and wore perforated cowrie shells imported from the East Coast.

**Source:** University of Pretoria: Mapungubwe Museum

**Source:** <http://www.mapungubwe.com/cultural.htm> (extracted and lightly adapted)

## Answers to activities

*Pair* Learner's Book page 134

1. a) Settled in one place. b) Settled in places where the land was fertile and there were rivers. c) They become wealthier than others. d) Other people to do jobs for them. e) Lived together in larger groups for protection. f) Laws were needed to organise society. g) The development of technology such as hoes and ploughs. h) Trade started within and between settlements.

*Individual* Learner's Book page 135

1. Each learner should draw a neat and realistic floor plan of her/his home. Note that you may need to explain what a 'floor plan' drawing is, and show learners an example.
2. Learner's answer should show awareness of at least two similarities and/or differences between the learner's home and what is known about the early farmer's home – for example, differences in the materials used for building; differences in how close together the houses are; differences in access to services (such as electricity and water taps). For many learners there may also be similarities – for example, learners living in urban informal settlements probably live in shacks built very close together.

*Pair* Learner's Book page 136

1. and 2. Benefits of farming animals and growing crops: people had easy access to a healthy diet – milk, vegetables and meat; people had manure to fertilise their fields and improve the soil; people were able to store food which meant a constant supply; people settled in one place and didn't have to move with the seasons

*Pair* Learner's Book 137

1. Learners should volunteer to read speech bubbles out loud.
2. The following apply to the Khoikhoi as well:
  - Elders and chiefs based their social and political power on the cattle they owned. Herds of cattle represented wealth, status and power.

- The chief had political authority.
- Farming societies all had some sort of political organisation. They weren't all highly organised chiefdoms, but they all established governments to solve their problems.

*Individual* Learner's Book page 139

*Example:*

Work the males did	Work the females did	Work I do to help my family
Herding	Cooking	e.g. keeping my room clean and tidy
Smelting (metalwork)	Vegetable gardening	e.g. mowing the grass and weeding
Making decisions and laws for the group	Looking after babies and young children	e.g. helping my younger sister with her homework
Carving (woodwork)	Weaving and sewing	e.g. keeping the yard clean
Protecting (soldiers/warriors)	Cleaning	e.g. taking out the rubbish (garbage)
	Collecting water	e.g. putting away the groceries
	Preserving and storing food	e.g. helping with peeling vegetables
	Making pottery	

*Group* and *Individual* Learner's Book page 141

1. Other possible ways village people helped each other in early farming society: shared seeds and seedlings for crops; shared knowledge and information relevant to the whole village; shared rites of passage ceremonies; shared childcare and domestic work; shared surplus food.
2. The learner's picture should illustrate any aspect of co-operation and good neighbourliness between village people, and the caption should be an appropriate description or statement.

*Pair* Learner's Book page 142

1. There will probably be a range of responses to this question – remind learners that they need to respect differences between families.
2. The main outcome here is that the learner writes a few sentences to support and explain her/his answer.

*Pair* Learner's Book page 144

1. Source of milk and meat; source of skins for clothing and shields, and horns for containers; used for trading; used as a form of payment, especially lobola; source of dung for plant fertiliser, and to plaster walls and floors of huts; source of dung which, when dry, was burned as a fuel.

*Group* Learner's Book page 144

2. The early farmers, like the Khoikhoi, were a patriarchal society, which meant that men had the most power and authority in the society. Some people say that our modern society is also a patriarchal society. In patriarchal societies females are generally

not seen as having the same value and importance as males. If a woman does not have her own wealth – whether that wealth is cattle or a modern wage – then she will have to rely and depend on a man (or another partner, or society) to help her to live, especially if she has children. Unfortunately this can put a woman in a very vulnerable situation if a man chooses to abuse his power. It can also put a lot of stress on a man to ‘look after’ a woman.

*Pair* Learner’s Book page 146

1. Iron ore was found in the rocks. The women and children would dig out the iron ore. The men heated the ore in hot furnaces. The iron melted at a different temperature and was separated from the rest of the rock. When the iron was soft, it was shaped into tools and weapons like spears.
2. They would have benefited from stronger, sharper tools for farming, ploughing and building. They would also be able to trade ironwork objects with other societies.

*Pair* Learner’s Book page 147

1. a) Objects are for daily use in early farmer societies.  
b) farming (cultivating); preserving and presenting food/water
2. Iron Age tools and pieces of pottery found in southern Africa

### **Informal assessment**

Monitor progress in discussions and in any of the work written in the learners’ notebooks.

### **Remedial and extension activities**

**Remedial:** There is quite a lot of reading for this unit, so learners who struggle may need the opportunity to read the information more than once, and also to have supported reading sessions (e.g. be part of a reading group with other learners who are slow readers – you will need to spend extra time working with the reading group).

**Extension:** Ask learners to find out more about archaeological sites in South Africa. They can choose any place/area in South Africa and write 2–3 paragraphs explaining why the site is important, and what we have learned from objects found at that site.

1.
  - a) nomadic: move from place to place instead of living in the same place all the time.
  - b) social hierarchy: a society with a system that classifies groups according to different levels of economic (and cultural) importance and value, for example, class society under capitalism.
  - c) communal: belonging to and/or used by a group of people.
  - d) *lobola* (*isiZulu, isiXhosa and isiNdebele*): means 'bride price' – the amount of cattle or money the future husband gives to his future wife's family to bring the two families together and provide some financial security for the young couple.
2. *For example:* They both had a social system headed by a chief and other important senior men; they both needed land and water for their cattle or other livestock; they both hunted for meat; they both established settlements (although the farmers established permanent settlements).
3. The Khoikhoi did not believe in a system of land ownership – the group shared the land.  
The farmers planted crops as well as grazing livestock.
4. Learner's picture should illustrate any aspect of co-operation between the Khoikhoi and the early farmers, and the caption should be an appropriate description or statement related to the picture.
5. Benefits of farming animals and growing crops: people had easy access to a healthy diet – milk, vegetables and meat; people had manure to fertilise their fields and improve the soil; people were able to store food which meant a constant supply; people settled in one place and did not have to move with the seasons.
6. Learners should by now have quite a lot of practice in drawing multi-level mind-maps to explore a topic or question. The information in the mind-map for this activity should – at least – be made up of key words and phrases from the Learner's Book; but also encourage learners to add additional information that they know or find out. Here is a reminder of roles and work of people in the community:  
 Adult males: carving and metalwork, hunting, preparing meat  
 Boys: herding  
 Adult females: cooking, sewing, looking after babies and young children, collecting water, gardening, gathering, making pottery  
 Girls: helping with cookery, gardening, and domestic work  
 Chief – male: making decisions and laws for the group

## Formal assessment task

- You can mark the first activity out of 30 – two marks for each section of the table.

	African farmers	Khoikhoi herders	San hunter-gatherers
Homes	Huts with thatched roofs and walls plastered with mud or dung, built around a central cattle kraal (homestead)	Huts with pole frames covered by grass. Huts set out in a circle, with cattle in the middle	Huts and shelters from sticks and branches covered with grasses and animal skins
Who made decisions?	The chief (with advisors – senior men)	The chief and senior men	Adults in the clan
What they ate	A varied diet including vegetables, fruit, grains, milk, and sometimes meat (cattle, sheep and chicken, and wild meat)	Milk, sometimes meat, as well as melons, bulbs and roots, berries, eggs, and wild meat	Melons, bulbs and roots, berries, ostrich eggs, tortoises, and other wild meat
Technology	Bows and arrows, spears, advanced metalwork, pottery	Bows and arrows, simple metalwork, pottery	Bows and arrows, fish hooks, sharp stones
Main mode of living	Keeping livestock and crop farming	Keeping livestock (herding)	Hunting and gathering

- The early farmers introduced crop farming to southern Africa, and cleared areas of land to cultivate their crops. They built permanent settlements of huts surrounded by fences, and changed (cultivated) the environment to meet their needs. (2)  
 Bantu speakers cultivated a range of indigenous crops, including millet, sorghum, beans and melons, along with other grains and vegetables which they introduced to southern Africa (for example, by introducing new seeds that they had traded with other groups). (2)
  - Compared with the San and Khoikhoi the farmer society was much more hierarchical and organised according to who was considered more and less important, for example, old over young, men over women, rich over poor, and chiefs over everyone else. (2)
- Metalwork enabled the farmers to make better, stronger, more accurate tools and weapons. (2)
  - Settling in one place meant they did not have to move with the seasons, and they could also store grains and seeds for a continuous supply of food. (2)
- The farmers had knowledge of cattle-keeping and new methods of cultivation (slash-and-burn), as well as expertise in metalworking and pottery (women). They cultivated large fields, produced finely worked gold and copper ornaments, hunted for ivory, and engaged in long-distance trade. Those close to the sea collected shellfish and fished. By having a large range of food sources, the farmers spread their risks in a difficult natural environment where drought, disease and crop failure were common. (5)



5. *For example:*

The picture shows part of a settlement with thatched huts and walls plastered with mud or dung. The people are early African farmers. Cattle are a very important part of this society – the more cattle, the greater someone's wealth and importance. This society also farms – and mainly lives off – cereals and vegetables (along with cow's milk). The technology of the early African farmers included bows and arrows, metalwork and pottery. (5)

**[Total: 50]**

# An ancient African society: Egypt

## Content and time

The suggested teaching time for History is approximately 15 hours per 10-week term (that is, approximately 1½ hours per week of contact time).

## Term 3

Week	Unit	Main content and concepts	Time
1–2	1	The Nile River and how it influenced settlement	2 hours
(3–7) 3–4 5 6–7	2	<b>Way of life in Ancient Egypt</b> <ul style="list-style-type: none"> <li>• Social structure; Beliefs and religion; Pharaohs</li> <li>• Sphinx, pyramids and temples; Hieroglyphics</li> <li>• Mathematics and astronomy; Medicine and physicians</li> </ul>	(8 hours) 3 hours 2 hours 3 hours
8–9	3	<b>Case study: The tomb of Tutankhamen</b> Discovery of the tomb; what it showed about ancient Egyptian society	2 hours
10	4	The spread of Egypt's advanced knowledge	1 hour
Ongoing and informal assessment, feedback and revision			1 hour
Formal assessment (end of term/Week 10)			1 hour

## Recommended resources

- English dictionary and other language dictionaries

## Additional resources

- Timeline of world history
- Map of Africa (historical and/or geographical)
- Map of Egypt (historical and/or geographical)
- Pictures and photographs of the Nile River (past and present)
- Pictures of Ancient Egyptian people, and of any examples of their tools, pottery, jewellery, cooking pots, and other objects
- Pictures and photographs of the pyramids and other Ancient Egyptian structures and sculptures, including hieroglyphic texts
- Relevant material from Egypt Tourism – e.g. brochures, pamphlets, maps
- Photocopies of Learner's Book page 192 – blank map of Africa (one for each learner)
- Websites: [http://womenshistory.about.com/od/ancient/Ancient\\_History.htm](http://womenshistory.about.com/od/ancient/Ancient_History.htm)  
<http://www.mummytombs.com/egypt/kingtut.htm>  
<http://www.ancientegypt.co.uk/writing/rosetta.html>  
[http://www.livinglearning.org.uk/assets/abc123/298030df\\_Tutenkhamunanon.pdf](http://www.livinglearning.org.uk/assets/abc123/298030df_Tutenkhamunanon.pdf)

**Curriculum content and concepts**

- The Nile River and how it influenced settlement.

**Teaching notes**

You will need: a blank map of Africa for learners to copy or to draw on, pictures and photographs of the Nile River (past and present), pictures of Ancient Egyptian people, examples of their tools, jewellery and other objects

- Learners should know about the position of the Nile River from their Geography studies. Ask them to work in pairs to label the blank map of Africa with the six features listed on page 151 of the Learner's Book. Ask them to also draw and label the Nile River. Then show the seven features on the classroom map of Africa or on a copy of the map that you have filled in. Learners should check their own maps to make sure they are correct.
- Show learners the pictures of the Nile River, and of Ancient Egyptian people, objects and places – find out what learners already know about Egyptian history.
- Ask learners to work on their own to read the information on pages 152–153, and then complete the activity on page 153 in their notebooks. Ask for volunteers to show their pictures to the class and to read the captions aloud.
- As a summary of the main learning for this unit, read the bulleted list on page 153 of the Learner's Book out loud – after each point ask for a learner to explain the point and/or give an example (or you should explain the points and give examples if relevant).
- Use any of the points in the Bright Idea box: 'Ten interesting points about the Nile River' to prompt discussion about important rivers in South Africa (e.g. by comparing information about the rivers), and to recap Geography learning from Learner's Book Module 2 Unit 3, Rivers.

**BRIGHT IDEA!****Ten interesting points about the Nile River**

1. The Nile River is approximately 6 695 kilometres long, probably the longest river in the world, although the Amazon River is a very close second.
2. While the Nile River is most commonly linked to Egypt, it also flows through Sudan, Burundi, Ethiopia, Zaire, Kenya, Uganda, Rwanda and Tanzania. (Only about 22% of the Nile passes through Egypt.)
3. The cities that the Nile flows past are Cairo, Khartoum, Gondokoro, Aswan, Karnak, Thebes and the town of Alexandria.

4. The Nile River is formed from the White Nile (which originates at Lake Victoria/Kagera River), and the Blue Nile, which originates at Lake Tana in Ethiopia. These rivers meet in Sudan.
5. There is some debate about the exact source of the White Nile. It is commonly accepted that the source of the river is Lake Victoria; but on the northern edge of the lake, water pours over a waterfall, known as Ripon Falls, into a narrow opening which some people believe is the beginning of the Nile River.
6. The largest tributary of Lake Victoria is the Kagera river. The Kagera and its tributary the Ruvubu, with its headwaters in Burundi, is now widely considered to be the true source of the Nile. It is from here that the Nile is measured as the world's longest river.
7. The name Nile comes from the Greek *neilos*, which means 'river valley'. The ancient Egyptians called the river *Ar* or *Aur*, meaning 'black', because of the black sediment left behind after the river floods.
8. The Aswan High Dam was built in 1970 to help control the flooding of the Nile River. Before the Aswan Dam was built, years that featured high levels of water could wipe out crops, while years of low level water could result in famines and drought. The Aswan High Dam helps to prevent massive flooding of populated areas.
9. The entire Nile River Delta area is so vast that it has a number of different climate areas. North, in Egypt and Sudan, rainfall is sparse. More to the south, in and around Ethiopia, rainfall is heavy, creating floodwaters that rush downstream and eventually create the fertile soil that supports so much of life in Egypt and Sudan.
10. The Nile River Delta is home to many species of animals, including crocodiles, turtles, baboons, wildebeest, and more than 300 species of birds, including fishing eagles, ibis, and the Nile Valley Sunbird.

**Sources:**

<http://www.sciencekids.co.nz/sciencefacts/earth/nileriver.html> <http://www.woodlands-junior.kent.sch.uk/Homework/egypt/nile.htm>  
<http://www.ancient-egypt-online.com/river-nile-facts.html>  
<http://www.socialstudiesforkids.com/articles/geography/nileriver.htm>  
<http://www.buzzle.com/articles/nile-river-facts.html>

## Answers to activity

*Individual Learner's Book* page 153

1. and 2. Learner's picture should illustrate any three uses of the Nile River, and the captions should be an appropriate description or statement related to each picture.

### Informal assessment

Informally assess learner's pictures and captions showing three uses of the Nile River.

### Additional resources

- Photocopies of Learner's Book page 192 – blank map of Africa (a copy for each learner).
- The blank map can also be used for remedial purposes – to help learners remember the relevant information for this unit.

- Pictures of the Nile River (past and present).
- Pictures of Ancient Egyptian people, examples of their tools, pottery, jewellery, cooking pots and other objects

### **Remedial and extension activities**

Read aloud the ten interesting points about the Nile River. Ask learners to research more information about the Nile River – anything to do with the Nile in the past or present – and then write five (remedial) to ten (extension) more interesting points. Put the lists up on the classroom wall for all learners to read and share information.

**Curriculum content and concepts**

- Way of life in ancient Egypt:
  - social structure in ancient Egypt
  - beliefs and religion
  - pharaohs
  - sphinx, pyramids and temples
  - hieroglyphics
  - mathematics and astronomy
  - medicine and physicians: diseases, anatomy, physiology and clinical examinations.

**Teaching notes**

You will need: pictures and photographs of the pyramids and other Ancient Egyptian structures and sculptures

- Read Learner's Book page 154 out loud (or ask learners to read quietly on their own) and talk about the information and picture. Ask learners to work in pairs to complete question 1 of the activity on page 154, and for volunteers from the pairs to show their drawings to the class. Draw the pyramid on the board to make sure everyone has understood the task.
- Then as a class discuss question 2 of the activity on page 154. Remind learners that everyone has the right to their own opinion, but they should be able to support their opinions with examples or reasons.
- After the class discussion, read through page 155 with the class, making sure that everyone understands the information. Then ask learners to work in pairs to complete the activity on page 156 of the Learner's Book. Go around the class to informally assess work and help where necessary. Ask for learners to report back to the class to share the pairs' answers and hear the different captions for the drawing in the Learner's Book on page 156. Ask the class to decide which pair wrote the best caption for the drawing.
- Ask learners to work on their own to write the answers to the activity on page 156 in their notebooks. (They should write the numbers on the drawing down the left side of the notebook page, and then write each matching caption next to its number.)
- Ask learners to work quietly on their own to read the information on page 157 about Pharaohs and to write the answers to the activity in their notebooks.
- **Suggested lesson break:** Learners should hand in their notebooks for you to assess informally before the next lesson.

- **Continue with the content for this unit:** Ask the class to tell you what they know about Pharaohs from their reading – ask questions to check understanding. Briefly discuss the answers to the activity on page 157.
- Show learners the pictures and photographs of pyramids and other Ancient Egyptian structures – what do they already know? Discuss the information on pages 158–159 of the Learner’s Book with the class. Remind learners that even though the Ancient Egyptian religion might be very different to their own beliefs, it is still important to understand and know what the Ancient Egyptians believed, and to respect differences.
- Introduce the concept of a hieroglyph (symbol or picture) and show learners examples of hieroglyphic text. Ask them what information they think the Ancient Egyptians recorded with hieroglyphs.
- Ask learners to work on their own to read the text on page 160, and to complete the activities on pages 159 and 160 in their notebooks.
- **Suggested lesson break:** Learners should hand in their notebooks for you to assess informally before the next lesson.
- **Continue with the content for this unit:** Start the next lesson by reading aloud some of the good stories written for the activity on page 159, question 1. Ask for volunteers to answer question 2 so that you can confirm the correct answer.
- Show the class any of the best examples of hieroglyph words from the activity on page 160.
- Read and discuss the information on Learner’s Book page 161. Ask learners to think of what maths and number systems we use today for:
  - measuring time
  - dividing areas of land
  - counting money
  - cooking
  - building.
- How are these types of maths different or the same to the maths the Egyptians used?
- Ask learners to work in pairs to complete the activity on page 161, and then to form a group of four with another pair to discuss their answers. Go around to the groups and assess informally while learners are discussing.
- Ask the groups to read the information on page 162–163 of the Learner’s Book and then work on the activity on page 162. Give learners about 30 minutes for the reading and discussion, and then ask for volunteers to report back to the class on the activity answers.
- If there is time, show learners how to make a sundial and ask them to work in pairs to make sundials for homework. The following websites are very useful for information about how to make a sundial:
  - <http://www.sundials.co.uk/projects.htm>
  - <http://www.qwerty.co.za/sundials/howto/steps.html>



## **BRIGHT IDEA!**

### **Women Pharaohs**

Here are 5 of the 12 women most commonly thought to have served as Pharaoh, or to have had the power of the Pharaoh as a regent.

The names are listed in reverse chronological order, with the last Pharaoh of Egypt – who was a woman – first in the list.

### **Cleopatra VII (Ptolemy)**

(~ 51–30 BCE)

The last Pharaoh of Egypt, daughter of Ptolemy XII, Cleopatra VII became Pharaoh when she was about 17 years old. She had no son at the time; she married a much younger brother. Cleopatra tried to keep Egypt's independence during a time of Roman domination by allying herself romantically, matrimonially and militarily with Roman commanders Julius Caesar and Mark Anthony. She had a son, Caesarion, supposed to be fathered by Julius Caesar, for whom she was regent. When she died, Egypt's rule passed into the hands of Rome.

### **Tausret (Twosret, Tausert, Tawosret)**

Nineteenth Dynasty (~1194–1186 BCE)

Tausret was chief wife of Seti II. When Seti II died, Tausret served as regent for his son, Siptah. Siptah was probably the son of Seti II and a minor wife, so Tausret was his stepmother. There is some indication that Siptah may have had some disability. He died about six years into his reign, and Tausret seems to have served as Pharaoh for two to four years, using kingly titles for herself.

### **Nefertiti**

Eighteenth Dynasty (~1336 BCE?, with her husband ~1353–1336 BCE)

The claim that Nefertiti ruled after the death of her husband, Akhenaton (Amenhotep IV), is based on the theory that she assumed the name Smenkhkare after his death. Even if she did not rule, during her husband's reign she was accorded more honor than usual for a Great Wife, and is sometimes depicted as a co-equal official at ceremonies.

### **Hatshepsut**

Eighteenth Dynasty (~1472–1458 BCE)

Widow of Thutmose II, she ruled first as regent for his minor son and heir, and then as Pharaoh, a female Horus. Her titles include 'King of Upper and Lower Egypt, Maatkare, Daughter of Re'. She is depicted in a fake beard and with the objects that a Pharaoh is usually depicted with, and in male attire, after a few years of ruling in female form. She reported herself heading up a military campaign and going on a journey to the Land of Punt.

### **Ashotep**

Eighteenth Dynasty

Mother of the founder of the Eighteenth Dynasty and New Kingdom, Ahmose I, himself the Pharaoh who defeated the Hyksos (foreign rulers of Egypt). In an inscription, Ahmose I credited her with holding the nation together during his minority, when she seems to have been regent for her son.

*From original article 'Female Pharaohs: Women Who Ruled in Ancient Egypt as Pharaoh' by Jone Johnson Lewis (extracted and adapted)*

**Source:** [http://womenshistory.about.com/od/ancientqueens/tp/women\\_pharaohs.htm](http://womenshistory.about.com/od/ancientqueens/tp/women_pharaohs.htm)

## **Answers to activities**

*Pair* Learner's Book page 156

- 1: They were buried with anything they might need in the next world, such as treasures, clothes and food. 2: Colourful wall paintings showed scenes of everyday life. 3: The priest mummifying the body wore a jackal mask to represent the



god Anubis. 4: Egyptians believed that the writing on the wall protected the dead person from evil. 5: The body was placed in a sarcophagus or stone casket after it was mummified. 6: Statues in the tomb looked after the dead person in the afterlife. 7: The bodies of the dead pharaohs were mummified. This meant that the body was dried out then wrapped in special oils, herbs and spices.

2. Check that learners understand that a caption for a picture must be a short description or explanation of the content of the picture – that is, what information does the picture show/tell us?  
Ask learners to report back to the class with their captions for the drawing on page 156. Ask the class to decide which pair wrote the best caption for the drawing.

*Individual* Learner's Book page 157

1. a) Pharaohs were believed to be gods, or like gods (and returned to being gods after death). This gave them unlimited power in society. b) by birth
2. See Bright Idea box on the previous page above.

*Individual* Learner's Book page 159

1. Learners should write 1–2 paragraphs to complete the story. This is creative writing, so any outcome is acceptable, but it should be true to the history of the time (that is, learner should write the story so it is believable for the time of Ancient Egypt).
2. There are a few theories about how, when and why the Sphinx's nose was damaged. Here are two reliable websites to find out more: <http://www.catchpenny.org/nose.html> and [http://en.wikipedia.org/wiki/Great\\_Sphinx\\_of\\_Giza](http://en.wikipedia.org/wiki/Great_Sphinx_of_Giza).

*Individual* Learner's Book page 160

1. Possible English words that can be written with the hieroglyphs on Learner's Book page 160 include:  
nab, nib, nub, nil, ban, bath, bale, bay, buy, bin, bun, hub, hen, has, hay, his, hake, hike, house, louse, south, than, they, this, yes, you. (Learner's hieroglyphs should be neatly drawn and accurate.)

*Pair* Learner's Book page 161

1. Same as our calendar: 365 days, 12 months.  
Different to our calendar: all months are 30 days, 5 feast days at the end of the year.
2. Very generally, people use maths for counting, measurement, logical reasoning, studying shapes, and for statistics. Maths is used in natural sciences, medicine, engineering and social sciences. Practical uses in daily life include: banking, building, cooking and baking, farming, gardening, shopping, and sewing.
3. The following websites will give you step-by-step instructions to make different types of sundials: <http://www.sundials.co.uk/projects.htm> and <http://www.qwerty.co.za/sundials/howto/steps.html>

Group Learner's Book pages 162–163

1. The following statements from the Learner's Book still apply to today:
  - Medicines were made from plants, herbs and minerals. (*This still applies to some medicines today.*)
  - Physicians used ointments for wounds and they treated chest complaints by getting the patient to breathe in steam. (*This still applies to some types of wounds and some types of chest complaints.*)
  - Personal hygiene was important, which helped to keep people healthy. (*Personal hygiene – cleanliness – is still very important and plays an important role in keeping healthy.*)
  - Certain illnesses were known and had names.
  - Surgery was used for removing tumours or swellings near the surface of the skin, treating wounds and broken bones, and dealing with boils and abscesses. (*And with modern technology we can do even more types of surgery.*)
  - Skeletons from Ancient Egypt show amputations with healed bone ends, suggesting successful surgery.
  - They knew that eating certain foods was good for you.
  - Physicians wrote down ideas and treatments. They kept records of which treatments worked and which didn't. In this way, medicine could advance.
  - Egyptians knew about taking someone's pulse to find out their heart rate.
- They knew that some insects carry disease.

### Informal assessment

Any of the work for this unit that is written in the learners' notebooks can be assessed informally.

### Additional resources

- [http://womenshistory.about.com/od/ancient/Ancient\\_History.htm](http://womenshistory.about.com/od/ancient/Ancient_History.htm)
- <http://www.ancientegypt.co.uk/writing/rosetta.html>

### Remedial and extension activities

There is quite a lot of reading for this unit, so learners who struggle may need the opportunity to read the information more than once, and also to have supported reading sessions (e.g. be part of a reading group with other learners who are slow readers; you will need to spend extra time working with the reading group).

There is a huge amount of interesting information about Ancient Egypt. As an extension activity, ask learners to use the library and the Internet to find out information that is relevant to this module, and share it with the class, e.g. by writing information from a book or printing it from the Internet. If a few learners work on this, they can make an interesting display about Ancient Egypt (e.g. in posters for the classroom wall).

**Curriculum content and concepts**

- Discovery of the tomb of Tutankhamen: who, when, why.
- What the discovery revealed about Ancient Egyptian society.

**Teaching notes**

You will need: pictures and photographs of objects related to the life and death of Tutankhamen

- Start the lesson by briefly explaining who Tutankhamen was; ask learners if they've heard of the 'curse' of Tutankhamen and what they know. (Check that everyone understands that 'a mummy' is a dead body that has been preserved and wrapped.) Read the first three paragraphs from the Bright Idea box below and then ask learners why they think so many people have believed the myth of the curse.
- Ask learners to quietly read the information in the Learner's Book on page 164, and look at the pictures on page 165. Then ask learners to form groups of 4–6 to discuss the activity on page 165.
- Ask for volunteers to report back from the group discussion, and write a list of points on the board about what the artefacts tell us about Tutankhamen's life. Also ask learners what the artefacts tell us about Ancient Egyptian beliefs.

**BRIGHT IDEA!****The 'Curse' of Tutankhamen**

Many people have believed that the tomb of Tutankhamen and his mummified body were cursed. The idea that mummies had magical power appealed to the imaginations of authors. After the first ghost story about a mummy's curse was published in 1699, many more followed. But the longest lasting episode involving a mummy's curse was the discovery and opening of King Tutankhamen's tomb in 1923.

This story has been told many times, but fact and fiction are usually blended. First, the facts: Lord Carnarvon, who had funded the search for King Tut's tomb, and archaeologist Howard Carter entered the king's burial chamber on 17 February 1923. On or about March 6, Lord Carnarvon was bitten by a mosquito on his cheek and became ill. Reported in the media, this event caused many people to jump to the conclusion that King Tutankhamen's tomb was cursed.

The mosquito bite became infected, he contracted pneumonia, and on 5 April he died.

When author Nicolas Reeves (*The Complete Tutankhamen*) was asked what he thought, he pointed out that Carnarvon was already in poor health when he arrived in Egypt. He also discounted the idea of the curse, indicating that most of the people who explored the tomb with Carter and Carnarvon survived without any appearance of 'the curse'.

But the legend of the curse became accepted as fact and was enhanced by many rumours and beliefs. Here are two of the most famous rumours:

- Over the door to King Tut's tomb was an inscription that read 'Death shall come on swift wings to him that toucheth the tomb of the Pharaoh'.

Even today, it is easy to find books that report this inscription as fact. For example, in his recent book about mummies, author John Vornholt writes, 'In an outer chamber, they [Carter and Carnarvon] found a clay tablet that read: "Death will slay with his wings whoever disturbs the peace of the Pharaoh".' This is simply not true – there was no such inscription!

- Most of the people present at the opening of the tomb met untimely deaths.

Again, Vornholt writes that '13 of 20 people who were present at the opening of King Tut's burial chamber died within a few years'. Vornholt does not give his source for this information, but it is clearly incorrect. The truth is that the newspapers at the time had a field day with the curse. Whenever anyone related to Carnarvon or the discovery of the tomb died, the death was taken as proof that the curse was in effect.

Egyptologist Herbert E. Winlock examined the evidence some 12 years after the tomb's opening. Of the 26 people present at the opening of the burial chamber, only 6 had died within the next 10 years. When King Tut's sarcophagus was opened, 22 of the 26 people were present, but only 2 of them had died within 10 years afterwards. Finally, only 10 of the 26 people had watched the unwrapping of the mummy. *And none of them had died within the next decade!* In fact, many of the people who had the most contact with the king's mummy lived long and productive lives.

**Source:** <http://www.mummytombs.com/egypt/kingtut.htm> (extracted)

## Answers to activity

*Group* Learner's Book page 165

2. There are no strictly right or wrong answers here, as long as the learners can support and explain their opinions as to why a particular artefact might have a particular meaning.

## Informal assessment

Monitor progress in discussions and activities.

**Curriculum content and concepts**

- The spread of Egypt's advanced knowledge to other places, such as Europe and the Middle East.

**Teaching notes**

- Ask learners to work on their own to read the text on Learner's Book page 166, and then discuss the information and picture as a class. Share any of the information from Bright Ideas box below.
- Complete the activity on page 167 as a class – ask for volunteers to tell you whether a sentence is true or false, and why. Write the correct sentences on the board.

**BRIGHT IDEA!**

Some achievements from Ancient Egyptian civilisation

- 3200 BCE - Egyptian hieroglyphs fully developed
- 3100 BCE - Decimal system, world's earliest (confirmed) use
- 3000 BCE - Copper plumbing
- 3000 BCE - Egyptian medicine
- 3000 BCE - Papyrus, world's earliest known paper
- 2900 BCE - *Senet*, world's oldest (confirmed) board game
- 2700 BCE - Surgery, world's earliest known
- 2600 BCE - Great Sphinx of Giza, to this day, this is the world's largest single-stone statue
- 2600 BCE - Pyramid of Djoser, world's earliest known large-scale stone building
- 2600 BCE - Red Pyramid, world's earliest known 'true' smooth-sided pyramid; solid granite
- 2560 BCE - Great Pyramid of Giza, the oldest of the Seven Wonders of the Ancient World, and the only one to remain mostly intact. Initially at 146,5 metres, the Great Pyramid was the tallest human-made structure in the world for over 3 800 years.
- 2400 BCE - Egyptian Astronomical Calendar
- 1650 BCE - Rhind Mathematical Papyrus: geometry, cotangent analogue, algebraic equations, arithmetic series, geometric series
- 1160 BCE - Turin papyrus, world's earliest known geological and topographic map

**Answers to activity**

*Class* Learner's Book page 167

1. a) T b) F: Greek scholars like Pythagoras and Archimedes studied in Egypt. c) F: The Egyptians created a 365-day calendar. d) T

### **Informal assessment**

Monitor progress in discussions and activity.

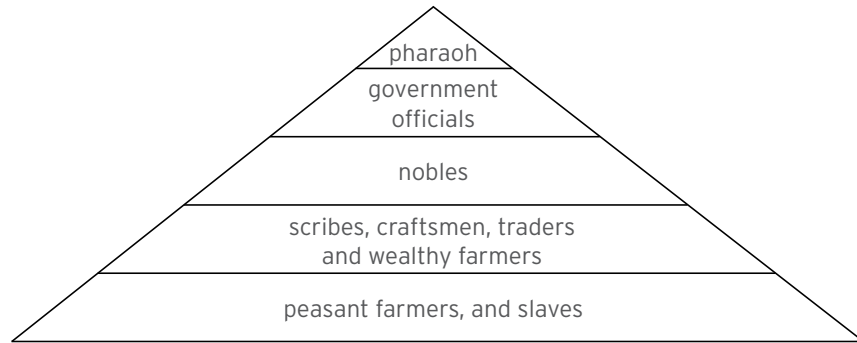
### **Remedial and extension activities**

In preparation for the end of module assessment, ask learners who struggle to pair with stronger learners so that the stronger learner can be a peer resource for co-operative learning. The stronger learner should help with explaining and reinforcing. (This should reinforce your explaining and demonstrating to the class.) You will need to monitor the pairs to check that they are working well. The stronger learner should feel challenged by the experience of facilitating, while the struggling learner should feel confident about using a peer as a resource or reference for learning.

1. Learners' notes can be written in a mind-map or in lists under the four headings (topics). Learners' notes should be written in their own words, not just copied from the Learner's Book, and should include at least three main points (from the Learner's Book) about each topic.
2. Learners' answer should reflect the primary importance of the Nile as bringing in the fertile soil through its annual flooding, which enabled settlement and farming along the river. Learners should also refer to other reasons why the river was important in the lives of Ancient Egyptians – for example, any of those listed in the Learner's Book on page 153 ('Egyptians used the river in many ways').
3. The underlined text is the main information that should be included in learner's answer of a few sentences.  
The Rosetta stone is important because it enabled researchers to understand/translate Egyptian hieroglyphics for the first time. The black granite stone was discovered by French soldiers in 1799 in a small town called Rosetta (Rashid). The stone has writing on it in two languages (Egyptian and Greek) using three writing scripts (hieroglyphic, demotic and Greek). When the Rosetta Stone was written (in 196 BCE) there were three scripts being used in Egypt (a script is a set of letters or other symbols for writing a particular language). Hieroglyphic was the script used for important or religious documents. Demotic was the common script of Egypt. Greek was the language of the rulers of Egypt at that time.  
Because it presents essentially the same text in all three scripts (with some minor differences between them), it provided the key to the modern understanding of Egyptian hieroglyphs. Before the discovery of the Rosetta Stone and working out the meaning of the hieroglyphics, there had been no understanding of the Ancient Egyptian language and script since around the fall of the Roman Empire.
4. The Ancient Egyptians used maths for: measuring time, predicting the annual flooding of the Nile River, dividing areas of land, counting money, working out taxes, and cooking.
5. Answers: 8 or 9, 18, the Valley of the Kings, small, archaeologist, 3 000, gold, afterlife
6. a) and b) A: The solid gold mask of Tutankhamen's face.  
 B: The Sphinx faces the rising sun.  
 C: The pyramids of Giza in Egypt.  
 D: Egyptian picture writing, called hieroglyphs.

## Formal assessment task

1.



2. This is a creative and interesting writing task. As a class, decide whether learners are going to produce a brochure or a fact sheet so that everyone is working on the same thing. Make sure learners know that they should first write a draft of the fact sheet or brochure, and check spelling and grammar and plan the pictures. Then they should write a second draft and check again before deciding whether they can hand in the work as completed.

**Use the rubric in the Extra resources section to assess each learner's fact sheet/brochure. Mark the task out of 30. Make sure each learner gets a copy of the rubric so they know exactly how they will be assessed.**



# A heritage trail through the provinces of South Africa

## Content and time

The suggested teaching time for History is approximately 15 hours per 10-week term (that is, approximately 1½ hours per week of contact time).

## Term 4

Week	Unit	Main content and concepts	Time
1–2	1	South Africa's provinces	1 hour
2	2	What is heritage?	2 hours
3–4	3	Heritage in Gauteng	1 hour
3–4	4	Heritage in Limpopo	1 hour
5–6	5	Heritage in the Free State	1 hour
5–6	6	Heritage in the Northern Cape	1 hour
7–8	7	Heritage in the Western Cape	1 hour
7–8	8	Heritage in the Eastern Cape	1 hour
8–9	9	Heritage in the North West	1 hour
8–9	10	Heritage in Mpumalanga	1 hour
9–10	11	Heritage in KwaZulu-Natal	1 hour
Ongoing and informal assessment, feedback and revision			2 hours
Formal assessment (end of term/Week 10)			1 hour

## Recommended resources

English dictionary and other language dictionaries, especially multilingual dictionaries

## Additional resources

- Map of South Africa
- *All About South Africa*, published by Struik in 2001
- Relevant material from SA Tourism – e.g. brochures, pamphlets, maps
- Pictures of statues of people in South Africa
- Websites:
  - <http://www.info.gov.za/aboutsa/holidays.htm#24september> (Heritage Day)
  - <http://www.southafrica.info/about/history/>
  - <http://www.sahistory.org.za/places>
  - <http://www.sahra.org.za/what.htm> (South African Heritage Resource Agency)
  - <http://www.nasmus.co.za> (National Museum, Bloemfontein) – see also other national museum websites

## Background information

- We have a rich and diverse heritage that belongs to all South Africans today.
- Heritage can be tangible and intangible. Tangible heritage includes things we can see and touch, such as objects and places. Intangible heritage includes things such as our family heritage, religion, praise poetry, music, songs, dance and festivals.
- If you have time and resources, choose further heritage examples from the province in which your school is located (and/or from nearby provinces)

**Curriculum content and concepts**

- The names of provinces and their capital cities on a map.

**Teaching notes**

You will need: map of South Africa

- Start this module with the pair activity on page 171 of the Learner's Book. Give learners 20 minutes to discuss the questions in pairs before asking for volunteers to share the facts they wrote. In your class you may have learners who come from different provinces; if so, write the provinces' names on the board and write the relevant facts under each name. This activity will give you a good sense of what learners know and remember about the history or heritage of their province.
- Using a map of South Africa (e.g. classroom wall map) briefly recap the names of the provinces with learners, and the biggest city in each province.
- Ask learners to work alone to read the information in the Learner's Book on page 172 and then answer question 1 of the Activity in their notebooks. When learners have finished, ask for volunteers to read their answers, and make sure that everyone knows the correct answers.
- Have a general class discussion for question 2 of the activity on page 172. Make notes of main ideas/points from the discussion on the board for learners to copy into their notebooks as a record of what they know and remember now.

**Answers to activity**

*Individual* Learner's Book page 172

- 1 a) and b) Learner should be able to identify her/his province and find it on the map on Learner's Book page 172, and identify the capital city.
  - c) Limpopo province
  - d) Learner should be able to identify neighbouring provinces without difficulty.

*Group* Learner's Book page 172

2. Learners should have some prior learning (from Grade 4) to help them with this discussion.

**Informal assessment**

Monitor progress in discussions, map work and activity.

**Curriculum content and concepts**

- What heritage is.

**Teaching notes**

- Read the text on Learner's Book page 173 out loud to learners while they follow in their Learner's Books. Talk to learners about what you have inherited from your own family and ancestors, and ask them to tell you what they have inherited, in terms of: languages, food and eating, art and culture, family stories, family history, family objects, and places.
- Ask for learners to take turns reading the captions and sentences on page 174 out loud to the class. Then read through the activity instructions with the learners.
- Spend some time talking about different traditional meals that learners have at home for special meals and celebrations. Talk about the many different styles of cooking (cuisines) that we have in South Africa, for example, Ethiopian, Moroccan, Indian, Mozambican, Cape Malay, Mediterranean (Arabic, Portuguese, Greek, Italian, Spanish, Turkish), Chinese, Japanese, Thai, European (British, Irish and French), etc.
- Learners will need to complete the activity on page 174 by the next lesson.
- If there is time, read the text from the Bright Idea box to the class. Ask learners to write the names of South Africa's World Heritage sites in their notebooks.

**BRIGHT IDEA!****World heritage in South Africa**

Did you know that Table Mountain National Park has more plant species in its 22 000 hectares than the British Isles or New Zealand? Or that the Drakensberg has both the highest mountain range in Africa south of Kilimanjaro and the continent's richest concentration of rock art?

South Africa is home to eight of the world's official heritage sites, as determined by Unesco's World Heritage Committee.

The committee seeks to encourage the identification, protection and preservation of cultural and natural heritage around the world considered to be of 'outstanding value to humanity'.

Internationally, there are 851 World Heritage sites in 141 countries (as of April 2008). South Africa has a total of eight – four cultural, three natural and one mixed (cultural and natural) sites. Starting with the first site added to the list, ending with the latest, these are:

- iSimangaliso (Lake St Lucia) Wetland Park (KwaZulu-Natal)
- Robben Island (Western Cape)
- Cradle of Humankind (Gauteng and North West)

- uKhahlamba Drakensberg Park
- Mapungubwe Cultural Landscape (Limpopo)
- Cape Floral Region (Western and Eastern Cape)
- Vredefort Dome (Free State and North West)
- Richtersveld Cultural and Botanical Landscape (Northern Cape)

**Source:**

<http://www.southafrica.info/travel/cultural/worldheritagesites.htm#ixzz1i7SHRnjJ>

### **Answers to activity**

*Individual* Learner's Book page 174

1. and 2. There is no right or wrong answer to this, as long as the learner follows the instructions.

*Group* Learner's Book page 174

3. This is an enjoyable opportunity for learners to talk about food as part of heritage, and to share the different recipes (some recipes will be for the same dish, and there will be differences in the recipes – this is all part of a living heritage).

### **Informal assessment**

Monitor progress in discussions and activity.

**Curriculum content and concepts**

- Heritage in sites of significance, example, Cradle of Humankind: Gauteng.

**Teaching notes**

- Ask learners if they know about the Cradle of Humankind and what the name means.
- Ask learners to work on their own to read the text and look at the pictures on page 175 of the Learner's Book. Then they should complete the activity on the same page (writing the sentences in their notebooks).
- Note that learners should start collecting stones from this lesson – see the photo of a stone wall on page 185. Learners should look for small to medium sized stones that will fit well together to make a small stone wall. They will need the stones for the activity in Unit 9, page 184–185. This is not an essential activity, so you could choose to leave it out, if you are pressed for time.

**BRIGHT IDEA!**

- Photocopy the outline map of South Africa (Extra resources section) and after each unit ask learners to fill in the heritage site on the map.
- As well as each province's main city name, the map should show heritage information – e.g. about a place/building/plant/person – using a key with symbols (e.g. simple shapes to show or represent the different types of heritage). The key and symbols can be agreed by the class or you can give them to the class.
- And/or learners can write the heritage name or event on the map in small, neat handwriting.

**Answers to activity**

*Individual* Learner's Book page 175

1. a) where important historical events have taken place.  
b) our earliest ancestors.  
c) Fossilised remains of ancient animals, plants and hominids

**Informal assessment**

Monitor progress in discussions and activity.

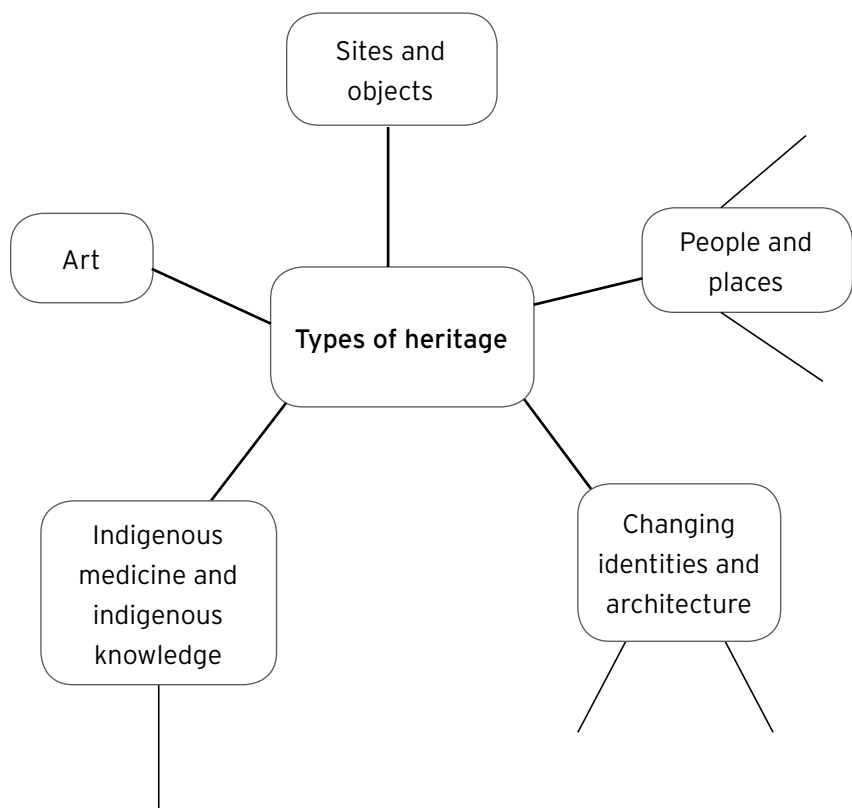
**Additional resources**

Blank mind-map, Extra resources section – for extension and remedial activities.

## Remedial and extension activities

Photocopy the mind-map for the learners to use to make notes about the different types of heritage in South Africa (mind-map, Extra resources section). It will be useful if you fill in a copy of the mind-map yourself so you can then guide learners with writing in the spaces.

Using Units 3–11 you should find enough information to fill in key words and phrases at the end of the mind-map lines coming from each outer circle (i.e. each example of heritage). You may also find extra information to add, or ask stronger learners to find out extra information, for example titles of books about this subject, known oral legends, or names of well-known sites of rock art. The mind-map can be started in this unit and completed in Unit 11.



**Curriculum content and concepts**

- Heritage in objects, example, Golden objects at Mapungubwe: Limpopo.

**Teaching notes**

- Ask learners to work in pairs to read the information in the Learner's Book on page 176, and then to answer the questions on page 177 in their notebooks.
- Then ask learners to team up with other pairs to mark their work, and then to hand in their notebooks for you to informally assess the activities in this unit and Unit 3, Heritage in Gauteng.
- For more information about Mapungubwe see the Bright Idea box on page 91 of this guide.
- Remind learners that they should already have a collection of stones for Unit 9 – learners should collect stones that will fit well together to make a small stone wall (see the photo of a stone wall on Learner's Book page 185).

**Answers to activity**

*Pair* Learner's Book page 177

1. Learners should read the information in pairs and help one another with understanding.
2. a) gold rhinoceros, sceptre and bowl  
b) gold sheet folded around wood  
c) practical purposes (e.g. tools) and decorative purposes (e.g. jewellery)

**Informal assessment**

Monitor progress in discussions and activities.

**Additional resources**

- The text in the Bright Idea box about Mapungubwe, in Module 6 Unit 2 (page 91 of this guide).



**Curriculum content and concepts**

- Heritage in names of places, example, Names of rivers, dams and towns: Free State.

**Teaching notes**

- Geography learning (from Module 2, Units 2–4) will be useful for this activity.
- Read all the information in the Learner's Book on pages 178–179 (except for the activity text) with the class and discuss the different names and their stories.
- Talk about the names of any other places that give us historical information (focusing first on places in the local area or province that learners know).
- Ask learners to complete the activity on page 179 in pairs, and to write the answers in their notebooks.

**Answers to activity**

*Pair* Learner's Book page 179

1. Learners should be able to answer this question from discussion and their general knowledge, and also from Geography learning (from Module 2, Units 2–4).
2. a) to c) To answer these questions the learners – and you – may need to do some research at the library or tourism office (if there is one), or find out from people in the community who know the area well.

**Informal assessment**

Monitor progress in reading, discussions and activity.

**Additional resources**

- Photocopy of map of South Africa with provincial lines (Extra resources section)
- <http://www.nasmus.co.za> (Bloemfontein national museum)

**Remedial and extension activities**

Use this as an opportunity for learners who struggle to recap the Geography learning about South African rivers and dams by drawing the rivers and dams on a copy of a blank map of South Africa and writing in the names. Learners should also include on the map the names and locations of all the Free State heritage places covered in the unit.

**Curriculum content and concepts**

- Heritage in people's achievements, example, Frances Baard: Northern Cape.

**Teaching notes**

- Ask learners to work on their own to read the information on page 180. When everyone has finished reading, talk about other statues in South Africa, and why a person is honoured with a statue. If you have any pictures of other statues, show them to learners as part of the discussion.
- Ask learners to work on their own to complete the activity on page 180 in their notebooks,

**Answers to activity**

*Individual* Learner's Book page 180

1. This is a very open question, and learners can suggest anyone, as long as they are able to support and explain why they would choose that person for a statue to be made of him or her.

**Informal assessment**

Monitor progress in reading, discussions and activity.

**Additional resources**

- Pictures of statues in South Africa.

**Curriculum content and concepts**

- Heritage and changing identities, example, The Castle: Western Cape.

**Teaching notes**

- Read through the information in the Learner's Book on page 181 with the class. Ask if any learners have seen or visited the Castle of Good Hope (if your school is in Cape Town try to organise a class trip to the Castle).
- Ask learners to work in pairs to draw and fill in the time line in their notebooks, and then discuss the answers as a class.
- Remind learners that they will need a collection of stones for Unit 9 – small stones that fit together well to make a small stone wall (see the photo of a stone wall on page 185).

**Answers to activity**

*Pair* Learner's Book page 181

*Information for timeline:*

1652	Jan van Riebeeck arrived at the Cape
1666–1679	The Castle of Good Hope was built by the Dutch East India Company during this period
1899–1902	Period of the South African War
1936	The Castle of Good Hope declared a national monument
2012	Today the Castle of Good Hope is a military museum and gallery

**Informal assessment**

Monitor progress in discussions and activity.

**Curriculum content and concepts**

- Heritage and indigenous medicine: for example, The healing properties of the aloe: Eastern Cape.

**Teaching notes**

- Ask learners to tell you what they remember about plant medicines and traditional remedies (from Learner's Book pages 116–117 and/or from their own experiences). Then read through the text on pages 182–183 with the class. Show the class part of an Aloe plant or Aloe products if you were able to get them.
- Read through the activity in the Learner's Book on page 182 and discuss with learners any traditional plant recipes or cures that you know of from your family.
- Learners will need to complete the activity for homework and bring the recipes and drawings to the next lesson.
- Remind learners that they will need a collection of stones for the next unit – stones that fit together well to make a small stone wall (see the photo of a stone wall on page 185).

**Answers to activity**

*Individual* Learner's Book pages 182

1. to 3. Learners should first try to find out a traditional herbal recipe or cure from an older person in the family, but other family members might also be able to help. For the next lesson each learner should bring a written recipe or method for making a traditional cure or remedy, as well as a carefully drawn plant and leaves used in the recipe, or even a few real leaves. It will be interesting to get herbal cures from different cultural traditions and to notice the similarities and differences.

*Group* Learner's Book page 182

4. Give the groups of 4–6 about 20 minutes to share and discuss the recipes in each group. Then ask for volunteers to report back for class discussion.

**Additional resources**

- A piece of *Aloe ferox* leaf to show learners, and any *Aloe ferox* products, for example, skincare products and burn lotion.
- Any traditional herbal recipes or cures that you use or know of from your family.

**Curriculum content and concepts**

- Heritage in architecture, example, Stone-walled town of Kaditshwene: North West.

**Teaching notes**

You will need: learners will need a collection of stones that fit together well to make a small stone wall (see the photo of a stone wall in the Learner's Book on page 185)

- Start this lesson with feedback from the group discussion from the previous unit's activity – Learner's Book page 182. After the discussion ask learners to hand in their work for informal assessment.
- Read the first sentence of the text on page 184 out loud, and then ask learners to each read one sentence aloud, moving from one learner to the next until the text is complete.
- Ask learners to tell you what they think it was like to live at Kaditshwene – remind them to recall what they have learned about Iron Age people and another famous Iron Age settlement at Mapungubwe to help them imagine life at Kaditshwene.
- Look at the photographs on page 185 with the class and talk about the building method used.
- Divide the class into two groups and let the groups go outside to each build a small dry stone wall with the stones they have collected over the weeks. Give learners about 30 minutes to work on this, and then return to class (or in the next lesson) to discussion question 3 of the activity on page 185 of the Learner's Book. Was one group more successful than the other – and if so, why?

This is an optional, fun activity, and is not essential. You may choose to skip it if you have time constraints.

**Answers to activity**

*Individual and Class* Learner's Book page 185

Learners should work together to make a small stone wall, using the stones they have been collecting over the past weeks. It is likely that learners will find this quite difficult to achieve, especially with the wall from the Kaditshwene Ruins as a reference! But their efforts and answers will be interesting and informative.

**Informal assessment**

Informally assess the activity, and monitor group work skills.

**Curriculum content and concepts**

- Natural heritage and indigenous knowledge systems (IKS), example, Makwonga Mountains, the oldest in the world. Mountains and ancestors in IKS: Mpumalanga.

**Teaching notes**

- The knowledge systems of indigenous people in Africa were for a long time not valued by most European settlers, and it is only in the last 20 years that indigenous knowledge systems have become generally recognised as an important resource and reference.
- Remind learners that they have learned about the indigenous knowledge systems of the San people, and ask them to give you an example of any aspect of the San's indigenous knowledge system.
- Ask learners to work in pairs to read the information in the Learner's Book on page 186, and to complete the activity in their notebooks. When the pairs have finished, asked for volunteers to read their questions, and then discuss the answers.

**Answers to activity**

*Pair* Learner's Book page 186

1. and 2.

*For example:*

- What is a 'natural heritage'?
- What is 'indigenous knowledge'?
- Where are the Makwonga Mountains?
- How old are the rocks at the Makwonga Mountains and why is this important?
- What valuable mineral can be found in the Makwonga Mountains?
- Who probably stayed in the area during the 1700s and 1800s?
- What battles were fought in the area?

**Informal assessment**

Monitor progress in discussions and activity.

**Curriculum content and concepts**

- Heritage in art, example, San rock art in the Drakensberg: KwaZulu-Natal.

**Teaching notes**

You will need: pictures of rock art (from Module 5)

- Ask learners to tell you what they already know or remember about rock art, and why it is part of our heritage. Then read the information in the Learner's Book on page 187.
- Ask learners why they think people vandalise rock art, and to think of possible ways to stop vandalism.
- Ask learners to work in groups of 4–6 to think of rules that people should follow when they visit rock art heritage sites.
- After 15 minutes of discussion, ask for volunteers to share ideas with the class and make a class list of the best ten rules.
- Ask learners if they think that having rules is enough to stop people, or whether there is anything else that can or should be done to change people's behaviour (e.g. education about the value of preserving heritage).
- Ask learners if they think there should also be rules for visiting other heritage sites they've learned about, and why or why not.

**Answers to activity**

*Group* Learner's Book page 187

1. *For example:*

- Don't touch the painting
- Don't touch the rock surface.
- Don't use a camera with a flash or use a torch (fades the painting).
- Don't bring any food or drinks into the area of the painting.
- Bring as little as possible into the area.
- Don't pick up or take anything from the area.
- Try not to stir up dust in the area – walk slowly and carefully.
- Only ten people at a time can look at the painting and only for 10–15 minutes if other groups are waiting. (To make sure the area isn't crowded and people too close to the painting.)
- If you see someone vandalising the painting, ask them to stop and explain why.
- If you see someone vandalising the painting, quickly report them to a park official.

*Class* Learner's Book page 187

2. The class should choose the ten best (most useful) rules from the groups.

### Informal assessment

Write the following table on the board, and ask learners to copy it into their notebooks and complete it as a summary of this module. The first row is filled in for you.

Province	Type of heritage	Example
KwaZulu-Natal	Art	Rock paintings in uKhahlamba-Drakensberg Park

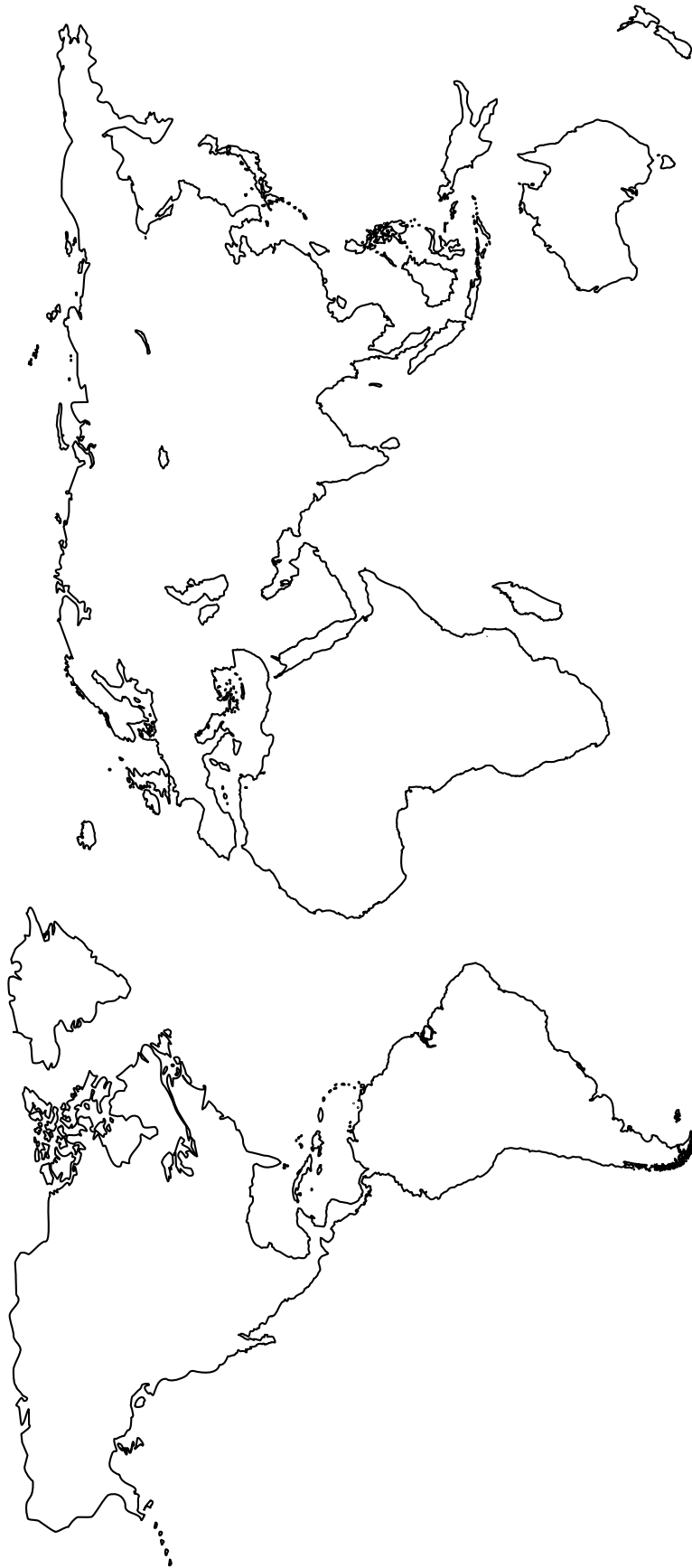


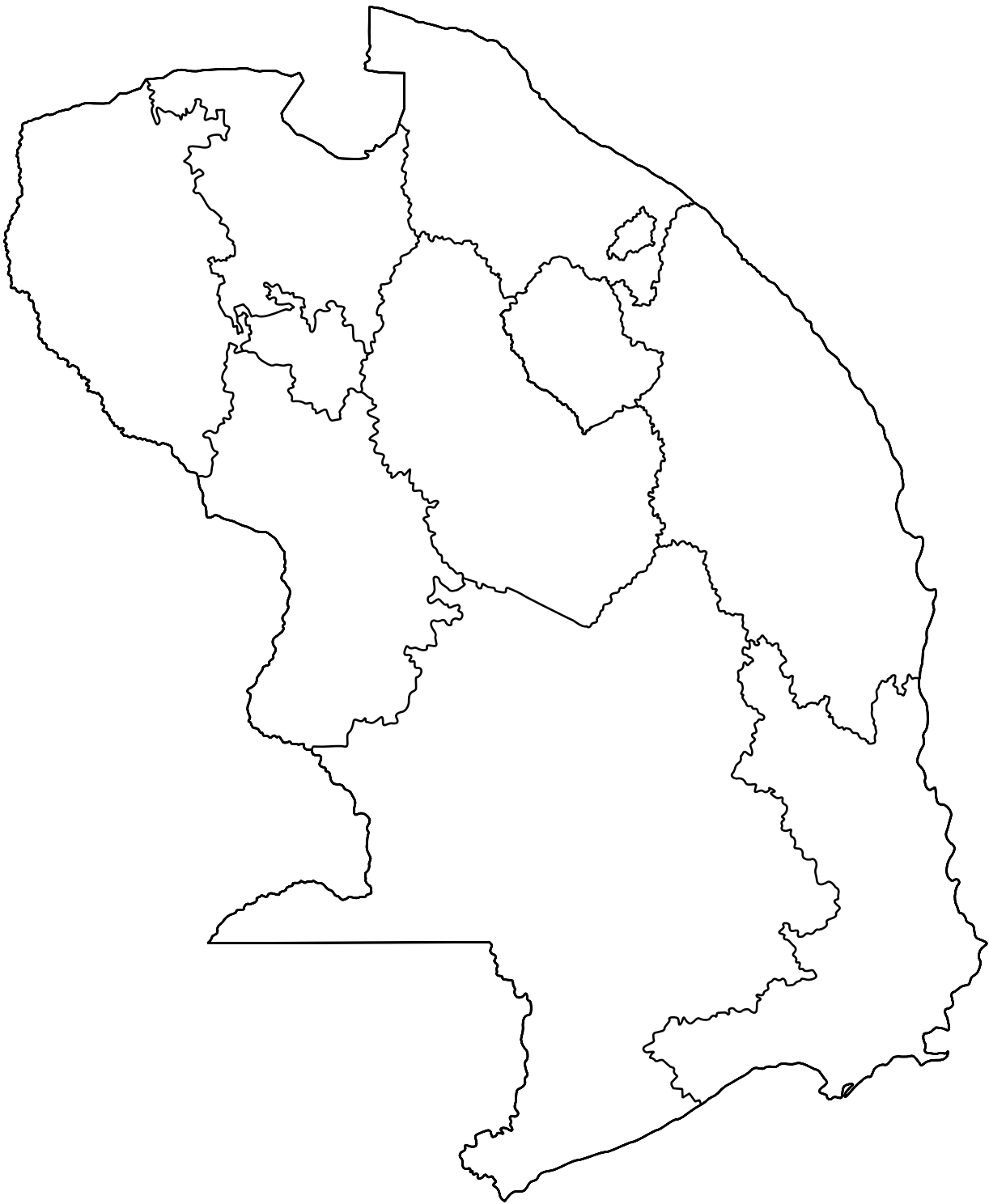
1. Learner's definition should include: Heritage is anything that a person inherits from the past. Heritage includes things, places and people that are important or special, and that help us to understand our identity. Heritage is about what we have in common with and share with other people.
2. Learners make their own posters about their family heritage. You can use the poster as an extra opportunity for collecting marks, if you need to. Make sure that the learners have covered each of the five points in the question, and give them two marks for each (total:10). Then use another five marks to assess the design of the poster – is it colourful, well laid-out, and neatly done? Give a five for the best mark, and a one for not well put-together. This will give the poster a total mark of 15.
3. Each person with family history in South/southern Africa is part of South African heritage.
4. Learners' drawings should clearly depict a particular site and include some detail to show what is special or important about the site. The caption should be a simple description or explanation of the picture. The paragraph should show that the learner is aware of what and why the site is important.
5. This is a creative and interesting task. Make sure learners know that they should first write a plan and draft of the poster, checking spelling and grammar and making sure they have included the necessary information. Then they should write a second draft and check again before deciding whether they can hand in the work as complete. Use the rubric in the Extra resources section to assess the posters.

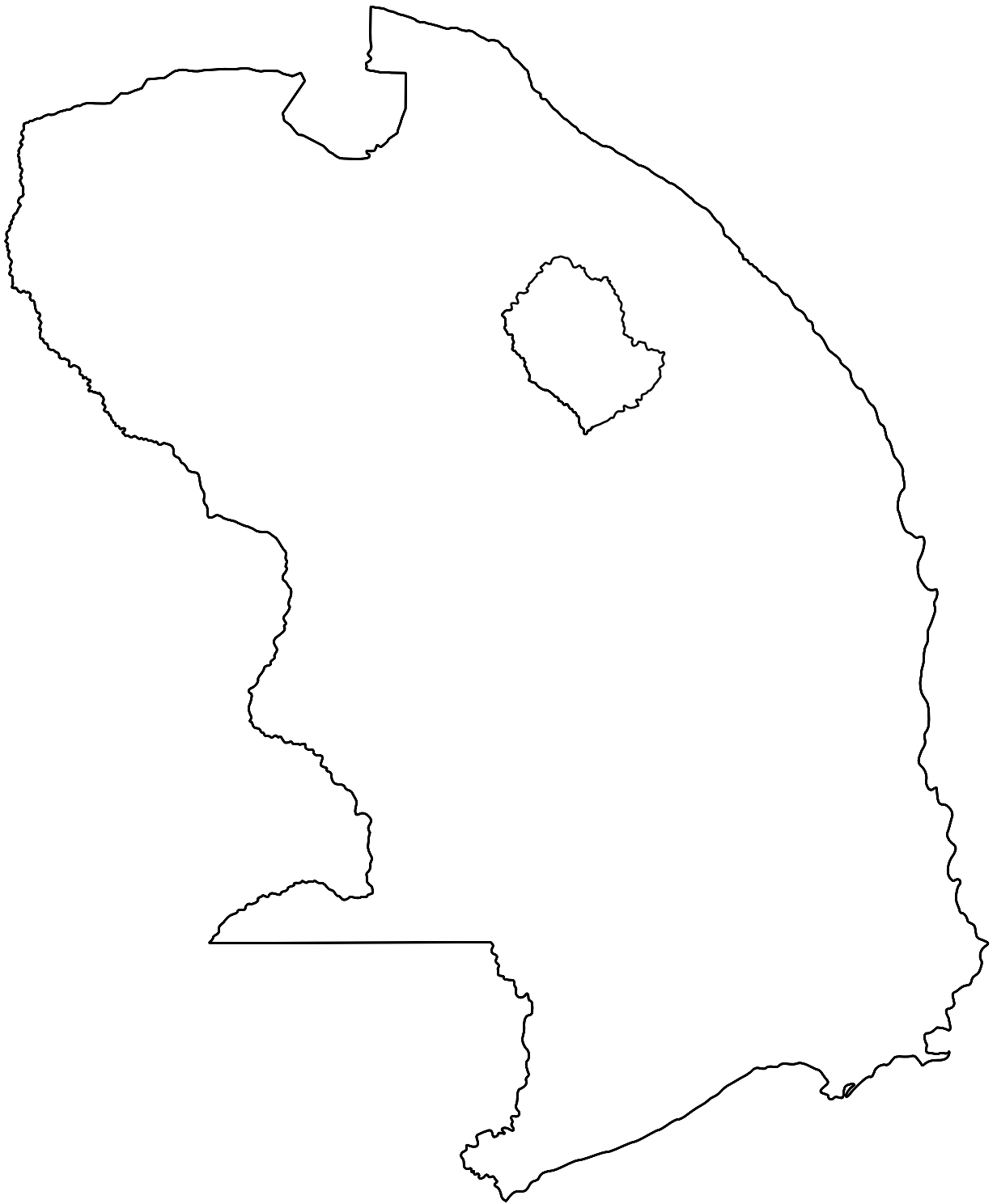
### **Formal assessment task**

It's time now for the end-of-year examination. You can set your own examination, or use the one in the Extra resources section of this Teacher's Guide. There is also a marking memorandum that goes with the examination.











## Module 3: Unit 2 Weather project

Learner name: \_\_\_\_\_ Date: \_\_\_\_\_ [Mark out of 100]

	<b>1</b> Not achieved (1 mark)	<b>2</b> Elementary (Almost achieved) (2 marks)	<b>3</b> Moderate (Not yet all achieved) (2 marks)	<b>4</b> Adequate (All achieved) (3 marks)	<b>5</b> Substantial (Achieved and more) (3 marks)	<b>6</b> Meritorious (Very well achieved) (4 marks)	<b>7</b> Outstanding (Excellent)
<b>ACHIEVEMENT:</b> In assessing you will need to see evidence that the learner:							
<b>Understand and work with a range of sources:</b> prepare to observe and record the weather	Is appropriately and sufficiently prepared for the stages of the project						
	Makes a functioning rain gauge as per Learner's Book instructions						
	Positions rain gauge appropriately						
	Demonstrates ability to correctly measure with rain gauge						
	Correctly identifies north, south, east and west in relation to the school						
	Makes functioning wind sock as per Learner's Book instructions						
	Positions wind sock correctly						
	Correctly measures wind direction						
	Correctly measures wind speed						
	Draws blank chart with key to record observations (as per Learner's Book)						
<b>Observe and engage with phenomena in their own environment:</b> observe and record the weather	Observes and records weather at same time every day						
	Observes and records weather at same place <sup>1</sup> every day						
	Observes and records temperature as per Learner's Book instructions						

continued ...

	<b>1</b> Not achieved (1 mark)	<b>2</b> Elementary (Almost achieved) (2 marks)	<b>3</b> Moderate (Not yet all achieved) (2 marks)	<b>4</b> Adequate (All achieved) (3 marks)	<b>5</b> Substantial (Achieved and more) (3 marks)	<b>6</b> Meritorious (Very well achieved) (4 marks)	<b>7</b> Outstanding (Excellent) (4 marks)
<b>ACHIEVEMENT:</b> In assessing you will need to see evidence that the learner:							
<b>Observe and engage with phenomena in their own environment:</b> observe and record the weather	Observes and records wind direction as per Learner's Book instructions						
	Observes and records wind strength as per Learner's Book instructions						
	Observes and records cloud cover as per Learner's Book instructions						
	Observes and records any precipitations, as per Learner's Book instructions						
<b>Communicate ideas and information:</b> management of project	Fills in chart correctly, as per Learner's Book instructions						
	Works consistently over 14 days						
	Fulfills requirements (task, instruments) of each stage or step of the project						
	(If necessary) gets support or help from you or another appropriate source						
<b>Communicate ideas and information:</b> presentation of project	Completes projects within required time						
	Produces a chart that is accurate and complete						
	Uses language and symbols correctly for the task						
	Clearly communicates required information in structured way						

1. To record weather at same place every day for 14 days in a row, learner should choose a place at home; if recording at school, the 14 days will break with two weekends.

To score this for your records: there are 25 criteria to meet, allocate 4 marks for each criterion, which gives you a total of 100.



## Module 3 Unit 4

**Letter to the Editor**, written to *The Star* newspaper (Gauteng).

Dear Editor

Climate change is the increasing temperatures that have led to floods, tornados and droughts. Scientists believe that human behaviour contributes to climate change. Three people died due to thunderstorms and lightening in rural KwaZulu-Natal and this means it affects us all, especially the poor.

The public can do something to reduce the impact of climate change. Stop cutting down trees and instead plant more of them. Trees provide us with oxygen, shelter and food. People must recycle cans, papers and plastic for re-use. We must all take care of our environment and be responsible citizens.

Water shortages are also a serious threat to our country and the world. By saving water now you are creating a better future for our children. People should also stop littering in our streets. Make sure that you save energy and switch off unused lights at your home and at work [or school].

The South African government has produced a White Paper on climate change – please read it. We all want to save tomorrow today.

From  
Sidwell Tshingilane (Soweto)

**Source:** *The Star* 28-11-2011, Letters to the Editor, page 9.

**Note:** *White Paper: government document for parliament and the public to read and comment on before it can become a law.*

### Wonderfonteinspruit catchment area still a concern

Uranium contamination of the environment by mines is an ongoing concern for communities in the Wonderfontein-spruit catchment area (WCA), west of Gauteng.

About 73 000 tons of uranium has been extracted during 120 years of gold mining in the WCA, which includes the West Rand and the Far West Rand areas, resulting in uranium pollution.

Since the 1980s, 450 000 tons of uranium has been deposited in the 270 waste dams of the Witwatersrand's goldfields and a further 250 000 tons of uranium has been deposited in the waste dams of the West Rand and the Far West Rand goldfields.

Studies and samples, which have been undertaken by various organisations over the past decade, have indicated that the waste dams within the WCA currently contain 100 000 tons of uranium.

A report by the Water Research Commission (WRC) found that 50 tons/year of uranium enters the groundwater from point sources, seepage and storm-water discharges within the West Rand and the Far West Rand goldfields.

Another report, titled 'Radiological impacts of the mining activities to the public in the Wonderfontein Catchment Area' by the National Nuclear Regulator (NNR), found that the small particles can be transported over relatively great distances to land used for agriculture.

The report further noted that the deposit of radioactive dust on the leaves of vegetables and plants could result in radiation exposures exceeding those from the inhalation of contaminated dust.

The Federation for a Sustainable Environment (FSE) recommended actions to be undertaken by the National Nuclear Regulator (NNR) within the Witwatersrand gold fields. These include informing mining communities of the risks and hazards of radioactivity in the area and regular assessments of dose contributions and dust emissions from slimes (waste) dams.

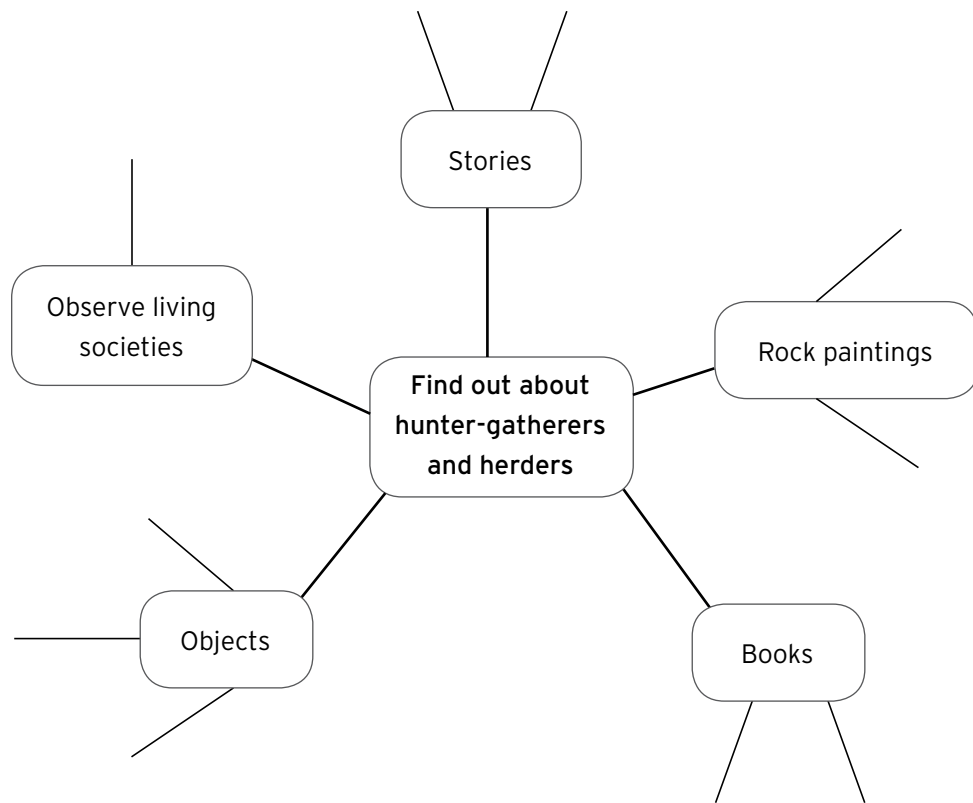
Thousands of residents of the Tudor Shaft informal settlement, near the Tudor dam in the south-eastern portion of the WCA, near Krugersdorp, are in the process of being moved to a safer site.

*Written by: Natasha Odendaal (article shortened and adapted)*

*Published: 18 March 2011 by Creamer Media (Pty) Ltd.*

*<http://www.miningweekly.com>*

## Module 5 Unit 1



Module 5 Unit 2



## Module 5 Formal assessment task

[one mark each – total 70]

Question 3: One-page essay about being a child in a San hunter-gather group

*Make sure learners know that they should first write a draft of the essay, and check spelling and grammar, and ask for your help if they need to. Then they should write a second draft and check again before deciding whether they can hand in the essay as completed.*

ACHIEVEMENT	1	2	3	4	5	6	7
In assessing the work you will need to see evidence that the learner has:	Not achieved	Elementary (Almost achieved)	Moderate (Not yet all achieved)	Adequate (All achieved)	Substantial (Achieved and more)	Meritorious (Very well achieved)	Outstanding (Excellent)
Planned and written a rough draft of the essay (evidence of planning and drafting)							
Written in their own words, and (if used) stated any sources used (at the end of the essay, e.g. details of a book used for reference)							
Written in English using full and meaningful sentences (always or almost always)							
Checked spelling, which is correct for school English (always or almost always)							
Checked grammar, which is correct for school English (always or almost always)							
Investigated topic using creative, imaginative vocabulary and sentences							
Integrated historical information to support story about being a child in a San hunter-gatherer group							
Written a story that is plausible (believable or possible)							
Written a story that is interesting and/or enjoyable to read							
Paraphrased or rewrote answers to questions 1 and 2 above as support material – the answers were adapted appropriately to fit in with new text							

## Module 7 Formal assessment task

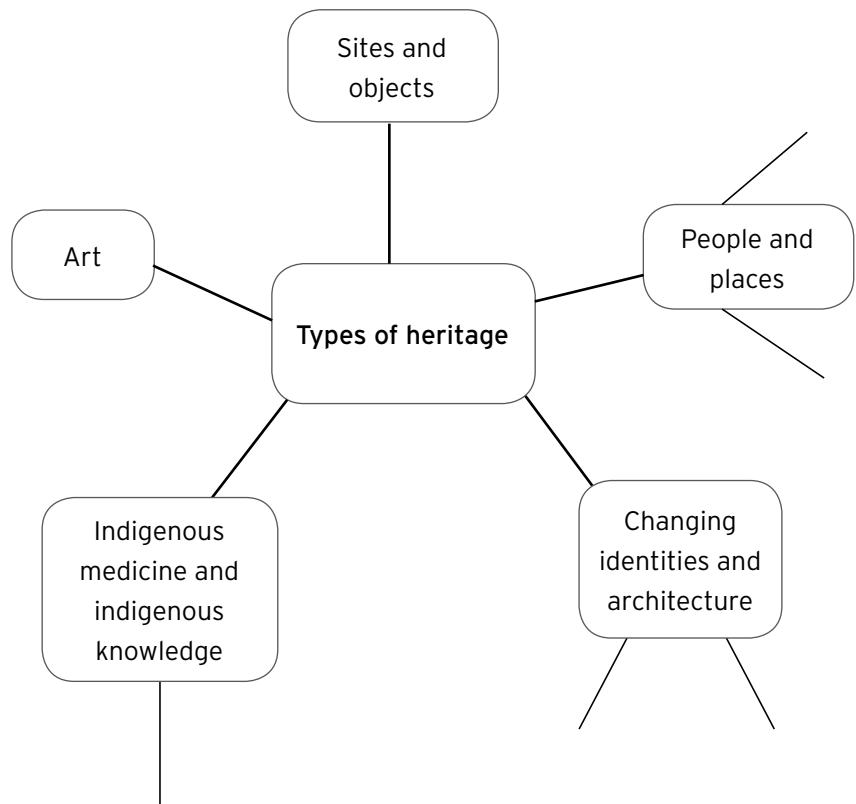
[Total: 30]

Question 2: One-page fact sheet or brochure about Ancient Egypt for a Grade 4 class

*Remind learners that they should write and check at least 1 draft of the work.*

<b>ACHIEVEMENT:</b> In assessing you will need to see evidence that the learner:	<b>1</b> Not achieved (0 mark)	<b>2</b> Elementary (Almost achieved) (1 mark)	<b>3</b> Moderate (Not yet all achieved) (1 mark)	<b>4</b> Adequate (All achieved) (2 marks)	<b>5</b> Substantial (Achieved and more) (2 marks)	<b>6</b> Meritorious (Very well achieved)	<b>7</b> Outstanding (Excellent) (3 marks)
Planned and written a rough draft of the fact sheet / brochure (evidence of planning and drafting)							
Written in their own words, and (if used) stated any sources used (at the end of the fact sheet/brochure, e.g. details of a book used for reference)							
Written in English using full and meaningful sentences (always or almost always)							
Checked spelling, which is correct for school English (always or almost always)							
Checked grammar, which is correct for school English (always or almost always)							
Investigated topic using interesting and appropriate vocabulary and sentences							
Used historical information appropriately to produce required text							
Written a text that is appropriate for Grade 4 learners							
Structured the fact sheet/brochure appropriately (e.g. use of headings)							
(If brochure) Used 2–3 appropriate pictures to illustrate text in brochure							

## Module 8 Unit 3



## Assessment Module 8

[10 criteria x 7 = mark out of 70]

Question 5: poster for tourists: 'A heritage trail through South Africa'  
*Remind learners that they should write and check at least one draft of the work.*

ACHIEVEMENT	1	2	3	4	5	6	7
In assessing the work you will need to see evidence that the learner has:	Not achieved	Elementary (Almost achieved)	Moderate (Not yet all achieved)	Adequate (All achieved)	Substantial (Achieved and more)	Meritorious (Very well achieved)	Outstanding (Excellent)
Planned and written a rough draft of the poster (evidence of planning and drafting), including planning visual parts							
Written in their own words, and (if used) stated any sources used (at the end of the fact sheet/brochure, e.g. details of a book used for reference)							
Written in English using full and meaningful sentences (always or almost always)							
Checked spelling, which is correct for school English (always or almost always)							
Checked grammar, which is correct for school English (always or almost always)							
Investigated topic using interesting and appropriate vocabulary and sentences							
Used historical information appropriately to produce required text							
Structured the poster appropriately (e.g. text and pictures grouped according to provinces)							
Used appropriate pictures to illustrate the poster							
Produced a poster that is appropriate for tourists and will create interest about South African heritage							



**Grade 5 Formal assessment task**  
**End-of-year examination**

**Geography**

**(Total: 25 marks)**

1. Short answers

(8 marks)



- a) Fill in the words for the eight points on the compass. (4)
- b) Name any country in Africa that is South of the Equator. (1)
- c) Name any country in Africa that is North of the Equator. (1)
- d) Name any important physical feature in Africa (excluding South Africa) and say why the physical feature is important. (2)

2. Mapwork

(10 marks)

Your teacher will give you a blank outline map of South Africa.

- a) On the outline map – using the map key below – draw the symbols in pencil to show where the physical features are located. Label each feature. Show the following features on the map:

- uKhahlamba-Drakensberg (1)
- Lake St. Lucia (1)
- Au-grabies Falls (1)
- Choose any other physical feature you know of and show it on the map. Use the map key symbols or make your own new symbol to show the feature. Write the name of the feature on the map. (2)

Map Key	
Mountain	^ ^ ^ ^ ^ ^ ^ ^
Lake	= = = = = = = =
Waterfall	/ / / / / / / /

- b) Choose any province on the map and answer these questions.
  - i. What is the name of the province? Write the name neatly on the map. (1)

- ii. Does the province get summer or winter rainfall? (1)
  - iii. What is the usual climate of this province in summer, and in winter? (2)
  - iv. Give an example of the type of natural vegetation of this province. (1)
3. Paragraph (7 marks)
- Write a paragraph of seven to eight sentences in which you:
- Explain what minerals are, and how we get them. (2)
  - Give an example of one of the main minerals mined in South Africa. Say where that mineral is mined, and what it is used for. (3)
  - Say why mining is a difficult, dangerous job, and give an example of how miners can be protected. (2)

**Grade 5 Formal assessment task**  
**End-of-year examination**

**History**

**(Total: 25 marks)**

1. Paragraph

(9 marks)



Write a paragraph of 10–11 sentences explaining the South African Coat of Arms.

Your paragraph must explain the main parts in the Coat of Arms and say what they mean. In your paragraph you must mention and explain:

- who the people are, what they are doing, and some information about their history (5)
- any two more aspects of the Coat of Arms – for example, plants, animals and natural elements – and what they mean (4)

2. Table

(6 marks)

Complete the table using the information you know about early African farmers and chiefdoms. Write 2 points or sentences for each topic.

Settlement	Homesteads and villages. In huts with thatched roofs and walls plastered with mud or dung, built around a cattle kraal
Farming and food	Vegetable and cereal crops. Livestock, especially cattle (milk and only rarely for meat)
Tools and technology	
Girls and women	
Boys and men	

3. Short answers

(10 marks)

Choose any five of the following topics and write two points (short sentences) to explain more about the topic:

- Hieroglyphics
- The tomb of Tutankhamen
- The Nile River
- Ancient Egyptian medicine
- Heritage in art
- Heritage in sites of importance
- Heritage in names of places
- Natural heritage

## Grade 5 Formal assessment task

### End-of-year examination

#### Geography memorandum (Total: 25 marks)

1. Short answers (8 marks)
  - a) North, North East, East, South East, South, South West, West, North West (½ mark each = 4)
  - b) Any African country that is located below the 0° latitude. (1)
  - c) Any African country that is located above the 0° latitude. (1)
  - d) Any one feature and its importance, for example: (2)

Feature	Importance
Kilimanjaro	Africa's highest mountains
Mount Kenya	southern Africa's highest peak
Thabana Ntlenyana (uKhahlamba-Drakensberg)	
Lake Victoria	Africa's largest lakes
Lake Malawi	
Lake Tanganyika	
Nile River	Africa's longest/biggest rivers
Niger River	
Congo River	
Zambezi River	
Limpopo River	
Gariiep-Orange River	
Victoria Falls	southern Africa's famous waterfalls
Maletsunyane Falls	
Augrabies Falls	
Sahara Desert	Africa's biggest deserts
Namib Desert	

2. Mapwork (10 marks)
  - a) Accurate and neat labeling of photocopied map. (3)
  - Accurate and neat use of map key and symbols. (2)
  - b) Name of province, rainfall, climate in summer and winter, natural vegetation (5)
3. Paragraph (7 marks)

Learners should mention these key points:

Minerals: Non-renewable, natural (solid non-living) resources usually mined (extracted) from below the ground. (2)

Examples: Any of the following: coal, gold, platinum, diamonds, iron ore, chrome, copper, silver and manganese. See Learner's Book page 90 'A mining map of South Africa' for key to what minerals are mined where.

See Learner's Book pages 88–90 for information about uses of minerals. (3)

Dangers and risks with mining – for examples see Learner's Book page 97 to 100. (1)

Rules and safety regulations – for examples see Learner's Book page 100. (1)

## Grade 5 Formal assessment task

### End-of-year examination

#### History memorandum (Total: 25 marks)

##### 1. Paragraph (9 marks)

The human figures stand for the San and Khoi peoples of southern Africa – together known as the Khoisan. The San were the first people to live in southern Africa and they were hunter-gatherers. The Khoi people lived mainly by keeping and trading sheep and cattle (livestock), and were more settled than the San. The people are shown greeting each other – which shows unity. The figures are important because they represent the first groups of people to live in southern Africa – the start of human history in the region. The language used in the Coat of Arms also reflects our Khoisan history and the idea of unity.

See Learner's Book page 120 for information about other aspects of the Coat of Arms.

##### 2. Table (6 marks)

Settlement	Homesteads and villages. In huts with thatched roofs and walls plastered with mud or dung, built around a cattle kraal
Farming and food	Vegetable and cereal crops. Livestock, especially cattle (milk and only rarely for meat)
Tools and technology	Metal working for weapons (spears and arrow heads) and domestic purposes (e.g. cutting and sewing), including decoration (jewelry); Pottery for domestic use (cooking, storing) and ceremonial use
Girls and women	Farming, raising children, cooking, sewing (domestic tasks)
Boys and men	Herding, hunting and protecting

##### 3. Short answers (10 marks)

Learners write on five of these, for two marks each.

- Hieroglyphics  
For example: Egyptians wrote with hieroglyphics, which are small pictures or symbols. The Rosetta Stone helped people to work out what hieroglyphs mean.
- The tomb of Tutankhamen  
For example: Tutankhamen was the most famous Egyptian pharaoh or king. He was buried in the Valley of Kings with many treasures and his tomb was discovered in 1922.
- The Nile River  
For example: People settled near the Nile about 6 000 years ago because it flooded every year and left good soil for farming after the floods. Some other uses of the Nile were drinking, fishing and sailing.

- Heritage in art  
For example: San Rock art is part of our South African heritage. Thousands of paintings can be seen in the rock shelters of the Ukhahlamba-Drakensberg Park, which is a World Heritage Site.
- Heritage in sites of importance  
For example: The Cradle of Humankind in Gauteng is important because this site can give us information about our early human ancestors. There are many caves in the area where fossils of ancient plants and animals have been found.





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