



education

Department of Education
REPUBLIC OF SOUTH AFRICA

**National Curriculum Statement
Grades 10 – 12
(General)**

GEOGRAPHY

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ISBN 1-919975-65-9

Design and Layout by: Seriti Printing (Pty) Ltd
Printed by the Government Printer Pretoria

HOW TO USE THIS BOOK

This document is a policy document divided into four chapters. It is important for the reader to read and integrate information from the different sections in the document. The content of each chapter is described below.

■ Chapter 1 - Introducing the National Curriculum Statement

This chapter describes the principles and the design features of the National Curriculum Statement Grades 10 – 12 (General). It provides an introduction to the curriculum for the reader.

■ Chapter 2 - Introducing the Subject

This chapter describes the definition, purpose, scope, career links and Learning Outcomes of the subject. It provides an orientation to the Subject Statement.

■ Chapter 3 - Learning Outcomes, Assessment Standards, Content and Contexts

This chapter contains the Assessment Standards for each Learning Outcome, as well as content and contexts for the subject. The Assessment Standards are arranged to assist the reader to see the intended progression from Grade 10 to Grade 12. The Assessment Standards are consequently laid out in double-page spreads. At the end of the chapter is the proposed content and contexts to teach, learn and attain Assessment Standards.

■ Chapter 4 – Assessment

This chapter deals with the generic approach to assessment being suggested by the National Curriculum Statement. At the end of the chapter is a table of subject-specific competence descriptions. Codes, scales and competence descriptions are provided for each grade. The competence descriptions are arranged to demonstrate progression from Grade 10 to Grade 12.

■ Symbols

The following symbols are used to identify Learning Outcomes, Assessment Standards, grades, codes, scales, competence description, and content and contexts.



= Learning Outcome



= Assessment Standard



= Grade



= Code



= Scale



= Competence Description



= Content and Contexts



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ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
AU	African Union
CASS	Continuous Assessment
DO	Developmental Outcome
FET	Further Education and Training
GET	General Education and Training
GIS	Geographical Information System(s)
GPS	Global Positioning System(s)
HE	Higher Education
HIV	Human Immunodeficiency Virus
IKS	Indigenous Knowledge Systems
LPG	Learning Programme Guidelines
NCS	National Curriculum Statement
NGO	Non-Governmental Organisation
NQF	National Qualifications Framework
NEPAD	New Partnership for Africa's Development
OBE	Outcomes-Based Education
OXFAM	Oxford Famine Relief
SADC	Southern African Development Community
SAQA	South African Qualifications Authority
UN	United Nations
WB	World Bank
WHO	World Health Organisation

CHAPTER 1

INTRODUCING THE NATIONAL CURRICULUM STATEMENT

The adoption of the Constitution of the Republic of South Africa (Act 108 of 1996) provided a basis for curriculum transformation and development in South Africa. The Preamble states that the aims of the Constitution are to:

- heal the divisions of the past and establish a society based on democratic values, social justice and fundamental human rights;
- improve the quality of life of all citizens and free the potential of each person;
- lay the foundations for a democratic and open society in which government is based on the will of the people and every citizen is equally protected by law; and
- build a united and democratic South Africa able to take its rightful place as a sovereign state in the family of nations.

The Constitution further states that ‘everyone has the right ... to further education which the State, through reasonable measures, must make progressively available and accessible’.

The National Curriculum Statement Grades 10 – 12 (General) lays a foundation for the achievement of these goals by stipulating Learning Outcomes and Assessment Standards, and by spelling out the key principles and values that underpin the curriculum.

PRINCIPLES

The National Curriculum Statement Grades 10 – 12 (General) is based on the following principles:

- social transformation;
- outcomes-based education;
- high knowledge and high skills;
- integration and applied competence;
- progression;
- articulation and portability;
- human rights, inclusivity, environmental and social justice;
- valuing indigenous knowledge systems; and
- credibility, quality and efficiency.

Social transformation

The Constitution of the Republic of South Africa forms the basis for social transformation in our post-apartheid society. The imperative to transform South African society by making use of various transformative tools stems from a need to address the legacy of apartheid in all areas of human activity and in education in particular. Social transformation in education is aimed at ensuring that the educational imbalances of the past are redressed, and that equal educational opportunities are provided for all sections of our population. If social transformation is to be achieved, all South Africans have to be educationally affirmed through the recognition of their potential and the removal of artificial barriers to the attainment of qualifications.

Outcomes-based education

Outcomes-based education (OBE) forms the foundation for the curriculum in South Africa. It strives to enable all learners to reach their maximum learning potential by setting the Learning Outcomes to be achieved by the end of the education process. OBE encourages a learner-centred and activity-based approach to education. The National Curriculum Statement builds its Learning Outcomes for Grades 10 – 12 on the Critical and Developmental Outcomes that were inspired by the Constitution and developed through a democratic process.

The Critical Outcomes require learners to be able to:

- identify and solve problems and make decisions using critical and creative thinking;
- work effectively with others as members of a team, group, organisation and community;
- organise and manage themselves and their activities responsibly and effectively;
- collect, analyse, organise and critically evaluate information;
- communicate effectively using visual, symbolic and/or language skills in various modes;
- use science and technology effectively and critically showing responsibility towards the environment and the health of others; and
- demonstrate an understanding of the world as a set of related systems by recognising that problem solving contexts do not exist in isolation.

The Developmental Outcomes require learners to be able to:

- reflect on and explore a variety of strategies to learn more effectively;
- participate as responsible citizens in the life of local, national and global communities;
- be culturally and aesthetically sensitive across a range of social contexts;
- explore education and career opportunities; and
- develop entrepreneurial opportunities.

High knowledge and high skills

The National Curriculum Statement Grades 10 – 12 (General) aims to develop a high level of knowledge and skills in learners. It sets up high expectations of what all South African learners can achieve. Social justice requires the empowerment of those sections of the population previously disempowered by the lack of knowledge and skills. The National Curriculum Statement specifies the minimum standards of knowledge and skills to be achieved at each grade and sets high, achievable standards in all subjects.

Integration and applied competence

Integration is achieved within and across subjects and fields of learning. The integration of knowledge and skills across subjects and terrains of practice is crucial for achieving applied competence as defined in the National Qualifications Framework. Applied competence aims at integrating three discrete competences – namely, practical, foundational and reflective competences. In adopting integration and applied competence, the National Curriculum Statement Grades 10 – 12 (General) seeks to promote an integrated learning of theory, practice and reflection.

Progression

Progression refers to the process of developing more advanced and complex knowledge and skills. The Subject Statements show progression from one grade to another. Each Learning Outcome is followed by an explicit statement of what level of performance is expected for the outcome. Assessment Standards are arranged in a format that shows an increased level of expected performance per grade. The content and context of each grade will also show progression from simple to complex.

Articulation and portability

Articulation refers to the relationship between qualifications in different National Qualifications Framework levels or bands in ways that promote access from one qualification to another. This is especially important for qualifications falling within the same learning pathway. Given that the Further Education and Training band is nested between the General Education and Training and the Higher Education bands, it is vital that the Further Education and Training Certificate (General) articulates with the General Education and Training Certificate and with qualifications in similar learning pathways of Higher Education. In order to achieve this articulation, the development of each Subject Statement included a close scrutiny of the exit level expectations in the General Education and Training Learning Areas, and of the learning assumed to be in place at the entrance levels of cognate disciplines in Higher Education.

Portability refers to the extent to which parts of a qualification (subjects or unit standards) are transferable to another qualification in a different learning pathway of the same National Qualifications Framework band. For purposes of enhancing the portability of subjects obtained in Grades 10 – 12, various mechanisms have been explored, for example, regarding a subject as a 20-credit unit standard. Subjects contained in the National Curriculum Statement Grades 10 – 12 (General) compare with appropriate unit standards registered on the National Qualifications Framework.

Human rights, inclusivity, environmental and social justice

The National Curriculum Statement Grades 10 – 12 (General) seeks to promote human rights, inclusivity, environmental and social justice. All newly-developed Subject Statements are infused with the principles and practices of social and environmental justice and human rights as defined in the Constitution of the Republic of South Africa. In particular, the National Curriculum Statement Grades 10 – 12 (General) is sensitive to issues of diversity such as poverty, inequality, race, gender, language, age, disability and other factors.

The National Curriculum Statement Grades 10 – 12 (General) adopts an inclusive approach by specifying minimum requirements for all learners. It acknowledges that all learners should be able to develop to their full potential provided they receive the necessary support. The intellectual, social, emotional, spiritual and physical needs of learners will be addressed through the design and development of appropriate Learning Programmes and through the use of appropriate assessment instruments.

Valuing indigenous knowledge systems

In the 1960s, the theory of multiple-intelligences forced educationists to recognise that there were many ways of processing information to make sense of the world, and that, if one were to define intelligence anew, one would have to take these different approaches into account. Up until then the Western world had only valued logical, mathematical and specific linguistic abilities, and rated people as ‘intelligent’ only if they were adept in these ways. Now people recognise the wide diversity of knowledge systems through which people make sense of and attach meaning to the world in which they live. Indigenous knowledge systems in the South African context refer to a body of knowledge embedded in African philosophical thinking and social practices that have evolved over thousands of years. The National Curriculum Statement Grades 10 – 12 (General) has infused indigenous knowledge systems into the Subject Statements. It acknowledges the rich history and heritage of this country as important contributors to nurturing the values contained in the Constitution. As many different perspectives as possible have been included to assist problem solving in all fields.

Credibility, quality and efficiency

The National Curriculum Statement Grades 10 – 12 (General) aims to achieve credibility through pursuing a transformational agenda and through providing an education that is comparable in quality, breadth and depth to those of other countries. Quality assurance is to be regulated by the requirements of the South African Qualifications Authority Act (Act 58 of 1995), the Education and Training Quality Assurance Regulations, and the General and Further Education and Training Quality Assurance Act (Act 58 of 2001).

THE KIND OF LEARNER THAT IS ENVISAGED

Of vital importance to our development as people are the values that give meaning to our personal spiritual and intellectual journeys. *The Manifesto on Values, Education and Democracy* (Department of Education, 2001:9-10) states the following about education and values:

Values and morality give meaning to our individual and social relationships. They are the common currencies that help make life more meaningful than might otherwise have been. An education system does not exist to simply serve a market, important as that may be for economic growth and material prosperity. Its primary purpose must be to enrich the individual and, by extension, the broader society.

The kind of learner that is envisaged is one who will be imbued with the values and act in the interests of a society based on respect for democracy, equality, human dignity and social justice as promoted in the Constitution.

The learner emerging from the Further Education and Training band must also demonstrate achievement of the Critical and Developmental Outcomes listed earlier in this document. Subjects in the Fundamental Learning Component collectively promote the achievement of the Critical and Developmental Outcomes, while specific subjects in the Core and Elective Components individually promote the achievement of particular Critical and Developmental Outcomes.

In addition to the above, learners emerging from the Further Education and Training band must:

- have access to, and succeed in, lifelong education and training of good quality;
- demonstrate an ability to think logically and analytically, as well as holistically and laterally; and
- be able to transfer skills from familiar to unfamiliar situations.

THE KIND OF TEACHER THAT IS ENVISAGED

All teachers and other educators are key contributors to the transformation of education in South Africa. The National Curriculum Statement Grades 10 – 12 (General) visualises teachers who are qualified, competent, dedicated and caring. They will be able to fulfil the various roles outlined in the Norms and Standards for Educators. These include being mediators of learning, interpreters and designers of Learning Programmes and materials, leaders, administrators and managers, scholars, researchers and lifelong learners, community members, citizens and pastors, assessors, and subject specialists.

STRUCTURE AND DESIGN FEATURES

Structure of the National Curriculum Statement

The National Curriculum Statement Grades 10 – 12 (General) consists of an Overview Document, the Qualifications and Assessment Policy Framework, and the Subject Statements.

The subjects in the National Curriculum Statement Grades 10 – 12 (General) are categorised into Learning Fields.

What is a Learning Field?

A Learning Field is a category that serves as a home for cognate subjects, and that facilitates the formulation of rules of combination for the Further Education and Training Certificate (General). The demarcations of the Learning Fields for Grades 10 – 12 took cognisance of articulation with the General Education and Training and Higher Education bands, as well as with classification schemes in other countries.

Although the development of the National Curriculum Statement Grades 10 – 12 (General) has taken the twelve National Qualifications Framework organising fields as its point of departure, it should be emphasised that those organising fields are not necessarily Learning Fields or ‘knowledge’ fields, but rather are linked to occupational categories.

The following subject groupings were demarcated into Learning Fields to help with learner subject combinations:

- Languages (Fundamentals);
- Arts and Culture;
- Business, Commerce, Management and Service Studies;
- Manufacturing, Engineering and Technology;
- Human and Social Sciences and Languages; and
- Physical, Mathematical, Computer, Life and Agricultural Sciences.

What is a subject?

Historically, a subject has been defined as a specific body of academic knowledge. This understanding of a subject laid emphasis on knowledge at the expense of skills, values and attitudes. Subjects were viewed by some as static and unchanging, with rigid boundaries. Very often, subjects mainly emphasised Western contributions to knowledge.

In an outcomes-based curriculum like the National Curriculum Statement Grades 10 – 12 (General), subject boundaries are blurred. Knowledge integrates theory, skills and values. Subjects are viewed as dynamic, always responding to new and diverse knowledge, including knowledge that traditionally has been excluded from the formal curriculum.

A subject in an outcomes-based curriculum is broadly defined by Learning Outcomes, and not only by its body of content. In the South African context, the Learning Outcomes should, by design, lead to the achievement of the Critical and Developmental Outcomes. Learning Outcomes are defined in broad terms and are flexible, making allowances for the inclusion of local inputs.

What is a Learning Outcome?

A Learning Outcome is a statement of an intended result of learning and teaching. It describes knowledge, skills and values that learners should acquire by the end of the Further Education and Training band.

What is an Assessment Standard?

Assessment Standards are criteria that collectively describe what a learner should know and be able to demonstrate at a specific grade. They embody the knowledge, skills and values required to achieve the Learning Outcomes. Assessment Standards within each Learning Outcome collectively show how conceptual progression occurs from grade to grade.

Contents of Subject Statements

Each Subject Statement consists of four chapters and a glossary:

- *Chapter 1, Introducing the National Curriculum Statement:* This generic chapter introduces the National Curriculum Statement Grades 10 – 12 (General).
- *Chapter 2, Introducing the Subject:* This chapter introduces the key features of the subject. It consists of a definition of the subject, its purpose, scope, educational and career links, and Learning Outcomes.
- *Chapter 3, Learning Outcomes, Assessment Standards, Content and Contexts:* This chapter contains Learning Outcomes with their associated Assessment Standards, as well as content and contexts for attaining the Assessment Standards.
- *Chapter 4, Assessment:* This chapter outlines principles for assessment and makes suggestions for recording and reporting on assessment. It also lists subject-specific competence descriptions.
- *Glossary:* Where appropriate, a list of selected general and subject-specific terms are briefly defined.

LEARNING PROGRAMME GUIDELINES

A Learning Programme specifies the scope of learning and assessment for the three grades in the Further Education and Training band. It is the plan that ensures that learners achieve the Learning Outcomes as prescribed by the Assessment Standards for a particular grade. The Learning Programme Guidelines assist teachers and other Learning Programme developers to plan and design quality learning, teaching and assessment programmes.

CHAPTER 2

GEOGRAPHY

DEFINITION

Geography is a science that studies physical and human processes and spatial patterns on Earth in an integrated way over space and time. It examines the spatial distribution of people and their activities, physical and human-made features, ecosystems and interactions between humans, and between humans and the environment in a dynamic context.

PURPOSE

Geography enables learners to explain processes and spatial patterns, to make well-informed judgements about changing environments and contexts, to think more critically and creatively about what it means to live sustainably, to recognise how values and attitudes influence and affect the environment, and to apply a range of geographical skills and techniques to issues and challenges in a rapidly-changing world.

Geography in the Further Education and Training band aims to:

- develop tools and skills to research, interpret, analyse and make judgements based on the information gathered, thereby contributing to geographical literacy. These tools are central to the distinctive approach of Geography in order to understand physical and human patterns and processes on Earth. Informed decisions, important to the well-being of society and the environment, are based on a range of geographical skills. All these decisions involve the ability to acquire, arrange and use geographical information and to think systematically and critically about social and environmental issues and challenges.
- develop knowledge and critical understanding of the changing nature and interrelatedness of human existence and the environment over space and time. This creates a frame of reference for asking and answering geographical questions, identifying and solving problems, and evaluating the consequences of alternative solutions and possible actions. Geography is in the unique position of drawing together aspects of natural sciences, humanities and indigenous knowledge systems in order to contribute to the understanding of spatial distribution, human-environment interactions, and sustainable development.
- prepare learners to become informed, critical and responsible citizens who can make sound judgements and take appropriate action that will contribute to equitable and sustainable development of human society and the physical environment. Geography prepares learners to become responsible and competent decision makers and agents, living and working in a complex world. It encourages them to challenge and address social and environmental injustices. Learners will be guided to develop attitudes and values that will

encourage them to take appropriate action, where possible, to address social and environmental problems and injustices.

SCOPE

The scope of Geography in the Further Education and Training band covers three major aspects of geographical studies: geographical skills and techniques (Learning Outcome 1); knowledge and understanding (Learning Outcome 2); and the application of skills and knowledge to practical issues and challenges (Learning Outcome 3). Each Learning Outcome is underpinned by Assessment Standards (eleven in each grade), which are supported by the content of the subject.

Essential skills and techniques

There are five broad, essential geographical skills and techniques (Learning Outcome 1):

- *Asking questions:* Geographers seek to understand and explain the interactions between humans, and between humans and the environment in space and time. This involves the ability and willingness to ask, speculate on, and answer questions related to Geography.
- *Acquiring information:* To answer questions, learners should start by gathering information from a range of sources in a variety of ways. The skills and methods involved in this process include locating and collecting information, observing and systematically recording information, reading and interpreting maps and other graphical representations, interviewing and executing general fieldwork skills.
- *Organising information:* Information is organised and displayed in ways that help with analysis and interpretation. Different types of information should be separated systematically and classified in visual or graphical forms (e.g. photographs, aerial photographs, graphs, cross-sections, climographs, diagrams, tables and maps). Information from documents or interview transcripts should be organised into pertinent quotes or statements, in a tabular or thematic form.
- *Analysing information:* Analysis involves establishing patterns, relationships and connections. It entails noting associations, similarities or differences between areas and/or phenomena, recognising patterns and drawing inferences from maps, graphs, diagrams, tables and other sources. Geographers also use statistical methods to identify trends, relationships and sequences. Observations can be synthesised into a meaningful interpretation by using important tools available in geographical analysis such as electronic (digital) databases and Geographical Information Systems (GIS).
- *Answering questions:* Successful geographical enquiry culminates in the development of generalisations and interpretations based on the data collected, organised and analysed. Learners should be able to communicate clearly and effectively their findings/answers by presenting them in the best possible way. Each question answered, decision reached or problem solved leads to new issues and situations being investigated.

These skills and techniques should be integrated throughout all the Learning Outcomes for Geography and not treated as separate elements that are isolated from the content of Geography.

Development and application of knowledge, understanding and skills

The development of knowledge and understanding (Learning Outcome 2) and the application of knowledge and skills (Learning Outcome 3) to phenomena, issues and challenges are essential.

Firstly, Geography studies how *spatial patterns and processes* affect the way people live and interact with the environment, how physical and human processes shape the environment, and how humans interrelate with the living and non-living environment. This aspect of Geography gives rise to questions such as ‘Where are things?’, ‘Why are they there?’, ‘What spatial patterns do they show?’, and ‘What processes give rise to these patterns?’. It further seeks to explain the character of places/regions and the distribution of people, features and events as they occur on the surface of the Earth.

Secondly, Geography seeks to understand *human-environment interactions*. Human actions modify the environment at different scales. Likewise, the environment and the availability of resources in regions and places shape human activities and lifestyles, and ultimately their well-being. The availability of water, for instance, provides opportunities for people to develop a region in a particular way. This aspect of Geography raises concerns about the nature of these interactions and the physical and human processes which influence them. In addition, it is concerned about how people depend on, adapt to and modify environments, and gives consideration to the consequences of human actions.

Thirdly, Geography is an *applied science* which seeks to apply skills and techniques, knowledge and understanding to issues and challenges in our immediate environments, and at a local, national, continental and global scale. These kinds of issues and challenges, no matter the scale, are often complex and are not easily solved. Geographers not only recognise the spatial and temporal dimensions of these issues and challenges, but also the values and attitudes that influence them. This encourages learners to develop critical perspectives to explain why these problems exist. In attempting to offer solutions to these kinds of issues, geographers apply principles such as those embodied in the concepts of sustainable development, sustainability, democracy, and social and environmental justice to offer appropriate solutions or strategies and to develop meaningful perspectives. In this way, Geography prepares learners to be active participants, informed citizens and responsible decision-makers. Learners will also be encouraged to recognise and appreciate values, attitudes and indigenous knowledge held by individuals and groups, to examine the consequences of their actions, and to make informed, logical decisions.

Approach

The scope of Geography, as described, emphasises the integration of physical and human geography. In the past, these components of Geography have been treated as separate elements. However, a study of physical processes that influence soil erosion, for example, must consider how human activities on the land also contribute to the process. The geographer needs to know why soil erosion is occurring and should understand the social, political and economic circumstances that may cause people to influence the rate of soil erosion in a place or in the broader region.

The integration of knowledge, understanding, skills and techniques is strengthened by approaching teaching

and learning in Geography through regional or thematic studies.

Regional studies should not only involve simple explanatory descriptions of parts of the world, but rather be a framework for applying all three Learning Outcomes of Geography. In this way learners come to understand the world as a set of interrelated elements that form a system. Geography encourages a deepening awareness and sense of place and region, which supports the concepts of nation building and the African Renaissance. Learners will become increasingly familiar with South Africa and its place within the African and global context.

Thematic studies need to be conducted in the framework of different locations. Three different approaches are applied in thematic studies, namely:

- *the systematic approach*, which enables the geographer to understand phenomena (physical and human) and their resultant patterns and impacts in a systematic way (e.g. tropical cyclones, natural hazards, urbanisation in a place or region).
- *the systems approach*, which enables the geographer to understand the wholeness of the environment and the interdependence of its individual components. Through this approach, physical systems (e.g. climatic systems) and human systems (e.g. settlement systems) in specific places and regions can be studied.
- *the issues-based approach*, which enables the geographer to focus on a specific issue in a natural, built or social environment in a locational (place or regional) context. A well-developed geographical understanding of these issues can result only from a process of enquiry in which questions are asked, evidence is examined and conclusions are reached. The enquiry method provides learners with ways of thinking critically and creatively about the problems or issues they study (e.g. the impact of HIV/AIDS on population dynamics, environmental quality, socio-economic disparities, hazards and disasters, poverty and resource management in a country).

EDUCATIONAL AND CAREER LINKS

Geography in the Further Education and Training band expands on the foundations developed in the General Education and Training band in the Social Sciences Learning Area with its emphasis on people, environment and people-environment relationships over space and time. The subject also builds on foundations laid in the study of physical processes, which were partly dealt with in the Natural Sciences Learning Area in the General Education and Training band.

Learners in the General Education and Training band ‘learn by doing’ as they explore their surroundings, engage in fieldwork, and access data and information from various sources. Learners in the Further Education and Training band continue with these activities, but should have a greater capacity for abstract thinking than the General Education and Training learners as they must apply concepts to a range of more complex challenges. In addition, a more advanced level of practical work and field-work will be demanded of them.

The following is a guide to the general competencies expected of a Grade 12 learner:

Skill	Acquire geographical information	Organise geographical information	Analyse geographical information
Literacy	Reading primary and secondary documents.	Compiling research plans. Reporting and writing essays. Documenting data.	Content analysis. Critical reviews.
Communication numeracy	Listening skills. Sampling.	Presentation skills. Using descriptive statistics, conversions and indices.	Seminar and debating skills. Applying analytical statistics.
Geographical numeracy	Doing measurements maps and imagery. Spatial sampling.	Using digital mapping and map projections. Applying cartographic principles.	Applying GIS procedures and spatial statistics.
Graphicacy	Interpreting maps, graphs, aerial photos, remotely-sensed imagery, photos and works of art.	Drawing maps. Constructing graphs. Converting imagery.	Using map statistics. Making inferences from maps, graphs, photos.
Field methods	Interviewing, observing, completing questionnaires, doing measurements, e.g. Global positioning systems (GPS), making notes, taking photos, drawing maps and making sketches.	Classifying and summarising data.	Making inferences from field observations.

The foundation for most of the skills listed above was laid in the General Education and Training band, and will be expanded in the Further Education and Training band. Using different investigative and enquiry methods, among others, these skills are developed in each of the three Learning Outcomes. These will form the basis for more specialised studies in certain fields of the Higher Education and Training band.

Geography provides a number of opportunities for additional education and training. Career links include amongst others, the following: aviation, cartography, earth sciences, eco-tourism, education and teaching, environmental management, geographical information systems, geology, land surveying, meteorology, nature conservation, remote sensing, rural and regional planning, urban planning, water and land affairs.

These careers span the administration, planning and development, transport, commerce, industrial, mining and tourism sectors.

LEARNING OUTCOMES



Learning Outcome 1: Geographical Skills and Techniques (practical competence)

The learner is able to demonstrate a range of geographical skills and techniques.

This Learning Outcome is achieved when learners are able to demonstrate the competence to ask questions, acquire, organise and analyse information, and make judgements based on the information gathered (enquiry skills). This includes competence in map use and map skills (spatial skills and techniques), and the manipulation of (electronic) geographical databases. These geographical skills provide the necessary tools, techniques and procedures for learners to think geographically and construct geographical knowledge.

Grade 10

Learners will be expected to use a range of geographical skills and techniques at a basic level in order to use and manipulate data and information. Furthermore, learners should demonstrate the skills of reporting findings and/or expressing an opinion.

Grade 11

Learners will be expected to plan and structure a project/enquiry process using a range of different geographical skills and techniques at a more advanced level in order to use and manipulate data and information. Furthermore, learners should demonstrate the skills of reporting findings and/or taking a substantiated position.

Grade 12

Learners will be expected to use a range of geographical skills and techniques in order to use and manipulate data and information. Furthermore, learners should demonstrate the skills to communicate and present findings/information reliably and accurately.



Learning Outcome 2: Knowledge and Understanding (foundational competence)

The learner is able to demonstrate knowledge and understanding of processes and spatial patterns dealing with interactions between humans, and between humans and the environment in space and time.

This Learning Outcome is achieved when learners are able to demonstrate knowledge and a critical understanding of physical and human processes and the resultant patterns found in a variety of spatial contexts over time. Geography is in the unique position of bringing together aspects of natural sciences, humanities and indigenous knowledge systems in order to contribute to the understanding of spatial distribution, human-environment interactions, and sustainable development.

Grade 10

Learners will be expected to demonstrate a basic operational knowledge of physical and human processes and the patterns which result from them, as well as the interactions between humans and the environment on a local and a global scale.

Grade 11

Learners will be expected to demonstrate a basic understanding of physical and human processes and the patterns which result from them, as well as the interactions between humans and the environment on a local and a continental scale.

Grade 12

Learners will be expected to demonstrate a fundamental knowledge of physical and human processes and the patterns which result from them, as well as the interactions between humans and the environment on local and a national scale.



Learning Outcome 3: Application (reflexive competence)

The learner is able to apply geographical skills and knowledge to environmental issues and challenges, recognise values and attitudes, and demonstrate the ability to recommend solutions and strategies.

This Learning Outcome is achieved when learners are able to demonstrate the competence to make sound judgements and take responsible and appropriate action that will contribute to the equitable and sustainable development of society and the environment. Geography encourages learners to recognise values and attitudes which influence issues, and also to develop values and attitudes to challenge and address socio-economic and environmental injustices.

Grade 10

Learners will be expected to apply knowledge and skills to select and propose known solutions or strategies to manage local/continental problems, acknowledging the values, attitudes and knowledge systems which impact on the actions of those involved.

Grade 11

Learners will be expected to apply acquired knowledge and skills in order to select appropriate procedures within given parameters to propose solutions or strategies to manage local or global problems, recognising the values, attitudes and knowledge systems which inform the actions of those involved.

Grade 12

Learners will be expected to apply acquired knowledge and skills to propose solutions or strategies to manage local or national problems, adapt known/common solutions for different problems and contexts, recognising the values, attitudes and knowledge systems informing the actions of those involved.

CHAPTER 3

LEARNING OUTCOMES, ASSESSMENT STANDARDS CONTENT AND CONTEXTS

Grade 10



Learning Outcome 1

Geographical Skills and Techniques (practical competence)

The learner is able to demonstrate a range of geographical skills and techniques.



Assessment Standards

We know this when the learner is able to:

- Identify issues and formulate questions for an investigation.
- Acquire information from fieldwork and a variety of other sources.
- Organise information graphically, pictorially and diagrammatically.
- Analyse information obtained from a variety of sources.
- Report findings in oral and/or written form.

Grade 11



Assessment Standards

We know this when the learner is able to:

- Plan and structure a project or enquiry process.
- Acquire a variety of information from relevant primary and secondary sources which include fieldwork.
- Classify the acquired information according to different categories.
- Analyse information obtained from a variety of sources – including fieldwork data, 1:50 000 topographical maps, orthophoto maps and statistics.
- Report findings in written, oral and/or illustrative form.

Grade 12



Assessment Standards

We know this when the learner is able to:

- Plan a geographical research project of limited extent in a familiar context.
- Integrate information from a variety of sources.
- Compare and contrast information from a variety of sources.
- Analyse the acquired information in order to answer the initial question.
- Substantiate findings in written, oral or illustrative form.



Learning Outcome 2

Knowledge and Understanding (foundational competence)

The learner is able to demonstrate knowledge and understanding of processes and spatial patterns dealing with interactions between humans, and between humans and the environment in space and time.



Assessment Standards

We know this when the learner is able to:

- Describe processes and associated spatial patterns in places and regions.
- Identify similarities and differences in processes and spatial patterns between places or between regions.
- Describe the links between environmental problems and social injustices in a local and global context.
- Describe the interdependence between humans and the environment at different scales.

Grade 11



Assessment Standards

We know this when the learner is able to:

- Explain processes and associated spatial patterns in a range of places and regions.
- Compare and contrast processes and spatial patterns between places and/or between regions.
- Examine issues and challenges arising from human and environment interactions in a local and continental context.
- Explain different measures of conserving the environment while addressing human needs in a variety of contexts.

Grade 12



Assessment Standards

We know this when the learner is able to:

- Explain the influence of processes and associated spatial patterns in a range of places and regions.
- Account for the similarities and differences in processes and spatial patterns between places and between regions.
- Explore possible responses to issues and challenges arising from human and environment interactions in a local and national context.
- Examine different approaches used to sustain the environment that take into account different knowledge systems in a variety of contexts.



Learning Outcome 3

Application (reflexive competence)

The learner is able to apply geographical skills and knowledge to environmental issues and challenges, recognise values and attitudes, and demonstrate the ability to recommend solutions and strategies.



Assessment Standards

We know this when the learner is able to:

- Apply skills and knowledge to a range of phenomena, issues and challenges at local and global scales.
- Identify different values and attitudes held by individuals and groups associated with processes, spatial patterns and human-environment interactions at local and global scales.

Grade 11



Assessment Standards

We know this when the learner is able to:

- Apply skills and knowledge to a range of phenomena, issues and challenges at local and continental scales.
- Examine the consequences of actions resulting from values and attitudes held by individuals and groups which influence processes, spatial patterns and human-environment interactions at a local and continental scales.

Grade 12



Assessment Standards

We know this when the learner is able to:

- Apply skills and knowledge to a range of phenomena, issues and challenges at local and national scales.
- Examine values and attitudes held by individuals and groups associated with processes, spatial patterns and human-environment interactions at local and national scales.



CONTENT AND CONTEXTS FOR THE ATTAINMENT OF ASSESSMENT STANDARDS

In this section content and contexts are provided to support the attainment of the Assessment Standards. The content indicated needs to be dealt with in such a way that the learner is assisted to progress towards the achievement of the Learning Outcomes. Content must serve the Learning Outcomes and not be an end in itself. The contexts suggested will enable the content to be embedded in situations that are meaningful to the learner and so assist learning and teaching. The teacher should be aware of and use local contexts, not necessarily indicated here, which could be more suited to the experiences of the learner. Content and context, when aligned to the attainment of the Assessment Standards, provide a framework for the development of Learning Programmes. The Learning Programme Guidelines give more detail in this respect.

Notes:

- Themes that are indicated for each grade should be addressed in the context of the three Learning Outcomes for Geography.
- Each grade has an overall focus as indicated. To make teaching and learning meaningful, it is important to link the chosen scale to other scales (local, provincial, national, continental, global).
- Although a global (Grade 10) and continental (Grade 11) focus should be adopted, the connection to the South African (national) context remains of utmost importance.
- The study of these content selections at different scales will enhance the learners' ability to understand the spatial nature of geographical processes and patterns.
- Where possible, different themes should be approached by integrating physical and human geography.
- The development and use of skills and techniques form an integral part of the process of constructing knowledge in Geography. Therefore, it should be developed, applied and integrated in the teaching of all the content selections.

GRADE 10

A. *Geographical skills and techniques*

- Using atlases: to familiarise and empower learners to use atlases on various themes as a rich source of spatially and non-spatially referenced data and information.
- Map use and map skills: these include reading and analysis of maps, orthophoto maps, oblique and vertical aerial photographs and graphical data, executing different techniques, for example:
 - map orientation (map position, types of grid reference);
 - different types of scales used on different maps and photos;
 - direction and true bearing;
 - map calculations (distance, area, gradient, vertical exaggeration);
 - drawing cross-sections and determining intervisibility;

- map analysis and interpretation.
- Map projections: Lambert.
- Fieldwork: using local maps/photos; recording geographical information in the local area.
- Geographical Information Systems (GIS):
 - general concepts (e.g. systems, information systems, GIS, remote sensing);
 - geographical concepts (e.g. spatial objects, lines, points, nodes, scales [small versus large], resolution [spectral and spatial]).

B. Atmosphere: weather and climate

Context: The World

- The atmosphere
 - composition and structure of the atmosphere;
 - heating of the atmosphere;
 - moisture in the atmosphere;
 - macro/meso weather systems over Africa;
 - the impact of weather systems on vegetation and human activities;
 - impact of humans on the atmosphere and weather (e.g. the ozone issue, global warming, acid rain, the greenhouse effect – use case studies from African states);
 - deserts: formation, distribution, arid processes and resultant landforms.

C. The structure and changing landforms of the Earth

Context: The World

- Gain an understanding of the time perspective within the geomorphical context.
- Internal forces:
 - plate tectonics, faulting and resultant landforms, earthquakes and vulcanism;
 - response of humans to these hazards and opportunities.
- External forces:
 - weathering and erosion: processes that shape the Earth's surface;
 - the influence of weathering and erosion on human activities;
 - the significance of the resultant landforms;
 - the impact (positive and negative) of humans on weathering and erosion processes.
- Rock types, formations, characteristics, uses and associated landforms.

D. People and places: population

Context: The World and Africa

- Key foci emphasising spatial distribution, processes and patterns include:
 - population movements: rural-urban migration, urbanisation;
 - population growth and density;
 - population distribution;
 - population explosion;
 - ageing population;
 - population control;
 - population policies;
 - rural depopulation;
 - population characteristics;
 - population pyramids.
- Key human-environment interactions, including:
 - population issues and dilemmas including poverty, racism, employment, conflicts, inequalities, HIV/AIDS and refugees;
 - gender issues.

E. People and their organisations

Context: The World and Africa

This section emphasises human interactions with the environment that promote democratic processes, social justice, economic sustainability and peace. It provides opportunities for learners to develop a critical understanding of unequal distribution patterns and processes over space and time, and the resultant uneven development. It also introduces learners to processes of democratic dialogue and collaborative action for the attainment of shared values. Learners are encouraged to develop a common purpose in seeking viable solutions and appropriate management strategies for addressing inequalities in society and the environment. People organise themselves for action in different ways.

- Civic organisations (e.g. local pressure groups, non-governmental organisations).
- National organisations (e.g. political organisations).
- Continental organisations (e.g. SADC, NEPAD, AU).
- Global organisations (e.g. United Nations, multinationals, Oxfam, World Bank).

GRADE 11

A. Geographical skills and techniques

- Using atlases: to familiarise and empower learners to use atlases on various themes as a rich source of spatially and non-spatially referenced data and information.
- Map use and map skills: includes reading and analysis of maps, orthophoto maps, aerial photographs and graphic data; executing different techniques, for example:
 - consolidation and more advanced application of map skills and techniques done in Grade 10 on topographical maps, aerial photos and orthophoto maps;
 - reading, analysis and interpretation of 1:50 000 topographical maps and orthophotos, integrating concepts done in content section.
- Map projections: Mercator.
- Fieldwork: using local maps/photos; recording geographical information in the local area.
- Functional elements of a GIS including:
 - data acquisition;
 - satellite remote sensing as a digital data source;
 - preprocessing;
 - data processing.

B. The significance of water masses

Context: Africa and the World

- The hydrological cycle.
- Water masses of Africa: oceans, permanent ice, lakes, swamps, etc.
- Climate change: effects of El Nino and La Nina in Africa.
- Hazards (flooding and drought) and the response of humans.
- Oceans as a major source of moisture and oxygen for the atmosphere, protein food and energy supply.
- Role of oceans: climate control, world trade and as a source of food.
- Impact of humans on oceans (e.g. pollution, over-exploitation).
- Forms of exploitation and its impact on sustainable living (e.g. commercial and subsistence fishing, mining, dumping of waste).
- Coastal environments: natural forces – erosion, deposition.
- Hazards and environmental management of hydrological systems (e.g. rivers, coastal resource management).

C. Ecosystems (biotic and abiotic components)

Context: Africa and the World

- Concepts (e.g. biosphere, ecosystem, biome, food webs and chains).
- Ecological processes (e.g. energy flow, nutrient cycling, self-regulation).
- Soil processes, soil profile and soil forming factors.
- Human impact on ecosystems and the consequences.
- Vegetation regions in Africa:
 - distribution;
 - comparing different biomes;
 - human impact on different biomes.
- Environmental relationships (influence of climate, soil, topography, veld fires on biomes).

D. Development and sustainability

Context: Africa and the World

- Concepts of ‘development’ and ‘sustainability’ at global and national scales.
- Indicators of development (social or economic) and sustainability.
- Models and theories of development over time.
- Rural and urban development: successes and failures.
- The unevenness of development globally (North/South divide).
- Contrasting developed and developing countries in terms of indicators.
- Role of agriculture, industry, aid, globalisation in development using case studies.
- Gender issues related to development.
- Changing patterns of agriculture, industry, transport, trade and settlement.
- Strategies by people, organisations and nations to address development problems.
- Application of development strategies in local context.

E. People and their needs

Context: Africa

- Resource use and management:
 - resources and their uses;
 - distribution and utilisation of renewable and non-renewable natural resources;
 - concepts of ‘resources exploitation’, ‘resource depletion’, ‘resource preservation’, ‘resource conservation’;

- extraction of raw materials, the conflicts and opportunities that are created;
 - land use conflicts in national parks;
 - the impact of values and attitudes of people affected.
- Energy use and management:
- increasing demand for energy;
 - relative and changing importance of fossil fuels, nuclear power and alternative energy sources;
 - the environmental costs of energy provision;
 - causes and effects of energy production related to pollution;
 - causes and consequences of acid rain and the importance of international co-operation;
 - environmental effects of resource and energy consumption on world temperatures;
 - sustainable energy principles and approaches – consider new forms of energy and approaches to energy conservation.

GRADE 12

A. Geographical skills and techniques

- Using atlases: to familiarise and empower learners to use atlases on various themes as a rich source of spatially and non-spatially referenced data and information.
- Map use and map skills: includes reading and analysis of maps, orthophoto maps, aerial photographs and graphic data; executing different techniques, for example:
- consolidation and more advanced application of map skills and techniques done in Grades 10 and 11 on topographical maps, orthophoto maps and aerial photos;
 - reading, analysis and interpretation on 1:50 000 topographical maps and orthophoto maps integrating concepts done in content section.
- Map projections: Gauss Conformal, Universal Transverse Mercator.
- Fieldwork: using local maps/photos and recording of information in the local area.
- Functional elements of a GIS including:
- data management;
 - data manipulation and analysis, and spatial analysis;
 - product generation;
 - application.

B. Climate and weather

Context: South Africa and the World

- Global air circulation and resultant weather patterns.

- Changes in energy balance.
- Mid-latitude cyclones and associated weather patterns, and their impact on human activities in South Africa.
- Subtropical anticyclones and resultant weather over South Africa.
- Tropical cyclones and associated weather patterns; impact on human activities; pre-cautionary strategies and disaster management.
- Synoptic weather maps and satellite image reading and interpretation.
- Climates at regional and local scale.
- Human-made climates (urban climate).
- Climate hazards and human response to these – risk and vulnerability.

C. Fluvial processes and landforms

Context: South Africa

- Fluvial processes – flowing water on the surface of the Earth:
 - river profiles;
 - superimposed and antecedent rivers;
 - drainage basins: characteristics, drainage patterns, importance and impact of humans;
 - catchment and river management.
- Topography associated with horizontal and inclined layers.
- Slopes: types, characteristics and significance for human activity.
- Mass movements and human responses.

D. People and places: rural and urban settlement

Context: South Africa and Africa

- With regard to processes and spatial patterns involved in rural and urban settlements:
 - settlement function, size and situation, density, hierarchy, services, (urban) profile;
 - population size, structure and patterns, land use characteristics, land use zones, the sphere of influence.
- Key human-environment interactions in rural settlements:
 - settlement issues: rural depopulation, closure of services, ageing of population, political influences, governance of rural settlements (local authorities, Agenda 21).
- Key human-environment interactions in urban settlements:
 - settlement issues: inner city problems, renewal, urban blight, congestion, pollution and land use conflict, standards of living, political influences;
 - post-modern urban settlements (changing urban centres), governance of urban settlements (local authorities, Agenda 21).

- Key sustainability-related strategies include:
 - rural: sustainable strategies to manage dwindling rural settlements, land reform and land redistribution, impact of HIV/AIDS and wars (refugees and displaced people) on rural settlement patterns.
 - urban: new towns, inner city renewal, self-help cities, urban planning, sustainable strategies to manage expanding centres, informal settlements;

E. People and their needs

Context: South Africa and the World

- Economic activities:
 - primary, secondary, tertiary and quaternary economic activities;
 - influence of economic, physical, political, social factors;
 - perceptions of decision-makers on the location of industries and other economic activities;
 - impact of humans on the location of economic activities;
 - response of people to environmental and socio-economic injustices linked to economic activities;
 - impact of the change of location of economic activities on people;
 - importance and challenges of the informal sector in different contexts;
 - influence of globalisation on economies and change;
 - agriculture as an economic activity: special emphasis on southern Africa, food security, risks and vulnerability;
 - transport and trade.
- Water as a critical resource in South Africa:
 - availability of water;
 - distribution and supply of water to South African citizens;
 - sustainable use and management of water.



A

GLOBAL SCALE

GEOGRAPHICAL SKILLS AND TECHNIQUES

- Using atlases: to familiarise and empower learners to use atlases on various themes as a rich source of spatially and non-spatially referenced data and information.
- Map use and map skills: these include reading and analysis of maps, orthophoto maps, oblique and vertical aerial photographs and graphical data, and executing different techniques, for example:
 - map orientation (map position, types of grid reference);
 - different types of scales used on different maps and photos;
 - direction and true bearing;
 - map calculations (distance, area, gradient, vertical exaggeration);
 - drawing cross-sections and determining intervisibility;
 - map analysis and interpretation.
- Map projections: Lambert.
- Fieldwork: using local maps and photos; recording geographical information in the local area.
- Geographical Information Systems (GIS)
 - general concepts (e.g. systems, information systems, GIS, remote sensing);
 - geographical concepts (e.g. spatial objects, lines, points, nodes, scales [small versus large], resolution [spectral and spatial]).

Grade 11



CONTINENTAL SCALE

GEOGRAPHICAL SKILLS AND TECHNIQUES

- Using atlases: to familiarise and empower learners to use atlases on various themes as a rich source of spatially and non-spatially referenced data and information.
- Map use and map skills: includes reading and analysis of maps, orthophoto maps, aerial photographs and graphic data, executing different techniques, for example:
 - consolidation and more advanced application of map skills and techniques done in Grade 10 on topographical maps and aerial photos and orthophoto maps;
 - reading, analysis and interpretation on 1:50 000 topographical maps and orthophotos integrating concepts done in content section.
- Map projections: Mercator.
- Fieldwork: using local maps and photos; recording geographical information in the local area.
- Functional elements of a GIS including:
 - data acquisition;
 - satellite remote sensing as a digital data source;
 - preprocessing;
 - data processing.

Grade 12



NATIONAL SCALE

GEOGRAPHICAL SKILLS AND TECHNIQUES

- Using atlases: to familiarise and empower learners to use atlases on various themes as a rich source of spatially and non-spatially referenced data and information.
- Map use and map skills: includes reading and analysis of maps, orthophoto maps, aerial photographs and graphic data; executing different techniques, for example:
 - consolidation and more advanced application of map skills and techniques done in Grades 10 and 11 on topographical maps, orthophoto maps and aerial photos;
 - reading, analysis and interpretation on 1:50 000 topographical maps and orthophoto maps integrating concepts done in content section.
- Map projections: Gauss Conformal, Universal Transverse Mercator.
- Fieldwork: using local maps and photos; recording geographical information in the local area.
- Functional elements of a GIS including:
 - data management;
 - data manipulation and analysis, spatial analysis;
 - product generation;
 - application.



B

GLOBAL SCALE

ATMOSPHERE: WEATHER AND CLIMATE

Context: The World

- The atmosphere:
 - composition and structure of the atmosphere;
 - heating of the atmosphere;
 - moisture in the atmosphere;
 - macro/meso weather systems over Africa;
 - impact of weather systems on vegetation and human activities;
 - impact of humans on the atmosphere and weather (e.g. the ozone issue, global warming, acid rain, Greenhouse effect [use case studies from African states]);
 - deserts: formation, distribution, arid processes and resultant landforms.

Grade 11



CONTINENTAL SCALE

THE SIGNIFICANCE OF WATER MASSES

Context: Africa and the World

- The hydrological cycle.
- Water masses of Africa: oceans, permanent ice, lakes, swamps, etc.
- Climate change: effect of El Niño and La Niña in Africa.
- Hazards (flooding and drought) and the response of humans.
- Oceans as a major source of moisture and oxygen for the atmosphere, protein food and energy supply.
- Role of oceans: climate control, world trade and as a source of food.
- Impact of humans on oceans (e.g. pollution, over-exploitation).
- Forms of exploitation and its impact on sustainable living (e.g. commercial and subsistence fishing, mining, dumping of waste).
- Coastal environments: natural forces including erosion and deposition.
- Hazards and environmental management of hydrological systems (e.g. rivers, coastal resource management).

Grade 12



NATIONAL SCALE

CLIMATE AND WEATHER

Context: South Africa and the World

- Global air circulation and resultant weather patterns.
- Changes in energy balance.
- Mid-latitude cyclones and associated weather patterns; impact on human activities in South Africa.
- Subtropical anticyclones and resultant weather over South Africa.
- Tropical cyclones and associated weather patterns, impact on human activities, precautionary strategies and disaster management.
- Synoptic weather maps and satellite image reading and interpretation.
- Climates at regional and local scale.
- Human-made climates (urban climate).
- Climate hazards and human response to these – risk and vulnerability.



C

GLOBAL SCALE

STRUCTURE AND CHANGING
LANDFORMS OF THE EARTH

Context: The World

- Gain an understanding of the time perspective within a geomorphical context.
- Internal forces:
 - plate tectonics, faulting and resultant landforms, earthquakes and vulcanism;
 - response of humans to these hazards and opportunities.
- External forces:
 - weathering and erosion: processes that shape the Earth's surface;
 - the influence of weathering and erosion on human activities;
 - the significance of the resultant landforms;
 - the impact (positive and negative) of humans on weathering and erosion processes.
- Rock types, formations, characteristics, uses and associated landforms.

Grade 11



CONTINENTAL SCALE

ECOSYSTEMS (BIOTIC AND ABIOTIC COMPONENTS)

Context: Africa and the World

- Concepts (e.g. biosphere, ecosystem, biome, food webs and chains).
- Ecological processes (energy flow, nutrient cycling, self-regulation).
- Soil processes, soil profile and soil-forming factors.
- Human impact on ecosystems and the consequences.
- Vegetation regions in Africa
 - distribution, comparing different biomes;
 - human impact on different biomes.
- Environmental relationships (influence of climate, soil, topography, veld fires on biomes).

Grade 12



NATIONAL SCALE

FLUVIAL PROCESSES AND LANDFORMS

Context: South Africa

- Fluvial processes: flowing water on surface of the Earth:
 - drainage basins: characteristics, drainage patterns, importance and impact of humans;
 - river profiles;
 - superimposed and antecedant rivers;
 - catchment and river management.
- Topography associated with horizontal, inclined and massive igneous layers.
- Slopes: types, characteristics and significance for human activity.
- Mass movements and human responses.



D

GLOBAL SCALE

PEOPLE AND PLACES: POPULATION

Context: Africa and the World

- Key foci emphasising spatial distribution, processes and patterns include:
 - population movements;
 - rural-urban migration;
 - urbanisation;
 - population growth and density;
 - population distribution;
 - population explosion;
 - ageing population;
 - population control;
 - population policies;
 - rural depopulation;
 - population characteristics;
 - population pyramids.

- Key human-environment interactions. including:
 - population issues and dilemmas including poverty, racism, employment, conflicts, inequalities, HIV/AIDS and refugees;
 - gender issues.

Grade 11



CONTINENTAL SCALE

DEVELOPMENT AND SUSTAINABILITY

Context: Africa and the World

- Concepts of ‘development’ and ‘sustainability’ at continental and global scales.
- Indicators of development (social or economic) and sustainability.
- Models and theories of development over time.
- Rural and urban development: successes and failures.
- The unevenness of development globally (North/South divide).
- Contrasting developed and developing countries in terms of indicators.
- Role of agriculture, industry, aid and globalisation in development, using case studies.
- Gender issues related to development.
- Changing patterns of agriculture, industry, transport, trade and settlement.
- Strategies by people, organisations and nations to address development problems.
- Application of development strategies in local context.

Grade 12



NATIONAL SCALE

PEOPLE AND PLACES: RURAL AND URBAN SETTLEMENT

Context: South Africa and Africa

- With regard to processes and spatial patterns involved in rural and urban settlements:
 - settlement function, size and situation, density, hierarchy, services, (urban) profile;
 - population size, structure and patterns, land use characteristics, land use zones, the sphere of influence.
- Key human-environment interactions in rural settlements:
 - settlement issues: rural depopulation, closure of services (e.g. shops and schools), ageing of population, political influences, governance of rural settlements (local authorities, Agenda 21).
- Key human-environment interactions in urban settlements:
 - settlement issues: inner city problems, renewal, urban blight, congestion, pollution and land use conflict, standards of living, political influences;
 - post-modern urban settlements (changing urban centres), governance of urban settlements (local authorities, Agenda 21).



D
continued

Grade 11



Grade 12



NATIONAL SCALE

PEOPLE AND PLACES: RURAL AND URBAN SETTLEMENT

Context: South Africa and Africa

- Key sustainability-related strategies include:
 - rural: sustainable strategies to manage dwindling rural settlements, land reform and land redistribution, impact of HIV/AIDS and wars (refugees and displaced people) on rural settlement patterns.
 - urban: new towns, inner city renewal, self-help cities, urban planning, sustainable strategies to manage expanding centres, informal settlements;



E

GLOBAL SCALE

PEOPLE AND THEIR ORGANISATIONS

Context: The World, Africa and South Africa

This section emphasises human interactions with the environment that promote democratic processes, social and environmental justice, economic sustainability, and peace. It provides opportunities for learners to develop a critical understanding of unequal distribution patterns and processes over space and time, and the resultant uneven development. It also introduces learners to processes of democratic dialogue and collaborative action for the attainment of shared values. They are encouraged to develop a common purpose in seeking viable solutions and appropriate management strategies for addressing inequalities in society and the environment. People organise themselves for action in different ways. Examples:

- Civic organisations (e.g. local pressure groups, NGOs).
- National organisations (e.g. political organisations).
- Continental organisations (e.g. SADC, NEPAD, AU).
- Global organisations (e.g. UN, multinationals, Oxfam, World Bank).

Grade 11



CONTINENTAL SCALE

PEOPLE AND THEIR NEEDS

Context: Africa

- Resource use and management:
 - resources and their uses;
 - distribution and utilisation of renewable and non-renewable natural resources;
 - concepts of ‘resources exploitation’, ‘resource depletion’, ‘resource preservation’, ‘resource conservation’;
 - extraction of raw materials and the conflicts and opportunities that are created;
 - land use conflicts in national parks;
 - the impact of values and attitudes of people affected.

- Energy use and management:
 - increasing demand for energy;
 - relative and changing importance of fossil fuels, nuclear power and alternative energy sources;
 - the environmental costs of energy provision;
 - causes and effects of energy production related to pollution;
 - causes and consequences of acid rain and the importance of international co-operation;
 - environmental effects of resource and energy consumption on world temperatures;
 - sustainable energy principles and approaches – consider new forms of energy and approaches to energy conservation.

Grade 12



NATIONAL SCALE

PEOPLE AND THEIR NEEDS

Context: South Africa and the World

- Economic activities:
 - primary, secondary, tertiary and quaternary economic activities;
 - influence of economic, physical, political, social factors;
 - perceptions of decision makers on the location of industries and other economic activities;
 - impact of humans on the location of economic activities;
 - response of people to environmental and socio-economic injustices linked to economic activities;
 - impact of the change of location of economic activities on people;
 - importance and challenges of the informal sector in different contexts;
 - influence of globalisation on economies and change;
 - agriculture as an economic activity: special emphasis on southern Africa, food security, risks and vulnerability;
 - transport and trade.

- Water as a critical resource in South Africa:
 - availability of water;
 - distribution and supply of water to South African citizens;
 - sustainable use and management of water.

CHAPTER 4

ASSESSMENT

INTRODUCTION

Assessment is a critical element of the National Curriculum Statement Grades 10 – 12 (General). It is a process of collecting and interpreting evidence in order to determine the learner's progress in learning and to make a judgement about a learner's performance. Evidence can be collected at different times and places, and with the use of various methods, instruments, modes and media.

To ensure that assessment results can be accessed and used for various purposes at a future date, the results have to be recorded. There are various approaches to recording learners' performances. Some of these are explored in this chapter. Others are dealt with in a more subject-specific manner in the Learning Programme Guidelines.

Many stakeholders have an interest in how learners perform in Grades 10 – 12. These include the learners themselves, parents, guardians, sponsors, provincial departments of education, the Department of Education, the Ministry of Education, employers, and higher education and training institutions. In order to facilitate access to learners' overall performances and to inferences on learners' competences, assessment results have to be reported. There are many ways of reporting. The Learning Programme Guidelines and the Assessment Guidelines discuss ways of recording and reporting on school-based and external assessment as well as giving guidance on assessment issues specific to the subject.

WHY ASSESS

Before a teacher assesses learners, it is crucial that the purposes of the assessment be clear and unambiguous. Understanding the purposes of assessment ensures that an appropriate match exists between the purposes and the methods of assessment. This, in turn, will help to ensure that decisions and conclusions based on the assessment are fair and appropriate for the particular purpose or purposes.

There are many reasons why learners' performance is assessed. These include monitoring progress and providing feedback, diagnosing or remediating barriers to learning, selection, guidance, supporting learning, certification and promotion.

In this curriculum, learning and assessment are very closely linked. Assessment helps learners to gauge the value of their learning. It gives them information about their own progress and enables them to take control of and to make decisions about their learning. In this sense, assessment provides information about whether teaching and learning is succeeding in getting closer to the specified Learning Outcomes. When assessment indicates lack of progress, teaching and learning plans should be changed accordingly.

TYPES OF ASSESSMENT

This section discusses the following types of assessment:

- baseline assessment;
- diagnostic assessment;
- formative assessment; and
- summative assessment.

Baseline assessment

Baseline assessment is important at the start of a grade, but can occur at the beginning of any learning cycle. It is used to establish what learners already know and can do. It helps in the planning of activities and in Learning Programme development. The recording of baseline assessment is usually informal.

Diagnostic assessment

Any assessment can be used for diagnostic purposes – that is, to discover the cause or causes of a learning barrier. Diagnostic assessment assists in deciding on support strategies or identifying the need for professional help or remediation. It acts as a checkpoint to help redefine the Learning Programme goals, or to discover what learning has not taken place so as to put intervention strategies in place.

Formative assessment

Any form of assessment that is used to give feedback to the learner is fulfilling a formative purpose. Formative assessment is a crucial element of teaching and learning. It monitors and supports the learning process. All stakeholders use this type of assessment to acquire information on the progress of learners. Constructive feedback is a vital component of assessment for formative purposes.

Summative assessment

When assessment is used to record a judgement of the competence or performance of the learner, it serves a summative purpose. Summative assessment gives a picture of a learner's competence or progress at any specific moment. It can occur at the end of a single learning activity, a unit, cycle, term, semester or year of learning. Summative assessment should be planned and a variety of assessment instruments and strategies should be used to enable learners to demonstrate competence.

WHAT SHOULD ASSESSMENT BE AND DO?

Assessment should:

- be understood by the learner and by the broader public;
- be clearly focused;
- be integrated with teaching and learning;
- be based on the pre-set criteria of the Assessment Standards;
- allow for expanded opportunities for learners;
- be learner-paced and fair; and
- be flexible;
- use a variety of instruments;
- use a variety of methods.

HOW TO ASSESS

Teachers' assessment of learners' performances must have a great degree of reliability. This means that teachers' judgements of learners' competences should be generalisable across different times, assessment items and markers. The judgements made through assessment should also show a great degree of validity; that is, they should be made on the aspects of learning that were assessed.

Because each assessment cannot be totally valid or reliable by itself, decisions on learner progress must be based on more than one assessment. This is the principle behind continuous assessment (CASS). Continuous assessment is a strategy that bases decisions about learning on a range of different assessment activities and events that happen at different times throughout the learning process. It involves assessment activities that are spread throughout the year, using various kinds of assessment instruments and methods such as tests, examinations, projects and assignments. Oral, written and performance assessments are included. The different pieces of evidence that learners produce as part of the continuous assessment process can be included in a portfolio. Different subjects have different requirements for what should be included in the portfolio. The Learning Programme Guidelines discuss these requirements further.

Continuous assessment is both classroom-based and school-based, and focuses on the ongoing manner in which assessment is integrated into the process of teaching and learning. Teachers get to know their learners through their day-to-day teaching, questioning, observation, and through interacting with the learners and watching them interact with one another.

Continuous assessment should be applied both to sections of the curriculum that are best assessed through written tests and assignments and those that are best assessed through other methods, such as by performance, using practical or spoken evidence of learning.

METHODS OF ASSESSMENT

Self-assessment

All Learning Outcomes and Assessment Standards are transparent. Learners know what is expected of them. Learners can, therefore, play an important part, through self-assessment, in ‘pre-assessing’ work before the teacher does the final assessment. Reflection on one’s own learning is a vital component of learning.

Peer assessment

Peer assessment, using a checklist or rubric, helps both the learners whose work is being assessed and the learners who are doing the assessment. The sharing of the criteria for assessment empowers learners to evaluate their own and others’ performances.

Group assessment

The ability to work effectively in groups is one of the Critical Outcomes. Assessing group work involves looking for evidence that the group of learners co-operate, assist one another, divide work, and combine individual contributions into a single composite assessable product. Group assessment looks at process as well as product. It involves assessing social skills, time management, resource management and group dynamics, as well as the output of the group.

METHODS OF COLLECTING ASSESSMENT EVIDENCE

There are various methods of collecting evidence. Some of these are discussed below.

Observation-based assessment

Observation-based assessment methods tend to be less structured and allow the development of a record of different kinds of evidence for different learners at different times. This kind of assessment is often based on tasks that require learners to interact with one another in pursuit of a common solution or product. Observation has to be intentional and should be conducted with the help of an appropriate observation instrument.

Test-based assessment

Test-based assessment is more structured, and enables teachers to gather the same evidence for all learners in

the same way and at the same time. This kind of assessment creates evidence of learning that is verified by a specific score. If used correctly, tests and examinations are an important part of the curriculum because they give good evidence of what has been learned.

Task-based assessment

Task-based or performance assessment methods aim to show whether learners can apply the skills and knowledge they have learned in unfamiliar contexts or in contexts outside of the classroom. Performance assessment also covers the practical components of subjects by determining how learners put theory into practice. The criteria, standards or rules by which the task will be assessed are described in rubrics or task checklists, and help the teacher to use professional judgement to assess each learner's performance.

RECORDING AND REPORTING

Recording and reporting involves the capturing of data collected during assessment so that it can be logically analysed and published in an accurate and understandable way.

Methods of recording

There are different methods of recording. It is often difficult to separate methods of recording from methods of evaluating learners' performances.

The following are examples of different types of recording instruments:

- rating scales;
- task lists or checklists; and
- rubrics.

Each is discussed below.

Rating scales

Rating scales are any marking system where a symbol (such as A or B) or a mark (such as 5/10 or 50%) is defined in detail to link the coded score to a description of the competences that are required to achieve that score. The detail is more important than the coded score in the process of teaching and learning, as it gives learners a much clearer idea of what has been achieved and where and why their learning has fallen short of the target. Traditional marking tended to use rating scales without the descriptive details, making it difficult to have a sense of the learners' strengths and weaknesses in terms of intended outcomes. A six-point scale of achievement is used in the National Curriculum Statement Grades 10 – 12 (General).

Task lists or checklists

Task lists or checklists consist of discrete statements describing the expected performance in a particular task. When a particular statement (criterion) on the checklist can be observed as having been satisfied by a learner during a performance, the statement is ticked off. All the statements that have been ticked off on the list (as criteria that have been met) describe the learner's performance. These checklists are very useful in peer or group assessment activities.

Rubrics

Rubrics are a combination of rating codes and descriptions of standards. They consist of a hierarchy of standards with benchmarks that describe the range of acceptable performance in each code band. Rubrics require teachers to know exactly what is required by the outcome. Rubrics can be holistic, giving a global picture of the standard required, or analytic, giving a clear picture of the distinct features that make up the criteria, or can combine both. The Learning Programme Guidelines give examples of subject-specific rubrics.

To design a rubric, a teacher has to decide the following:

- Which outcomes are being targeted?
- Which Assessment Standards are targeted by the task?
- What kind of evidence should be collected?
- What are the different parts of the performance that will be assessed?
- What different assessment instruments best suit each part of the task (such as the process and the product)?
- What knowledge should be evident?
- What skills should be applied or actions taken?
- What opportunities for expressing personal opinions, values or attitudes arise in the task and which of these should be assessed and how?
- Should one rubric target all the Learning Outcomes and Assessment Standards of the task or does the task need several rubrics?
- How many rubrics are, in fact, needed for the task?

It is crucial that a teacher shares the rubric or rubrics for the task with the learners before they do the required task. The rubric clarifies what both the learning and the performance should focus on. It becomes a powerful tool for self-assessment.

Reporting performance and achievement

Reporting performance and achievement informs all those involved with or interested in the learner's progress. Once the evidence has been collected and interpreted, teachers need to record a learner's achievements. Sufficient summative assessments need to be made so that a report can make a statement about the standard achieved by the learner.

The National Curriculum Statement Grades 10 – 12 (General) adopts a six-point scale of achievement. The scale is shown in Table 4.1.

Table 4.1 Scale of achievement for the National Curriculum Statement Grades 10 – 12 (General)

Rating Code	Description of Competence	Marks (%)
6	Outstanding	80-100
5	Meritorious	60-79
4	Satisfactory	50-59
3	Adequate	40-49
2	Partial	30-39
1	Inadequate	0-29

SUBJECT COMPETENCE DESCRIPTIONS

To assist with benchmarking the achievement of Learning Outcomes in Grades 10 – 12, subject competences have been described to distinguish the grade expectations of what learners must know and be able to achieve. Six levels of competence have been described for each subject for each grade. These descriptions will assist teachers to assess learners and place them in the correct rating. The descriptions summarise the Learning Outcomes and the Assessment Standards, and give the distinguishing features that fix the achievement for a particular rating. The various achievement levels and their corresponding percentage bands are as shown in Table 4.1.

In line with the principles and practice of outcomes-based assessment, all assessment – both school-based and external – should primarily be criterion-referenced. Marks could be used in evaluating specific assessment tasks, but the tasks should be assessed against rubrics instead of simply ticking correct answers and awarding marks in terms of the number of ticks. The statements of competence for a subject describe the minimum skills, knowledge, attitudes and values that a learner should demonstrate for achievement on each level of the rating scale.

When teachers/assessors prepare an assessment task or question, they must ensure that the task or question addresses an aspect of a particular outcome. The relevant Assessment Standard or Standards must be used when creating the rubric for assessing the task or question. The descriptions clearly indicate the minimum level of attainment for each category on the rating scale.

The competence descriptions for this subject appear at the end of this chapter.

PROMOTION

Promotion at Grade 10 and Grade 11 level will be based on internal assessment only, but must be based on the same conditions as those for the Further Education and Training Certificate. The requirements, conditions, and rules of combination and condonation are spelled out in the *Qualifications and Assessment Policy Framework for the Grades 10 – 12 (General)*.

WHAT REPORT CARDS SHOULD LOOK LIKE

There are many ways to structure a report card, but the simpler the report card the better, provided that all important information is included. Report cards should include information about a learner's overall progress, including the following:

- the learning achievement against outcomes;
- the learner's strengths;
- the support needed or provided where relevant;
- constructive feedback commenting on the performance in relation to the learner's previous performance and the requirements of the subject; and
- the learner's developmental progress in learning how to learn.

In addition, report cards should include the following:

- name of school;
- name of learner;
- learner's grade;
- year and term;
- space for signature of parent or guardian;
- signature of teacher and of principal;
- date;
- dates of closing and re-opening of school;
- school stamp; and
- school attendance profile of learner.

ASSESSMENT OF LEARNERS WHO EXPERIENCE BARRIERS TO LEARNING

The assessment of learners who experience any barriers to learning will be conducted in accordance with the recommended alternative and/or adaptive methods as stipulated in the *Qualifications and Assessment Policy Framework for Grades 10 – 12 (General)* as it relates to learners who experience barriers to learning. Refer to *White Paper 6 on Special Needs Education: Building an Inclusive Education and Training System*.



Code



Scale

6

80%-100%
Outstanding



Competence Descriptions

By the end of Grade 10 the learner with outstanding achievement can:

- plan geographical research projects of limited extent in familiar contexts;
- integrate information from a variety of sources;
- compare, contrast and analyse the information acquired in order to answer the initial question by substantiating findings in written, oral or illustrative form;
- explain the influence of processes and associated spatial patterns in a range of places and regions;
- account for the similarities and differences in processes and spatial patterns between places and between regions;
- explore possible responses to issues and challenges arising from human and environment interactions in a local and global context;
- examine different approaches used to sustain the environment;
- take into account different knowledge systems in a variety of contexts;
- apply skills and knowledge to a range of phenomena, issues and challenges;
- examine values and attitudes held by individuals and groups associated with processes, spatial patterns and human-environment interactions at local and global scales.

Grade 11



Competence Descriptions

By the end of Grade 11 the learner with outstanding achievement can:

- demonstrate competence in all the elements of the Assessment Standards for the Learning Outcomes, *and in addition*:
- manage own learning, working in a logical and focused manner;
- make clear and logical interpretations of evidence and substantiate judgments using evidence;
- demonstrate solid understanding of many geographical concepts, principles and theories;
- make some abstract connections;
- manipulate and use knowledge of the relationships between physical and human environments;
- predict, anticipate and provide strategies to address issues and challenges from a local to a continental scale;
- demonstrate the ability to use scientific or technological knowledge and skills to manage and solve standard problems.

Grade 12



Competence Descriptions

By the end of Grade 12 the learner with outstanding achievement can:

- demonstrate competence in all the elements of the Assessment Standards for the Learning Outcomes, *and in addition*:
- show initiative and innovation in managing own learning, working independently in a logical and focused manner;
- make complex and subtle connections, sophisticated interpretations of evidence, well-substantiated judgments and present convincing evidence;
- demonstrate a comprehensive and in-depth understanding of geographical concepts, principles and theories;
- make complex connections, transferring and transforming knowledge of the intricate relationships between physical and human environments;
- predict, anticipate and provide sophisticated strategies to address issues and challenges from a local to global scale;
- demonstrate the ability to use scientific or technological knowledge and skills to manage and solve complex problems.

Grade 10



Code



Scale

5

60%-79%
Meritorious



Competence Descriptions

By the end of Grade 10 the learner with meritorious achievement can:

- plan and structure a project or enquiry process;
- acquire a variety of information from relevant primary and secondary sources, including fieldwork;
- classify the information acquired according to different categories;
- analyse information obtained from a variety of sources, including fieldwork data, 1:50 000 topographical maps, orthophoto maps and statistics;
- report findings in written, oral and/or illustrative form;
- explain processes and associated spatial patterns in a range of places and regions;
- compare and contrast processes and spatial patterns between places and/or between regions;
- examine issues and challenges arising from human and environment interactions in a local and global context;
- explain different measures of conserving the environment while addressing human needs in a variety of contexts;
- apply skills and knowledge to a range of phenomena, issues and challenges;
- examine the consequences of actions resulting from values and attitudes held by individuals and groups which influence processes, spatial patterns and human-environment interactions at local and global scales.

Grade 11



Competence Descriptions

By the end of Grade 11 the learner with meritorious achievement can:

- demonstrate competence in all the elements of the Assessment Standards for the Learning Outcomes, *and in addition*:
- plan geographical research projects of limited extent in familiar contexts;
- integrate information from a variety of sources;
- compare, contrast and analyse the information acquired in order to answer the initial question;
- substantiate findings in written, oral or illustrative form;
- explain the influence of processes and associated spatial patterns in a range of places and regions;
- account for the similarities and differences in processes and spatial patterns between places and between regions;
- explore possible responses to issues and challenges arising from human and environment interactions in local and continental contexts;
- examine different approaches used to sustain the environment that take into account different knowledge systems in a variety of contexts;
- apply skills and knowledge to a range of phenomena, issues and challenges;
- examine values and attitudes held by individuals and groups associated with processes, spatial patterns and human-environment interactions at local and continental scales.

Grade 12



Competence Descriptions

By the end of Grade 12 the learner with meritorious achievement can:

- demonstrate competence in all the elements of the Assessment Standards for the Learning Outcomes, *and in addition*:
- show initiative in managing own learning, working in a logical and focused manner;
- make some abstract connections, clear and logical interpretations of evidence, and substantiate judgments using evidence;
- demonstrate solid understanding of many geographical concepts, principles and theories;
- manipulate and use knowledge of the relationships between physical and human environments;
- predict, anticipate and provide strategies to address issues and challenges from a local to global scale;
- demonstrate the ability to use scientific or technological knowledge and skills to manage and solve standard problems.



Code



Scale

4

50%-59%
Satisfactory



Competence Descriptions

By the end of Grade 10 the learner with satisfactory achievement can:

- identify issues and formulate questions consistently for an investigation;
- acquire information from fieldwork and a variety of other sources;
- organise information graphically, pictorially and diagrammatically;
- analyse information obtained from a variety of sources;
- report findings in oral and/or written form;
- describe processes and associated spatial patterns in places and regions;
- identify similarities and differences in processes and spatial patterns between places or between regions;
- describe the links between environmental problems and social injustices in local and global contexts;
- describe the interdependence between humans and the environment at different scales;
- apply skills and knowledge consistently to a range of phenomena, issues and challenges;
- identify different values and attitudes held by individuals and groups associated with processes, spatial patterns and human-environment interactions at local and global scales.

Grade 11



Competence Descriptions

By the end of Grade 11 the learner with satisfactory achievement can:

- plan and structure a project or enquiry process;
- consistently acquire a variety of information from relevant primary and secondary sources, including fieldwork;
- classify the information acquired according to different categories;
- analyse information obtained from a variety of sources, including fieldwork data, 1:50 000 topographical maps, orthophoto maps and statistics;
- report findings in written, oral and/or illustrative form;
- in a variety of situations, explain processes and associated spatial patterns in a range of places and regions;
- compare and contrast processes and spatial patterns between places and/or between regions;
- examine issues and challenges arising from human and environment interactions in local and continental contexts;
- explain different measures of conserving the environment while addressing human needs in a variety of contexts;
- apply skills and knowledge consistently to a range of phenomena, issues and challenges;
- examine the consequences of actions resulting from values and attitudes held by individuals and groups which influence processes, spatial patterns and human-environment interactions at local and continental scales.

Grade 12



Competence Descriptions

By the end of Grade 12 the learner with satisfactory achievement can:

- consistently show the ability to plan geographical research projects of limited extent in familiar contexts;
- integrate information from a variety of sources;
- compare, contrast and analyse the information acquired in order to answer the initial question;
- substantiate findings in written, oral or illustrative form;
- explain consistently in a variety of contexts the influence of processes and associated spatial patterns occurring in a range of places and regions;
- account for the similarities and differences in processes and spatial patterns between places and between regions;
- explore a wide range of possible responses to issues and challenges arising from human and environment interactions in local and national contexts;
- examine different approaches used to sustain the environment, taking into account different knowledge systems in a variety of contexts;
- apply skills and knowledge consistently to a range of phenomena, issues and challenges at a local and national scale;
- examine values and attitudes held by individuals and groups associated with processes, spatial patterns and human-environment interactions at local and national scales.



Code



Scale

3

40%-49%
Adequate



Competence Descriptions

By the end of Grade 10 the learner with adequate achievement can:

- identify issues and formulate questions for an investigation;
- acquire information from fieldwork and a variety of other sources;
- organise information graphically, pictorially and diagrammatically;
- analyse information obtained from a variety of sources;
- report findings in oral and/or written form;
- describe processes and associated spatial patterns in places and regions;
- identify similarities and differences in processes and spatial patterns between places or between regions;
- describe the links between environmental problems and social injustices in local and global contexts;
- describe the interdependence between humans and the environment at different scales;
- apply skills and knowledge to a range of phenomena, issues and challenges;
- identify different values and attitudes held by individuals and groups associated with processes, spatial patterns and human-environment interactions at local and global scales.

Grade 11



Competence Descriptions

By the end of Grade 11 the learner with adequate achievement can:

- plan and structure a project or enquiry process;
- acquire information from relevant primary and secondary sources, including fieldwork;
- classify the information acquired according to different categories;
- analyse information obtained from a variety of sources, including fieldwork data, 1:50 000 topographical maps, orthophoto maps and statistics;
- report findings in written, oral and/or illustrative form;
- explain processes and associated spatial patterns in a range of places and regions;
- compare and contrast processes and spatial patterns between places and/or between regions;
- examine issues and challenges arising from human and environment interactions in local and continental contexts;
- explain different measures of conserving the environment while addressing human needs in a variety of contexts;
- apply skills and knowledge to a range of phenomena, issues and challenges;
- examine the consequences of actions resulting from values and attitudes held by individuals and groups which influence processes, spatial patterns and human-environment interactions at local and continental scales.

Grade 12



Competence Descriptions

By the end of Grade 12 the learner with adequate achievement can:

- plan geographical research projects of limited extent in familiar contexts;
- integrate information from a variety of sources;
- compare, contrast and analyse the information acquired in order to answer the initial question;
- substantiate findings in written, oral or illustrative form;
- explain the influence of processes and associated spatial patterns in a range of places and regions;
- account for the similarities and differences in processes and spatial patterns between places and between regions;
- explore possible responses to issues and challenges arising from human and environment interactions in local and national contexts;
- examine different approaches used to sustain the environment, taking into account different knowledge systems in a variety of contexts;
- apply skills and knowledge to a range of phenomena, issues and challenges at a local and national scale;
- examine values and attitudes held by individuals and groups associated with processes, spatial patterns and human-environment interactions at local and national scales.



Code



Scale

2

30%-39%
Partial



Competence Descriptions

By the end of Grade 10 the learner with partial achievement can:

- identify issues, but is unable to formulate questions for an investigation;
- acquire information from sources provided by the teacher;
- organise information in written and graphic form;
- analyse information from a single source with support;
- partially report findings in a logical way, in oral or written form;
- only describe processes in places and regions;
- identify similarities and differences in processes between places or between regions, but needs support;
- identify the links between environmental problems and social injustices in a local and global context, but needs support;
- attempt to describe the interdependence between humans and the environment at different scales;
- apply some skills and knowledge to a range of phenomena and issues at local and global scales;
- with support identify values and attitudes held by individuals and groups associated with processes, spatial patterns and human-environment interactions at local and global scales.

Grade 11



Competence Descriptions

By the end of Grade 11 the learner with partial achievement can:

- identify issues and formulate questions for an investigation, but is unable to plan and structure a project;
- acquire information from fieldwork and a variety of other sources, but sometimes needs support;
- organise information graphically, pictorially and diagrammatically, but sometimes needs support;
- analyse information obtained from sources and report findings in oral and/or written form, at times needing support;
- describe processes and associated spatial patterns in places and regions;
- identify similarities and differences in processes and spatial patterns between places or between regions but is not able to compare and contrast these processes and patterns;
- describe the links between environmental problems and social injustices in local and continental contexts and the interdependence between humans and the environment at different scales;
- apply skills and knowledge to phenomena, issues and challenges, but needs limited support to do so;
- identify different values and attitudes held by individuals and groups associated with processes, spatial patterns and human-environment interactions at local and continental scales, but needs limited support to do so.

Grade 12



Competence Descriptions

By the end of Grade 12 the learner with partial achievement can:

- plan and structure a project or enquiry process but is not yet able to conduct an independent research project;
- acquire information from relevant primary and secondary sources, including fieldwork;
- classify the information acquired according to different given categories;
- do simple analysis of information obtained from sources, including fieldwork data, 1:50 000 topographical maps, orthophoto maps and statistics;
- report findings in written, oral and/or illustrative form;
- explain processes and associated spatial patterns in a range of places and regions, but is not able to identify the influence of these processes and patterns;
- compare and contrast processes and spatial patterns between places and/or between regions;
- identify issues and challenges arising from human and environment interactions in local and national contexts;
- begin to explain some measures of conserving the environment while addressing human needs;
- apply skills and knowledge to some phenomena, issues and challenges;
- examine certain obvious consequences of actions resulting from values and attitudes held by individuals and groups which influence processes, spatial patterns and human-environment interactions at local and national scales.



Code



Scale

1

0%-29%
Inadequate



Competence Descriptions

By the end of Grade 10 the learner with inadequate achievement can:

- identify issues but needs support;
- acquire information but only from single-type sources provided by the teacher;
- demonstrate limited ability to organise information and needs support;
- analyse information but needs support;
- demonstrate limited ability to report findings but needs support;
- only describe the processes in places and regions;
- display minimal ability to identify similarities and differences in processes between places or between regions;
- identify the links between environmental problems and social injustices in a local context but needs support;
- insufficiently describe the interdependence between humans and the environment at different scales and needs support to do so;
- apply some skills and limited knowledge to a range of phenomena and issues at a local scale;
- only rarely identify values and attitudes held by individuals and groups and attempt to associate them with processes, spatial patterns and human-environment interactions on any scale.

Grade 11



Competence Descriptions

By the end of Grade 11 the learner with inadequate achievement can:

- identify issues but is unable to formulate questions for an investigation;
- acquire information from sources provided by the teacher;
- organise information in written and graphic form but with support;
- analyse information from a single source with support but is unable to report findings in a logical way, either in oral or written form;
- only describe processes in places and regions;
- recognise similarities and differences in processes between places or between regions but needs support;
- identify the links between environmental problems and social injustices in a local context, but needs support;
- attempt to describe the interdependence between humans and the environment at different scales;
- apply some skills and knowledge to certain phenomena and issues and with support identify values and attitudes held by individuals and groups associated with processes, spatial patterns and human-environment interactions at a local scale.

Grade 12



Competence Descriptions

By the end of Grade 12 the learner with inadequate achievement can:

- identify issues and formulate questions for an investigation, but is not yet able to plan and structure an investigation;
- acquire information from fieldwork and other sources;
- in most cases organise information graphically, pictorially and diagrammatically;
- do simple analysis of information;
- report findings in oral and/or written form;
- describe processes and associated spatial patterns in places and regions, but is unable to explain them;
- identify basic similarities and differences in processes and spatial patterns between places or between regions;
- describe some links between environmental problems and social injustices in local and national contexts, attempting to describe the interdependence between humans and the environment at different scales;
- apply skills and knowledge to certain phenomena, issues and challenges, while identifying values and attitudes held by individuals and groups associated with processes, spatial patterns and human-environment interactions at local and national scales.

GLOSSARY

biogeography – the study of the distribution of plants and animals over the Earth’s surface (The biogeographer is interested in describing and explaining meaningful patterns of plant and animal distributions in a given area, either at a particular time or through a time period.)

chart – a map especially designed to serve the need of navigators, nautical and aeronautical (‘Maps are used to look at, charts to work on.’)

climograph – a bar or line graph used to depict average monthly temperatures and precipitation

data base (or data bank) – a store of information (usually in digital form) organised in such a way that retrieval can be done on a selective basis

digital mapping – the mapping of quantities represented by code (digit) (contrast to analogue)

ecosystem – a population of organisms existing together in a particular area, together with the energy, air, water, soil and chemicals upon which it depends

environment – surroundings; the totality of things that in any way may affect an organism, including physical and cultural conditions; a region characterised by a certain set of physical conditions; the physical, built and social environment in the context of this document

geographic information system (GIS) – the complete sequence of components for acquiring, processing, storing and managing spatial data

global positioning system (GPS) – a method of using satellite observations for the determination of extremely accurate locational information

image (imagery) – two-dimensional data representation (e.g. a photograph, a multi-spectral imaging sensor data output [digital image(ry)], and the processed result of an aeromagnetic survey)

region – in geography, an earth area that displays a distinctive grouping of physical or cultural phenomena or is functionally united as a single organisational unit

remote sensing – obtaining information about an object or phenomenon without direct contact

sensor – a device that gathers electromagnetic radiation or other physical data and presents it in a form suitable for obtaining information about the environment

spatial data – data with implicit or explicit information about location

spatial database – spatially referenced data in a **database**

sustainability – a way of living that meets the needs of the present without compromising the ability of future generations to meet their needs

system – a topic area comprising many interrelated elements

thematic (map) – the main objective is to portray geographical relationships regarding particular distributions (e.g. densities, relative magnitudes, gradients, movements and various other environmental and geographical aspects of earthly phenomena)