



ZIMBABWE

MINISTRY OF PRIMARY AND SECONDARY EDUCATION

GEOGRAPHY SYLLABUS

FORMS 1 - 4
2015-2022

**Curriculum Development Unit
P.O. Box MP133
Mount Pleasant
Harare**

**©All Rights Reserved
2015**

ACKNOWLEDGEMENTS

The Ministry of Primary and Secondary Education wishes to acknowledge the following for their valued contribution in the production of this syllabus:

- National Geography Subject Panel
- Ministry of Higher and Tertiary Education Science and Technology Development
- Representatives from Teachers` Colleges
- Zimbabwe School Examinations Council (ZIMSEC)
- Department of Geography and Environmental Science (UZ)
- Department of Science and Mathematics Education (UZ)
- Department of Geography and Environmental Studies (MSU)
- Environmental Management, Renewable Energy and Climate Change Research Centre (HIT)
- Publishers
- United Nations Children's Education Fund (UNICEF)
- United Nations Educational Scientific Cultural Organisation (UNESCO)
- Civil Protection Department

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	i
1.0 PREAMBLE	1
1.2 RATIONALE	1
1.4 ASSUMPTIONS	1
1.5 CROSS-CUTTING THEMES	1
2.0 PRESENTATION OF SYLLABUS	1
3.0 AIMS	1
SYLLABUS OBJECTIVES	1
METHODOLOGY AND TIME ALLOCATION	2
TOPICS	2
SCOPE AND SEQUENCE	3
COMPETENCY MATRIX	15
9.0 ASSESSMENT	92
(a) Assessment Objectives	92
(b) Scheme of Assessment	92
(c) Specification Grid	96

PREAMBLE

1.1 INTRODUCTION

This syllabus is designed to cover progressively the study of geography from form 1 to 4.

It motivates learners to appreciate their local, national, regional and global geographical space. This will raise awareness of resource distribution, management and utilisation for the benefit of Zimbabwean citizens. The syllabus seeks to equip learners with skills, attitudes, values and practical competencies that enable them to participate in the development of the country. It enables response to challenges by developing solutions and skills leading to sustainable development. The syllabus recognises individual special education needs.

1.2 RATIONALE

Geography in the secondary school curriculum will equip learners with skills to understand location, patterns and processes of phenomena. It is designed to make learners appreciate diversity, valuation, utilisation and conservation of resources. The learning area gives an opportunity to learners to manipulate geographical data and make informed decisions in their day to day experiences. The geography syllabus enables learners to develop the following skills:

- Problem solving
- Critical thinking
- Decision making
- Communication
- Technology and innovation
- Graphicacy

The geography learning area is a science that comprises both physical and human aspects. It also covers field-work, map interpretation skills and graphicacy.

1.4 ASSUMPTIONS

It is assumed that learners:

- Have a natural desire to explore their environment
- have basic knowledge of direction and location
- constantly interact with weather phenomena in day to day life
- interact with natural resources
- are aware of people engaging in various economic activities

1.5 CROSS-CUTTING THEMES

This phase will develop in learners, skills and an appreciation of:

- environmental issues
- safety and health issues
- disaster risk management
- enterprise
- sexuality, HIV and AIDS
- heritage
- climate change
- financial literacy

- gender
- technology

PRESENTATION OF SYLLABUS

The Geography Syllabus is a single document covering Forms 1 - 4.

AIMS

The aims of the syllabus are to:

- 3.1 equip learners with skills in statistical and cartographic techniques ;
- 3.2 develop practical skills of enquiry, observation, recording and interpretation of geographical information;
- 3.3 promote an understanding of environmental management issues;
- 3.4 promote sustainable exploitation, processing and economic use of minerals and other resources;
- 3.5 develop in learners an understanding of societal issues of HIV and AIDS, climate change and disaster risk management;
- 3.6 develop an appreciation of diverse communities and cultures worldwide.
- 3.7 promote an understanding of environmental patterns, dynamics and relationships.

SYLLABUS OBJECTIVES

By the end of this learning phase learners should be able to:

- 4.1 demonstrate basic knowledge of geographic information systems (GIS) in resource management
- 4.2 interpret topographical maps, photographs and satellite images.
- 4.3 collect, analyse and interpret geographical data
- 4.4 value natural resources in the context of both economic development and environmental protection
- 4.5 develop technologies in issues of climate change and climate change adaptation
- 4.6 demonstrate knowledge and understanding of the processes that bring about change in both physical and human environment
- 4.7 demonstrate geographical knowledge to create solutions to everyday challenges
- 4.8 develop in learner's enterprise skills in resource utilization and conservation
- 4.9 demonstrate the relationship between physical and human processes in the shaping of geographic space

METHODOLOGY AND TIME

ALLOCATION

This syllabus takes into account learner centred approaches and methods. The choice of teaching methods and approaches should be guided by the principles of inclusivity, relevance, specificity, gender sensitivity and respect. The following approaches and methods are recommended in the teaching and learning of geography:

The syllabus proposes the use of the concentric, systems and integrated approaches.

6.10	Industry
6.11	Settlement and population
6.12	Transport and trade

The concentric approach: It recommends teaching geography starting from the local environment to the whole of Zimbabwe, Southern African Development Community region, the rest of Africa and the World.

Systems Approach: It involves the study of inter-relationships of various components in the environment which make up the whole. The focus is on the inputs, processes and outputs and feedback in a given system.

The integrated approach: It recommends that related topics should be taught together rather than in isolation.

5.1 METHODOLOGY

The following are suggested methods of teaching and learning geography:

- Demonstrations
- Field work
- Games
- Simulations
- Debates
- Laboratory work and experiments
- Group work and discussions
- Role-play
- Case studies
- Project based learning
- Educational tours

NB. The above suggested methods should be enhanced by the application of orthodidactic principles and multi-sensory approaches to teaching. These include tactility, concreteness, individualisation, self-activity, totality and wholeness. Teachers are encouraged to address the learners' residual senses.

5.2 TIME ALLOCATION

Five (5) periods of 40 minutes per week should be allocated for adequate coverage of the syllabus. The teachers should allocate time appropriately for learners with individual special education needs.

Educational tours should be undertaken at least once a year.

TOPICS

- 6.1 Weather and Climate
- 6.2 Landforms
- 6.3 Ecosystems
- 6.4 Natural resources
- 6.5 Energy and Power
- 6.6 Map work and Geographical Information systems
- 6.7 Minerals and mining
- 6.8 Environmental management
- 6.9 Agriculture and land reform

SCOPE AND SEQUENCE

7.1 TOPIC 1: WEATHER AND CLIMATE

FORM 1	FORM 2	FORM 3	FORM 4
<ul style="list-style-type: none"> • Weather elements and instruments • Weather station • Weather data • Types of rainfall and distribution • Weather forecasting 	<ul style="list-style-type: none"> • Weather hazards • Influence of people on weather • Climate of Zimbabwe • Climate variability 	<ul style="list-style-type: none"> • Air masses • Air masses affecting Zimbabwe and Southern Africa • Climatic types on global scale; • Interpretation of climatic data 	<ul style="list-style-type: none"> • Temperate depressions • Frontal systems • Tropical cyclones, • People's influence on climate • Climate change

FORM 1	FORM 2	FORM 3	FORM 4
<ul style="list-style-type: none"> Landforms in the local area, Zimbabwe, Africa and the world and benefits of these landforms. 	<ul style="list-style-type: none"> Rocks Weathering of rocks and resulting landforms Internal structure of the earth Continental Drift theory 	<ul style="list-style-type: none"> Plate theory Folding Faulting Volcanoes and earthquakes Effects of tectonic processes 	<ul style="list-style-type: none"> Landforms resulting from: <ul style="list-style-type: none"> -Water action and river processes -Wind action Hazards associated with landform development processes Disaster risk management:

7.3 TOPIC 3: ECOSYSTEMS

FORM 1	FORM 2	FORM 3	FORM 4
<ul style="list-style-type: none"> • Components of an ecosystem • Micro ecosystems • Interdependence in ecosystems (food chains and webs) 	<ul style="list-style-type: none"> • Biodiversity • Tropical ecosystems (biomes) • Sustainable management of ecosystems • Use of ecosystems in entrepreneurship 	<ul style="list-style-type: none"> • Biogeochemical cycles • Wetlands • Conservation of ecosystems • Restoration of ecosystem • Benefits of ecosystems 	<ul style="list-style-type: none"> • Soil components • Soil forming processes in the tropics. • Soil properties • Soil types

7.4 TOPIC 4: NATURAL RESOURCES

FORM 1	FORM 2	FORM 3	FORM 4
<ul style="list-style-type: none"> • Natural resources concept • Renewable and non-renewable resources • Sustainable use of resources in their local area 	<ul style="list-style-type: none"> • Population and resources • Exploitation of resources in Zimbabwe and Africa 	<ul style="list-style-type: none"> • Conservation of resources • Wildlife management 	

7.5 TOPIC 5: ENERGY AND POWER DEVELOPMENT

FORM 1	FORM 2	FORM 3	FORM 4
<ul style="list-style-type: none"> • Types and sources of energy • Siting of power plants • Power generation • Environmental impact from generation and use of different energy types 	<ul style="list-style-type: none"> • Economic importance of energy types • Relative importance of using different energy sources 	<ul style="list-style-type: none"> • Conservation of energy sources • Project on use of energy in the local area. 	

7.6 TOPIC 6: MAP WORK AND GEOGRAPHICAL INFORMATION SYSTEMS

FORM 1	FORM 2	FORM 3	FORM 4
<ul style="list-style-type: none"> • Characteristics of a good map • Types of maps • Location • Scale • Universal symbols • Direction • Distance 	<ul style="list-style-type: none"> • Gradient • Land use • Patterns and networks 	<ul style="list-style-type: none"> • Location (Geographical Positioning System) and world time zones • Electromagnetic spectrum • Remote sensing (Photo interpretation) 	<ul style="list-style-type: none"> • Boolean logic: Venn diagrams • Overlay analysis

7.7 TOPIC 7: MINERALS AND MINING

FORM 1	FORM 2	FORM 3	FORM 4
<ul style="list-style-type: none"> • Distribution of minerals and mines of Zimbabwe • Ores and mineral groups • use and 	<ul style="list-style-type: none"> • Factors influencing mining in Zimbabwe • Methods of mining • Mineralogy • Environmental impacts of mining 	<ul style="list-style-type: none"> • Small scale mining in Zimbabwe • Extraction and processing of minerals in Zimbabwe and Africa 	<ul style="list-style-type: none"> • Environmental conservation and environmental management • Environmental impact assessment in mining • Sustainable utilisation

importance of minerals		<ul style="list-style-type: none"> • Health and safety • Beneficiation and value addition 	of mineral resources
------------------------	--	---	----------------------

7.8 TOPIC 8: ENVIRONMENTAL MANAGEMENT

FORM 1	FORM 2	FORM 3	FORM 4
<ul style="list-style-type: none"> • Aspects of the environment • State of the environment in Zimbabwe 	<ul style="list-style-type: none"> • Environmental deterioration • Global warming • Climate change • Climate change adaptation and mitigation 	<ul style="list-style-type: none"> • Environmental management legislation • International protocols and treaties 	<ul style="list-style-type: none"> • Environmental management planning • Aspect of Environmental Impact Assessment(EIA) • Land use planning as a strategy of sustainable environmental management

7.9 TOPIC 9: AGRICULTURE AND LAND REFORM

• FORM 1	• FORM 2	• FORM 3	• FORM 4
<ul style="list-style-type: none"> • Factors influencing agriculture • Farming as a system • Land use zoning 	<ul style="list-style-type: none"> • Farming types in Zimbabwe • Agro ecological regions in Zimbabwe 	<ul style="list-style-type: none"> • Land tenure • Land reform • Land Reform in Zimbabwe • Contribution of small scale farmers to food security 	<ul style="list-style-type: none"> • Climate change and agriculture • Agricultural disease, pests and solutions • Urban agriculture • Agribusiness

7.10 TOPIC 10: INDUSTRY

FORM 1	FORM 2	FORM 3	FORM 4
<ul style="list-style-type: none"> • Types of industry • Importance of industries to Zimbabwe • Nature and distribution of industries in Zimbabwe 	<ul style="list-style-type: none"> • Secondary industry: • Factors influencing location of industry; • Types and distribution of manufacturing and processing industries • Transnational industries 	<ul style="list-style-type: none"> • Small to medium enterprises • The role of informal industries in Zimbabwe • Occupational safety and health • Problems associated with manufacturing industries in Zimbabwe 	<ul style="list-style-type: none"> • Service industries • tourism as a case study of a service industry • Tourism and its importance in Zimbabwe • Quaternary industries • Problems associated with service industries in Zimbabwe

7.11 TOPIC 11: SETTLEMENT AND POPULATION

FORM 1	FORM 2	FORM 3	FORM 4
<ul style="list-style-type: none"> • Types of settlements • Site and location of settlements • Rural settlement patterns • Rural and urban land use planning legislation 	<ul style="list-style-type: none"> • Urbanisation • Urban land use models • Unplanned urban settlements • Effects and solutions of unplanned settlements • Disaster resilient infrastructure 	<ul style="list-style-type: none"> • Basic population terms • Collection, presentation and interpretation of population data • Population distribution and density in Zimbabwe, Africa and the world 	<ul style="list-style-type: none"> • Population growth • Patterns/Demographic Transition Model • Causes of population growth and their effects • Causes and effects of migration • Internal and International • Population policy • Population and diseases

7.12 TOPIC 12: TRANSPORT AND TRADE

FORM 1	FORM 2	FORM 3	FORM 4
<ul style="list-style-type: none"> • Transport -Modes of transport -Advantages and disadvantages • Zimbabwean transport network 	<ul style="list-style-type: none"> • Trade - domestic - foreign 	<ul style="list-style-type: none"> • Regional imbalances in trade • Trading blocks 	

COMPETENCY MATRIX
FORM 1: SYLLABUS

Topic 1: WEATHER AND CLIMATE

Topic	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Weather elements and instruments	<ul style="list-style-type: none"> distinguish between weather and climate list elements of weather describe instruments used to measure weather elements read and record weather data 	<ul style="list-style-type: none"> Differences between Weather and climate Weather elements Weather instruments Reading instruments and recording weather data 	<ul style="list-style-type: none"> Discussing the differences between weather and climate Describing weather conditions they experience Matching elements to corresponding instruments Describing the functions of weather instruments 	<ul style="list-style-type: none"> Weather instruments School weather station Print media Electronic media Weather charts Timber Woodwork tools Resource persons Local environment Jaws software Talking books
Weather station	<ul style="list-style-type: none"> identify the factors influencing the location of a weather station 	<ul style="list-style-type: none"> Location of a Weather station The Stevenson screen 	<ul style="list-style-type: none"> Measuring and recording weather data Note: Schools should establish and run functional weather 	

	<ul style="list-style-type: none"> describe the characteristics of the Stevenson screen make a Stevenson screen 		<p>stations</p> <ul style="list-style-type: none"> Determining the suitability of the location of a school weather station Explaining the characteristics of a Stevenson screen Making a Stevenson screen 	
Weather data	<ul style="list-style-type: none"> draw weather tables and graphs Interpret synoptic symbols Calculate weather statistics 	<ul style="list-style-type: none"> Weather tables , graphs and maps Synoptic symbols Weather statistics 	<ul style="list-style-type: none"> Plotting weather tables and graphs Interpreting weather maps Drawing synoptic symbols Reading synoptic charts Calculating weather statistics 	
Precipitation	<ul style="list-style-type: none"> identify types of precipitation describe the rainfall formation process draw annotated diagrams of types of rainfall 	<ul style="list-style-type: none"> Precipitation e.g. rain, snow, and hail Rainfall formation processes Types of rainfall, such as relief rainfall, convectional rainfall, frontal rainfall. 	<ul style="list-style-type: none"> Listing forms of precipitation Describing the process of rainfall formation Drawing diagrams illustrating relief rainfall, convectional rainfall, and frontal rainfall. 	

Weather forecasting	<ul style="list-style-type: none"> • explain weather forecasting • describe the importance of weather forecasting • forecast weather using indigenous knowledge systems (IKS) 	<ul style="list-style-type: none"> • Weather forecasting • Importance of weather forecasting • Indigenous weather forecasting 	<ul style="list-style-type: none"> • Stating the meaning of weather forecasting • Interpreting national weather forecast reports • Predicting weather • Discussing importance of weather forecasting • Gathering information on use of IKS in weather forecasting 	
---------------------	--	--	--	--

TOPIC 2: LANDFORMS AND LANDSCAPE PROCESSES

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Landforms	<ul style="list-style-type: none"> • identify landforms • describe the landforms 	<ul style="list-style-type: none"> • Landforms: <ul style="list-style-type: none"> - local area - regional - Africa - the world 	<ul style="list-style-type: none"> • Observing landforms • Describing landforms • Listing of landforms • Sketching landforms 	<ul style="list-style-type: none"> • Local environment • Photographs • Videos • Jaws software • Talking books

Benefits of landforms	<ul style="list-style-type: none"> • explain benefits of landforms • differentiate between landforms and landscape 	<ul style="list-style-type: none"> • Benefits of landforms 	<ul style="list-style-type: none"> • Discussing benefits of landforms • Modelling landforms and landscape in the local environment 	
-----------------------	--	---	--	--

TOPIC 3: ECOSYSTEMS

TOPIC	OBJECTIVES	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Components of Ecosystems	<ul style="list-style-type: none"> • describe the meaning of systems and ecosystems. identify components of the ecosystem.. • explain the components of the ecosystem. draw food chains and food webs. 	<ul style="list-style-type: none"> • Components of ecosystems: <ul style="list-style-type: none"> - Biotic - Abiotic 	<ul style="list-style-type: none"> • Outlining systems and ecosystems • Identifying components of the ecosystem • Demonstrating knowledge of ecosystem components 	<ul style="list-style-type: none"> • Local ecosystems • Talking books • Jaws software
Micro ecosystem	<ul style="list-style-type: none"> • identify components of a local micro ecosystem 	<ul style="list-style-type: none"> • Components of micro ecosystem: <ul style="list-style-type: none"> - Inputs 	<ul style="list-style-type: none"> • Listing inputs, processes and outputs • Discussing linkages 	

	<ul style="list-style-type: none"> explain the linkages of the components. 	<ul style="list-style-type: none"> Processes Outputs 	<ul style="list-style-type: none"> Touring local ecosystems Recording components of the ecosystems 	
Interdependence in ecosystems	<ul style="list-style-type: none"> draw food chains and food webs interpret food chains, food webs and food pyramids. 	<ul style="list-style-type: none"> Food chain, food webs and food pyramids 	<ul style="list-style-type: none"> Illustrating food chains, food webs and food pyramids Explaining linkages of the components of the ecosystem 	

TOPIC 4: NATURAL RESOURCES

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Renewable and non-renewable resources	<ul style="list-style-type: none"> classify resource into renewable and non-renewable 	<ul style="list-style-type: none"> Renewable and non-renewable resources 	<ul style="list-style-type: none"> Classifying resources into renewable and non-renewable 	
Sustainable use of resources in their local area	<ul style="list-style-type: none"> describe how resources can be extracted sustainably in their locality 	<ul style="list-style-type: none"> Sustainable exploitation of resources 	<ul style="list-style-type: none"> Discussing sustainable extraction of resources 	

TOPIC 5: ENERGY AND POWER

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Types and sources of energy	<ul style="list-style-type: none"> list types of energy identify sources of energy describe uses of energy 	<ul style="list-style-type: none"> Energy Renewable: <ul style="list-style-type: none"> -solar -biogas -water -wood fuel -wind Non renewable fossil fuels: <ul style="list-style-type: none"> -coal -Petroleum -Natural gas -Nuclear energy 	<ul style="list-style-type: none"> Identifying fuel types Describing sources of renewable and non renewable energy 	<ul style="list-style-type: none"> Local environment Photographs Videos Local environment Photographs Videos Local environment Photographs Videos Jaws software Talking books
Siting of power Plants	<ul style="list-style-type: none"> state factors affecting siting of power plants describe the siting of power plants 	<ul style="list-style-type: none"> Siting of power plants Location of hydro electric power 	<ul style="list-style-type: none"> Identifying the factors affecting siting of power plants 	
Power generation	<ul style="list-style-type: none"> describe types of power generation explain the processes of power 	<ul style="list-style-type: none"> Nuclear and thermal plants (including geo-thermal) 	<ul style="list-style-type: none"> Discussing possible power plants 	

<p>Environmental impact from generation and use of energy</p>	<p>generation</p>	<ul style="list-style-type: none"> • Thermal power generation(Geo thermal, gas, coal) • Solar • HEP • Wind • Nuclear 	<ul style="list-style-type: none"> • Energy and environment: <ul style="list-style-type: none"> -Pollution -Deforestation -Climate change • Mitigation <ul style="list-style-type: none"> -Reforestation -A forestation -Use of clean energy 	<ul style="list-style-type: none"> • Discussing uses of energy • Undertaking educational tours • Describing environmental impact of types of energy • Discussing processes of mitigation
---	-------------------	---	--	--

TOPIC 6: MAP WORK AND GEOGRAPHICAL INFORMATION SYSTEMS

TOPIC	OBJECTIVES	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Characteristics of a map	<ul style="list-style-type: none"> • list the components of a good map. • identify the components of a good map on a given map 	<ul style="list-style-type: none"> • Components of a good map <ul style="list-style-type: none"> - Title - Grid/ graticule - Direction information - Legend/ Key - Scale - Cartographer - Co-ordinate reference system 	<ul style="list-style-type: none"> • Outlining the components of a good map • Finding the components of a good map on a given map 	<ul style="list-style-type: none"> • Ordnance survey Maps • Atlases • Magnetic compasses
Types of maps	<ul style="list-style-type: none"> • outline the characteristics of the major types of maps. • classify map into the major types 	<ul style="list-style-type: none"> • Major types of maps <ul style="list-style-type: none"> - Topographical maps - Political - Physical - Economic 	<ul style="list-style-type: none"> • Listing the characteristics of the major types of maps • Categorising maps into major types 	

<p>Location on maps</p>	<ul style="list-style-type: none"> determine the longitude and latitude of a point in degrees establish the longitude and latitude of a point using metres 	<ul style="list-style-type: none"> Co-ordinate systems <ul style="list-style-type: none"> - geographic co-ordinate system - Universal Transverse Mercator co-ordinate system (Thirteen figure grid reference) 	<ul style="list-style-type: none"> Mapping the location of home and school Locating features on a map 	
<p>Scale</p>	<ul style="list-style-type: none"> draw a sketch map showing locality of school and home. explain the concept of scale describe the importance of scale outline types of scale distinguish among the types of scale demonstrate the use of scale in drawing simple maps. 	<ul style="list-style-type: none"> The concept of scale Importance of scale Types of scale <ul style="list-style-type: none"> - simple statement scale - representative fraction - linear scale Use of scale for producing simple maps 	<ul style="list-style-type: none"> Outlining the concept of scale Explaining the importance of scale Listing the types of scale Differentiating the types of scale Drawing simple maps using scale 	
<p>Universal symbols</p>	<ul style="list-style-type: none"> draw universal symbols Interpret universal symbols on maps 	<ul style="list-style-type: none"> Common universal symbols Interpretation of universal symbols on maps 	<ul style="list-style-type: none"> Illustrating phenomena using universal symbols Explaining universal symbols 	

<p>Direction</p>	<ul style="list-style-type: none"> • explain the concept of direction • illustrate compass directions • calculate bearings • navigate using magnetic compasses 	<ul style="list-style-type: none"> • The concept of direction • Compass directions • Bearing • Magnetic compasses and their use 	<ul style="list-style-type: none"> • Describing the concept of direction • Outlining compass directions • Computing bearings • Finding directions using magnetic compasses 	
<p>Distance</p>	<ul style="list-style-type: none"> • measure distances using various methods • demonstrate the use of the Pythagoras theorem in the calculation of distance • estimate area on maps using grid squares and graph paper 	<ul style="list-style-type: none"> • Measurement of straight and winding distances on maps: <ul style="list-style-type: none"> - string - straight edged piece of paper - pair of dividers • Calculation of straight distances • Estimation of area on maps 	<ul style="list-style-type: none"> • Finding straight and winding distances on maps • Calculating distances using the Pythagoras theorem • Finding area on maps using graphs paper and grid squares 	
<p>Area</p>	<ul style="list-style-type: none"> • Estimate area on maps using grid squares and graph paper 	<ul style="list-style-type: none"> • Estimation of area on maps 	<ul style="list-style-type: none"> • Finding area on maps using graph paper and grid squares 	

TOPIC 7: MINERALS AND MINING

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Distribution of minerals and mines in Zimbabwe	<ul style="list-style-type: none"> • identify mines and minerals in Zimbabwe • describe the distribution of mines and minerals in Zimbabwe 	<ul style="list-style-type: none"> • Zimbabwe's geological formations • Mines and minerals in Zimbabwe • Distribution of mines and minerals in Zimbabwe 	<ul style="list-style-type: none"> • Drawing maps showing mines and minerals distribution in Zimbabwe • Describing the distribution of mines and minerals in Zimbabwe • Touring mines 	<ul style="list-style-type: none"> • Geological maps • Mineral samples • Local mines • Photographs of minerals • Recommended text books
Ores and mineral groups	<ul style="list-style-type: none"> • list precious minerals in Zimbabwe • identify ores and mineral groups 	<ul style="list-style-type: none"> • Precious minerals in Zimbabwe • Ores and mineral groups 	<ul style="list-style-type: none"> • Identifying precious minerals in Zimbabwe • Identifying minerals • Discussing the characteristics of ores and mineral groups in Zimbabwe 	

Use and importance of minerals	<ul style="list-style-type: none"> describe the economic importance of minerals in Zimbabwe 	<ul style="list-style-type: none"> The economic importance of minerals in Zimbabwe 	<ul style="list-style-type: none"> Discussing the economic importance of minerals in Zimbabwe
--------------------------------	--	---	--

TOPIC 8: ENVIRONMENTAL MANAGEMENT

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Aspects of the environment	<ul style="list-style-type: none"> identify aspects of the environment describe aspects of the environment 	<ul style="list-style-type: none"> Aspects of the environment -land -water -air 	<ul style="list-style-type: none"> explaining aspects of the environment 	<ul style="list-style-type: none"> Photographs Videos Talking books Jaws software Local environment Resource persons EMA Act ZINWA Act Water Act Parks and Wildlife Act Forestry Act Recommended

				text books
State of the environment	<ul style="list-style-type: none"> describe state of the environment distinguish between pristine and degraded state of the environment 	<ul style="list-style-type: none"> Environment: <ul style="list-style-type: none"> Pristine Degraded 	<ul style="list-style-type: none"> Observing the state of the environment Discussing the pristine and degraded environment 	
Environmental management	<ul style="list-style-type: none"> outline the Indigenous knowledge systems (IKS) in environmental management explain the environmental management concept: 	<ul style="list-style-type: none"> Management of <ul style="list-style-type: none"> Land Water Air Wildlife 	<ul style="list-style-type: none"> Investigating IKS on environmental management Discussing environmental management Developing environmental management plan 	

TOPIC 9: AGRICULTURE AND LAND REFORM

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	RECOMMENDED RESOURCES
Factors influencing agriculture	<ul style="list-style-type: none"> • explain agriculture • Identify types of agriculture • explain factors influencing agriculture 	<ul style="list-style-type: none"> • Types of agriculture • Physical factors • Political factors • Socio-economic factors 	<ul style="list-style-type: none"> • Discussing the concept of agriculture • Listing types of agriculture • Explaining factors influencing agriculture 	<ul style="list-style-type: none"> • Local farms • Charts showing farming in Zimbabwe • Local land uses • Recommended text books
Farming as a system	<ul style="list-style-type: none"> • name elements of a farm • classify inputs into physical, human and economic • identify elements of a communal farm 	<ul style="list-style-type: none"> • Inputs • Processing • Outputs 	<ul style="list-style-type: none"> • Listing elements of a farm • Differentiating classes of inputs • Tabulating elements of a communal farm 	
Land use zoning	<ul style="list-style-type: none"> • identify land use zones in a community • Justify the need for zoning • outline suitability of land for particular land use 	<ul style="list-style-type: none"> • Land use zones such as: <ul style="list-style-type: none"> - arable land - grazing land - residential land • Land use legislation such as: the town and 	<ul style="list-style-type: none"> • Drawing different land use zones on maps • Explaining land uses in the local community • Justifying each land use zone • Touring farms 	

<p>Factors influencing agriculture</p>	<ul style="list-style-type: none"> • explain agriculture • Identify types of agriculture • explain factors influencing agriculture 	<p>country planning Act</p> <ul style="list-style-type: none"> • Types of agriculture • Physical factors • Political factors • Socio-economic factors 	<ul style="list-style-type: none"> • Discussing the concept of agriculture • Listing types of agriculture • Explaining factors influencing agriculture 	<ul style="list-style-type: none"> • Local farms • Charts showing farming in Zimbabwe • Local land uses • Recommended text books
<p>Farming as a system</p>	<ul style="list-style-type: none"> • name elements of a farm • classify inputs into physical, human and economic • identify elements of a communal farm 	<ul style="list-style-type: none"> • Inputs • Processing • Outputs 	<ul style="list-style-type: none"> • Listing elements of a farm • Differentiating classes of inputs • Tabulating elements of a communal farm 	

<p>Land use zoning</p>	<ul style="list-style-type: none"> • identify land use zones in a community • Justify the need for zoning • outline suitability of land for particular land use 	<ul style="list-style-type: none"> • Land use zones such as: <ul style="list-style-type: none"> - arable land - grazing land - residential land • Land use legislation such as: the town and country planning Act 	<ul style="list-style-type: none"> • Drawing different land use zones on maps • Explaining land uses in the local community • Justifying each land use zone • Touring farms 	
------------------------	--	---	---	--

TOPIC 10: INDUSTRY

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Types of industry	<ul style="list-style-type: none"> • describe industry • identify types of industry 	<ul style="list-style-type: none"> • Industry • Types of industry 	<ul style="list-style-type: none"> • Describing industry • Identifying types of industry 	<ul style="list-style-type: none"> • Maps • Charts • Newspaper • Talking books • Jaws software • Recommended text books

Importance of industries to Zimbabwe	<ul style="list-style-type: none"> explain the importance of industry 	<ul style="list-style-type: none"> Importance of industries 	<ul style="list-style-type: none"> Discussing importance of industry Touring local industries
Nature and distribution of industries in Zimbabwe	<ul style="list-style-type: none"> describe the distribution of industries in Zimbabwe 	<ul style="list-style-type: none"> Distribution of industries in Zimbabwe 	<ul style="list-style-type: none"> Describing the distribution of industries in Zimbabwe

TOPIC 11: SETTLEMENT AND POPULATION

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Types of settlement	<ul style="list-style-type: none"> identify different types of settlement describe the characteristics features of different settlement types 	<ul style="list-style-type: none"> Characteristics of rural settlements Characteristics of urban settlements 	<ul style="list-style-type: none"> Observing nature of settlement in local area Discussing differences between urban and rural settlement Debating the advantages and disadvantages of 	<ul style="list-style-type: none"> Local environment Photographs Jaws software Maps Resource persons Acts of Parliament Constitution of Zimbabwe Recommended

<p>Site and situation of settlements</p>	<ul style="list-style-type: none"> distinguish site and situation of a settlement outline general site factors of settlements identify site factors that influenced location of their local settlement explain the importance of situation in growth of settlement 	<ul style="list-style-type: none"> Site and situation factors <ul style="list-style-type: none"> Nucleation Dispersion 	<p>living either in rural or urban settlement</p>	<p>text books</p>
<p>Rural settlement patterns</p>	<ul style="list-style-type: none"> identify rural settlement patterns describe rural settlement 	<ul style="list-style-type: none"> Rural settlement patterns 	<ul style="list-style-type: none"> Describing arrangement of dwelling units in the local area (rural or urban) 	

	patterns		<ul style="list-style-type: none"> Drawing rural settlement patterns 	
Rural and Urban land use planning legislation	<ul style="list-style-type: none"> list laws governing rural and urban land use in Zimbabwe 	<ul style="list-style-type: none"> Regional town and country planning Act Rural councils Act 	<ul style="list-style-type: none"> Describing land use planning laws Discussing the main issues in the land use planning laws 	

TOPIC12: TRANSPORT AND TRADE

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Modes of Transport	<ul style="list-style-type: none"> describe 'transport' Identify modes of transport explain changes in modes of transport in recent times 	<ul style="list-style-type: none"> Modes of transport <ul style="list-style-type: none"> air railway road water pipeline 	<ul style="list-style-type: none"> Describing 'transport' as a concept Listing modes of transport Touring transport convergence centres such as airports and road ports 	<ul style="list-style-type: none"> Maps showing transport networks Photographs Airports Road ports Sea ports

<p>Advantages and Disadvantages of transport modes</p>	<ul style="list-style-type: none"> • explain the advantages and disadvantages of modes of transport 	<ul style="list-style-type: none"> • Advantages and disadvantages 	<ul style="list-style-type: none"> • Outlining advantages and disadvantages of different modes of transport 	
<p>Transport networks</p>	<ul style="list-style-type: none"> • explain the different transport networks in Zimbabwe, region and Africa. • draw transport networks • calculate transport indices • interpret transport indices 	<ul style="list-style-type: none"> • Transport networks and analysis 	<ul style="list-style-type: none"> • Mapping/drawing of transport network routes of Zimbabwe • Describing transport networks in Zimbabwe, region and Africa. • Identifying transport networks from maps • Drawing transport flow line diagrams • Calculating transport indices • Interpreting transport indices 	
<p>Transport challenges</p>	<ul style="list-style-type: none"> • discuss solutions to transport challenges 	<ul style="list-style-type: none"> • Transport challenges and solutions 	<ul style="list-style-type: none"> • Discussing solutions to transport challenges 	

FORM 2 COMPETENCY MATRIX

FORM 2: SYLLABUS

TOPIC 1: WEATHER AND CLIMATE

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Weather hazards	<ul style="list-style-type: none"> outline weather hazards describe causes and effects of weather hazards suggest measures to reduce weather hazards 	<ul style="list-style-type: none"> Weather hazards such as floods, lightning and drought Causes of weather hazards Weather hazards impact Mitigation measures 	<ul style="list-style-type: none"> Stating weather hazards Identifying hazards impacts Determining mitigation measure Identifying human activities which contribute to changes in local weather 	<ul style="list-style-type: none"> Maps Weather instruments School weather station Print media Electronic media Weather charts Resource persons Local environment

<p>Influence of people on weather</p>	<ul style="list-style-type: none"> describe how human activities contribute to weather changes evaluate the effect of human influence on weather 	<ul style="list-style-type: none"> Effect of human activities on weather such as deforestation, dam construction, industrialisation 	<ul style="list-style-type: none"> Analysing the effects of human activities on weather 	
<p>Climate of Zimbabwe</p>	<ul style="list-style-type: none"> describe Zimbabwe's climatic zones relate Zimbabwe's climatic zones to various economic activities 	<ul style="list-style-type: none"> Climatic zones and patterns in Zimbabwe 	<ul style="list-style-type: none"> describing climatic zones of Zimbabwe Discussing relationships between climatic zones and economic activities of Zimbabwe 	
<p>Climate variability</p>	<ul style="list-style-type: none"> describe climate variability suggest solutions to effects of climate variability describe effects of climate variability 	<ul style="list-style-type: none"> Climate variability in Zimbabwe (temperature and rainfall anomalies) Effects of climate variability Solutions to effects of climate variability 	<ul style="list-style-type: none"> Discussing climate variability Examining effects of climate variability Discussing solutions to effects of climatic variability Note: Learners should continue recording weather data 	

TOPIC 2: LANDFORMS AND LANDSCAPE PROCESSES

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Rocks	<ul style="list-style-type: none"> • Identify main types of rocks • Describe the formation of each of the main rock types • describe the characteristics of various rock under each main rock type • classify the rock types 	<ul style="list-style-type: none"> • Rock types; <ul style="list-style-type: none"> - igneous - sedimentary - metamorphic • Origin of rocks 	<ul style="list-style-type: none"> • Examining rocks • Describing the formation of rocks • Distinguishing characteristics of rocks • classifying rocks under each main rock type 	<ul style="list-style-type: none"> • Rock samples • Local environment • Photographs • Videos

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
<ul style="list-style-type: none"> Weathering of rocks and resultant landforms 	<ul style="list-style-type: none"> describe the main types of weathering distinguish between mechanical and chemical weathering describe landforms resulting from weathering 	<ul style="list-style-type: none"> Physical/mechanical weathering Chemical weathering Landforms resulting from weathering <ul style="list-style-type: none"> granitic landforms karst landform 	<ul style="list-style-type: none"> Describing the main types of weathering Distinguishing between mechanical and chemical weathering Sketching landforms resulting from weathering Observing landforms in the local area 	<ul style="list-style-type: none"> Photographs Sketches diagrams Local environment Model of the earth Maps
<ul style="list-style-type: none"> Internal structure of the earth 	<ul style="list-style-type: none"> illustrate with a diagram the internal structure of the earth describe the parts of the internal structure of the earth 	<ul style="list-style-type: none"> The parts of the internal structure of the earth <ul style="list-style-type: none"> crust mantle core 	<ul style="list-style-type: none"> Drawing the internal structure of the earth Modelling the internal structure of the earth 	

TOPIC 3: ECOSYSTEMS

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Biodiversity	<ul style="list-style-type: none"> identify habitats in a local ecosystem 	<ul style="list-style-type: none"> Species diversity Habitat diversity Genetic diversity 	<ul style="list-style-type: none"> Undertaking Field survey to determine biodiversity Adopting a micro environment for biodiversity conservation Participating in biodiversity conservation projects 	<ul style="list-style-type: none"> Maps Photographs Videos Local environment Satellite images Legislation such as Ecosystems Protection Act
Tropical ecosystems	<ul style="list-style-type: none"> locate biomes in Africa identify the inputs, processes and outputs of each biome explain the adaptations of vegetation and animals in each biome 	<ul style="list-style-type: none"> Equatorial rainforest Tropical continental Tropical desert 	<ul style="list-style-type: none"> Describing the location of individual biomes on a map. Describing the inputs, processes and outputs of each biome. Outlining the adaptation of vegetation and animals in each biome 	

<p>Sustainable Management of ecosystems</p>	<ul style="list-style-type: none"> • describe sustainability of ecosystem • identify strategies for conserving local forests • construct fireguards around the school • plant trees in the locality • control local erosion 	<ul style="list-style-type: none"> • Concept of ecosystem sustainability • Conservation measures against environmental challenges such as veld fires, deforestation and soil erosion 	<ul style="list-style-type: none"> • Describing ecosystems sustainability • Formulating ways of conservation of local forests • Participating in constructing fireguards • Planting trees and controlling soil erosion 	<ul style="list-style-type: none"> • Maps • Photographs • Videos • Local environment • Satellite images • Legislation such as Ecosystems Protection Act
<p>Use of ecosystems in entrepreneurship</p>	<ul style="list-style-type: none"> • Identify potential businesses from ecosystems • Design a small business using local ecosystems • Run a small business using local ecosystem 	<ul style="list-style-type: none"> • Potential eco-business • Project on small business using local ecosystems 	<ul style="list-style-type: none"> • Listing potential businesses from ecosystems e.g. eco-tourism • Drawing up a business proposal based on resources from local ecosystem • Running a small ecosystem-based business. 	<ul style="list-style-type: none"> • Local ecosystems • Recommended textbooks

TOPIC 4: NATURAL RESOURCES

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Population and resources	<ul style="list-style-type: none"> describe the growth of population and its effects on resources 	<ul style="list-style-type: none"> Growth of population and its effects on resources 	<ul style="list-style-type: none"> Discussing the growth of population and effects on resources 	<ul style="list-style-type: none"> Maps Charts Print media Magazines ZimStat Local environment
Exploitation of natural resources in Africa	<ul style="list-style-type: none"> describe the factors influencing exploitation of natural resources 		<ul style="list-style-type: none"> Discussing the factors influencing the exploitation of natural resources 	

TOPIC 5: ENERGY AND POWER DEVELOPMENT

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Economic importance of energy types	<ul style="list-style-type: none"> explain the importance of energy in economic activities examine the advantages and disadvantages of using different types of energy 	<ul style="list-style-type: none"> Importance of energy in agriculture, mining, and manufacturing Advantages and disadvantages of using different sources of energy 	<ul style="list-style-type: none"> Discussing the role of energy in economic development Comparing and contrasting different energy types 	<ul style="list-style-type: none"> Photographs Videos Local environment Print media Electronic media
Relative importance of using different energy sources	<ul style="list-style-type: none"> justifying the choice of particular types of energy 	<ul style="list-style-type: none"> Sources of energy: <ul style="list-style-type: none"> -water -wind - solar, - nuclear -biogas -fossil fuels -wood -animal draught power 	<ul style="list-style-type: none"> Calculating the relative costs of using different energy types Touring farms and factories that use energy 	

TOPIC 6: MAP WORK AND GEOGRAPHICAL INFORMATION SYSTEMS

TOPIC	OBJECTIVES	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Contour lines and their interpretation	<ul style="list-style-type: none"> describe the concept of contour lines determine altitude using contour lines identify landforms using contour patterns 	<ul style="list-style-type: none"> The concept of contour lines Determination of altitude using contour lines Identification of landforms using contour patterns 	<ul style="list-style-type: none"> Explaining the concept of contour lines Finding altitude using contour lines Recognising contour patterns using contour patterns 	<ul style="list-style-type: none"> Ordnance survey Maps Atlases
Gradient	<ul style="list-style-type: none"> describe the concept of gradient calculate gradient of a slope apply gradient data to understand phenomena on the map 	<ul style="list-style-type: none"> The concept of gradient Calculation of gradient Interpretation of gradient data 	<ul style="list-style-type: none"> Explaining the concept of gradient Finding the gradient of a slope Describing phenomena on a map using gradient data 	
Landuse Patterns	<ul style="list-style-type: none"> describe types of landuse on a map explain determinants of landuse zoning on maps 	<ul style="list-style-type: none"> Types of landuse Factors affecting landuse patterns Identification landuse 	<ul style="list-style-type: none"> Identifying types of landuse on maps Outlining determinants of landuse patterns on map Outlining land uses from 	

	<ul style="list-style-type: none"> • identify landuse patterns on a map • describe types of landuse patterns • explain processes influencing landuse patterns 	<p>patterns on maps</p> <ul style="list-style-type: none"> • Types of landuse patterns <ul style="list-style-type: none"> - point data - polygon/area data - line data • Processes influencing landuse pattern on maps 	<p>maps</p> <ul style="list-style-type: none"> • Recognising landuse patterns on a map • Explaining the types of landuse patterns • Describing the determinants of landuse patterns 	
--	--	--	--	--

TOPIC 7: MINERALS AND MINING

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Factors influencing mining in Zimbabwe	<ul style="list-style-type: none"> • describe the term mining • describe the factors influencing mining in Zimbabwe 	<ul style="list-style-type: none"> • Mining • Factors influencing mining 	<ul style="list-style-type: none"> • Discussing the meaning of mining • Explaining factors influencing mining 	<ul style="list-style-type: none"> • Mining Maps • Models of Mining methods • Print media • Internet • Videos on mining methods • Mines (including panning sites) • Photographs

	<ul style="list-style-type: none"> describe the mining methods in Zimbabwe 	<ul style="list-style-type: none"> Methods of mining: <ul style="list-style-type: none"> Surface Underground 	<ul style="list-style-type: none"> Discussing the mining methods: advantages and disadvantages of each. 	<ul style="list-style-type: none"> Gold panners Testing kits
<p>Mineralogy</p>	<ul style="list-style-type: none"> identify methods used in prospecting for gold describe physio-chemical properties of alluvial minerals identify methods used in gold panning outline problems associated with gold panning suggest measures to increase the contribution of gold panning to the national economy 	<ul style="list-style-type: none"> Gold panning in Zimbabwe: <ul style="list-style-type: none"> prospecting methods (including IKS) physio-chemical properties of alluvial minerals mining methods problems associated with gold panning measures to increase the contribution of gold panning to the national economy 	<ul style="list-style-type: none"> Investigating methods used to prospect for gold <ul style="list-style-type: none"> Describing methods used in gold panning Touring gold panning sites Devising measures to increase the contribution of gold panning proceeds to the economy Testing for gold, diamond, tin etc. <p>NB Learners should test for the properties of one mineral in the laboratory</p>	<ul style="list-style-type: none"> Mineral samples Recommended textbooks Mineral testing kits

<p>Environmental impact of mining</p>	<ul style="list-style-type: none"> describe the environmental impacts of mining identify mitigation measures Identify mining area rehabilitation measures 	<ul style="list-style-type: none"> Environmental impact of mining Mitigation and rehabilitation of a mining area 	<ul style="list-style-type: none"> Discussing environmental impacts of mining Touring a local mine to study environmental impact of mining and discussing solutions Developing a sustainable environmental management plan 	
---------------------------------------	--	--	---	--

TOPIC 8: ENVIRONMENTAL MANAGEMENT

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Environmental degradation	<ul style="list-style-type: none"> describe forms of environmental degradation describe causes of environmental degradation 	<ul style="list-style-type: none"> Forms of environmental degradation such as: <ul style="list-style-type: none"> veld fires soil erosion silting of rivers rivers changing courses 	<ul style="list-style-type: none"> Outlining forms of environmental degradation Debating causes of environmental degradation Discussing 	<ul style="list-style-type: none"> Local environment Photographs Videos Resource persons Climate Policy

	<ul style="list-style-type: none"> • explain effects of environmental degradation • outline mitigation measures 	<ul style="list-style-type: none"> - gullies - uncontrolled mining - uncontrolled sand abstraction - deforestation - destruction of wetlands - water pollution - air pollution - poor waste management practices - other forms such as noise and graffiti • Social, economic and physical effects • Mitigation of environmental degradation 	<p>effects of environmental degradation</p> <ul style="list-style-type: none"> • Explaining ways of mitigating environmental degradation 	<p>document</p> <ul style="list-style-type: none"> • Climate Change Response Strategy document
<p>Impact of climate change on the environment</p>	<ul style="list-style-type: none"> • identify impacts of climate change on the environment 	<p>Impact on :</p> <ul style="list-style-type: none"> • Land <ul style="list-style-type: none"> - soil - vegetation • Water: <ul style="list-style-type: none"> - quantity 	<ul style="list-style-type: none"> • Discussing impacts of climate change on the environment • Debating pros and cons of 	

		<ul style="list-style-type: none"> • explain pros and cons of climate change 	<ul style="list-style-type: none"> - quality • Air quality • Negative impacts • Positive impacts 	climate change impact in Zimbabwe
Climate change mitigation	<ul style="list-style-type: none"> • describe climate change mitigation measures 	<ul style="list-style-type: none"> • Climate change mitigation -targeting people and environment 	<ul style="list-style-type: none"> • Identifying climate change mitigation measures 	

TOPIC 9: AGRICULTURE AND LAND REFORM

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Farming types in Zimbabwe	<ul style="list-style-type: none"> • identify the dominant farming types in Zimbabwe • explain the characteristics of each farming type 	<ul style="list-style-type: none"> • Characteristics of farming types <ul style="list-style-type: none"> - Subsistence <ul style="list-style-type: none"> * Benefits and challenges - Communal farming in Zimbabwe <ul style="list-style-type: none"> * Commercial * dairying, * horticulture/ market gardening 	<ul style="list-style-type: none"> • Classifying farming types in Zimbabwe • Outlining characteristics of each farming type 	<ul style="list-style-type: none"> • Local farms • Map showing farming in Zimbabwe • Photographs of farms or farming activities



	<ul style="list-style-type: none"> * cattle ranching * mixed farming * plantation and irrigation farming 		
<p>Agro-ecological regions of Zimbabwe</p>	<ul style="list-style-type: none"> • draw Zimbabwe's agro-ecological regions on a map of Zimbabwe • describe the characteristics of each region • explain the farming activities of each region 	<ul style="list-style-type: none"> • Regions 1 - 6 <ul style="list-style-type: none"> - location - characteristics - farming activities 	<ul style="list-style-type: none"> • Identifying regions on a map of Zimbabwe • Outlining the characteristics of each region • Identifying the farming activities of each region



TOPIC 10: INDUSTRY

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Secondary industry: factors influencing location of industry	<ul style="list-style-type: none"> explain factors influencing the location of industries 	<ul style="list-style-type: none"> Factors influencing the location of industry 	<ul style="list-style-type: none"> Discussing factors influencing location of industry Identifying types of industrial location Explaining the factors influencing the location of a local industry Touring a local industrial site 	<ul style="list-style-type: none"> Charts Photographs Local industry Maps



Transnational corporations (TNCs)	<ul style="list-style-type: none"> • describe transnational corporations • discuss the advantages and disadvantages of Transnational corporations 		<ul style="list-style-type: none"> • Transnational corporations • Advantages and disadvantages of Transnational corporations 		<ul style="list-style-type: none"> • Explaining the concept transnational corporations • Describing the advantages and disadvantages of Transnational corporations 		
-----------------------------------	---	--	--	--	--	--	--



TOPIC 11: SETTLEMENT AND POPULATION

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Urbanisation	<ul style="list-style-type: none"> • explain the causes of urbanisation • describe process of urbanisation • describe effects of urbanisation • suggest solutions to problems of urbanisation 	<ul style="list-style-type: none"> • Causes of urbanisation • Process of urbanisation • Effects of urbanisation 	<ul style="list-style-type: none"> • Discussing causes of urbanisation • Explaining the process of urbanisation • Debating effects of urbanisation • Identifying solution to problems of urbanisation 	<ul style="list-style-type: none"> • Graphs • Tables • Local urban centre • Photographs • Videos • Print media • Electronic media • Unplanned settlements
Urban land use models	<ul style="list-style-type: none"> • describe urban land use zones • outline the main features of different land use models 	<ul style="list-style-type: none"> • Urban land use zones: <ul style="list-style-type: none"> - CBD - industrial zones - residential zones - recreational 	<ul style="list-style-type: none"> • Matching models to actual towns in Zimbabwe • Undertaking an educational tour/trip to an urban area 	

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
		<ul style="list-style-type: none"> zones Land use models: <ul style="list-style-type: none"> - Concentric - Sector - Multiple-nuclei 		
Unplanned urban Settlements	<ul style="list-style-type: none"> state characteristic of unplanned settlements describe the location of unplanned settlements within urban centres explain causes of unplanned settlements 	<ul style="list-style-type: none"> Nature of unplanned settlements Distribution of unplanned settlements within urban centres Causes of unplanned settlements in urban areas 	<ul style="list-style-type: none"> Undertaking an educational tour to unplanned settlements Identifying characteristics of unplanned settlements Explaining the distribution of unplanned settlement 	
Effects and solutions of unplanned settlements	<ul style="list-style-type: none"> outline effects of unplanned settlements suggest measures to solve problems of unplanned settlements 	<ul style="list-style-type: none"> Unplanned settlements and the environment Socio-economic impact of unplanned settlements Measures to solve problems of unplanned 	<ul style="list-style-type: none"> Identifying effects of unplanned settlements Discussing solutions to the challenges of unplanned settlements 	<ul style="list-style-type: none"> Photographs Videos Local urban centre Local environment Print media Electronic media Unplanned settlements

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Disaster resilient Infrastructure	<ul style="list-style-type: none"> • identify the main features of disaster resilient infrastructure • describe factors considered in siting settlements 	settlement <ul style="list-style-type: none"> • Housing designs and materials • Factors to consider when siting settlements 	<ul style="list-style-type: none"> • Observing local infrastructure designs • Suggesting examples of disaster resilient infrastructure 	

TOPIC12: TRANSPORT AND TRADE

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Trade	<ul style="list-style-type: none"> • Explain trade • Describe trade patterns in Zimbabwe, SADC, Africa and the world 	<ul style="list-style-type: none"> • Trade as a result of demand in one place being met by supply from another • Trade patterns in Zimbabwe, SADC ,Africa and the world 	<ul style="list-style-type: none"> • Identifying what necessitates trade • Outlining trade patterns • Drawing trade diagrams showing trade patterns 	<ul style="list-style-type: none"> • Maps showing trade patterns and volumes



<p>Domestic and foreign trade</p>	<ul style="list-style-type: none"> • outline the characteristics of domestic and foreign trade • differentiate domestic from foreign trade 	<ul style="list-style-type: none"> • Domestic trade • Foreign trade 	<ul style="list-style-type: none"> • Interpreting trade graphs • Outlining the characteristics of domestic and foreign trade • discussing the differences between domestic and foreign trade 	
-----------------------------------	--	---	---	--



FORM 3: COMPETENCY MATRIX

FORM 3: SYLLABUS

TOPIC 1: WEATHER AND CLIMATE

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Air masses	<ul style="list-style-type: none"> describe an air mass classify air masses describe types of air masses and their characteristics 	<ul style="list-style-type: none"> Air mass Classification of air masses Characteristics of types of air masses 	<ul style="list-style-type: none"> Describing an air mass Describing the basis for classifying air masses Discussing the types and characteristics of air masses 	<ul style="list-style-type: none"> Videos Maps of Zimbabwe, Africa and the World Climatic tables Charts Synoptic maps

<p>Air masses affecting Zimbabwe and Southern Africa</p>	<ul style="list-style-type: none"> describe weather associated with air masses affecting Zimbabwe and Southern Africa describe weather conditions associated with the Inter-Tropical Convergence zone 	<ul style="list-style-type: none"> Air masses affecting Zimbabwe and Southern Africa (south-east and north-east trades and north-west trade winds) Weather associated with air masses affecting Zimbabwe and Southern Africa The Inter-Tropical Convergence Zone(ITCZ) 	<ul style="list-style-type: none"> Identifying air masses affecting Zimbabwe Describing the weather associated with air masses affecting Zimbabwe and Southern Africa Illustrating the position of the ITCZ in Africa in January and July 	
<p>Climate types on a global scale</p>	<ul style="list-style-type: none"> explain the basis for climatic classification on a global scale describe characteristics of world' s climatic regions 	<ul style="list-style-type: none"> Climatic types and characteristics on a global scale i.e. tropical climates, warm temperate climates and polar climates 	<ul style="list-style-type: none"> Discussing the basis for climatic classification on a global scale Drawing maps of Africa showing major climatic regions 	

Interpretation of climatic data	<ul style="list-style-type: none"> interpret climatic graphs and tables 	<ul style="list-style-type: none"> Climatic data 	<ul style="list-style-type: none"> Describing climatic tables and graphs
---------------------------------	--	---	---

TOPIC 2: LANDFORMS AND LANDSCAPE PROCESSES

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Continental Drift Theory	<ul style="list-style-type: none"> outline the continental drift theory 	<ul style="list-style-type: none"> The continental drift theory 	<ul style="list-style-type: none"> Identifying evidence of the continental drift theory 	<ul style="list-style-type: none"> World map GIS (simulation) Videos
Plate tectonics theory	<ul style="list-style-type: none"> describe tectonic movement explain implications of plate tectonic movements on climate 	<ul style="list-style-type: none"> Plate boundaries: <ul style="list-style-type: none"> Constructive/Divergent Destructive/Convergent Transform 	<ul style="list-style-type: none"> Illustrating constructive, destructive and conservative boundaries Discussing implications of plate movements 	

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Folding and faulting	<ul style="list-style-type: none"> describe processes of folding and faulting describe resultant landforms 	<ul style="list-style-type: none"> Folding and resultant landforms Faulting and resultant landforms 	<ul style="list-style-type: none"> Illustrating landforms resulting from folding and faulting 	
Volcanoes and earthquakes	<ul style="list-style-type: none"> outline the distribution of volcanoes and earthquakes explain the causes of volcanoes and earthquakes 	<ul style="list-style-type: none"> Volcanoes and Earthquakes 	<ul style="list-style-type: none"> Outlining the distribution of volcanoes and earthquakes 	
Effects of tectonic processes	<ul style="list-style-type: none"> identify effects of volcanic activity and earthquakes identify measures 	<ul style="list-style-type: none"> Effects of volcanic activity and earthquakes 	<ul style="list-style-type: none"> Explaining the effects of volcanic activity and earthquake 	
Mitigating effects of vulcanicity and earthquakes	<ul style="list-style-type: none"> to reduce effects of vulcanicity and earthquakes 	<ul style="list-style-type: none"> Measures to reduce effects of vulcanicity and earthquakes 	<ul style="list-style-type: none"> Suggesting measures to reduce the effects of vulcanicity and earthquakes 	

TOPIC 3: ECOSYSTEMS

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Biogeochemical cycles	<ul style="list-style-type: none"> explain the biogeochemical cycles outline the importance of biogeochemical cycles in the ecosystem 	<ul style="list-style-type: none"> Biogeochemical cycles (Nutrient cycle, Nitrogen cycle and Carbon cycle) 	<ul style="list-style-type: none"> Describing biogeochemical cycles Discussing the importance of the cycles to the ecosystems 	<ul style="list-style-type: none"> Local ecosystems Photographs Electronic media Print media
Wetlands	<ul style="list-style-type: none"> explain the importance of wetlands outline the benefits of wetlands 	<ul style="list-style-type: none"> Importance of wetlands Benefits of wetland areas 	<ul style="list-style-type: none"> Describing the importance of wetlands Discussing the benefits of wetlands 	<ul style="list-style-type: none"> Wetlands
Conservation of ecosystem	<ul style="list-style-type: none"> Identify methods of conservation 	<ul style="list-style-type: none"> Conservation methods such as: <ul style="list-style-type: none"> terracing use of alternative sources of energy such as biogas, solar destocking legislation IKS 	<ul style="list-style-type: none"> Explaining the methods of conservation 	<ul style="list-style-type: none"> EMA Act
Restoration of ecosystems	<ul style="list-style-type: none"> explain the methods of restoring ecosystems outline benefits of restoring ecosystems 	<ul style="list-style-type: none"> Restoration methods such as: <ul style="list-style-type: none"> gully reclamation grass planting tree planting 	<ul style="list-style-type: none"> Discussing the methods of restoration Explaining the benefits of 	<ul style="list-style-type: none"> Degraded environment



Benefits of ecosystems	<ul style="list-style-type: none"> • explain the importance of ecosystems 		<ul style="list-style-type: none"> • Benefits such as <ul style="list-style-type: none"> - timber - carbon sinks - oxygen - fruits/honey - reduce soil erosion - humus - medicines - increase in precipitation 		<ul style="list-style-type: none"> • restoring the ecosystems • Adopting degraded local ecosystems and rehabilitating them • Discussing the benefits of ecosystems 		
------------------------	--	--	--	--	---	--	--



TOPIC 4: NATURAL RESOURCES

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Conservation of resources	<ul style="list-style-type: none"> • describe resources conservation measures • identify ways of conserving resources 	<ul style="list-style-type: none"> • Resources conservation methods of: <ul style="list-style-type: none"> - fish - water - soil - forest 	<ul style="list-style-type: none"> • Undertaking field trip /tour • Identifying ways of conserving resources 	<ul style="list-style-type: none"> • Maps • Print media • CITES • Reserves and sanctuaries • Wildlife parks • Local environment • CAMPFIRE districts such as Mbire, Mahenye, Hurungwe

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Wildlife management	<ul style="list-style-type: none"> • describe wildlife management • identify advantages of wildlife management 	<ul style="list-style-type: none"> • Types of wildlife management <ul style="list-style-type: none"> - Game parks - Conservancies - Safari areas - Sanctuaries - National parks 	<ul style="list-style-type: none"> • Discussing advantages and disadvantages of wildlife management 	
Human wildlife conflict	<ul style="list-style-type: none"> • distinguish problem-animals from dangerous animals • identify the causes of human-wildlife conflict • suggest solutions to 	<ul style="list-style-type: none"> • Human-wildlife conflict • Causes of human-wildlife conflict • Solutions to human- 	<ul style="list-style-type: none"> • Listing problem animals and dangerous animals • Explaining the causes of human-wildlife conflict • Discussing the 	

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Communal Areas Management Programme For Indigenous Resources (CAMPFIRE)	<ul style="list-style-type: none"> • human wildlife conflict • give reasons for the establishment of the CAMPFIRE • discuss the benefits of the CAMPFIRE • discuss the sustainability of CAMPFIRE 	<ul style="list-style-type: none"> • wildlife conflict • CAMPFIRE • Benefits of CAMPFIRE • Sustainability of CAMPFIRE 	<ul style="list-style-type: none"> • solutions to human-wildlife conflict • Identifying reasons for the establishment of CAMPFIRE • Explaining the benefits of CAMPFIRE • Discussing sustainability of CAMPFIRE • Note: Refer to a specific case study in Zimbabwe. 	

TOPIC 5: ENERGY AND POWER

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Conservation of energy sources	<ul style="list-style-type: none"> explain how energy sources can be conserved 	<ul style="list-style-type: none"> Energy conservation methods: <ul style="list-style-type: none"> -Increased use of public transport -Use of renewable energy sources (wind, biogas, Hydro- electric power, solar power) 	<ul style="list-style-type: none"> Explaining energy conservation Participating in conservation activities such as tree planting and recycling 	<ul style="list-style-type: none"> Local environment Policies and strategies such as: <ul style="list-style-type: none"> - Renewable energy policy - Bio-fuels policy - Climate policy - Climate change response strategy



<p>Energy production and conservation in the local area</p>	<ul style="list-style-type: none"> analyse types of energy used and conservation measures undertaken in the local area 	<ul style="list-style-type: none"> Production of energy in the local area Conservation measures: <ul style="list-style-type: none"> reforestation use of energy efficient technologies 	<ul style="list-style-type: none"> Conducting survey on energy conservation in the local area Making energy conserving technologies such as: <ul style="list-style-type: none"> biogas digester and isotso stove <p>Note: Learners are encouraged to form energy conserving clubs</p>	
---	---	---	---	--



TOPIC 6: MAP WORK AND GEOGRAPHIC INFORMATION SYSTEMS (GIS)

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Global Positioning System and world time zones	<ul style="list-style-type: none"> explain the concept of GPS apply GPS technology in navigation calculate time using longitude 	<ul style="list-style-type: none"> The concept of GPS Navigation using GPS World time zones <ul style="list-style-type: none"> - Calculating time using longitude 	<ul style="list-style-type: none"> Describing how GPS works Navigating using GPS Finding the time zone of a location 	<ul style="list-style-type: none"> GPS units Smart phones Q GIS software (open source) Computers The Internet – Google earth/ Flashearth
The Electromagnetic spectrum	<ul style="list-style-type: none"> describe the concept of light as a wave explain the visible wave bands of the electromagnetic spectrum apply the electromagnetic spectrum in the interpretation of photographs 	<ul style="list-style-type: none"> The concept of light as a wave The visible wave bands of the electromagnetic spectrum Application of the electromagnetic spectrum in the interpretation of photographs. 	<ul style="list-style-type: none"> Explaining the concept of light as a wave Describing the visible wave bands of the electromagnetic spectrum Demonstrating the ability to use the electromagnetic spectrum in the interpretation of photographs 	

TOPIC 7: MINERALS AND MINING

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Small scale mining in Zimbabwe	<ul style="list-style-type: none"> describe small scale mining describe the contribution of small scale mining to the economy of Zimbabwe explain the challenges and solutions to small scale mining outline the legislative 	<ul style="list-style-type: none"> Small scale mining Contribution of small scale mining to the economy of Zimbabwe Challenges and solutions Legislative 	<ul style="list-style-type: none"> Discussing small scale mining Discussing the contribution of small scale mining to the economy. Identifying challenges and solutions to small scale mining. Researching on legal requirements on mining and mining rights 	<ul style="list-style-type: none"> Maps Charts Print media Internet Mines and Minerals Act Environmental Management Act NASSA Act EMA officials Resource persons
Processing of minerals in Zimbabwe and Africa	<ul style="list-style-type: none"> framework on mining and mining rights explain the processing of selected minerals in 	<ul style="list-style-type: none"> framework on mining and mining rights The processing of selected 	<ul style="list-style-type: none"> Discussing the processing of selected minerals in Zimbabwe and Africa 	

Beneficiation and Value addition	Zimbabwe and Africa	minerals in Zimbabwe and Africa		
Safety and Health in mining				

Beneficiation and Value addition

Zimbabwe and Africa

minerals in Zimbabwe and Africa

Safety and Health in mining

- describe the importance of beneficiation of minerals in Zimbabwe

- The beneficiation of minerals in Zimbabwe

- Discussing the importance of beneficiation of minerals

- explain the importance of safety and health issues in mining

- Issues of safety and health in mining

- Discussing safety and health issues in mining

TOPIC 8: ENVIRONMENTAL MANAGEMENT

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Environmental management legislation in Zimbabwe	<ul style="list-style-type: none"> explain environmental management legislation assess the effectiveness of requisite legislation on environmental management discuss challenges and solutions of implementing environmental management legislation 	<ul style="list-style-type: none"> Environmental management legislation Effectiveness of environmental management legislation Challenges and Solutions 	<ul style="list-style-type: none"> Interpreting key provisions of environmental management legislation Explaining the effectiveness of environmental management legislation Discussing challenges and solutions of implementing environmental management legislation 	<ul style="list-style-type: none"> Constitution of Zimbabwe Environmental Management Act Ecosystems Protection Act Photographs Videos Resource persons

TOPIC 9: AGRICULTURE AND LAND REFORM

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Land tenure	<ul style="list-style-type: none"> describe land tenure identify forms of land tenure in Zimbabwe explain 	<ul style="list-style-type: none"> Land tenure systems <ul style="list-style-type: none"> Free-hold Leasehold Communal State-owned Advantages and disadvantages 	<ul style="list-style-type: none"> Explaining land tenure Listing land tenure types Describing characteristics of each tenure system Giving advantages and disadvantages of each land tenure system 	<ul style="list-style-type: none"> Title deeds and lease agreements forms Charts illustrating models of

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
	<ul style="list-style-type: none"> characteristics of each land tenure system compare land tenure systems 			<ul style="list-style-type: none"> resettlement farms Newly resettled farmers
Land reform	<ul style="list-style-type: none"> describe land reform explain forms of land reform 	<ul style="list-style-type: none"> Reorganisation of land <ul style="list-style-type: none"> - Land tenure - Land use land consolidation land fragmentation 	<ul style="list-style-type: none"> Discussing land reform Debating the need for land reform Explaining forms of land reform 	
Land reform in Zimbabwe	<ul style="list-style-type: none"> identify reasons for land reform in Zimbabwe explain the land reform process in Zimbabwe outline the contribution of small-scale farming to food security 	<ul style="list-style-type: none"> Resettlement: <ul style="list-style-type: none"> - Phase 1 (the willing seller willing buyer) and Phase 2 (accelerated) <ul style="list-style-type: none"> * Aims * Processes * Outcomes * Challenges and solutions * Characteristics of resettlement models Small scale farming and food security 	<ul style="list-style-type: none"> Justifying land reform in Zimbabwe Explaining land reform in Zimbabwe Touring resettlement farms Discussing the contribution of small scale farming to food security 	

TOPIC 10: INDUSTRY

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Small to medium enterprises	<ul style="list-style-type: none"> describe the causes, characteristics and location of small to medium enterprises 	<ul style="list-style-type: none"> small to medium enterprise <ul style="list-style-type: none"> causes characteristics location 	<ul style="list-style-type: none"> Describing the characteristics, causes and location of small to medium enterprises 	<ul style="list-style-type: none"> Print media Pamphlets Government publications Statutory instruments
The role of informal industries in Zimbabwe	<ul style="list-style-type: none"> discuss the role of informal industries in Zimbabwe 	<ul style="list-style-type: none"> The role of informal industries in Zimbabwe 	<ul style="list-style-type: none"> Discussing the role of informal industries in Zimbabwe 	
Occupational safety and health in industry	<ul style="list-style-type: none"> discuss measures adopted in industries to promote occupational safety and health 	<ul style="list-style-type: none"> Occupational safety and health 	<ul style="list-style-type: none"> Discussing measures adopted in industries to promote occupational safety and health 	

Challenges associated with manufacturing and processing industries in Zimbabwe	<ul style="list-style-type: none"> identify solutions to challenges facing manufacturing and processing industries in Zimbabwe 	<ul style="list-style-type: none"> Challenges facing manufacturing and processing industries in Zimbabwe 	<ul style="list-style-type: none"> Discussing solutions associated with challenges facing manufacturing and processing industries in Zimbabwe
--	---	---	--

TOPIC 11: SETTLEMENT AND POPULATION

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Population terms	<ul style="list-style-type: none"> describe population terms apply population terms at local or national levels 	<ul style="list-style-type: none"> Population terms such as: <ul style="list-style-type: none"> Birth rate, death rate Infant mortality rate Fertility 	<ul style="list-style-type: none"> Describing population terms Applying population terms 	<ul style="list-style-type: none"> The home The local community Census reports
Population data collection,	<ul style="list-style-type: none"> collect population data within the 	<ul style="list-style-type: none"> Population data collection and 	<ul style="list-style-type: none"> Conducting sample survey and a school 	<ul style="list-style-type: none"> Class members Family members

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
presentation and interpretation	school or local community <ul style="list-style-type: none"> analyse population data present population data interpret population data 	analysis techniques <ul style="list-style-type: none"> Population data presentation techniques 	census <ul style="list-style-type: none"> Drawing population pyramids Discussing the data Comparing population pyramids of different regions(Zimbabwe and Sweden/Germany) 	<ul style="list-style-type: none"> Population pyramids
Population distribution and density in Zimbabwe, Africa and the world	<ul style="list-style-type: none"> describe population distribution in Zimbabwe, Africa, and the world explain differences in population density in Zimbabwe, Africa and the world 	<ul style="list-style-type: none"> Population distribution in Zimbabwe: Africa World Variations in population density in Zimbabwe, Africa and the world Factors affecting population density 	<ul style="list-style-type: none"> Identifying population distribution patterns Discussing causes of population distribution/density 	<ul style="list-style-type: none"> Population maps of Zimbabwe Population maps of Africa Population maps of the World

TOPIC12: TRANSPORT AND TRADE

TOPICS	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	RECOMMENDED RESOURCES
Regional imbalances in trade	<ul style="list-style-type: none"> demonstrate how trading patterns may create imbalances nationally and between regions/nations 	<ul style="list-style-type: none"> Trade imbalances within a country Regional trade imbalances International trade imbalances 	<ul style="list-style-type: none"> Explaining the concept of 'regional trade imbalance' Identifying trade imbalances on maps nationally, regionally and internationally 	<ul style="list-style-type: none"> Maps of internal, regional and international trade
Trading blocs	<ul style="list-style-type: none"> name economic groupings like SADC, COMESA, ECOWAS, OPEC, EU Give reasons for the formation of trading blocs 	<ul style="list-style-type: none"> Trading blocs <ul style="list-style-type: none"> SADC COMESA ECOWAS OPEC EU 	<ul style="list-style-type: none"> Listing of trading groupings Explaining the aims of the different economic groupings 	

FORM 4 SYLLABUS COMPETENCY MATRIX

FORM 4: SYLLABUS

TOPIC 1: WEATHER AND CLIMATE

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Temperate depressions	<ul style="list-style-type: none"> describe factors influencing the development and distribution of temperate depressions 	<ul style="list-style-type: none"> Development of temperate depressions 	<ul style="list-style-type: none"> Discussing structure and development of temperate depressions 	<ul style="list-style-type: none"> Maps Photographs charts
Frontal systems	<ul style="list-style-type: none"> describe weather associated with different types of fronts 	<ul style="list-style-type: none"> Types of fronts and related weather 	<ul style="list-style-type: none"> Identifying types of fronts and their associated weather 	

Tropical cyclones	<ul style="list-style-type: none"> • discuss the distribution and development of tropical cyclones • explain weather hazards associated with tropical cyclones 	<ul style="list-style-type: none"> • Distribution and development of tropical cyclones • Weather conditions and hazards associated with tropical cyclones 	<ul style="list-style-type: none"> • Describing the distribution and development of tropical cyclones • Explaining weather 	
Human influence on climate	<ul style="list-style-type: none"> • identify human activities influencing climate 	<ul style="list-style-type: none"> • Human influence on climate such as afforestation, desertification, dam construction 	<ul style="list-style-type: none"> • conditions and hazards associated with tropical cyclones • Identifying human activities influencing climate 	
Climate change	<ul style="list-style-type: none"> • describe the nature, causes and effects of climate change in Zimbabwe and the world at large • identify ways of adaptation and mitigation against climate change 	<ul style="list-style-type: none"> • Nature, causes and effects of climate change • Adaptation to climatic change • Mitigation against climate change 	<ul style="list-style-type: none"> • Discussing the nature, causes and effects of climate change • Identifying ways of adaptation and mitigation against climate change 	

TOPIC 2: LANDFORMS AND LANDSCAPE PROCESSES

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Landforms resulting from water action and river processes	<ul style="list-style-type: none"> describe the nature of seasonal water flow in rivers explain river processes in shaping the landscape describe landforms resulting from river processes 	<ul style="list-style-type: none"> Seasonal nature of rivers in Zimbabwe Processes operating along a river channel Landforms resulting from river processes: <ul style="list-style-type: none"> valleys meanders waterfalls rapids 	<ul style="list-style-type: none"> Labelling of rivers in Zimbabwe Explaining the processes operating along a river channel Describing landforms resulting from river processes: <ul style="list-style-type: none"> valleys meanders waterfall rapids etc. 	<ul style="list-style-type: none"> Maps Local rivers Photography Print and electronic media
Landforms resulting from wind action	<ul style="list-style-type: none"> describe the characteristics of arid and semi-arid regions explain the distribution of arid and semi-arid regions 	<ul style="list-style-type: none"> Characteristics of arid and semi-arid regions Distribution of arid and semi-arid regions Wind action processes such as erosion, transportation and deposition Landforms resulting from wind action areas in Zimbabwe and Africa 	<ul style="list-style-type: none"> Discussing characteristics of arid and semi-arid regions Describing factors influencing location and extent of arid and semi-arid areas in Zimbabwe and Africa Explaining wind action processes of erosion, transportation and 	

	<ul style="list-style-type: none"> explain the processes of wind action describe the landforms resulting from wind action 		<ul style="list-style-type: none"> Describing the formation of landforms from wind action 	
Hazards associated with landform development	<ul style="list-style-type: none"> describe the hazards associated with landform development 	<ul style="list-style-type: none"> Hazards associated with landforms development 	<ul style="list-style-type: none"> Describing hazards associated with landform development 	
Disaster risk management of volcanoes, earthquakes, flooding, mass wasting	<ul style="list-style-type: none"> identify methods of disaster risk management of volcanoes, earthquake flooding and mass wasting 	<ul style="list-style-type: none"> Disaster risk management of <ul style="list-style-type: none"> volcanoes earthquakes flooding mass wasting 	<ul style="list-style-type: none"> Discussing disaster risk management of volcanoes, earth quakes, flooding and mass wasting 	

TOPIC 3: ECOSYSTEMS

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Soil components	<ul style="list-style-type: none"> • identify components of soil • measure soil components • analyse soil components 	<ul style="list-style-type: none"> • Components of soil: <ul style="list-style-type: none"> - air - organic matter - water and - minerals 	<ul style="list-style-type: none"> • describing the components of soil • collecting soil samples • measuring soil components • drawing tables and graphs from findings • analysing findings 	<ul style="list-style-type: none"> • Soil samples • Instruments to measure soil components
Soil forming processes in the tropics and soil types	<ul style="list-style-type: none"> • describe the processes of gleyzation and cheluviation • name type of soils formed through soil forming processes in the tropics 	<ul style="list-style-type: none"> • Soil forming processes: <ul style="list-style-type: none"> - gleyzation - cheluviation • Soil types <ul style="list-style-type: none"> - sand - clay - loam 	<ul style="list-style-type: none"> • Explaining the process of gleyzation and cheluviation • Differentiating soil types 	

Soil properties	<ul style="list-style-type: none"> • explain soil profiles • identify soil properties • describe horizons in the soil profile 	<ul style="list-style-type: none"> • Soil profile • Soil properties: <ul style="list-style-type: none"> - texture - structure - colour - pH - organic content - mineral content 	<ul style="list-style-type: none"> • Identifying (digging) the soil profile in the local area • Discussing the soil properties • Drawing the soil profile • Testing the pH 	<ul style="list-style-type: none"> • Soil profile in the local area • Soil samples • Litmus paper
-----------------	--	--	--	--

TOPIC 5: GEOGRAPHIC INFORMATION SYSTEMS (GIS)

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Venn Diagrams (Boolean logic)	<ul style="list-style-type: none"> • describe the basic functions of Boolean logic • apply the Boolean logic in solving simple spatial problems • describe the concept of overlay analysis 	<ul style="list-style-type: none"> • Boolean logic <ul style="list-style-type: none"> - intersection - union - complement • Application of Boolean logic in solving simple spatial problems • The concept of overlay analysis 	<ul style="list-style-type: none"> • Explaining the basic functions of Boolean logic. • Using Boolean logic basics to interpret spatial problems 	

Overlay Analysis	<ul style="list-style-type: none"> • apply relational and conditional statements in overlay analysis 	<ul style="list-style-type: none"> • Use of relational statements in overlay analysis • Use of conditional statements in overlay analysis 	<ul style="list-style-type: none"> • Explaining the concept of overlay analysis • Using relational and conditional statements in overlay analysis.
------------------	---	---	--

TOPIC 6: MINERALS AND MINING

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Sustainable use of mineral resources	<ul style="list-style-type: none"> • explain sustainable use of mineral resources 	<ul style="list-style-type: none"> • Sustainable use of mineral resources such as, reuse and recycling 	<ul style="list-style-type: none"> • Discussing sustainable use of resources 	<ul style="list-style-type: none"> • Print media • Videos • Mines • EIA guidelines • EIA experts • Maps • Ministry of mines
Environmental Impact Assessment (EIA) in mining	<ul style="list-style-type: none"> • describe environmental impact assessment • describe the importance of environmental impact assessment in mining 	<ul style="list-style-type: none"> • Environmental impact assessment in mining • The importance of environmental impact assessment in mining 	<ul style="list-style-type: none"> • Discussing environmental impact assessment in mining • Discussing the importance of environmental impact assessment in mining 	
Cost-benefit	<ul style="list-style-type: none"> • explain the cost- 	<ul style="list-style-type: none"> • Cost-benefit 	<ul style="list-style-type: none"> • Calculating cost- 	

analysis (CBA)	<ul style="list-style-type: none"> benefit analysis concept describe the importance of the cost-benefit analysis in mining 	analysis	<ul style="list-style-type: none"> benefit for a hypothetical mining project Discussing the importance of cost-benefit analysis 	
----------------	--	----------	---	--

TOPIC 7: ENVIRONMENTAL MANAGEMENT

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Environmental management at global level	<ul style="list-style-type: none"> identify international treaties and protocols relevant to environmental management discuss pros and cons of domesticating international treaties and protocols 	<ul style="list-style-type: none"> International treaties and protocols in environmental management Pros and cons of domesticating international treaties and protocols 	<ul style="list-style-type: none"> Discussing international treaties and protocols domestication (applying international treaties and protocols to Zimbabwe's environment legislative framework) Debating on pros and cons of domesticating international treaties and protocols 	<ul style="list-style-type: none"> International treaties and protocols such as : <ul style="list-style-type: none"> - UN Framework Convention on Climate Change - Kyoto Protocol - Montreal Protocol - Bamako Convention - Basel

<p>Land use planning as a strategy for sustainable environmental management</p>	<ul style="list-style-type: none"> • describe land use planning • explain land use planning as a strategy for sustainable environmental management • identify challenges in land use planning • suggest mitigation measures 	<ul style="list-style-type: none"> • Land use planning in Zimbabwe • Land use planning as a strategy for sustainable environmental management • Challenges in land use planning • Mitigation measures: <ul style="list-style-type: none"> - risk informed land use planning related policies and legislation 	<ul style="list-style-type: none"> • Explaining land use planning in Zimbabwe • Describing land use planning as a strategy for sustainable environmental management • Outlining challenges in land use planning • Discussing mitigation measures 	<ul style="list-style-type: none"> - Convention - Zambezi River Basin Action Plan • Resource persons • Land use related legislation such as: Regional, Town and Country Planning Act
---	---	--	--	--

TOPIC 8: AGRICULTURE AND LAND REFORM

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Climate change and agriculture	<ul style="list-style-type: none"> deduce the effects of climate change on agriculture suggest mitigation measures assemble possible adaptation measures 	<ul style="list-style-type: none"> Effects of climate change on agriculture Mitigation in agriculture Adaptation 	<ul style="list-style-type: none"> Identifying the effects of climate change on agriculture worldwide, Discussing mitigation Outlining measures for each effect Suggesting adaptation measures for Zimbabwe and Southern Africa 	<ul style="list-style-type: none"> Climate change simulation data World map showing possible effects Photographs Pests Farms Electronic media
Agricultural diseases, pests and solutions	<ul style="list-style-type: none"> identify agricultural diseases and pests describe the effects of pests and diseases suggest manual, biological and chemical control measures 	<ul style="list-style-type: none"> Diseases Pests Effects of pests and diseases on productivity Biological and chemical Control 	<ul style="list-style-type: none"> Naming diseases and pests Discussing the effect of pests and diseases on productivity identifying control methods Touring farms 	
Urban Agriculture	<ul style="list-style-type: none"> evaluate advantages and 	<ul style="list-style-type: none"> Urban agriculture - nature - advantages 	<ul style="list-style-type: none"> assessing urban agriculture explaining 	

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
	<ul style="list-style-type: none"> • disadvantages of urban agriculture • identify problems of urban agriculture • suggest solutions to the problems 	<ul style="list-style-type: none"> - disadvantages of urban agriculture - problems of urban agriculture • solutions for urban agriculture 	<ul style="list-style-type: none"> • problems of urban agriculture • discussing solutions to problems of urban agriculture 	
Agribusiness	<ul style="list-style-type: none"> • list types of agribusiness in Zimbabwe • identify sources of funding for small scale agribusiness • evaluate importance of agribusiness to the individual and economy 	<ul style="list-style-type: none"> • Forms of Agribusiness funding • Importance of Agribusiness 	<ul style="list-style-type: none"> • Naming Agribusiness types • Suggesting possible sources of funding • Discussing importance of Agribusiness • Proposing small projects based on Agriculture 	<ul style="list-style-type: none"> • Agribusiness • Internet • Videos on small Agribusinesses

TOPIC 9: INDUSTRY

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Service Industries	<ul style="list-style-type: none"> describe service industry 	<ul style="list-style-type: none"> Service industries 	<ul style="list-style-type: none"> Discussing characteristics of service industries 	<ul style="list-style-type: none"> Zimbabwe Tourist maps Tourist magazines and brochures Tourist sites Videos on tourism and service industries
Tourism and its importance in Zimbabwe	<ul style="list-style-type: none"> define tourism describe tourism in Zimbabwe describe problems associated with tourism in Zimbabwe suggest solutions to problems faced by tourism in Zimbabwe 	<ul style="list-style-type: none"> Tourism Importance of tourism in Zimbabwe Tourist attractions in Zimbabwe Problems associated with tourism in Zimbabwe Solutions to tourism related problems 	<ul style="list-style-type: none"> Discussing the importance of tourism in Zimbabwe Touring local tourist sites Discussing problems associated with service industry in Zimbabwe Suggesting solutions to tourism related problems 	

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Quaternary industries	<ul style="list-style-type: none"> describe quaternary industries in Zimbabwe 	<ul style="list-style-type: none"> Quaternary Industries 	<ul style="list-style-type: none"> Describing quaternary industries 	
Challenges associated with service and quaternary industries in Zimbabwe	<ul style="list-style-type: none"> explain problems associated with service and quaternary industries in Zimbabwe 	<ul style="list-style-type: none"> Problems associated with service and quaternary industries in Zimbabwe 	<ul style="list-style-type: none"> Discussing problems associated with service and quaternary industries in Zimbabwe 	

TOPIC 10: SETTLEMENT AND POPULATION

TOPIC	OBJECTIVES Learners should be able to:	CONTENT	SUGGESTED NOTES AND ACTIVITIES	SUGGESTED RESOURCES
Population growth patterns	<ul style="list-style-type: none"> • identify factors which influence population growth • explain factors which influence population growth 	<ul style="list-style-type: none"> • Factors affecting population growth: <ul style="list-style-type: none"> - birth rate - death rate - immigration - emigration 	<ul style="list-style-type: none"> • Discussing factors which affect population growth 	<ul style="list-style-type: none"> • Map of Zimbabwe • World map • Videos • Photographs of migrants • Case studies of : <ul style="list-style-type: none"> - Typical

<p>Causes and effects of migration</p>	<ul style="list-style-type: none"> • describe causes of migration • explain effects of migration • outline different categories of migration 	<ul style="list-style-type: none"> • Causes: <ul style="list-style-type: none"> - push factors - pull factors • Effects in: <ul style="list-style-type: none"> - sending areas - receiving areas • Internal migration <ul style="list-style-type: none"> - rural to urban - urban to rural - urban to urban - rural to rural - intra-urban - Intra- rural • International migration • Voluntary and involuntary 	<ul style="list-style-type: none"> • Discussing causes of migration • Discussing effects of migration • Outlining the categories of migration 	<p>developing countries</p> <ul style="list-style-type: none"> - Typical developed countries • Photographs showing diseases in: developing countries - developed countries • Videos of people suffering from various diseases of HIV/AIDS, Ebola, hypertension • Chart showing population
--	---	---	--	--



<p>Population policy</p>	<ul style="list-style-type: none"> describe the rationale of having population policies explain the effects of population policies for named developed and developing countries 	<ul style="list-style-type: none"> Population policies in developing countries Population policies in developed countries Policies promoting population growth Policies limiting population growth 	<ul style="list-style-type: none"> Discussing the importance of population policies Debating the need for population policies 	<p>pyramids of contrasting population growth</p> <ul style="list-style-type: none"> The Demographic Transition Model Population pyramids
--------------------------	---	--	---	--



<p>Population and diseases</p>	<ul style="list-style-type: none"> describe diseases associated with developing countries describe diseases associated with developed countries explain the difference in diseases between developed and developing countries explain social and economic effects of diseases 	<ul style="list-style-type: none"> Common diseases in: <ul style="list-style-type: none"> developing countries (at least one of water borne, vector borne and nutritional diseases) developed countries (mainly lifestyle diseases). Reasons for variations in diseases spread between developed and developed countries Socio-economic effects of diseases 	<ul style="list-style-type: none"> Discussing reasons for the incidence/spread of diseases in developed and developing countries Discussing differences in diseases between developed and developing countries Debating socio-economic effects of diseases 	
--------------------------------	---	---	---	--

<p>The Demographic Transition Model (DTM)</p>	<ul style="list-style-type: none"> describe the features of the various stages of the DTM identify countries with high/low population growth rate 	<ul style="list-style-type: none"> Stages of the DTM Critique of the DTM Examples of countries with: <ul style="list-style-type: none"> high population growth declining population Effects of population growth 	<ul style="list-style-type: none"> Describing the stages of the DTM Assessing the applicability of the DTM to local community and Zimbabwe Discussing effects of high population growth 	
<p>Effects of population growth/decline</p>	<ul style="list-style-type: none"> explain the effects of population growth (negative or positive) 	<ul style="list-style-type: none"> Effects of declining population 	<ul style="list-style-type: none"> Discussing effects of declining population 	

9.0 ASSESSMENT

(a) Assessment Objectives

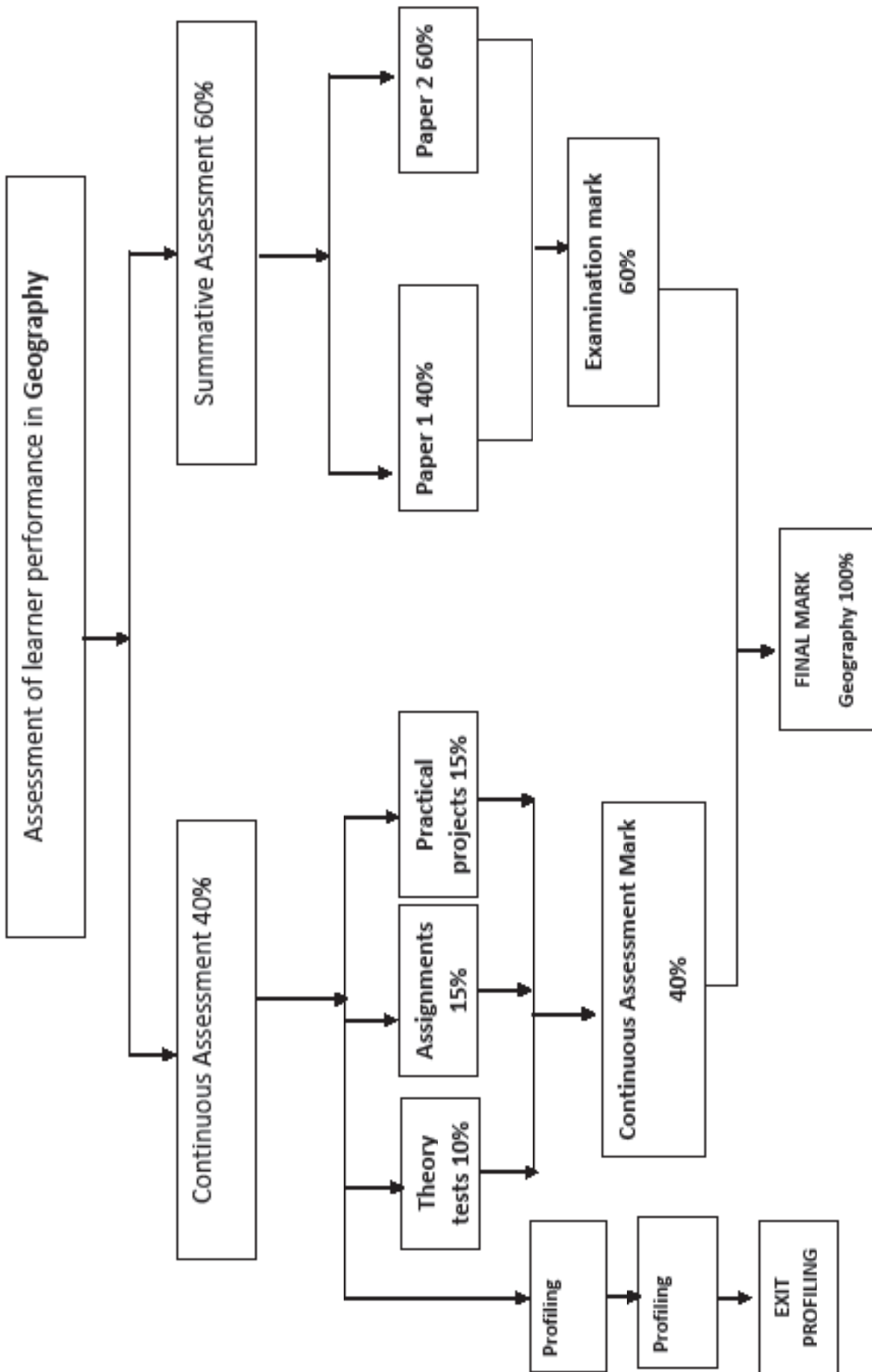
Learners will be assessed on their ability to demonstrate:

- Knowledge and understanding of:
 - processes underlying physical and human landscapes and spatial patterns
 - how landscapes and patterns change
 - environmental inter-relationships
- Skills and their application:
 - Basic skills of observation, recording, interpretation and analysis
 - Use of Secondary sources of data
 - Draw and interpret tables, graphs, maps, charts and diagrams
 - How to select, use and communicate information and conclusions effectively
- Judgement and decision making:
 - The role of values, perceptions and decision making in evolution of patterns in human Geography
 - How to use Geographical principles and concepts in interpreting situations at various scales
 - How to prepare, justify and evaluate solutions to environmental and socio-economic problems
 - Recall, recognize and use Geographical terms and definitions

b) Scheme of Assessment

The assessment in Geography will be based on 40% continuous assessment and 60% summative assessment.

Arrangements, accommodation and modifications must be visible in both continuous and summative assessment to enable learners with special needs to access assessment and receive accurate performance measurement of their abilities.



Continuous Assessment

Level	Assessment task	Frequency	Weighting
Form 1	Practical assignment	1 per term	5%
	Theory test	1 per term	
	Project	1 per year	
Form 2	Practical assignment	1 per term	10%
	Theory test	1 per term	
	Project	1 per year	
Form 3	Practical assignment	1 per term	10%
	Theory test	1 per term	
	Project	1 per year	
Form 4	Practical assignment	1 per term (term 1 and 2)	15%
	Theory test	1 per term (term 1 and 2)	
	Project	1 per year	
TOTAL			40%

***NB: Each assessment task is marked out of 100**

Description of papers

The examination will consist of 2 papers: Paper 1 and Paper 2

Paper 1: Multiple choice:

Duration: One hour thirty minutes

The paper consists of 40 multiple choice questions, marked out of 40. The paper is compulsory and will be set on all syllabus topics.

Paper 2: Structured free-response and data response
Duration: Two hours thirty minutes, marked out of 100 and constituting 40% of the total weighting

The paper consists of nine structured free-response and data-response questions, three in Section A, three in Section B and three in Section C. Candidates are required to answer four questions, one from section A, one from section B, one from section C and one other question chosen from any section. Each question will score 25 marks.

Summative Assessment

Paper	Paper type	Marks	Duration	Weighting
1	Multiple choice	40	1 ½ hours	20%
2	Structured – free-response and data response	100	2 ½ hours	40%
TOTAL				60%

(c) Specification Grid

Skill	Paper 1	Paper 2
Knowledge and comprehension	40%	30%
Skills (including practical) and their Application	40%	40%
Judgement and decision making	20%	30%
TOTAL	100%	100%

CONTENT SPECIFICATION GRID

Paper one

Content assessment	Topographical Map work	Physical Environment	Economic Geography	Population, settlement and trade	Total items	% Skill weighting
objectives						
Skill 1 knowledge with understanding		7 items	4 items	3 items	14	35%

Skill 2 Skills and their application	10 items	3 items	2 items	2 items	2 items	17	42.5%
Skill 3 Judgement and decision making	2 items	3 items	2 items	2 items	2 items	9	22.5%
Total	12 items	13 items	8 items	7 items	40	100%	

Paper two

Content	Number of questions
Section A: Physical Environment	4
Section B: Economic Geography	4
Section C: Population, Settlement, Transport and Trade	4
Total	12







