



ACCELERATED EDUCATION PROGRAMME

GEOGRAPHY

SYLLABUS



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© National Curriculum Development Centre (2019)

Published by

National Curriculum Development Centre

P.O. Box 7002,
Kampala- Uganda
www.ncdc.go.ug

ISBN: 978-9970-00-171-2

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Foreword

Education is a fundamental tool for protection of conflict-and-disaster-affected children and youths from harm and exploitation. This is a crucial part of UNESCO's advocacy messages. Under appropriate conditions of security, provision of education can help protect children and youth from recruitment into fighting forces, forced labour, prostitution, drug abuse and other criminal activities. In post-conflict settings, education contributes to the reintegration into society of former soldiers and other children and youths associated with fighting forces.

The National Curriculum Development Centre (NCDC), in collaboration with War Child Canada, embraced Accelerated Education Programme (AEP) that focuses on providing relevant and appropriate education to the learners in refugee camps and the host communities of secondary school age (ages 16 – 45+) in Adjumani district. The programme will help them to acquire the necessary competencies that will enable them to 'catch-up' and re-join the learners of the same (or near) age group in the formal education programme.

AEP subjects were selected based on the Ugandan regulation which states that learners must study the seven core subjects, i.e. Mathematics, English, Physics, Chemistry, Biology, History and Geography. So AEP learners shall take all the core subjects. In addition, the learners shall take: Religious Education which will help to address the prevalence of early marriages for the girl-child, cases of indiscipline and moral modelling of the learners; Personal Social and Health Education/Physical Education which will help the learners to develop physically, learn to live together, develop talents and become emotionally balanced; Guidance and Counselling in which the teachers will be trained on integration of guidance and counselling services in the delivery of the education curriculum.

This Programme will equip teachers and other stakeholders in schools and the communities with relevant information, values and skills that will enable them to effectively facilitate the teaching and learning processes.

I, therefore, recommend AEP to you because I trust that the materials will be valuable in your endeavour to meet the educational needs of the refugee learners and other beneficiaries from the host communities.



Hon. Janet Kataaha Museveni
MINISTER OF EDUCATION AND SPORTS

Acknowledgement

National Curriculum Development Centre (NCDC) would like to express its gratitude to all those who, in one way or another, contributed and worked tirelessly towards the development of this Accelerated Education Programme (AEP) Geography Syllabus.

Special thanks go to War Child Canada - Uganda for the financial support, their guidance in overseeing and taking timely decisions whenever necessary during the development and production of this AEP Geography Syllabus.

We also express our gratitude to NCDC Subject Specialists and panel members for their professional guidance and technical assistance.

Furthermore, NCDC recognises the work of the editors who worked with the writers through the development of this document.

NCDC takes responsibility for any shortcomings that might be identified in this syllabus and welcomes suggestions for addressing the inadequacies. Such comments and suggestions may be communicated to NCDC through: P.O. Box 7002, Kampala or e-mail admin@ncdc.og.ug.



Grace K. Baguma
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Introduction to Accelerated Education Programme

Worldwide, substantial alternative schooling programmes are developed to meet the basic education needs of under-reached children. Of recent, it has been increasingly recognized that the goals of Education for All cannot be achieved unless more attention is paid to educating out-of-school children (UNESCO, Global Monitoring Report, 2008). Indeed, the UNESCO Global Monitoring Report 2010 'Reaching the Marginalized' focused on this issue. In a bid to help developing countries achieve the Millennium Development Goals, there should be initiatives to incorporate elements of accelerated learning to achieve SDG 4.

The Accelerated Education Programme (AEP) in Uganda is a form of curriculum option which combines the stronger features of earlier mainstreaming approaches into the new design to raise the success rates for refugee community learners. The AEP secondary school tier is a bigger stride to address the education gap within refugee communities not only in Uganda but also in other neighbouring countries. This AEP for Secondary has benchmarked on the Primary AEP Programme, and intends to infer the entire process of education and its cognitive, emotional, and social components.

The Accelerated Education Programme at Secondary school level focuses on completing learning in a shorter period of two years. The AEP is complementary both in providing an alternative route and in matching its curriculum to the 'official' curriculum, thus allowing the learners to return to formal schooling at some stage. The programme intends to promote access to education in an accelerated timeframe for disadvantaged groups, out of school and over-age children, and youths who missed out or had their education interrupted due to poverty, violence, conflict and crisis. The goal of this programme is to provide the learners with competencies equivalent to those in the formal system in an accelerated timeframe, with the learners either transitioning back into the mainstream education or exiting with some competencies required for work.

Ideally, teaching AEP calls for a methodology that is interactive and learner-centred, incorporating other aspects of multiple-intelligence learning. Because teaching and learning are accelerated, and the curriculum content is compressed and condensed, the four 'P' elements are at the core of the accelerated learning cycle: processes, psychological,

physiological and physical. These core elements provide the physical and psychological space in which the learners can learn more effectively.

It is intentional to include alternative subjects in this programme e.g. life skills, peace education, environment, HIV and AIDS which are responsive to the context. The learners of AEP need alternative supporting knowledge and life skills to survive in the challenging world. It is equally important to note that this conception of accelerated learning requires an extremely well-resourced classroom and exceptionally well-trained teachers. The expanded learning time from the norm is because the teaching methodology is interactive and learner-centred.

It is our hope that AEP will register considerable success in meeting the educational needs of these underserved populations, not only in terms of access and equity, but also in being able to return to school for the completion of their education, and most importantly, in getting measurable learning outcomes.

Purpose of the AEP Geography Syllabus

This syllabus is aimed at providing the teacher with the guidance required to teach Geography to learners who will not go through the four years of the ordinary level education cycle. It is meant to cover the most critical aspects of Geography without affecting its standards. It will adequately prepare learners for the Uganda Certificate of Education (UCE). However, it requires the teacher to be very creative and innovative if learners are to acquire the same competences as those following the traditional O-level Geography syllabus.

Rationale for Teaching Geography

Nearly all aspects of our lives are influenced by the environment, both natural and human, which we live in. In turn, our lives have effects on the environment. Geography deals with this inter-relationship between humans and their environment. This relationship is becoming increasingly important as the population of the world grows and the world's resources remain finite. Thus the key issues of Geography become increasingly important: population growth; soils conservation and erosion; the use and preservation of the oceans; the world's food supply and food shortages; rural-urban drift, urbanisation and the problems of urban areas; problems of pollution of all kinds; the conservation of wild life and many related issues.

At the Lower Secondary level, Geography is seen as the study of human communities at local East African and African levels, with contrast through

specific case studies of other areas of the world. At this level, therefore, the emphasis is on human and regional geography focusing on actual people in actual communities, rather than the more scientific study of spatial relationships which geography becomes at a higher level.

Topics

The Accelerated Education Program (AEP) for Geography has been organised into 24 topics and their respective sub-topics. The program is divided into two levels as indicated in the table below.

LEVEL 1	LEVEL 2
<ol style="list-style-type: none"> 1. Introduction to Geography 2. Showing Physical and Human Features in the Local Area on a Map 3. Map Reading and Map Use 4. Using Tables, Graphs and Charts 5. The Shape and Movements of the Earth 6. Weather and Climate in East Africa 7. Introduction to East Africa 8. Formation of Rocks and Major Landforms in East Africa 9. Rivers and Drainage Patterns in East Africa 10. The Soils of East Africa 11. Climate and Natural Vegetation of East Africa 12. Forestry in East Africa 	<ol style="list-style-type: none"> 13. Fishing in East Africa 14. Population and Urbanisation in East Africa 15. Development of Agriculture in East Africa 16. Mining in East Africa 17. Development of Industries in East Africa 18. Wildlife Conservation and Tourism in East Africa 19. More on Use of Maps <p>The Rest of Africa</p> <ol style="list-style-type: none"> 20. Location and Size of Africa 21. Climate and Vegetation of Africa 22. Development of Agriculture in Africa: Arable and Pastoral 23. Forest Resources and Forestry in Africa 24. Development of Industry in Africa

Note: Case Studies

Case Studies of limited areas of North America and the Rhine lands have been included to provide studies of some areas of the world outside East Africa and the rest of Africa. They show the learners' aspects of life outside East Africa, provide contrasts and comparisons with East Africa; and stress ways in which East Africa can learn from outside areas. Each case study directly links with a study of a similar topic in East Africa or the rest of Africa. They are interspersed throughout the syllabus and teachers are not expected to treat them as regional studies.

Structure of the Syllabus

The syllabus has been structured into three columns.

Column 1 outlines the **learning outcomes** the learners should achieve in learning each topic. This includes factual knowledge which they should be able to list or reproduce; concepts which they should understand and be able to explain; skills, both cognitive and practical which they should be able to use; and values and attitudes which they should acquire and exhibit in real life situations. These are further elaborated below:

Knowledge: All learning must have a background of factual knowledge. However, emphasis should not just be on acquiring knowledge, but also on understanding it and being able to use it in real life situations.

Concepts: These should not only be useful to the learners in understanding the world they live in but also in their future life and studies. They should be able to explain these concepts in their own words. It is pointless for the learners to acquire concepts without understanding them. What is learnt must not simply be crammed to be reproduced in an exam.

Skills: The learners should acquire both cognitive and practical skills which they can use when they leave school for the world of work – employed or self-employed – and those they can use in further studies later. These include cognitive skills such as literacy and numeracy and higher level thinking skills such as comparing, contrasting, summarising, analysing, etc. Skills also include practical activities such as drawing and interpreting diagrams, graphs and statistics, drawing tables, interpreting photographs and maps, doing experiments or fieldwork.

Values and attitudes: These can help learners to become useful and productive members of society, including conserving their immediate environment and resources; and also forming their own opinions and defending such opinions.

Column 2 suggests **teaching/learning activities** which the learners should do to achieve the above learning outcomes. Most of the activities are designed for the learners themselves to do to avoid knowledge gained simply through listening to the teacher or reading textbooks. In some cases, where there are no appropriate activities for the learners, there are activities for the teacher to explain the knowledge or concepts to the learners. In this syllabus, the word “explain” is used where the teacher will explain. However, this should usually be accompanied by questioning or discussion to make sure the learners participate in order to better understand what is being taught.

Column 3 lists suggested **sample assessment strategies**. These are activities of formative assessment by which the teacher can find out if the learners have achieved the learning outcomes listed in column 1. They do not just test knowledge but understanding and skills gained. They are not written questions which can be marked as in a test. They include other types of activities to find out if the learners have acquired specified knowledge and skills. They are suggestions which may be used if the teacher thinks they are useful, but he/she may choose to use other similar activities for assessment. This does not mean that summative assessment is not important. There will also be summative assessment at the end of each term and year, and an end of cycle (UCE) exam set by the Uganda National Examinations Board (UNEB).

Program Planner

Level 1	Topic No.	Title	Duration (Hours)
Term 1	1	Introduction to Geography	4
	2	Showing Physical and Human Features in the Local Area on a Map	3
	3	Map Reading and Map Use	6
	4	Using Tables, Graphs and Charts	7
Term 2	5	The Shape and Movements of The Earth	4
	6	Weather and Climate	7
	7	Introduction to East Africa	3
	8	Formation of Rocks and Major Landforms in East Africa.	22
Term 3	9	Rivers and Drainage Patterns in East Africa	9
	10	The Soils of East Africa	6
	11	Climate and Natural Vegetation of East Africa	8
	12	Forestry in East Africa	8

Level 2	Topic No.	Title	Duration (Hours)
Term 1	13	Fishing in East Africa	8
	14	Population and Urbanisation in East Africa	8
	15	Development of Agriculture in East Africa	19
	16	Mining in East Africa	6
	17	Development of Industries in East Africa	7
	18	Wildlife Conservation and Tourism in East	8

Term 2		Africa	
	19	More on Use of Maps	4
	20	Location and Size of Africa	1
	21	Climate and Vegetation of Africa	6
Term 3	22	Development of Agriculture in Africa: Arable and Pastoral	16
	23	Forest Resources and Forestry in Africa	6
	24	Development of Industry in Africa	6

LEVEL 1

Term 1

Topic 1: Introduction to Geography

Duration: 4 Hours

Competency

The learner understands geography, searches geographical information from different sources and appreciates the importance of studying Geography.

Sub-topic 1: Meaning, Branches and the Importance of Studying Geography

Duration: 2 Hours

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>The learner should be able to:</p> <ul style="list-style-type: none"> a. know the meaning of geography. b. understand that the environment includes all the things around us, both natural and things made by people. c. identify the features of the environment by going outside the classroom to observe. d. understand that geography is the 	<ul style="list-style-type: none"> • The learners go outside to observe and make a list of things they can see. • Work in pairs and group the things they have listed into two categories: natural and things made by people. • Through discussion of the categories they have made, explain that all the things they have grouped make up our environment. The natural environment is made up of three parts: lithosphere, biosphere and atmosphere. • Challenge learners to 	<p>1. Ask learners to individually write two paragraphs: one describing the physical environment around the school and one describing the human environment.</p> <p>2. Learners give examples of how people in the local area:</p> <ul style="list-style-type: none"> a) are affected by the physical environment. b) have changed the physical environment.

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>study of people and their environment.</p> <p>e. appreciate that the study of geography helps us to understand how our lives are affected by the environment and how we can conserve it.</p>	<p>individually identify the branches of geography and the part of the environment each studies.</p> <ul style="list-style-type: none"> • Explain that geography has two branches: physical geography and human geography. • Learners individually explain what they understand by geography. • In groups, learners discuss the importance of studying geography. • Ask learners to give their views about the value of studying geography. 	

Sub-topic 2: Sources of Geographical Information

Duration: 2 Hours

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>The learner should be able to:</p> <p>a. understand the different sources of geographical information.</p> <p>b. use different sources to find geographical information about different areas.</p> <p>c. form opinions</p>	<ul style="list-style-type: none"> • Learners to suggest how they can find out information about the geography of: <ul style="list-style-type: none"> a) a local area. b) areas they have never been to. • Write these on the chalkboard: <ul style="list-style-type: none"> a) visit the area, look for information and talk to people. b) look at pictures; read 	<p>Give the learners a group task to visit a local area and find out particular geographical information about it. They present reports.</p>

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>about the different sources of geographical information.</p>	<p>textbooks and stories; read newspapers and magazines; use maps; use atlases; use statistics; use the Internet; watch television and movies.</p> <ul style="list-style-type: none"> • Explain that these are sources of geographical information. • Explain that visiting an area to find out geographical information is called fieldwork. • Learners conduct a library/ Internet research to find out geographical information. 	

References

- Kaggwa, H., Mugumya, R., Sepuya, N., and Mutyaba, J. C. (2007). *MK Integrated Secondary Geography*. Student's Book 1, pp. 1-10.
- Karuggah, R. and Kibuuka, P. (2003). *Certificate Geography, Form 1*. Oxford University Press, Nairobi. pp. 1-6

Topic 2: Showing Physical and Human Features in the Local Area on a Map

Duration: 3 Hours

Competency

The learner knows the main physical and human features of the local area and represents them on a map.

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>The learner should be able to:</p> <ul style="list-style-type: none"> a. know what a map is and how it can be used to show places. b. realise that different kinds of maps can show areas of different sizes. c. draw a map of a local area. d. describe a place from a map. e. follow a route on a map from the school or any other area. f. appreciate that maps can help us to move around an area and to a place we have never been to. 	<p>Site and Location of the School</p> <ul style="list-style-type: none"> • The learner draws a map to guide a friend who is new in the area on how to get to the school. • In pairs, the learners discuss and comment on each other's maps. • Explain that a map is drawn as if the observer is looking at features from above i.e. looking at their tops from the air. • In groups, the learners move around the school and draw the map of the school. • Using the map, they have drawn, groups comment on each other's map and discuss the features of a good map. List these on the chalkboard: key, scale, direction finder (compass rose), frame. • Task learners to draw a map of the area surrounding their school. • Explain that this map shows the location of the school. 	<p>The learner draws a map of the route from the school to their home (or other known area) showing the main features. They should include all features of a good map learnt.</p>

Reference

Hickman, G. (1994). *Lands and Peoples of East Africa*. Longman Limited
Burnt Mill. pp 84-85

Topic 3: Map Reading and Map Use

Duration: 6 Hours

Competence

The learner knows the main types of maps, features of a map and uses maps in different situations.

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>The learner should be able to:</p> <ul style="list-style-type: none"> a. know the main types of maps. b. know the meaning of scale, compass, direction, bearing, grid reference and symbols. c. understand that a map shows things by symbols, including colours or shading. d. interpret symbols on a map, 	<p>Types of Maps</p> <ul style="list-style-type: none"> • Present examples of different types of maps and ask the learners to explain the difference between them. • The learners suggest the type of map each one is. In groups, the learners discuss and suggest categorise into which maps can be put. (Outline maps, atlas maps, survey maps) <p>Showing Features on a Map</p> <ul style="list-style-type: none"> • Using the same examples of maps used in the above sub-topic, challenge the learners to explain how different features are shown on a map. List these on the chalkboard: symbols, shading and colouring. <p>Explain that maps do not show things as they appear in reality. They show things using symbols including shading and colouring.</p> <ul style="list-style-type: none"> • The learners suggest symbols which can be used to represent a farm, forest, church, mosque, etc. <p>Types of Scale</p> <ul style="list-style-type: none"> • Show a photograph of a house or 	<p>1. Give out maps, preferably survey maps or similar ones and ask questions to test all aspects of maps learnt in this topic.</p> <p>2. Let the learners conduct a whole class discussion on the advantages and disadvantages of the different methods used to show features on a map.</p>

<p>including colours /shades.</p> <p>e. estimate distance and area of features on a map using the scale.</p> <p>f. use a compass to determine direction and bearings of features on a map.</p> <p>g. use grids and names to find features on a map.</p> <p>h. appreciate that there are many types of maps and many ways of showing things on a map.</p>	<p>person and ask the learners to compare this with the real size of the house or person. Ask: If a photograph reduces the real size of a house or person by a certain amount, does it reduce all parts by the same amount?</p> <ul style="list-style-type: none"> • Explain that a scale does the same thing on a map. • Explain that all things on a photograph or map are reduced by the same amount so, to get the real size, you multiply e.g. 1 cm on a photograph or map = 10 cm in real size. • Challenge the learners to measure lines on the ground and reduce them to the size of a paper and work out a representative fraction scale. • In pairs, the learners: <ul style="list-style-type: none"> - discuss and express the R. F. scale each has come up with in words. Explain that this is called a statement scale. - draw a line scale to show the same distances. This is called a linear scale. • Explain that we use this scale to estimate distance and area of features on maps. • Challenge the learners to study maps with different line scales and work out distances using the scales. • Demonstrate how to measure winding distances using the linear scale. • Demonstrate how to calculate areas of features with different shapes on a map using a linear scale. • Let learners do exercises to practice this skill. <hr/> <p>Directions and Compass</p> <ul style="list-style-type: none"> • Using the same map (used above), ask the learners: How do you know which 	
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	<p>direction to go?</p> <ul style="list-style-type: none"> • Explain that maps show real directions of features and places. • Let them swap maps and in pairs explain directions between specific places or features on the map. • Through questioning, revise compass already studied at Primary school level. • Show a map with compass directions and ask the learners for directions between specific places. • Explain the main points of a compass. • Let the learners individually draw a diagram showing the main points of a compass. • Demonstrate how to determine compass bearing based on degrees of circle. • Present a map and challenge the learners to determine the bearing of features or places. <hr/> <p>Grid and Grid References</p> <ul style="list-style-type: none"> • Using a map, explain the meaning of a grid, including Eastings and Northings. • Demonstrate how to find features on a map using four and six figure grid references. • Explain that we use the four figure grid reference to find the approximate position of a feature while the six figure grid reference gives the exact position of the feature. • Task the learners to describe the location of features on a map using grid references. • Challenge learners to individually explain what they understand by grid reference. <hr/> <p>Names or labels</p> <ul style="list-style-type: none"> • Using the same map (used above), let 	
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	<p>the learners work in pairs to find particular features such as a river, lake, swamp, trading centre, etc.</p> <ul style="list-style-type: none"> • In pairs, let the learners explain how they have been able to identify those features. • Explain that sometimes the key may not tell us all features shown on the map. So we may use names or labels against those features. 	
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Topic 4: Using Tables, Graphs and Charts

Duration: 7 Hours

Competency

The learner knows the methods used to represent and store geographical information and uses them to analyse different aspects of the natural and human environments.

Sub-topic 1: Tables and Line Graphs

Duration: 2 hours

Learning Outcomes	Suggested Teaching/Learning Activities	Sample Assessment Strategy
<p>The learner should be able to:</p> <ul style="list-style-type: none"> a. know the difference between a table and a graph. b. know what a line graph is and the main types of line graphs. c. understand that graphs can be used to store and communicate many things about the physical environment and human activities. d. draw line graphs from statistics relating to human and physical environments. e. describe certain aspects of 	<ul style="list-style-type: none"> • Present a table containing information in form of numbers, preferably showing changes in the value or amount of one item over several months or years. In groups, let the learners study the information to find out: <ul style="list-style-type: none"> - How much the item it shows is. - How fast it changes. - How much faster it changes from one month or year to the other. • Explain that the same numerical information can be interpreted more easily if it is presented on a graph. • Using the same information, demonstrate how a line graph is constructed. • Challenge the learners to interpret the graph. • In groups, let the learners discuss and find out the characteristics or features of 	<p>Give the learners a table with statistics e.g. about population, production, trade and ask them to construct a line graph to represent the information it contains. Let them describe the trend of the item(s) and suggest reasons for it.</p>

Learning Outcomes	Suggested Teaching/Learning Activities	Sample Assessment Strategy
<p>geography such as trade, production and population growth from line graphs.</p> <p>f. describe the trend of something such as export trade, production, tourism from a line graph.</p> <p>g. appreciate that sometimes line graphs can tell us something more easily than words and numbers.</p>	<p>a good graph.</p> <ul style="list-style-type: none"> • Write the learner's ideas on the chalkboard: (Suitable title, vertical scale, and a key or labels). • Let the learners individually use another set of statistics showing changes in the value or amount of two items over the same period of time to construct a line graph and describe it. • Explain that if we want to compare changes in amounts of different things over the same period, we can plot the figures on one-line graph called a comparative line graph. 	

Sub-topic 2: Bar Graphs

Duration: 3 Hours

Learning Outcomes The learner should be able to:	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>a. know what a bar graph is and the main types of bar graphs.</p> <p>b. understand that bar graphs can be used to store and communicate information about many things in our environment.</p> <p>c. draw bar graphs from statistics relating to human</p>	<ul style="list-style-type: none"> • In groups: <ul style="list-style-type: none"> - learners study a table showing changes in the value or amount of one item for several years or places; and create a bar graph to represent the information. - summarise the steps followed when constructing a bar graph and share these during whole class discussion. • Explain that such a graph is called a simple bar graph and 	<p>Give the learners a drawn bar graph and ask them to interpret it. Ask a range of questions about the graph.</p>

Learning Outcomes The learner should be able to:	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>and physical environments.</p> <p>d. describe certain aspects of geography such as trade, population growth, and production from bar graphs.</p> <p>e. describe the trend of something such as tourism, trade, and production from a bar graph.</p> <p>f. appreciate that bar graphs can be used to store and communicate information about many things including those concerning our own lives.</p> <p>g. appreciate that sometimes bar graphs can tell us something more easily than words and numbers.</p>	<p>the reasons for this.</p> <ul style="list-style-type: none"> • In pairs, the learners are tasked to study another set of statistics showing changes in the value or amount of two items over the same period of time or places and construct a bar graph to represent the information in the table. • In pairs, the learners discuss and agree on the differences between the graph they have constructed and the simple bar graph. • Let the pairs feed their ideas into a whole class discussion. • Explain that if we want to compare two or more items, we can plot their figures on one bar graph. This is called a comparative bar graph. • The learners work on more exercises to practise drawing and interpreting bar graphs. <hr/>	

Sub-topic 3: Pie-Charts (Pie graphs)

Duration: 2 Hours

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>The learner should be able to:</p> <ul style="list-style-type: none"> a. know what a pie chart is. b. understand the steps followed when constructing a pie chart. c. understand the kind of information we represent using pie charts. d. draw a pie chart from statistics concerning different aspects. e. describe information about something from a pie chart. f. appreciate that pie charts can be used to represent information concerning many things including those we experience in our day to day life. 	<ul style="list-style-type: none"> • Provide statistics and task the learners to use these to construct a pie chart. • In pairs, the learners swap their charts and comment on each other's drawing. • The learners discuss the characteristics of a good pie chart. • In a whole class discussion, the learners identify and summarise the steps followed when constructing a pie chart. • Write the learners' ideas on the chalkboard. • The learners copy the steps in their note books. • Explain that the values given are converted into degrees so that they can be plotted on a circle of 360°; but the finished chart is labelled using the values originally given e.g. tons, dollars, shillings or percentages. • Challenge learners to suggest reasons for this. • Learners individually describe what the pie chart they have drawn shows. • Ask: What kind of information is represented using pie charts? • Explain that we use pie charts to represent total value (amount) and how 	<p>Give a table of figures and ask the learners to represent it on a pie chart. Ask them questions about the chart they have drawn.</p>

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
	<p>much each individual item contributes to the total. This is called relative importance.</p> <ul style="list-style-type: none"> <li data-bbox="544 487 918 713">• The learners conduct a library or the Internet search for statistics about different geographical aspects and construct pie charts to represent and analyse them. 	

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Term 2

Topic 5: The Shape and Movements of the Earth

Duration: 4 Hours

Competency

The learner understands the shape and movements of the Earth and predicts the effects of the Earth's movements on the lives of people in the local area and other areas.

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>The learner should be able to:</p> <ul style="list-style-type: none"> a. know the shape of the Earth. b. understand that the Earth rotates on an axis. c. understand that the rotation of the Earth causes day and night. d. understand that the Earth moves around the sun. e. understand the effects of the revolution of the Earth. f. predict seasons based on the position of the Earth in relation to the sun. g. appreciate how the movement of the 	<p>How do we Know the Earth is Round?</p> <ul style="list-style-type: none"> • In groups, let the learners discuss and find answers to the following questions: <ul style="list-style-type: none"> - Why can we only see a certain distance from any place? - What happens to the distance we can see when we climb a high hill? - Why is there a horizon? - What shape is the horizon on a flat plain or lake? - If we travel west or east in a plane, where will we end eventually? • Demonstrate using the globe that the Earth is round, following the equator or a particular line of longitude and return to the starting point. • Ask: Why do people in 	<p>Ask the learners to imagine they have a friend who has not yet studied the shape of the Earth. Let them write a letter to the friend describing the Earth, including the proof that it is a sphere.</p>

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
Earth in relation to the sun affects the way people live.	<p>different places see the rising sun at different times?</p> <ul style="list-style-type: none"> • Through discussion, explain that if one stands at a lakeshore, one will see a ship approaching the shore part-by-part. This is because the Earth is round. • Show pictures of the Earth taken from space. What shape is it? • Let learners individually search using the Internet for photographs of the world taken from space. • In groups, let the learners compare their findings and use these to make a summary of the available proof that the Earth is round. <hr/> <p>Rotation of the Earth</p> <ul style="list-style-type: none"> • Explain that the Earth moves and not the sun and this has been proved by scientists like Copernicus. • Spin the globe or football to show the axis. Explain that the Earth spins/rotates on an axis. • Ask: In which direction are we moving in relation to the sun: at sunset; at sunrise? • Ask: Where are we in relation to the sun: in daytime; at night? • Explain that the rotation of the Earth causes day and night. • Demonstrate the rotation of 	<p>Give the learners a task to draw diagrams to show:</p> <ul style="list-style-type: none"> - Why we have day and night Why there are seasons <p>Use a diagram to show 4 positions of the movement of the Earth round the sun</p>

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
	<p>the Earth with a globe or football and light source.</p> <hr/> <p>Revolution of the Earth</p> <ul style="list-style-type: none"> • Explain that the earth revolves or moves round the sun once a year. • Demonstrate the revolution of the Earth with a globe or ball moved round the classroom with a source of light in the middle. • Demonstrate and draw diagrams to show that the axis is tilted. • Demonstrate using a globe or football that poles do not move and the equator moves round fastest. • Move a tilted globe or ball, with poles marked, round the 'sun'. Ask: Which parts of the Earth are tilted towards or away from the sun at different times? Ask: When will it be hotter or colder: when we are tilted away or towards the sun? • Explain and demonstrate that this causes seasons: hot or summer when tilted towards sun, and cold or winter when titled away from sun. • Explain spring: moving from winter to summer; and autumn moving from summer to winter. • Challenge the learners to suggest why places near the equator do not have hot and 	<p>and ask questions about the seasons in different places.</p>

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
	<p>cold seasons.</p> <ul style="list-style-type: none"> • Move a globe or ball to a position when north is tilted towards the sun. • Ask: For how long will a place near the North Pole be in the sun; for how long will a place near the South Pole be in the sun? • Explain the different lengths of day and night in summer and winter. • Let the learners research on the Internet or in textbooks for any sets of diagrams or pictures which explain seasons. 	

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Topic 6: Weather and Climate

Duration: 7 hours

Competency

The learner understands the main elements of weather, their causes, how they are measured and recorded and uses the weather data collected in the local area when carrying out his/her activities.

Sub-topic 1: Elements of Weather and their Measurement

Duration: 3 Hours

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
The learner should be able to: <ol style="list-style-type: none"> know the meaning of weather and climate. understand the elements of weather. understand the difference between weather and climate. understand what a weather station is and conditions influencing its location. know the instruments at a weather station and how each is used. measure and record weather 	What is Weather? <ul style="list-style-type: none"> In groups, let the learners go outside, observe and describe the weather at the moment. The learners mention the elements of weather observed. List them on the blackboard. Ask the learners to list other elements of weather not observed. Explain that these describe the weather of a place. Ask: What is climate? Let the learners individually explain what they understand by climate. In groups, let the learners explain the difference between weather and climate. Explain that weather describes conditions of the atmosphere at a particular 	1. Give the learners a task to describe the weather in the local area at the current season and suggest how this affects people living in the area. 2. Give the learners a task to describe the weather in different seasons in the local area.

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>and keep a weather diary for the local area.</p> <p>g. appreciate the importance of measuring and recording weather to farmers and other people.</p> <p>h. appreciate that weather influences our day-to-day activities.</p>	<p>moment; climate describes what the weather is usually like.</p> <p>-----</p> <p>The Weather Station</p> <ul style="list-style-type: none"> • Task the learners to list the elements of weather and the instruments used to measure each. • List the learners' ideas on the chalkboard and add those not mentioned, if any. • Explain that the place where these instruments are kept is called a weather station. • In groups, let the learners discuss the conditions considered when establishing a weather station. • Present a drawing of a Stevenson screen and ask the learners to describe its features. Let the learners copy this in their books. • Let the learners identify the instruments kept in a Stevenson screen. • As a class, the learners discuss the importance of a Stevenson screen at a weather station. • The learners look up instruments found at a weather station on the Internet, textbooks or at a local weather station. • Let the learners carry out a project on making some 	<p>3. Give the learners an exercise to draw diagrams of selected weather recording instruments and to explain how each is used at a weather station.</p>

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
	<p>weather recording instruments. Let them use these to record local weather.</p> <ul style="list-style-type: none"> • In groups or pairs, the learners research the importance of a weather station and present their findings in a whole class discussion. 	

Sub-topic 2: Clouds and Rainfall

Duration: 2 Hours

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>The learner should be able to:</p> <ol style="list-style-type: none"> know the names and characteristics of the main types of clouds and rainfall. understand that clouds are a collection of water droplets. recognise the main types of clouds by observing them from outside. understand 	<p>Types of Clouds</p> <ul style="list-style-type: none"> • Explain that there are three main types of clouds: low, medium and high. Write them on the chalkboard: <ul style="list-style-type: none"> - Cirrus (very high and thin) - Stratus (medium, thick and flat) - Cumulus (low, thick and tall) - Cumulonimbus (low, thick, tall) • The learners move outside, observe and identify the types of clouds and their characteristics. • Ask the learners to suggest how cloud cover can be measured in an area. • Explain that cloud cover is estimated using our eyes. • Challenge the learners to explain the relationship between clouds and rainfall. 	<ol style="list-style-type: none"> 1. Give learners a task to work in pairs and observe clouds in the local area for two weeks. They make a report pointing out the types seen each day and their characteristics. 2. Give the learners a task in which they suggest the types of

<p>how cloud cover is measured and recorded.</p> <p>e. understand how the different types of rainfall are formed.</p>	<p>Rainfall</p> <ul style="list-style-type: none"> Ask the learners to mention the types of rainfall they know. List them on the chalkboard. In groups, the learners discuss how each type of rainfall is formed. The learners use diagrams to illustrate the formation of each type of rainfall. Ask: In which part of Uganda is each type of rainfall most likely to be experienced? 	rainfall received in the local area and give reasons for their suggestions. Let them use diagrams to explain how each type of suggested rainfall is formed.
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Sub-topic 3: Recording Elements of Weather on Maps and Graphs

Duration: 2 Hours

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>The learner should be able to:</p> <p>a. draw simple graphs to represent rainfall and temperature.</p> <p>b. know the different isolines used to record elements of weather on maps.</p> <p>c. describe climate from a graph.</p>	<ul style="list-style-type: none"> Present climate statistics for a station in East Africa and challenge the learners to draw a graph to represent this. Explain that elements of weather can be represented on maps by joining places of equal amounts using lines called Isolines i.e. Isobars, Isohyets, Isohels, Isotherms. Present maps with isolines and demonstrates to the learners how these are used to represent elements of weather. Let the learners do exercises to practise drawing climate graphs and isolines. 	Give the learners two climate graphs from different climatic zones. They: <ul style="list-style-type: none"> a. describe the climate shown on each graph. b) suggest the ways of life of people living in the area represented by each graph.

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Topic 7: Introduction to East Africa

Duration: 3 Hours

Competency

The learner knows the countries making up East Africa; their comparative sizes and understands the main relief regions and human activities carried out in each of them.

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>The learner should be able to:</p> <ul style="list-style-type: none"> a. know the names of the countries of East Africa. b. locate East Africa on a map. c. draw a map of East Africa. d. know the approximate size of the countries of East Africa and analyse these using a simple graph or chart. e. know the main relief regions of East Africa and the characteristics of each. f. locate the relief regions of East Africa on a map. g. draw a map to show the main relief regions of East Africa. h. recognise relief 	<p>Location, Size and Countries of East Africa</p> <ul style="list-style-type: none"> • Present a wall map/textbook/atlas map of East Africa and ask the learners to: <ul style="list-style-type: none"> - identify the countries of East Africa. - describe the position of East Africa. • The learners copy the map in their books. • Present a table showing the areas (size) of individual countries of East Africa and ask the learners to draw a bar graph or pie chart to represent this. <hr/> <p>Relief Regions of East Africa</p> <ul style="list-style-type: none"> • The learners work in groups to carry out research on the relief regions of East Africa. Let them suggest reasons why each region is named so. • Through discussion, the 	<ol style="list-style-type: none"> 1. Give the learners a map showing the relief regions of East Africa and ask questions such as the following: <ol style="list-style-type: none"> a) Name the relief regions. b) Choose any three relief regions and explain the main human activities carried out in each of them. 2. Give out photographs from different relief regions and ask the following questions: <ol style="list-style-type: none"> a). Describe the relief of the area shown in each photo. b) Identify human activities in each photograph and

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
regions on photographs. i. understand the effect of relief on human activities. j. appreciate that relief greatly affects the way of life of the people.	learners present reports pointing out the location, characteristics and influence of each region on people's ways of life. <ul style="list-style-type: none"> • Summarise their report on the chalkboard. Correct mistakes made, if any. 	explain how they are related to relief. c) Suggest the relief region from which each photo could have been taken.

Topic 8: Formation of Rocks and Major Landforms in East Africa

Duration: 22 Hours

Competency

The learner understands how each of the main types of rocks and landforms in East Africa were formed and how rocks affect the lives of people.

Sub-topic 1: Rocks of the Earth

Duration: 2 Hours

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>The learner should be able to:</p> <ul style="list-style-type: none"> a. know the main rock types. b. describe the characteristics of the main types of rock. c. identify the main types of rocks through fieldwork. d. use diagrams to describe how the main rock types were formed. e. understand the influence of rocks on landform formation. f. understand the influence of rocks on 	<ul style="list-style-type: none"> • If possible, show samples of some of the main types of rock and ask the learners to identify any differences they can see. • In pairs, the learners discuss what they understand by a rock and present their views to the class. • Explain that every rock is a combination of minerals. • Explain that there are three main types of rock: <ul style="list-style-type: none"> - Igneous/volcanic rock. - Sedimentary rocks. - Metamorphic rocks. • The learners research from textbooks or on the Internet for diagrams illustrating how each type of rock is formed. • In groups, the learners 	<ol style="list-style-type: none"> 1. Give the learners a group task to carry out a fieldwork study of a local area to identify rocks in the area. They explain how rocks affect landscape and human activities in the area. 2. The learners choose any two types of rocks and draw diagrams to explain how they are formed. 3. Let the learners imagine they live in an area with one of the rock types. Let them suggest how the

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
people's ways of life. g. appreciate that rocks greatly influence landforms and human activities.	carry out a fieldwork study of a local area to identify rocks in the area. Let them discuss the influence of rocks on landforms and human activities.	rocks would affect their own lives.

Sub-topic 2: Faulting, Down Warping and Vulcanicity

Duration: 8 Hours

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
The learner should be able to: a. know the meaning and causes of faulting. b. know the relief features resulting from faulting. c. use diagrams to explain the formation of faulted landforms. d. locate features formed by faulting on a map. e. recognise faulted landforms on photographs. f. understand the benefits and problems associated with	Faulting <ul style="list-style-type: none"> • Show diagrams of faulting. Ask: If a fault or crack occurs, what might happen to the land along the fault line? • Explain with the aid of diagrams faults and the main effects of faulting, including rift valleys, block mountains and escarpments. • Show the map of East Africa and ask where the rift valleys and block mountains are (eastern and western rift valleys and block mountains – Rwenzori, Usambara, Pare, etc.) • The learners individually 	1. Task the learners to use a diagram to explain how any one landform in East Africa was formed due to faulting. Let them explain how the landform affects the lives of the people.

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>g. appreciate that faulting has both positive and negative effects on our ways of life.</p>	<p>features formed by faulting.</p> <ul style="list-style-type: none"> • In groups, the learners discuss and suggest the advantages and problems of living in an area with features formed by faulting. • Let the learners search the Internet or textbooks for diagrams of features formed by faulting. Let them draw these in their books. <p>Case Study: The Rhine Rift Valley</p> <ul style="list-style-type: none"> • Using the map of Germany, describe the extent of the Rhine Rift Valley. Ask the learners to draw a cross section of the rift valley and annotate it. • Let the learners draw diagrams to explain how the Rhine Rift Valley was formed. • Show photographs of farms in the Rhine Rift Valley and ask the learners to explain how relief influences human activities in the region, including the likely problems facing farmers in the area. • In groups, the learners conduct research about 	

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
	<p>factors favouring viticulture in the Rhine Rift Valley and the benefits of this type of farming.</p>	
<ul style="list-style-type: none"> a. understand the meaning of vulcanicity. b. know the features formed by volcanic eruptions c. use diagrams to explain the formation of volcanic features. d. draw a map to show volcanic features in East Africa. e. recognise volcanic features on photographs. f. understand the benefits and problems associated with volcanoes. g. appreciate that volcanoes have both positive negative effects on our lives. 	<p>Vulcanicity</p> <ul style="list-style-type: none"> • Ask the learners: What happens when molten rock material rises to the earth's surface? Where does this occur in East Africa? • Explain using diagrams how volcanoes, including volcanic mountains, plugs, craters, and calderas are formed. • Using diagrams, explain how sometimes molten rock may fail to reach the surface of the earth. When it cools and solidifies inside the crust, it forms underground/intrusive features e.g. batholiths, sills and dykes. • Explain that the features formed when molten rock cools and solidifies inside the earth's crust are called intrusive igneous landforms. • Let the learners suggest the advantages and problems of living in a volcanic area. • Let the learners look for diagrams and pictures of volcanoes in East Africa 	<p>Give an exercise about the dangers and advantages of living in a volcanic area. Let them learners explain why volcanic areas or former volcanoes often have a high population density.</p>

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
	on the Internet.	
<p>a. understand what down warping is and the forces that cause it.</p> <p>b. draw diagrams to explain the effects of down warping on landscape.</p> <p>c. locate down warped lake basins on a map.</p> <p>d. appreciate that down warping has great influence on the relief, drainage and resources of East Africa.</p>	<p>Down Warping</p> <ul style="list-style-type: none"> Ask the learners: What is a plateau? How much of East Africa is a plateau? Using a diagram, explain how the plateau can be warped or sink down slightly in some places. The learners suggest where this has happened most in East Africa. (L. Victoria and L. Kyoga basin). The learners copy the diagram and summarise the process of down warping in their notebooks. In groups, the learners discuss the benefits and problems of the features formed by down warping. 	<ol style="list-style-type: none"> Give the learners a task to use (a) diagram(s) to explain the effects of down warping on landscape in East Africa. The learners explain the benefits the people of East Africa get from down warped features.

Sub-topic 3: Landforms Resulting from the Wearing away of Rocks of the Earth

Duration: 12 Hours

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>The learner should be able to:</p> <p>a. know what weathering and landslides are.</p> <p>b. understand the</p>	<p>Rock Weathering</p> <ul style="list-style-type: none"> Present samples of unweathered rock and loose rock material or soil and ask the learners to examine them. Explain that the loose material was at one time a 	<p>Give the learners an exercise to draw a tree diagram to summarise the types of</p>

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>main types of weathering and landslides.</p> <p>c. understand the conditions under which each type of weathering and landslides take place.</p> <p>d. recognise the effects of weathering on rocks through fieldwork.</p> <p>e. recognise the effects of landslides on landscape and human activities on photographs.</p> <p>f. realise that weathering influences human activities.</p> <p>g. realise that landslides affect human activities negatively.</p> <p>h. appreciate the need to regulate human activities on steep slopes in order to prevent landslides.</p>	<p>hard rock material.</p> <ul style="list-style-type: none"> • The learners are tasked to explain how the rock material could have broken into the loose material. • Explain that the process by which rocks are broken down into loose material is called weathering. • Explain the main types of weathering, their processes and conditions under which each takes place: <ul style="list-style-type: none"> - Physical weathering - Chemical weathering - Biological weathering • In groups, let the learners conduct a field study of a local area to identify the effects of weathering on rock material and human activities. The learners then present their reports to the class for discussion. <p>Landslides</p> <ul style="list-style-type: none"> • Using diagrams or photographs, explain the main types of landslides: <ul style="list-style-type: none"> - Mudslides, soil creep, rock falls and earth flows. • Challenge the learners to identify places in East Africa which experience landslides. • List these on the chalkboard: Mt. Elgon region, Mt. Rwenzori, Kigezi highlands etc. • Ask the learners: When do 	<p>weathering. The learners briefly explain any two processes of each type of weathering.</p> <p>Task the learners to imagine they live on a mountain slope that receives heavy rains. Let them explain the precautions they would take to avoid the occurrence of landslides.</p>

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
	<p>landslides occur?</p> <ul style="list-style-type: none"> • Explain that landslides commonly occur in steep, wet highland areas. • In groups, let the learners study photographs of landslides and find answers to the question: How does a landslide affect: <ul style="list-style-type: none"> a) Landscape? b) Human activities? • In groups, let the learners discuss and suggest ways of preventing landslides. 	
<p>a. know the meaning of glaciation and features resulting from glaciation.</p> <p>b. understand the processes by which ice erodes and transports rock material.</p> <p>c. draw diagrams to explain the formation of landforms by ice.</p> <p>d. recognise on photographs the features formed by ice.</p> <p>e. explain the benefits and problems of glaciation.</p> <p>f. appreciate the positive and negative effects of glaciation on people's lives.</p>	<p>Erosion by Ice (Glaciation)</p> <ul style="list-style-type: none"> • Present photographs showing ice on mountains e.g. Mt. Rwenzori, Mt. Kenya, or Mt. Kilimanjaro. • Ask the learners: What will happen to the rocks and soil when ice moves? <ul style="list-style-type: none"> - Use diagrams and photos to explain the processes of glaciational erosion: frost action, plucking, abrasion. • Using the same diagrams and photos you have used above, explain the features formed by glacial erosion: cirque/corrie, tarn, arêtes, glacial troughs, pyramidal peak/horn, hanging valleys, etc. • Let the learners copy these in their notebooks. • Explain that the rock material eroded and carried by ice glaciers is called moraine or till. 	<p>Task the learners to use diagrams to explain any one glacial landform in East Africa. Let them explain the likely effects of glacial features on human activities in the areas where they exist.</p>

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
	<ul style="list-style-type: none"> Let the learners discuss the benefits and problems of glaciation. List the ideas given by the learners on the chalkboard and add any not mentioned. 	
<ol style="list-style-type: none"> know what a coast is and the main features found at the coast. know what waves are and the main types of waves. understand how the main coastal landforms were formed by waves. recognise coastal features in photographs. understand how coastal features affect people's ways of life. appreciate that coastal features have both positive and negative effects on people. 	<p>Lake and Sea Coasts: Coastal Features</p> <ul style="list-style-type: none"> If possible visit a lake, observe and ask the learners: How does the water move? What causes it to move? What effects does this have where the waves break? Where does the material on the shore come from? Using diagrams, explain how waves move, break against the coast, and how they erode material from the coast: hydraulic action (breaking waves hit the coast and remove some rock material along cracks). Use diagrams and photos to explain coastal features formed by wave erosion: cliffs, notches, caves, blow holes, arches, stacks, etc. Use diagrams and questions to explain coastal features formed by deposition: beaches, spits and bars, lagoons, etc. In groups, let the learners discuss the benefits and problems of coastal landforms. 	<p>Use a scenario of a family living by a lakeside with numerous erosional and depositional features, and ask the learners to explain how any two features in each category were formed. Let them suggest how the family can use those features to earn a living.</p>
a. know what coral	Coral Reefs	Give the

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>reefs are and places where they are found.</p> <p>b. know the different types of coral reefs.</p> <p>c. understand the conditions under which coral reefs form.</p> <p>d. use diagrams to illustrate the different types of coral reefs.</p> <p>e. recognise coral reefs on photograph.</p> <p>f. appreciate that the coral reefs influence people's ways of life.</p>	<ul style="list-style-type: none"> • Present photographs of coral reefs and ask the learners to describe the features shown and to suggest what they are. • Explain that tiny creatures called coral polyps live in some areas of the sea near the shore. When they die, their skeletons get cemented together to build a solid white rock called coral limestone. • Explain that when coral forms a chain of rocks covering a large area, it is called a coral reef. • Using diagrams, explain the different types of coral reefs: <ul style="list-style-type: none"> - Fringing reefs - Barrier reefs - Atoll • In groups, let the learners discuss and suggest the benefits and problems of coral reefs. • Write the learners' ideas on the chalkboard and add those not mentioned, if any. • In groups, let the learners do research about coral reefs, conditions favouring their formation and places where they occur in East Africa. Let the groups present their findings in a whole class discussion. 	<p>learners a task to use diagrams to describe any two types of coral reefs. Let them give reasons why there are no coral reefs in inland lakes such as L. Victoria and L. Kyoga.</p>

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Term 3

Topic 9: Rivers and Drainage Patterns in East Africa

Duration: 9 Hours

Competency

The learner understands how rivers modify landscape, their benefits and problems; and appreciates the different ways river valleys can be harnessed for development.

Sub-topic 1: The Work of Rivers on Rocks 3 Hours

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
The learner should be able to: <ol style="list-style-type: none"> a. know the difference between a stream and a river. b. know the major rivers of East Africa and their names. c. draw a map showing the major rivers of East Africa. d. understand how rivers change landscape through erosion and deposition. e. understand the 	<ul style="list-style-type: none"> • Challenge the learners to explain what a river is and how rivers form. • Ask the learners: Where in East Africa are rivers likely to start? • The learners name any three rivers they know in each country of East Africa. List these on the chalkboard. • Using a wall map, atlas or chalkboard, show the main rivers of East Africa. Ask the learners to identify the rivers they have mentioned and to draw it in their notebooks. • If possible, let the learners visit a river or stream and observe how it erodes the land, carry its load and deposit. • Explain the four processes by which a river erodes its valley. • Using diagrams and photos, 	Task the learners to think of any river they know in East Africa. Let them describe how this river erodes its valley or deposits material.

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
main stages of a river valley and the features of each stage. f. identify the effects of rivers on landscape through fieldwork. g. appreciate that rivers greatly affect landscape and human activities.	explain the main stages of a river course and features found in each: youthful stage, mature stage, old stage. <ul style="list-style-type: none"> • Let learners visit a local stream or river to identify the stages and related features. • Give the learners the task to look up on the Internet each of the features along a river valley and find their photographs. 	

Sub-topic 2: Drainage Patterns

Duration: 1 Hour

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
The learner should be able to: <ul style="list-style-type: none"> a. know the main patterns formed by streams and rivers on landscape. b. draw diagrams to illustrate the main drainage patterns. c. recognise drainage patterns using survey maps and photographs. d. appreciate that 	<ul style="list-style-type: none"> • Using diagrams or topographic maps of different areas, challenge the learners to work in groups to identify the main rivers and their tributaries. • In groups, let the learners describe how each river and its tributaries are arranged on the ground over which they flow. • Explain that the plan formed on the ground by rivers and their tributaries is called a drainage pattern. All rivers do not have the same drainage pattern. • The learners individually draw diagrams of different drainage patterns in their notebooks 	Give out a survey map of a hilly or dissected plateau area. Use this to ask questions on the main drainage patterns.

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>the flow of streams and rivers is influenced by relief and nature of the rock.</p>	<p>and write a description of each.</p> <ul style="list-style-type: none"> For each of the main patterns, briefly explain conditions leading to its formation. 	

Sub-topic 3: How River Valleys Affect People's Ways of Life

Duration: 5 Hours

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>The learner should be able to:</p> <ol style="list-style-type: none"> understand the benefits of rivers to people. understand the problems faced by people living in river valleys. locate the Tennessee River Valley on a map. know the names of states in the Tennessee River Valley. understand, through case studies, how the problems facing people in river valleys can be overcome. draw a map to show the area of 	<ul style="list-style-type: none"> Learners work in groups to find answers to the questions: Have you ever lived near a river or seen people living near a river? What benefits do people get from rivers? Let group ideas feed into a whole class discussion. List these on the blackboard and add those not listed if any. In groups, let learners discuss the problems people living in river valleys are likely to face and suggest ways of overcoming these. List these on the blackboard and add any not mentioned. <hr/> <p>Case Study of Development of a River Basin: The Tennessee River Valley (USA)</p> <ul style="list-style-type: none"> In pairs, the learners study a textbook, atlas or chalkboard map to identify the area drained by the Tennessee River and its 	<p>1. Ask the learners to think of any one river they know in East Africa and explain how useful it is to the people in the region.</p> <p>2. Give an exercise about the Tennessee Valley Authority and its activities in the Tennessee</p>

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>the case study.</p> <p>g. recognise through photographs the benefits and problems of river valleys.</p> <p>h. appreciate the need for government programmes to develop river valleys.</p>	<p>tributaries.</p> <ul style="list-style-type: none"> • The learners suggest the problems people living in the Tennessee Valley area are likely to be facing. Pair ideas feed into a class discussion. List these on the chalkboard and add any unmentioned problems. • Explain that those identified problems were faced in the Tennessee Valley before 1933. • Explain the general living conditions in the region before the creation of the Tennessee Valley Authority. • Let the learners suggest the steps that might have been taken to improve on the living conditions in the region. List these on the chalkboard and explain other steps that were taken by the Tennessee Valley Authority to improve on the living conditions in the region. • In groups, the learners conduct a library/internet research on the benefits and problems created by the Tennessee Valley in the region. 	<p>River basin. The learners compare the utilisation of rivers, as a resource, in East Africa and USA.</p>

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Topic 10: The Soils of East Africa

Duration: 6 Hours

Competency

The learner understands the processes of soil development, causes and ways of controlling soil erosion in order to conserve soils and landscape.

Sub-topic: Soil Types and Soil Development

Duration: 6 Hours

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>The learner should be able to:</p> <ul style="list-style-type: none"> a. know the main types of soil and [places where they occur. b. understand the main processes of soil formation and development. c. understand that soil mainly develops from rock materials. d. recognise, through fieldwork, the types of 	<p>Soil Types</p> <ul style="list-style-type: none"> • Present samples of the main soil types and let the learners work in groups to identify each type of soil. • Explain that soil is divided into three main types: loam soil, clay soil, sandy soil. • Using the same soil samples, ask the learners to suggest materials from which each soil type is formed. • Explain that soil is formed from rocks and the remains of living things, especially vegetation. <hr/> <p>Soil Development</p> <ul style="list-style-type: none"> • With the help of questions, revise rock weathering and soil formation, and factors influencing soil formation. • Using a diagram of a simple soil profile, ask the learners to draw it, identify and name the layers. • Explain that sometimes the soil profile may have a hard stony reddish-brown layer in the sub-soil. This is called laterite. • Explain that laterite is formed by leaching. 	<p>1. Group the learners and task them to conduct a fieldwork study of a local area to identify the soil types and soil catena. Groups write reports and share these in class.</p> <p>2. Give an exercise on the causes and dangers of soil erosion, and ways it can be</p>

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>e. know the main types of soil erosion and their causes.</p> <p>f. understand the problems caused by soil erosion especially on farmland.</p> <p>g. explain the different methods used to control soil erosion and suggest those suitable to the local area.</p> <p>h. appreciate the need to sensitise farmers on the dangers of soil erosion and the need to conserve soil.</p>	<ul style="list-style-type: none"> • Ask the learners: Have you ever seen a garden on a hill slope, or have you moved along a hill slope from the valley up to the hill top? Is the same type of soil found along the hill from the bottom to the hill top? • Using a diagram, explain a soil catena. • Allow the learners to copy the diagram and annotate it. • In groups, guide the learners to discuss and suggest why soil changes with height even over a small area. <hr/> <p>Soil Erosion and Soil Conservation in East Africa</p> <ul style="list-style-type: none"> • The learners observe a gentle area outside the classroom. Ask: What happens to some of the soil when it rains? • Explain that when rain water flows over bare ground, it washes away top soil over a wide area. This is called sheet erosion. • Let the learners observe any steep slope or a drainage trench on the roadside. Ask: What happens to the soil when it rains? • Explain that on steep slopes, water running downslope collects in small channels called rills and deepens them as it washes away more soil. This is called rill erosion. Ask the learners to individually draw a simple diagram to illustrate this. • Ask the learners: What happens to rills if more water runs along them and removes more soil? Explain gully erosion. • The learners individually draw a 	<p>prevented.</p>

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
	<p>simple diagram to illustrate gully erosion.</p> <ul style="list-style-type: none"> • In groups, guide the learners to discuss and suggest which of the three types of soil erosion is most destructive and why. • Let the learners list areas they know in Uganda and the rest of East Africa which experience soil erosion. List them on the chalkboard. • Task the learners to study and draw a textbook or chalkboard map of East Africa showing areas affected by soil erosion and identify those they have listed. • Use question technique to discuss the main causes of soil erosion in different areas of East Africa. • In pairs, let the learners carry out library or the Internet search on ways of controlling soil erosion, and places in East Africa where each method is used. • Pair findings feed into a class discussion. • Summarise these on the chalkboard and add those left out, if any. 	

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Topic 11: Climate and Natural Vegetation of East Africa

Duration: 8 Hours

Competency

The learner understands the main types of climate in East Africa, and how the climate influences the vegetation and ways of life.

Sub-topic 1: Types of Climate and Factors Affecting Climate in East Africa

Duration: 5 Hours

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>The learner should be able to:</p> <ul style="list-style-type: none"> a. know the main types of climate in East Africa. b. understand the characteristics of each type of climate in East Africa. c. locate the types of climate in East Africa on a map. d. understand the factors affecting the climates and their distribution. e. understand how climate affects people's lifestyles in each climatic region. 	<p>Types of Climate in East Africa</p> <ul style="list-style-type: none"> • Show a climate graph for each type of climate, un-named (Use two Savannah graphs for north and south of the equator). • In groups, the learners describe climate from the graph, answer questions and describe the type of climate. • Show all climatic regions on wall or chalkboard map. • Explain by questioning from climate graphs: Equatorial, Savannah, semi-arid, Montane and coastal climates. • Let the learners draw sketch maps to show climatic regions of East Africa. <hr/> <p>How Climate Influences People's Lives</p> <ul style="list-style-type: none"> • Present photographs showing land use and people's ways of life in different climatic regions of East Africa. 	<ol style="list-style-type: none"> 1. Give out two climate graphs different from those already used, or climate statistics and ask the learners to draw graphs. The learners describe the climates and explain how people would live in each area. 2. Give out sketch maps of East Africa with climatic regions marked, not named. Learners use a

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
f. appreciate that people's ways of life are mainly influenced by climate especially rainfall amounts and distribution.	<ul style="list-style-type: none"> • In groups, the learners study each photo and suggest how the climate affects the way people in that type of area live, what economic activities they carry out, their dressing styles, etc. • Explain that traditionally, the way people lived depended mainly on the climate. • Challenge the learners to suggest why many people's way of life is less affected by the climate today. 	key and shading to show the names of each type of region.

Factors Affecting the Climate of East Africa

Temperatures and Rainfall

- Through questioning, revise Topic 6: Why do most places in East Africa have a hot climate? Which places are cooler and why?
- Ask the learners: Which type of rainfall is formed when hot air rises into the atmosphere?
- Explain that because most places are hot, the most important type of rainfall in East Africa is convectional.
- The learners work in groups to find answers to the following questions:
 - i) When is the northern hemisphere tilted towards the sun and when is it towards the southern hemisphere?
 - ii) What months will it be hottest in East Africa north of equator; and what months will be hottest in south?
- Explain that most rain occurs at the hottest time (summer).
- Ask questions and explain other

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
	factors affecting temperature and rainfall.	

Sub-topic 2: Natural Vegetation of East Africa

Duration: 3 Hours

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>The learner should be able to:</p> <ul style="list-style-type: none"> a. know the main types of natural vegetation in East Africa. b. draw a map to show the main types of vegetation in East Africa. c. understand the factors affecting vegetation distribution in East Africa. d. understand the relationship between climate and vegetation in East Africa. e. recognise vegetation types on photographs. f. carry out fieldwork and identify vegetation types and their benefits to the local people. g. appreciate the need 	<p>Types of Vegetation</p> <ul style="list-style-type: none"> • Present photographs of each type of vegetation and ask the learners to study them. • In groups, the learners describe vegetation and suggest, with reasons, what type of climate it comes from. • Let the learners use their knowledge of climate of East Africa to draw a sketch map showing vegetation types. • By questioning, discuss other factors influencing vegetation distribution in East Africa. • In pairs, the learners discuss and suggest why some types of vegetation in East Africa (e.g. Equatorial forests and Savannah woodlands) are decreasing in size. • In groups, let the learners visit a local area; investigate vegetation types 	<p>Give out a sketch map of East Africa with vegetation types marked, not named. The learners use shading and construct a key to show the names of each type of vegetation. They explain the characteristics of any two vegetation types.</p>

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
to conserve natural vegetation including that in the local area.	and how each type benefits the community.	

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Topic 12: Forestry in East Africa

Duration: 8 Hours

Competency

The learner understands factors affecting the development of forestry, the contribution of forestry to the economy, the dangers facing forest resources in East Africa and ways to make them sustainable.

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>The learner should be able to:</p> <ul style="list-style-type: none"> a. know what forestry is, the main types of forests and examples of each. b. draw a map of East Africa and locate the main types of forests. c. know the major tree species in East Africa and the case study area and how they affect development of the forest industry. d. understand factors affecting forestry. e. understand the benefits and problems 	<p>East Africa's Forests and their Value</p> <ul style="list-style-type: none"> • Ask the learners: What are the main types of forest in East Africa? List them on the chalkboard: natural and planted forests. • Ask the learners: From your previous knowledge, where are the main natural forests in East Africa found, and how are these forests related to the climate? What tree species do you know that grow in these forests? What type of timber do they produce? • Learners draw a map showing the main types of forest in East Africa. • In groups, the learners discuss the benefits of forests. Group ideas feed into a whole class discussion. • In groups, the learners study photographs of logging, describe what they see and construct a flow diagram to show the production, use and export of timber (show 	<ol style="list-style-type: none"> 1. Give statistics or photographs about forestry in both East Africa and British Columbia and ask questions about them. The learners use their knowledge about forestry to interpret and analyse the stimulus materials given. 2. Give a task involving imagination that one is in a position controlling all forests in a country or district. Ask questions concerning: <ol style="list-style-type: none"> a) destruction of forests.

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>f. understand the challenges facing the development of forest resources.</p> <p>g. understand, through case studies, how forest resources have been developed in other parts of the world.</p> <p>h. draw a map showing the forested areas, major timber centres and ports in the case study area.</p> <p>i. recognise features related to forestry from photographs.</p> <p>j. appreciate that forests are an important resource which should be conserved.</p> <p>k. draw simple graphs and</p>	<p>clearing roads/paths, felling a tree, cutting timber into logs, transportation, log collection points, export overseas or local use in a timber factory).</p> <ul style="list-style-type: none"> • The learners suggest why it is better to process the timber and make wood products in East Africa than selling logs overseas. • Ask: What kind of factory can be developed to process wood into products? What are the difficulties in doing this (furniture industry, building, paper; main difficulty is inadequate capital)? <p>Destruction of Forests in East Africa</p> <ul style="list-style-type: none"> • Ask the learners if they have heard of destruction or illegal cutting down of forests in Uganda. Why is this happening? What are the trees used for? • Explain that this is happening in all forested areas of East Africa. • Ask: What are the dangers of cutting down too many forest trees? What are the difficulties of controlling this? • The learners suggest how this can be controlled and how we can replace the forests. 	<p>b) policies to control the cutting down of forests.</p> <p>3. Give the learners a task to compare aspects of forestry in British Columbia and East Africa.</p>

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>charts represent statistics related to forestry.</p>	<ul style="list-style-type: none"> • Explain that replanting only works partially because planted forests do not contain the same variety of species as natural forests and hard wood trees take long to grow. • Let the learners look up information on the Internet about deforestation in Africa. <p>Case study: Forestry in British Columbia</p> <p>Location, relief, soils and vegetation</p> <ul style="list-style-type: none"> • The learners use a wall map or chalkboard map, atlas or the Internet to locate British Columbia. • Explain that it is a province in Canada and called British Columbia because Canada used to be ruled by the British. • The learners describe relief from the wall or atlas map. • Ask: Can this kind of relief allow farming to be carried out so that people can get food and raw materials for industries? • In groups, let the learners use the position and relief of British Colombia to describe the climate of British Columbia. • Ask: With that kind of relief, do you expect British Columbia to be having deep fertile soils? 	

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
	<ul style="list-style-type: none"> • Explain that the soils of British Columbia are thin, porous and infertile. This discourages crop farming in most parts of the province except in a few valleys with alluvial soils. • In groups, let the learners identify some of those valleys on the maps. • Allow the learners study photographs showing areas in British Columbia and describe natural vegetation (forests especially coniferous forests). • Let the learners use the Internet to find photographs of natural vegetation in British Columbia. • Let the learners use photographs to describe the nature of forests in British Columbia and compare them with the tropical forest of East Africa. • Ask: What types (species) of trees are likely to grow in the forests of British Columbia? List these on the chalkboard: Douglas fir, Balsam fir, spruce, Western hemlock; red, white and yellow cedar, Ponderosa pine, etc. <p>Use of Forests: Logging</p> <ul style="list-style-type: none"> • Explain that Europeans developed large scale logging. • In pairs, let the learners study photographs and 	

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
	<p>describe stages in logging or 'lumbering' and movement of timber to sawmill and markets.</p> <ul style="list-style-type: none"> • Let the learners use the Internet or library research to look for information about the use forests in British Columbia. • Let the learners suggest difficulties of logging, including fire problems and need for fire guards. • Let the learners suggest dangers of cutting too many trees: deforestation and effects on climate, wildlife and soils. • Allow the learners to suggest possible solutions: limiting number of trees cut, replanting, etc. <hr/> <p>Processing Timber</p> <ul style="list-style-type: none"> • Ask: Have you ever seen or read about a timber processing factory? What activities take place at the factory? List the responses on the chalkboard and add those not mentioned, if any. • Ask: What products are got from logs? List the responses on the chalkboard and add those not mentioned, if any. • Let the learners study maps and identify the major timber ports and processing centres in British Columbia. They draw the maps in their 	

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
	<p>notebooks.</p> <p>Factors Favouring Forestry</p> <ul style="list-style-type: none"> The learners use their knowledge about climate, relief, soils and vegetation to explain natural factors favouring forestry in British Columbia. Ask: What human factors may encourage the development of forestry? List the learners' responses on the chalkboard and add others not mentioned, if any. <p>Benefits of the Forestry Industry</p> <ul style="list-style-type: none"> In groups, guide the learners to discuss and suggest the importance of conserving forests in British Columbia. List their responses on the chalkboard. Add those not mentioned, if any. <p>Problems Facing Forestry and Ways of Overcoming them</p> <ul style="list-style-type: none"> In pairs, task the learners to carry out research on the problems facing forestry in British Columbia and how they are being solved. Pair findings feed into a class discussion. Summarise their views on the chalkboard and add those not mentioned. 	

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LEVEL 2

Term 1

Topic 13: Fishing in East Africa

Duration: 8 Hours

Competency

The learner know the main fishing areas in East Africa and understands the factors affecting the development of fishing, the contribution of fishing to the economy, problems of fishing and ways fish resources can be used sustainably.

Sub-topic 1: Major Fishing Grounds and Factors

Favouring the Development of Fishing

Duration: 8 Hours

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>The learner should be able to:</p> <ul style="list-style-type: none"> a. know the major fishing grounds in East Africa, inland and on sea. b. describe the methods of catching and preserving fish. c. explain the difference between traditional and modern 	<p>The Fishing Grounds of East Africa</p> <ul style="list-style-type: none"> • Ask the learners to name areas where people fish in East Africa. What sorts of places are they? • Explain two types of fishing areas: the sea and coast (marine); lakes and rivers (in land). • Use a wall map, chalkboard, sketch map or atlas map to show main fishing areas of East Africa. • Let the learners copy the map as sketch map. <hr/> <p>Methods of Fishing</p> <ul style="list-style-type: none"> • If possible, let the learners visit an area where fishing takes place. Let them find out the types of fish caught, what methods are used, where and how the fish are sold, what problems the fishing people have, etc. 	<p>1. Task the learners to choose any one area of East Africa useful for fishing. Let them suggest the best methods to use to gain a good income but preserve</p>

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>d. understand the factors favouring fishing in East Africa.</p> <p>e. recognise aspects related to fishing in photographs .</p> <p>f. analyse and represent statistics on fishing using simple graphs and charts.</p> <p>g. understand the benefits of fishing to the people of East Africa and Canada.</p> <p>h. explain problems facing fishing in East Africa and how they can be overcome.</p> <p>i. understand, through case studies, the dangers to fishing grounds and</p>	<ul style="list-style-type: none"> • Ask the learners what kinds of methods of fishing they have used or observed. Volunteers sketch these on chalkboard and explain methods. • Draw diagrams of the main traditional methods and ask the learners to copy these and explain methods (spears, gill nets, fishing lines, traps, baskets, bow and arrow). • Draw diagrams of modern methods of fishing and explain them (trawling, drift nets, long lining, purse seining and dynamite blasting). • The learners copy the diagrams. • The learners discuss the advantages and disadvantages of each method of fishing, and indicate whether traditional or modern methods are best for conserving fish. • Explain the dangers of some modern methods (drift net and blasting) and why these are banned. • Ask the learners to suggest dangers of using nets with small holes and catching too many young fish and why people do it. • Task the learners to use the Internet or library research to find out more about fishing in East Africa. <hr/> <p>Preservation of Fish</p> <ul style="list-style-type: none"> • Ask the learners if they know of the methods of preserving fish so they can be sent long distances (smoking, salting, sun-drying, canning, and freezing). <hr/> <p>Factors Favouring Fishing</p> <ul style="list-style-type: none"> • Ask the learners to discuss what they think may encourage fishing: <ul style="list-style-type: none"> - Well stocked fishing grounds - Different species 	<p>the fish for future generations.</p> <p>2. Give statistics or graphs about fishing in both East Africa and British Columbia and ask questions about them. The learners use their knowledge of fishing to interpret and analyse the information given.</p>

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>how these can be prevented.</p> <p>j. draw a map of the case study area showing the main fishing grounds.</p> <p>k. appreciate the need for strict laws to conserve fish resources.</p>	<ul style="list-style-type: none"> - Markets and good transport to markets - Capital to buy fishing gear - Government policy to enforce laws against over-fishing and pollution <hr/> <p>Benefits of the Fishing Industry</p> <ul style="list-style-type: none"> • Let the learners discuss and suggest the benefits the fishing communities and the country can get from fishing. List the learners' ideas on the chalkboard and add those left out, if any. • Ask the learners to copy the benefits in their notebooks and illustrate each with relevant examples from East Africa. <hr/> <p>Problems Facing the Fishing Industry in East Africa</p> <ul style="list-style-type: none"> • In groups, let the learners discuss the problems limiting the development of fishing in East Africa. • Groups share their ideas in a whole class discussion. • Summarise the views on the chalkboard, clarify them through explaining and add any left out. <hr/> <p>Solving Problems Facing Fishing in East Africa</p> <ul style="list-style-type: none"> • In groups, let the learners discuss how the problems limiting development of the fishing sector can be solved. • Group ideas feed into class discussion. • List the solutions on the chalkboard and explain more where necessary. Add any solution left out. <hr/> <p>Case Study: Fishing in British Columbia</p> <p>Main fishing grounds and methods of</p>	

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
	<p>catching fish</p> <ul style="list-style-type: none"> • Revise the background to British Columbia in the previous case study on forestry. • Let the learners use a wall map or chalkboard map and atlas to suggest places in British Columbia where fishing takes place. List their views on the chalkboard: Pacific Ocean, at river mouths, rivers in the interior. Let them draw a map showing the main fishing grounds. • Use photographs or pictures to show the main types of fish caught (salmon, halibut, sable fish, rock fish, cod herring). • Use pictures for the learners to describe methods of fishing. Ask: How are these methods different from those used in East Africa? <hr/> <p>Methods of Preserving Fish and Factors Favouring Fishing in British Columbia</p> <ul style="list-style-type: none"> • If possible, give a table of statistics about methods used to preserve fish in British Columbia. The learners draw a pie chart or bar graph to represent these. Or explain the methods. • Ask: Which method is used to preserve the largest amount of fish, and why is this so? • The learners use the map of fishing grounds, knowledge about methods used to catch and process fish to suggest factors favouring fishing in British Columbia. • Explain other factors and list them on the chalkboard. • In groups, let the learners carry out research about the benefits of fishing in British Columbia and Canada. Let them 	

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
	<p>present reports.</p> <hr/> <p>Problems Facing Fishing in British Columbia</p> <ul style="list-style-type: none"> • Let the learners suggest possible dangers to fishing industry, partly using knowledge from the study of East Africa: over-fishing, catching young fish, using small-holed nets, etc. • Use diagrams to show the life cycle of salmon and journey up and down rivers. • Explain blocking of travel of fish down and up rivers by building hydro-electric dams and need to provide 'steps' for fish to climb up by jumping. • Discuss conflict between the need for hydro-electricity and the needs of fishing. • Ask how mining and industries may pollute rivers and the sea. • Explain other ways of conserving fish resources in British Columbia. 	

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Topic 14: Population and Urbanisation in East Africa

Duration: 8 Hours

Competency

The learner understands and appreciates the factors influencing population growth and distribution in East Africa and the effects this has, including on environment and urbanisation.

Sub-topic 1: Population Growth and Distribution

Duration: 2 Hours

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>The learner should be able to:</p> <ul style="list-style-type: none"> a. know the meaning of population growth, distribution, density, under population and over population. b. understand the causes of rapid population growth. c. understand the problems of rapid population growth. d. know the areas of high, moderate and low population density. e. draw a map to show areas of 	<p>Population Growth</p> <ul style="list-style-type: none"> • Present population figures of any one country of East Africa for at least five censuses. • Let the learners individually draw a line or bar graph to represent the information. Let them use the graph to describe how the population is growing. • Ask: Is the population changing fast or slowly? What is causing this (birth and death rates, and rate of natural increase)? • Explain the factors leading to population increase, e.g. improved medical care, cultural and religious beliefs, etc. <hr/> <p>Distribution and Density of Population</p> <ul style="list-style-type: none"> • Present a wall map, chalkboard map or atlas to show distribution of 	<ol style="list-style-type: none"> 1. Give the learners the task to write an essay on why Uganda's population is growing too rapidly and, the measures we should take to reduce the rate of growth. 2. Give out a map showing population density in East Africa with a key. Task the learners to choose any two areas with different

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>high, moderate and low population density.</p> <p>f. draw simple graphs and charts to analyse population statistics.</p> <p>g. understand factors affecting population distribution in East Africa.</p> <p>h. understand the effects of high and low population density.</p> <p>i. suggest ways of reducing rapid population growth.</p> <p>j. appreciate the need to reduce a rapidly growing population.</p>	<p>population in East Africa. Let the learners copy the map in their notebooks.</p> <ul style="list-style-type: none"> • Let the learners work in groups to list: a) areas of high population density b) moderate population density c) low population density • Let the learners suggest reasons for areas of high and low density. • Using the learners' ideas, explain the factors affecting density of population in East Africa: • In groups, ask the learners to discuss the problems of high population densities in rural areas. • Group ideas feed into whole class discussion. • List the learners' views on the chalkboard and add others not given if any. <hr/> <p>Problems of Rapid Population Growth</p> <ul style="list-style-type: none"> • Let the learners hold a debate or discussion on whether the rate of population growth in Uganda needs to be reduced, and if so, how can this be done. Include cultural and religious issues. 	<p>densities and give reasons for the differences.</p>

Sub-topic 2: Rural-Urban Migration and the Growth of Urban Areas

Duration: 6 Hours

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
The learner should be able to: <ol style="list-style-type: none"> a. understand what rural-urban migration is and factors leading to it. b. know the activities carried out in urban areas. c. explain the main differences between urban and rural areas. d. locate major urban areas of East Africa on a map. e. draw maps to show case studies of urban areas. f. understand factors leading to the development of urban centres. g. use graphs to analyse the development of urban 	<p>Rural-Urban Drift</p> <ul style="list-style-type: none"> • In groups, the learners discuss reasons for rural-urban drift: pull factors and push factors. • List these on the chalkboard. Clarify learners' views and add any others not pointed out. <hr/> <p>Growth of Urban Centres</p> <ul style="list-style-type: none"> • In pairs, let the learners use the Internet or textbook to find the population of some urban areas for at least five years e.g. Kampala, Nairobi in 1960, 1980, 2000, 2010, 2015, 2018, etc. • Let the learners discuss the population figures to find out whether the population of urban areas is increasing or falling. • Explain that the continuous increase of the number of people living in towns and cities is called urbanization. It is usually followed by the expansion of such towns or urban areas. • Let the learners work in groups to find out whether people in towns carry out the same activities as those living in rural areas. • Let them draw a table with two columns to distinguish between the activities done in rural and urban areas. • Ask the learners the problems related to rapid growth of urban 	1. Give the learners the task to carry out a fieldwork study of a local town or trading centre. The learners find out: <ol style="list-style-type: none"> a) Where did the people living in the area come from? b) What social and economic activities do the people in the area carry out? c) What factors are responsible for the development of the town? d) What are

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>areas.</p> <p>h. appreciate the effects and problems of urban growth.</p> <p>i. suggest ways of solving problems of urban growth.</p> <p>j. use lessons learnt from case studies to appreciate the need for planning the development of urban areas.</p>	<p>areas and summarise their responses on the chalkboard.</p> <ul style="list-style-type: none"> • Ask the learners to suggest how these problems can be solved or reduced. • Let the learners carry out individual research about any two of these major urban areas of East Africa: Nairobi, Kampala, Dar es Salaam, and Mombasa. <hr/> <p>Case Study: The Development of New York</p> <p>Position and site</p> <ul style="list-style-type: none"> • Use a wall map, chalkboard map and atlas to show the position of New York along the N.E coast of North America and the site of New York. • Let the learners use the map to describe the position and site of New York. • Through questioning, let the learners suggest why New York became an important port. • Explain that the first Europeans settled along the north east coast opposite Europe where they came from. (Ask why it is called New York.) • Explain the importance of New York as a port. • Let the learners use ideas from the above activities to explain factors which led to the growth of New York. <hr/> <p>Growth of New York</p> <ul style="list-style-type: none"> • Present statistics of the growth of New York (population figures), and 	<p>the problems faced by the town?</p> <p>Let them suggest the best ways of solving problems facing the town.</p> <p>2. Task the learners to use the knowledge they have learnt in this topic to write a comparison between New York and Kampala; describing similarities and differences.</p>

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
	<p>challenge the learners to draw line or bar graphs to represent these.</p> <ul style="list-style-type: none"> • Let the learners analyse the graph drawn and explain the growth of New York. <p>Functions of New York</p> <ul style="list-style-type: none"> • In groups, let the learners discuss and list all the things people in Kampala City do. Group ideas feed into a class discussion. • List their views on the chalkboard and add others left out, if any. • Explain that these are called the functions of the city. • Task the learners to use the activities carried out in Kampala to list functions of New York. • List these on the chalkboard and add any left out including: <ul style="list-style-type: none"> - Port - Trade with overseas and interior - International government centre - Tourism, etc. <hr/> <p>Problems of New York</p> <ul style="list-style-type: none"> • Use questioning to revise problems of cities in East Africa. Explain that New York has similar problems although some are less severe. Summarise these on the chalkboard. <hr/> <p>Solving the Problems of Large Cities</p> <ul style="list-style-type: none"> • Ask the learners to discuss, using examples of Kampala or other East African city, and New York, 	

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
	<p>all the above problems and suggest possible ways of solving them.</p> <ul style="list-style-type: none"> • Let the learners carry out individual research about the development of Rotterdam (Netherlands). • Individual reports feed into class discussion. 	

References

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Topic 15: Development of Agriculture in East Africa

Duration: 19 Hours

Competency

The learner understands the importance of agriculture in East Africa, types of agriculture, factors and problems affecting agriculture and their solutions.

Sub-topic 1: Types of Farming in East Africa

Duration: 12 Hours

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>The learner should be able to:</p> <ul style="list-style-type: none"> a. know the main types of agriculture in East Africa, including the main crops grown and animals kept. b. understand the importance of agriculture in both East Africa, and case study areas. c. understand the differences between subsistence and 	<p>Fieldwork on Farming</p> <ul style="list-style-type: none"> • If possible, let the learners visit a farming area, or think of any farming area they know, and report on the size of the farms, type of farming, crops grown and animals kept, methods used, etc. • The learners ask farmers the main problems they face in their farming. <hr/> <p>Types of Farming</p> <ul style="list-style-type: none"> • Using the knowledge obtained through the fieldwork study let the learners divide farming into types. List these on the chalkboard: subsistence, commercial, small scale and large scale farming. • Let the learners individually explain what they understand by subsistence and commercial farming; small scale and large scale farming. • Task the learners to describe the 	<ol style="list-style-type: none"> 1. Ask the learners to imagine that they are the Minister for Agriculture in an East African country. Ask each of them to write a policy or list of ideas how he/she is going to improve agriculture in that country. 2. Give an exercise to compare plantation farming in

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>commercial agriculture, and small scale and large scale agriculture.</p> <p>d. describe the main factors affecting agriculture in East Africa, and case study areas.</p> <p>e. suggest the advantages and disadvantages of small holdings.</p> <p>f. understand the advantages and disadvantages of extensive grain farms and plantations.</p> <p>g. understand, through case studies, the problems of agriculture and ways of improving agriculture in East Africa.</p> <p>h. recognise different types of farming</p>	<p>type of farming that is most common in Uganda.</p> <ul style="list-style-type: none"> Challenge the learners to explain how each of the following factors affects farming in an area they know: climate, soils, relief, money (capital), market for produce, transport, labour, technology and tools used. From the examples above, let the learners decide whether most farming in Uganda and East Africa is: small scale or large scale; subsistence or commercial or both. <hr/> <p>Small Holder Farming</p> <ul style="list-style-type: none"> Use a map and/or photograph to help the learners describe and explain small holding growing crops for subsistence and for sale. Let the learners list the cash crops commonly grown on small holdings in different parts of Uganda and the rest of East Africa. Discuss the advantages of this kind of farming, including mixed cropping. Let the learners suggest and explain the problems caused by increasing population in areas of small holder farming. Discuss methods of conserving the soil including conservation farming. Task the learners to look up soil conservation in textbooks or on the Internet and describe how it applies to East Africa. <hr/>	<p>East Africa and large scale extensive farming in the Prairies.</p> <p>3. Give information about farmers' activities either on a farm or in a farming area. Task the learners to draw a chart or diagram to represent the information. Ask questions about the diagram and the area it represents.</p>

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>from photographs.</p> <p>i. draw diagrams to show seasonal activities on farms.</p> <p>j. draw maps to show different types of farming in East Africa, and case study areas.</p> <p>k. appreciate the importance of agriculture to the economies of East Africa, and case study areas.</p> <p>l. appreciate, through case studies, the need for government policies to assist farmers and develop farming.</p> <p>m. appreciate, through case studies, that development of agriculture depends on the level of economic development and</p>	<p>Improvement of Small Holder Farming</p> <ul style="list-style-type: none"> • Using the learners' experience, discuss the problems of small holder farmers. • Let the learners discuss and suggest how the problems of small holder farmers can be solved and how small holder farming can be improved, including the following: government policies, co-operative societies, better transport and marketing, etc. • Let the learners discuss and suggest solutions to the problems of climate change, including increased drought. • Explain with the use of photographs the different kinds of irrigated farming. • Let the learners discuss the advantages of developing industries to process the products of farming. <hr/> <p>Large Scale Farming and Plantations</p> <ul style="list-style-type: none"> • Ask: Have you seen or heard about large scale farming? Mention areas in East Africa where that type of farming is carried out. • Use a map and photographs to show large scale commercial farming or plantation farming and discuss the characteristics of this. • Discuss the advantages and disadvantages of plantation farming. 	

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
technology.	<ul style="list-style-type: none"> • List the crops usually grown on plantations and suggest reasons for this. • Let the learners use the internet or other sources to find a photo of plantation farming in East Africa and describe what they see. <hr/> <p style="text-align: center;">Case Study of Large Scale Commercial Farming on the Canadian Prairies</p> <ul style="list-style-type: none"> • Explain that one of the main agricultural areas in USA and Canada is the Prairies. • Present a map already drawn or in an Atlas and challenge the learners to locate the Prairies. • Present climate statistics for any one station on the Prairies. Let the learners draw a graph and use it to describe the climate of the area. • Through discussion, summarise the climate of the Prairies. • Let the learners use photograph(s) of wheat farms on the Prairies (large wheat field showing harvester, silo storage and communication line) to find answers to the following: <ul style="list-style-type: none"> i) Describe the relief of the area. ii) How big are the fields? iii) How many different crops are grown? iv) How are the crops being grown? v) How many people do you think are employed? vi) Are the crops probably grown for the farmer's use or 	

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
	<p>for sale?</p> <p>vii) What do you think the big building is used for?</p> <p>viii) How is the crop transported away?</p> <p>ix) Where will it be taken?</p> <ul style="list-style-type: none"> • Explain and clarify the answers with the use of photographs. • On the same map used above, let the learners locate the major wheat export routes. • In groups, ask the learners to discuss and suggest the benefits and problems of each route. • Task the learners to use what has been learnt above to summarise factors favouring development of wheat farming on the Prairies. • Ask the learners to list the main differences between this farming and most farming in East Africa. • In groups, let the learners discuss: Could this method be used in most parts of East Africa? Why not? Would this be a good method for East Africa? • Ask the learners: Where has this type of farming been used in East Africa? Who used it and how did they get land? • Task the learners to use library or the Internet to carry out group research on problems faced by wheat farmers and their solutions. Let them present reports and share these as a class. 	

Sub-topic 2: Irrigation Farming in East Africa

Duration: 4 Hours

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
<p>The learner should be able to:</p> <ul style="list-style-type: none"> a. know some important irrigation schemes in East Africa and case study areas and the types of crops grown. b. explain the methods used to supply water to farmland.) c. suggest whether some methods of irrigation used in North America are suitable for East Africa. d. locate major irrigation projects on the maps of East Africa and case study areas. e. understand the benefits and problems of irrigation. f. appreciate that dry lands can be very productive if improved through irrigation. <p>appreciate that development of irrigated agriculture depends on the level of economic development and technology.</p>	<p>Irrigation Schemes and Methods Used</p> <ul style="list-style-type: none"> • Ask the learners from what they learnt about climate why irrigation is an important method of farming. • Ask the learners to suggest methods which could be used in their home area or an area they know to irrigate the land. • Using photographs and diagrams, the learners describe the methods of irrigation: drip irrigation by fetching water from a water source in containers and dripping the water onto the plants; building small dams to trap the water in the wet season so it can be used in the dry seasons; damming streams or rivers to trap water; building water channels to distribute the water to the plants. • Let the learners look up types of irrigation in textbooks or on the Internet and explain 	<p>1. Give learners a task in which they suggest reasons why we should increase irrigation use in Uganda and the best methods to do this.</p> <p>Give out maps of irrigated lands in California and any scheme in East Africa. Ask questions about the two.</p>

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
	<p>whether each of these is suitable for East Africa, with reasons.</p> <ul style="list-style-type: none"> • Ask the learners to describe any areas where they know the above types of irrigation are being used. Which types might work in their home area and what might be the difficulties? • Let the learners discuss the development of specific irrigation schemes in East Africa: <ul style="list-style-type: none"> - Mubuku, Mwea-Tebere, Ahero pilot scheme - Kilombero For each scheme, the learners explain: its location and organisation, facilities and methods used to supply water, major crops grown, factors for the development and benefits to people. <hr/> <p>Case Study: Irrigation Farming in the Central Valley, California</p> <ul style="list-style-type: none"> • Present a chalkboard or atlas map and assist the learners to locate California, including the Central Valley. 	

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
	<ul style="list-style-type: none"> • Let the learners use the same map to describe the relief and drainage of California. • Ask: Where are most rivers flowing from and where do they end? Which part of California has land that may be suitable for farming? Do the rivers flow through that area? • Present a climate graph for any one station in California. Ask the learners to describe rainfall: total amount and seasons. • Ask the learners: Is there enough rainfall all the year for crops needing heavy rainfall? • Provide the learners with a photograph of irrigated fruit/grape farming in Central valley. Or the learners find a photograph of irrigated farming in California on the Internet. • Challenge the learners to explain the facilities and methods used to supply water to the farms, including major dams, canals and 	

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
	<p>aqueducts. Let them locate these facilities on the map.</p> <ul style="list-style-type: none"> • Ask the learners: Describe the land. Is the farm large — as large as those on the Prairies? What type of crops is being grown? Do they need water? How is water being supplied? Who will pick the fruit? Is much labour needed? Do you think crops are grown for sale or subsistence? • Explain how this is different from the Prairies: smaller farms using less land. But some are becoming larger. Higher yields per hectare — more intensive. Intensive by using irrigation and fertilizers. Even larger farms are intensive. Use more labour. • Let learners discuss whether this kind of farming would be good for East Africa. Advantages: uses less land and more labour, so less unemployment. More intensive i.e. higher yields per hectare. Uses irrigation, becoming 	

Learning Outcomes	Suggested Teaching and Learning Activities	Sample Assessment Strategy
	<p>more important in East Africa due to climate change and long droughts. Does not exhaust the soil.</p> <ul style="list-style-type: none"> • Ask: Is this type of farming used in East Africa? In places where farmers are using irrigation or fertilizers to make farming more intensive, e.g. some fruit farming like passion fruit, citrus and some intensive use for other crops. • Task learners use the same map and photographs to explain factors for the development of the Central Valley project. • Challenge learners to carry out a research about the benefits and problems of irrigation farming in California. • Give an assignment for the learners to carry out library or Internet research about land reclamation in the Netherlands. It should include types of farming on the polders. 	

Sub-topic 3: Traditional Pastoral Farming and Commercial Livestock Ranching in East Africa

Duration: 3 Hours

Learning Outcomes	Suggested Teaching and Learning Activities	Suggested Assessment Strategy
<p>The learner should be able to:</p> <ul style="list-style-type: none"> a. know the main areas of pastoral farming and types of animals kept. b. know the characteristics of traditional pastoral farming. c. understand the advantages of commercial pastoral farming over traditional pastoral farming. d. understand the problems of pastoral farming and ways of improving it in East Africa. e. recognise different types of pastoral farming from photographs. f. draw maps to show main areas of traditional and commercial pastoral 	<p>Traditional Pastoral Farming</p> <ul style="list-style-type: none"> • Use a photograph for the learners to describe traditional pastoral farming and its characteristics. • Use a chalkboard or textbook map to guide the learners to locate major areas of traditional pastoral farming: Maasai land, Turkana, Karamoja, and Ankole-Masaka dry corridor. • The learners copy the map. • Explain the difference between sedentary and nomadic pastoral farming. • Discuss the advantages and challenges of traditional pastoralists changing to partly commercial farming by sale of cattle and milk. • Use a photograph to explain small scale commercial dairying and discuss the advantage of this. <hr/> <p>Livestock Ranching</p> <ul style="list-style-type: none"> • Ask the learners whether they have ever seen a livestock ranch. Let them describe its main features. • Use maps and photographs to explain large scale commercial ranching and discuss the characteristics, advantages and 	<p>1. Give out a map showing areas practising nomadic pastoral farming with areas marked but not named. Let the learners name the areas. Let them choose one area and explain why herders move from place to place, and suggest ways of improving upon farming in the area.</p>

Learning Outcomes	Suggested Teaching and Learning Activities	Suggested Assessment Strategy
<p>g. appreciate the importance of the problems of transforming traditional pastoral farming into commercial farming.</p>	<p>disadvantages of this with specific examples.</p> <ul style="list-style-type: none"> • Discuss the problems facing ranches and their solutions. • Task learners to do individual research about ranching in the following areas: <ul style="list-style-type: none"> - Ankole – Masaka corridor - Maasai land - Kongwa 	

References

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Topic 16: Mining in East Africa

Duration: 6 Hours

Competency

The learner knows the minerals found in East Africa, and understands methods used to extract them, factors favouring mining and its contribution to the East African economy.

Learning Outcomes	Suggested Teaching and Learning Activities	Suggested Assessment Strategy
The learner should be able to: <ul style="list-style-type: none"> a. know the main minerals found in East Africa and their locations. b. know the uses of the minerals. c. understand why some minerals are mined while others are not. d. draw diagrams to illustrate the stages and methods used to mine the different 	<p>Major Minerals of East Africa</p> <ul style="list-style-type: none"> • Ask the learners to name things in the classroom or things they use that are made of minerals. • Let learners explain what a mineral is and give examples of minerals in East Africa. • Ask the learners whether all minerals are valuable and the difference between a valuable mineral and others. • Explain that all rocks are made of minerals but mining is only concerned with minerals which are valuable because they have uses. • Show the map of the main mining sites in East Africa and the minerals mined. Or look up mining in East Africa on the Internet. Let the learners draw the map in their note books. • Ask the learners to make a list from this in four columns under each East African country: name of mineral, mining sites, uses of the mineral, exported or used locally. (Note that this should show only major minerals not every mineral and mining site.) <hr/> <p>Factors Affecting Mining</p> <ul style="list-style-type: none"> • Explain that not all valuable minerals 	<ol style="list-style-type: none"> 1. Give an exercise on the contributions mining can make to the development of East African countries. The learners should suggest the dangers of mining benefiting a few people in the country. 2. Give figures/statistics on mineral production or exports for all or one country of East Africa. Task the learners to draw a graph to represent these. Ask questions about

Learning Outcomes	Suggested Teaching and Learning Activities	Suggested Assessment Strategy
<p>e. minerals.</p> <p>e. recognise activities related to mining from photographs.</p> <p>f. describe trends in mineral production and trade from statistics and graphs.</p> <p>g. explain the factors influencing mining.</p> <p>h. understand the physical and human problems facing mining.</p> <p>i. appreciate the need to have strict laws to control mining.</p>	<p>are worth mining.</p> <ul style="list-style-type: none"> In groups, let the learners discuss the factors which influence whether a mineral is mined or not. Group ideas feed into the class discussion. Summarise these on the chalkboard and add any not brought out. <hr/> <p>-</p> <p>Methods of Mining</p> <p>Open cast</p> <ul style="list-style-type: none"> Use a photograph to draw a diagram of an open cast mine. Let the learners use this to describe the mining. Task learners to convert this into a flow diagram, showing the stages involved. Let the learners suggest the advantages and possible dangers of open cast mining. Let the learners suggest how this may damage the environment. <p>Underground Mining: Adit and Shaft Methods</p> <ul style="list-style-type: none"> Using a map, let the learners list minerals mined underground in East Africa. Use photographs and draw diagrams of underground mine (Kilembe copper) and challenge learners describe the methods of mining. Let the learners convert these into flow diagrams to show the stages of mining. Let the learners suggest the advantages and possible dangers of underground mining. Task them to suggest how this may damage the environment. Explain why Kilembe underground 	<p>the graph drawn in relation to mining.</p>

Learning Outcomes	Suggested Teaching and Learning Activities	Suggested Assessment Strategy
	<p>mine stopped for a long while and find out if it has re-opened.</p> <p>Extraction of Oil (Drilling)</p> <ul style="list-style-type: none"> • Draw a series of diagrams to show the stages in the extraction of oil, or the learners look this up on the Internet. Let the learners convert this to a flow diagram. • Task the learners to suggest possible problems of oil extraction, how this may damage the environment and how it may be prevented. • The learners discuss the problems of compensation and ownership of land where the oil is found. <hr/> <p>-</p> <p>Benefits and Problems of Mining</p> <ul style="list-style-type: none"> • Task learners to suggest why development of mining, including oil extraction, is very expensive. • The learners suggest why this is mainly done by overseas companies. • Ask the learners whether local people always benefit from mining, and if not, why not. List the benefits on the chalkboard. • Explain that in many countries, the mines are owned by overseas companies and they pay taxes to the government. • Explain that sometimes taxes are kept or diverted to rich people by corruption. • Explain that this sometimes means that ordinary people in the country, including those owning the land where the minerals are found, may get little or no benefit, with all the 	

Learning Outcomes	Suggested Teaching and Learning Activities	Suggested Assessment Strategy
	<p>money going to overseas companies or to important people in government and other rich people.</p> <ul style="list-style-type: none">• Task the learners to suggest how this may be prevented.• Let the learners research the effects of mining on the environment and problems facing mining in East Africa.	

Topic 17: Development of Industries in East Africa

Duration: 7 Hours

Competency

The learner understands the benefits of developing manufacturing industries, the types and locations of manufacturing industries and the problems of developing manufacturing industries.

Learning Outcomes	Suggested Teaching and Learning Activities	Suggested Assessment Strategy
<p>The learner should be able to:</p> <ul style="list-style-type: none"> a. know what manufacturing industries are. b. know some types of manufacturing industries in East Africa, case study areas and their locations. c. understand the factors affecting the development and locations of manufacturing industries in East Africa, and case study areas. d. understand the problems facing the development of manufacturing industries. e. suggest possible solutions to the problems above. 	<p>Types of Manufacturing Industries</p> <p>If possible guide the learners to visit a manufacturing or processing industry and discover what it produces, raw materials used, labour use, capital and ownership etc.</p> <ul style="list-style-type: none"> • Ask the learners what they understand by manufacturing industries. • Let them give examples of manufacturing industries in the local area and other areas of Uganda, and suggest where the products of these industries are sold. • Ask the learners to explain where manufacturing industries are located in Uganda and the reasons for location. • Explain three types of manufacturing industry: those making goods for sale in shops (consumer goods); those making goods for sale to other industries (industrial/producer goods); those processing agricultural raw 	<p>1. The learners choose one of the following and explain the development of one of this type of industry in East Africa: processing industry; industrial/producer goods industry; consumer goods industry.</p> <p>Ask them to explain the location; reasons for development; what is</p>

<p>f. describe the advantages of developing manufacturing industries.</p> <p>g. explain the problems created by manufacturing industries.</p> <p>h. draw maps to show the main industrial centres of East Africa and case study areas.</p> <p>i. draw a flow diagram to show the processes of industrial development from raw material to markets.</p> <p>j. appreciate the importance of developing industries to process raw materials exported from East Africa.</p> <p>k. appreciate, through case studies, the need to avoid pollution in developing industries.</p> <p>l. appreciate, through case studies, the</p>	<p>materials or minerals (processing industries).</p> <ul style="list-style-type: none"> Ask the learners to make lists of examples of each type of industry in Uganda or East Africa and their locations. Let learners draw a map to show the main industrial centres in East Africa. <hr/> <p>Factors for the Development of Manufacturing Industries</p> <ul style="list-style-type: none"> Ask the learners to list things which are needed to develop a manufacturing industry, thinking of specific examples they know. Let the learners look up manufacturing industry on the Internet and apply the information to East Africa. Explain the factors necessary for the development of industries (raw materials; land; water sources; power; capital; labour; transport; markets; government policy; political stability). The learners think of one or two industries in Uganda and write how each of the above factors is important in the development of that industry. <hr/> <p>Processing Industries</p> <ul style="list-style-type: none"> Explain that many industries in East Africa are there to process raw materials before they are sold for export. Ask learners to give four examples of these: two for agricultural raw materials and two for minerals. Challenge learners to suggest the advantages of exporting 	<p>produced; markets; benefits to the area; problems.</p> <p>2. Give a task on policies or laws which can ensure that the development of manufacturing industries benefit the people in the local area.</p>
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<p>importance of power, market, and transport in the development of industries.</p>	<p>processed or manufactured goods rather than raw materials.</p> <ul style="list-style-type: none"> • Explain the idea of adding value to a product. • Let learners suggest some agricultural products which farmers can add value to. <hr/> <p>Industrial/ Producer Goods Industries</p> <ul style="list-style-type: none"> • Suggest what kinds of materials are usually imported from overseas when we develop or build things like roads, railways, dams or buildings. • Let the learners explain why it is good to develop manufacturing industries for industrial/producer goods to be used by other industries. • Explain using the example of cement in Uganda. <hr/> <p>Consumer Goods Industries</p> <ul style="list-style-type: none"> • Ask the learners to give examples of goods made in Uganda for sale in the local shops. • Ask the learners to give examples of goods we buy from overseas which could be made in Uganda. • The learners explain the advantages of the "Buy Uganda-Build Uganda" policy. <hr/> <p>Problems of Developing Manufacturing Industries</p> <ul style="list-style-type: none"> • The learners discuss the problems of developing manufacturing industries in East Africa (capital, power supplies, transport, skilled labour, political instability, competition from cheaper imported goods). 	
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	<ul style="list-style-type: none"> • Ask the learners to discuss or debate whether we should continue to import second-hand clothes from overseas. What are the advantages and disadvantages of this? • Ask the learners what they know about the wages paid to people working in factories: are they adequate for people to live? • Explain the problem of overseas companies, or local companies, paying very low wages. The learners discuss whether there should be a minimum wage. • Ask the learners where people who work in manufacturing industries live? Do they live in good conditions? Why do people from rural areas come to work in manufacturing industries? • Explain the problems of rural-urban drift and the creation of slums. • Ask the learners if they know a manufacturing industry. Does it produce waste or cause pollution? If so, what kind of waste and where does it go? • Discuss the problems of waste and pollution from factories. Ask the learners which particular kinds of places are polluted. • Discuss the dangers of pollution of lakes and wetlands, especially Lake Victoria. <hr/> <p>Case Study: Manufacturing industry in the Ruhr</p> <p>Growth of Industries</p> <ul style="list-style-type: none"> • Use an atlas or textbook map to locate Germany, River Rhine and 	
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	<p>its tributaries. Explain that the European region where Germany is found is called the Rhine lands. Ask the learners to suggest the reason for this.</p> <ul style="list-style-type: none"> • Using the same map above, the learners list other countries of the Rhine lands. • Show the map of the Ruhr industrial area and coal field, showing rivers, canals, towns and position in relation to Rhine lands. • Ask the learners to draw the map. • Explain that this is one of the main industrial areas of Europe. It originally developed heavy industries i.e. industries producing goods for use in other industries, especially iron and steel. • Ask the learners to use the map to suggest what advantages the Ruhr area had for the development of heavy industries, including iron and steel. • Discuss the answers and explain the factors leading to the development of heavy industry (coal, rivers and canals for transporting heavy goods, flat land, position in the middle of western Europe giving a big market, capital from Germany which was a rich country, skilled labour as Germany had well developed education, connection with Britain where industrial revolution started) • Ask the learners: Which goods from Germany are sold in Uganda? (cars like Mercedes, Volkswagen and Audi, electrical 	
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	<p>goods and technology)</p> <ul style="list-style-type: none"> • Explain the history of the Ruhr: Germany was involved in First and Second World Wars leading to the destruction of industries. Formation of European Union (formerly European Economic Community) bringing together European countries, especially Germany, France and Britain, which had always fought each other. Free trade without customs between countries gave very big market for goods from Ruhr. Later disagreements, with Britain leaving. <hr/>	
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References

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Term 2

Topic 18: Wildlife Conservation and Tourism in East Africa

Duration: 8 Hours

Competency

The learner understands and appreciates the need for conserving wildlife, why tourists come to East Africa, the kind of facilities they want and the benefits we get from tourism and to suggest.

Learning Outcomes	Suggested Teaching and Learning Activities	Suggested Assessment Strategy
<p>The learner should be able to:</p> <ul style="list-style-type: none"> a. know what is meant by wildlife and major areas for conserving wildlife in East Africa. b. know the main tourist attractions of East Africa and locations of the main tourist areas. c. know the meaning of national park, game/wildlife reserves, sanctuaries, historic and prehistoric sites. 	<p>Wildlife Conservation</p> <ul style="list-style-type: none"> • Let the learners study an atlas or wall map, identify and list the areas used for conserving wildlife in East Africa. Ask them to draw the map in their notebooks. • Ask the learners what they understand by wildlife. • Ask the learners to discuss why wildlife in East Africa is rapidly being destroyed. • In groups, learners discuss and suggest the consequences of failing to conserve wildlife. <hr/> <p>Who is a Tourist and Why do they Come?</p> <ul style="list-style-type: none"> • Ask the learners who a tourist is. Are all people who come to East Africa tourists? What other kinds of people come? Ask the learners where they would like to go if they had the money to become tourists. • Do tourists come to East Africa to 	<ol style="list-style-type: none"> 1. Task learners to suggest ways to conserve wildlife in East Africa. 2. From what they have learnt, let learners suggest the best ways to attract more tourists to East Africa. 3. Ask learners to think of any one area of Uganda they know well. Let them suggest the tourist attractions it has or could have, and how one could attract tourists, or more tourists, to the

Learning Outcomes	Suggested Teaching and Learning Activities	Suggested Assessment Strategy
<p>d. know where most tourists to East Africa come from.</p> <p>e. understand the meaning of domestic tourism.</p> <p>f. understand the challenges facing wildlife conservation in East Africa.</p> <p>g. understand who a tourist is and why tourists come.</p> <p>h. understand why tourists are particularly interested in natural scenery and wild animals.</p> <p>i. understand the kind of facilities tourists need.</p> <p>j. understand the challenges facing tourism in East Africa.</p> <p>k. recognise tourist attractions from photographs.</p> <p>l. draw a map of the main national parks</p>	<p>see the kinds of things you want to see? Why not?</p> <ul style="list-style-type: none"> • Explain that tourists mainly come from industrialised countries where they live in big polluted cities, so they like to see natural areas and wild life. East African tourists might like to see big cities because they live in rural areas. • Task the learners to use the Internet to find out tourist attractions in East Africa. • In pairs, ask learners to make a list of the kinds of places tourists come to see in East Africa, and decide which ones are the most important. • Ask learners to suggest other kinds of areas which attract tourists. List the learners' suggestions on the chalkboard and add any not mentioned. <hr/> <p>Where do Tourists Come from?</p> <ul style="list-style-type: none"> • Show statistics of arrivals and origins of tourists in one or all East African countries. Ask the learners to represent the statistics using simple graphs and analyse them. • Let learners use the Internet to find more statistics of arrivals and origins of tourists in East Africa. • Explain that tourists come from industrialised countries, especially Europe which is traditionally linked to East Africa and is close. Also North America 	<p>area.</p>

Learning Outcomes	Suggested Teaching and Learning Activities	Suggested Assessment Strategy
<p>and other tourist areas in East Africa.</p> <p>m. represent statistics on wild life and tourism using simple graphs.</p> <p>n. appreciate the need for conserving wildlife.</p>	<p>and increasingly China, Japan and South Korea as those countries are more industrialised and richer.</p> <p>-----</p> <p>Why is East Africa Popular to Tourists?</p> <ul style="list-style-type: none"> • Use a wall map of East Africa and ask the learners to list the main areas tourists go to. Ask them why East Africa is popular to tourists. • Explain that East Africa has some of the best game parks and game reserves, coastlines and coral reefs, mountain scenery and rivers and lakes in Africa. • Ask the learners: What else attracts tourists? <p>-----</p> <p>Challenges Facing Tourism</p> <ul style="list-style-type: none"> • In groups, let the learners discuss why sometimes tourists do not come to some parts of East Africa and the dangers which may spoil tourism. • Ask why tourists no longer go to some parts of the Kenya coast e.g. north of Malindi (political instability e.g. Al Shabab; and rumours of political trouble). <p>-----</p>	
<p>a. know the major tourist attractions and centres of Switzerland.</p> <p>b. understand the reasons for the</p>	<p>Case Study: Tourism in Switzerland</p> <p>Tourist Attractions of Switzerland</p> <ul style="list-style-type: none"> • Use photographs of tourist attractions and activities and ask the learners to describe these and say why they are attractive to tourists. 	<p>Give learners a task to compare tourism in Switzerland with tourism in Uganda.</p>

Learning Outcomes	Suggested Teaching and Learning Activities	Suggested Assessment Strategy
<p>c. understand how the position of Switzerland in Europe favours tourism.</p> <p>d. understand the effects of climate on tourism.</p> <p>e. understand the economic importance of tourism.</p> <p>f. describe some tourist attractions from photographs and suggest why the areas are attractive.</p> <p>g. analyse statistics of tourism in Switzerland.</p> <p>h. draw a map showing some tourist centres.</p> <p>i. appreciate the need to develop good facilities for tourism.</p> <p>j. appreciate the importance of</p>	<ul style="list-style-type: none"> • Use photographs of tourist facilities and ask the learners why these are important for tourism. • Use a map showing Switzerland in Europe and ask learners why Switzerland's position in Europe is favourable for tourism. • Use a map to show some of the main tourist areas. Let learners draw the map in their notebooks. • Use a climate graph for an area in the Alps and ask the learners to suggest activities done by tourists in each season. • The learners suggest why the peace and neutrality of Switzerland has been an important factor in the development of tourism in Switzerland and compare this with East Africa. • Challenge the learners to compare these aspects of tourism in Switzerland with those in East Africa. <hr/> <p>Importance of Tourism</p> <ul style="list-style-type: none"> • Present statistics on the importance of tourism in Switzerland. Ask the learners to analyse these to show where the tourists come from and the importance of tourism to the economy. The learners compare this with East Africa. 	

Learning Outcomes	Suggested Teaching and Learning Activities	Suggested Assessment Strategy
peace and neutrality in attracting tourists. k. compare tourism in Switzerland with tourism in Uganda and suggest what we can learn from it.		

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Topic 19: More on Use of Maps

Duration: 4 Hours

Competency

The learner uses survey maps to find out and describe more about places.

Learning Outcomes	Suggested Teaching and Learning Activities	Suggested Assessment Strategy
<p>The learner should be able to:</p> <ul style="list-style-type: none"> a. know the meaning of contours and cross sections. b. understand what a contour is. c. understand how to use contours to describe the relief of an area. d. draw a cross section from a survey map. e. use contours to describe the relief of an area. f. use survey maps to describe relief, drainage, climate, vegetation, 	<p>Using Contours</p> <ul style="list-style-type: none"> • Use questioning to revise isolines. Explain that contours are lines joining places of the same height. • Let one group of learners line along one contour and another group lines along a contour above or below the first one to show what a contour is. • Ask the learners to line along different contours along a steep slope. • Explain that on a steep slope, contours are close together while on a gentle slope, they are widely spaced. • Present a sand tray and task the learners to draw contours around a hill, valley, and spur to show the shape of these features on a contour map. • Explain how contours are numbered. • Show a simple contour map showing steep slope, gentle slope, hill, valley, flat land, etc. • Use questioning to help the learners recognise the features. <hr/> <p>Describing an Area from a Survey</p>	<ol style="list-style-type: none"> 1. The learners do exercises on describing the relief of areas on different contour maps. 2. Give the learners exercises to describe physical features and human activities on a survey map and to relate the two. 3. Give the learners exercises to draw cross sections, annotate and use them to relate human features to relief and height.

Learning Outcomes	Suggested Teaching and Learning Activities	Suggested Assessment Strategy
<p>population and human activities in an area.</p> <p>g. use a sketch map to show areas on survey maps.</p> <p>h. appreciate the importance of survey maps in studying geography.</p>	<p>Map</p> <ul style="list-style-type: none"> In groups, task learners to use a survey map to describe relief, drainage, vegetation, settlement, transport and communication and other human activities in the area. Ask learners questions that relate human features to physical features and to each other. Let the learners draw a sketch map to show the relationship between features on a survey map. Challenge the learners to describe economic development of an area using a survey map; problems facing development, prospects and potentials for development <hr/> <p>-</p> <p>Drawing a Cross Section</p> <ul style="list-style-type: none"> Demonstrate drawing cross sections from a topographic survey map. In pairs, let learners practise drawing cross sections from maps and mark human features along the sections. Explain how cross sections can be used to describe areas and to relate features in an area to relief and height. <hr/>	

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- Kiguru, J. (1988). *Map Reading and Photographic Interpretation for "O" Level*. Macmillan Kenya. pp. 6-17.

The Rest of Africa

Topic 20: Location and Size of Africa

Duration: 1 Hour

Competency

The learner should know the size of Africa, its position in the world and compares these with those of other continents.

Learning Outcomes	Suggested Teaching and Learning Activities	Suggested Assessment Strategy
<p>The learner should be able to:</p> <ul style="list-style-type: none"> a. know the position of Africa in the world. b. know the size of Africa. c. understand that Africa occupies a unique position as the most tropical of continents. d. draw a sketch map showing the position of Africa. 	<p>Location and Size</p> <ul style="list-style-type: none"> • Use wall and atlas maps of the world and ask the learners to describe the position of Africa. Ask them compare Africa to other continents and to the equator and tropics. • Present a table showing the areas of continents and task the learners to construct a pie chart to compare the size of Africa with other continents. • Let the learners use wall and atlas maps of Africa or the Internet maps to describe the position of East Africa within Africa. • Individually, the learners draw the map in their books. 	<p>Task the learners to explain what makes Africa different from other continents.</p>

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Topic 21: Climate and Vegetation of Africa

Duration: 6 Hours

Competency

The learner understands the climates of Africa and their distribution; explain the factors influencing the climates, and the effects of these climates on human ways of life.

Learning Outcomes	Suggested Teaching and Learning Activities	Suggested Assessment Strategy
The learner should be able to: <ol style="list-style-type: none"> know the main climatic regions of Africa. draw a map to show these climatic regions. understand the reasons for the distribution of the climatic regions of Africa. understand the characteristics of each type of climate. draw climate graphs and 	Factors Affecting the Climates in Africa <ul style="list-style-type: none"> Using questioning, revise the seasons and apparent movement of the sun. Ask the learners when the northern and southern hemispheres are tilted towards the sun. Explain that this affects the angle of the sun at midday. Explain the positions of the overhead sun at different times of the year. In groups, let learners discuss and suggest what will happen to the air when the sun is overhead and what this will cause. (Air will rise causing convectional rain.) Explain that this rising air causes winds to blow from north and south to fill up the gap left by the rising air. Let learners study diagrams and map of the winds. These cause north east trades and south east trades. Explain that the place where these winds meet is the Inter-tropical convergence zone (ITCZ): an area of rising air and heavy rain. 	1. The learners choose two of the climatic regions of Africa. Compare them, mentioning climate, causes of the climate, and the effect of the climates on the way of life. 2. Let the learners suggest why people in Africa today are less affected by the climate than they were in the past.

Learning Outcomes	Suggested Teaching and Learning Activities	Suggested Assessment Strategy
<p>use these to describe the climate of different regions in Africa.</p> <p>f. understand the effects of the climates on the way of life of the people.</p> <p>g. appreciate that the traditional way of life of the people of Africa is strongly influenced by the climates.</p>	<ul style="list-style-type: none"> • Ask the learners to search the Internet or library books for ITCZ and find out about its position, seasonal movements and effects. • Explain the seasonal movements of the ICTZ and how this affects rainfall patterns and distribution in Africa. • Task learners to describe how this affects different climates: Equatorial and Savannah. • Explain that places outside the tropics have different kinds of climate not affected by ITCZ. <hr/> <p>The Climates of Africa</p> <ul style="list-style-type: none"> • Let the learners study and use climate statistics to draw climate graphs for each type of climate in Africa: Equatorial, Savannah, hot desert, Mediterranean. • In pairs, let learners discuss and suggest which climates are in the ITCZ twice a year, once a year, and not at all. Let them give reasons to support their views. • Ask the learners to draw a sketch map showing the climates in Africa. • Let the learners use the graphs drawn and facts about ICTZ to explain the main climates: Equatorial, Savannah, hot desert, and Mediterranean. <hr/> <p>How Climate Affects Way of Life</p> <ul style="list-style-type: none"> • Using questioning based on the graphs drawn, challenge the learners to suggest types of vegetation, farming, crops grown and animals kept in each of the above climatic regions. 	

Learning Outcomes	Suggested Teaching and Learning Activities	Suggested Assessment Strategy
	<ul style="list-style-type: none"> • Clarify their views and explain further about the Mediterranean region i.e. short shrubs, small trees, wheat, maize, olives, and grapes. • Present photographs of each of the climatic regions, or use the Internet to find photographs. Challenge the learners to decide, with reasons, the climatic region shown in each. 	

References

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Term 3

Topic 22: Agriculture in Africa

Duration: 16 hours

Competence

The learner understands the development of arable and pastoral farming in Africa, factors influencing farming, how farming is changing from subsistence to commercial and the advantages associated with that change.

Learning Outcomes	Suggested Teaching and Learning Activities	Suggested Assessment Strategy
<p>The learner should be able to:</p> <ul style="list-style-type: none"> a. know the main types of agriculture in Africa: traditional and modern. b. know the main subsistence and commercial crops and main animals kept. c. draw a map to show the main pastoral farming areas in Africa. 	<p>Traditional Agriculture in Africa</p> <ul style="list-style-type: none"> • Use questioning to revise the traditional types of agriculture in East Africa: shifting cultivation or bush fallowing, and the reasons these are adapted to the climate and soils. • Provide the learners with a map of Africa showing areas of traditional farming. Let the learners draw the map and suggest why these are also the main traditional farming method in other parts of Africa. <hr/> <p>Change from Subsistence to more Commercial Methods of Farming</p> <ul style="list-style-type: none"> • In groups, the learners discuss and suggest why many farmers in Africa are changing to more commercial methods. • Revise using questioning, two main methods of commercial farming: small holdings and plantation farming. <hr/>	<ol style="list-style-type: none"> 1. Task the learners to draw on the knowledge from the examples studied, to discuss whether Uganda or other countries of Africa should encourage small holdings or large scale plantation farming. 2. Let the learners suggest the best ways of improving small holder farming in Africa. 3. Task the learners to

Learning Outcomes	Suggested Teaching and Learning Activities	Suggested Assessment Strategy
<p>d. understand the differences between traditional pastoral farming and modern ranching.</p> <p>e. understand how agriculture in Africa is influenced by the climate.</p> <p>f. understand the change from subsistence agriculture to commercial agriculture in Africa.</p> <p>g. understand the advantages and disadvantages of small holdings and plantations.</p> <p>h. understand the importance of agriculture in the</p>	<p>Small Holding Commercial Farming in Ghana</p> <ul style="list-style-type: none"> • In groups, let the learners carry out research about a case study of cocoa farming in Ghana. The group findings feed into the class discussion. • Explain that many small scale farmers in Ghana started to grow cocoa as a cash crop as well as continuing to grow some subsistence crops. • Challenge the learners to suggest why small holders started to grow a cash crop and why they continued to grow some subsistence crops. • Provide the learners with the map showing the main cocoa growing areas in Ghana and ask them to draw it. • Let the learners compare cocoa growing in Ghana with coffee growing in southern Uganda. • Use photographs to show cocoa growing in Ghana and challenge the learners to study them and explain factors making southern Ghana suitable for cocoa as a cash crop. • Summarise these on the chalkboard and add any points left out. • Explain the characteristics of cocoa growing in Ghana and compare these with coffee growing in Uganda. <hr/> <p>-</p> <p>Plantations Farming in Liberia</p> <ul style="list-style-type: none"> • Present the map showing the main areas of plantation farming in Africa. • Let the learners compare this map with the map showing climatic 	<p>discuss the advantages and disadvantages of ranching over nomadic pastoral farming in modern Africa. Is it better to encourage ranching or the commercialization of nomadic farming?</p>

Learning Outcomes	Suggested Teaching and Learning Activities	Suggested Assessment Strategy
<p>economies of African countries.</p> <p>i. understand the main features of nomadic pastoral farming.</p> <p>j. understand the advantages and disadvantages of commercial ranching.</p> <p>k. draw maps to show the layout of typical farms in Africa.</p> <p>l. describe the types of agriculture in Africa from photographs.</p> <p>m. draw the map to show the main pastoral farming areas of Africa.</p> <p>n. draw a summary</p>	<p>regions, and explain the relationship between climate and plantation farming.</p> <ul style="list-style-type: none"> Explain that Liberia is one of the main plantation farming countries in Africa. Let the learners use textbook maps, an atlas, or wall maps to identify the position of Liberia in Africa. Ask the learners look up in the textbooks or on the Internet for rubber plantations in Liberia and draw a map showing the main rubber growing areas. Let the learners compare rubber plantations in Liberia with sugar cane or tea plantations in Uganda. Challenge the learners to use their knowledge of agriculture in East Africa to suggest the advantages and disadvantages of rubber plantations in Liberia. <hr/> <p style="text-align: center;">Nomadic Pastoral Farming in Africa (Fulani)</p> <ul style="list-style-type: none"> Show the map of the main nomadic pastoral areas of Africa with the names of some pastoral groups. Let the learners draw the map in their notebooks. Give the learners one or more photographs from the Sahel showing the Fulani pastoralists and their herds and a climate graph of the Sahel area. Challenge them to describe the area on the photograph, including the environment and the activities seen. Using the climate graph, explain how the farming is 	<p>Task the learners to suggest whether a large scale irrigation scheme based on</p>

Learning Outcomes	Suggested Teaching and Learning Activities	Suggested Assessment Strategy
<p>table comparing nomadic pastoral farming with commercial ranching.</p> <p>o. appreciate the importance of agriculture in African economies and the need to improve agriculture.</p> <p>p. understand why irrigation is important in Africa.</p> <p>q. know some examples of irrigation schemes in Africa.</p> <p>r. understand one example of a large scale irrigation scheme.</p> <p>s. understand the factors leading to the development</p>	<p>related to the environment.</p> <ul style="list-style-type: none"> • In groups, let the learners use previous knowledge and own knowledge to discuss the problems of nomads in the modern world. <hr/> <p>Improving Pastoral Farming: Commercial Ranching in Botswana</p> <ul style="list-style-type: none"> • Let the learners use the map of Africa to find Botswana and describe its location. • Give an outline map of Botswana and ask the learners to search from the textbooks or on the Internet to find out the main ranching areas and plot these on the map. • Give out photographs of a commercial ranch in Botswana. Ask the learners to describe what they see and compare with the nomadic pastoral areas. • Describe the main features of ranching in Botswana and ask the learners to summarise in a table the differences between nomadic pastoral farming and ranching. • In groups, let the learners discuss the advantages of commercial ranching in the modern world. <hr/> <p>Irrigation Farming in Africa</p> <ul style="list-style-type: none"> • Ask: Why is irrigation important in Africa? Which parts of Africa are most important for irrigation? • Show on a map with examples of irrigation schemes in Africa and ask the learners to record their names and countries. 	<p>cooperation between local farmers and government would be suitable for Uganda. They should give reasons to support their views.</p>

Learning Outcomes	Suggested Teaching and Learning Activities	Suggested Assessment Strategy
<p>t of the Gezira scheme.</p> <p>t. understand how the Gezira scheme works, its benefits and difficulties.</p> <p>u. recognise different methods of irrigation from photograph s.</p> <p>v. describe the climate of Gezira plains from a climate graph.</p> <p>w. draw maps of the Gezira scheme and its location.</p> <p>x. appreciate the advantages of government cooperation with small scale farmers.</p>	<p>Case Study: The Gezira Irrigation Scheme</p> <ul style="list-style-type: none"> Provide the learners with a map showing the position of the Gezira scheme in relation to the branches of the Nile and a climate graph of the Gezira area. Challenge the learners to suggest why the Gezira scheme was set up where it is and factors leading to its development. Task the learners to look up Gezira irrigation scheme on the Internet and describe what they find out. Describe, with the use of a diagram, the organisation of the Gezira scheme as cooperation (joint venture) between government and small holders. Ask the learners to suggest the advantages of cooperation between government and local farmers. Describe the problems of the Gezira scheme. In groups, let the learners discuss and suggest some of the problems of the schemes organised by governments and how these can be reduced. 	

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Topic 23: Forest Resources and Forestry in Africa

Duration: 6 Hours

Competency

The learner analyses the distribution, importance and uses of forest resources in Africa and appreciates the importance of preserving these resources.

Learning Outcomes	Suggested Teaching and Learning Activities	Suggested Assessment Strategy
<p>The learner should be able to:</p> <ul style="list-style-type: none"> a. know the distribution of the main forest resources in Africa. b. understand the characteristics of the forests in Africa. c. understand the importance of forests. d. understand the factors favouring the development of the forestry industry. e. form opinions about the methods of harvesting trees from the forest. f. understand the development of the hardwood 	<p>Africa's Forests</p> <ul style="list-style-type: none"> • Ask the learners, based on their previous knowledge, to identify where the main forests in Africa are and how these are related to the climate. What type of timber do they produce? • Let the learners use previous knowledge to describe the main characteristics of tropical rain forests. • In groups, guide the learners to discuss the importance of forests, including why they are important in preserving the environment. <hr/> <p>Case Study: The Forest Industry in Gabon</p> <ul style="list-style-type: none"> • Let the learners use an atlas to find out the location of Gabon and suggest the type of climate and vegetation found in the country. • Use a textbook or chalkboard map to show 	<ol style="list-style-type: none"> 1. Let the learners explain the dangers of cutting down forests and suggest how this can be prevented. 2. Task the learners to imagine they are the Minister for Forestry in Uganda, and then answer the following questions: Would you ban all tree cutting? What would be the difficulties of doing this? What would be the best policies to control the cutting down of forests?

Learning Outcomes	Suggested Teaching and Learning Activities	Suggested Assessment Strategy
trade in Gabon. g. identify through photographs the characteristics of forests and activities related to logging in Gabon. h. use simple graphs and charts to present and analyse statistics on the timber industry in Gabon. i. draw the map showing the major forested areas and timber processing areas in Gabon. j. appreciate the dangers of unsustainable forestry in Africa and the dangers of destroying forests.	the major forest areas of Gabon, the major rivers, the transport routes and the timber centres named. Let the learners draw the map. <ul style="list-style-type: none"> • Ask the learners to suggest why a timber industry has developed in Gabon. List the points and add any not listed. • Show photographs of logging and ask the learners to describe what they see and construct a flow diagram to show the production, use and export of timber. • Ask: How do the people of Gabon benefit from the presence and exploitation of forests? • In pairs, challenge the learners to suggest the likely problems faced in exploiting forests in Gabon. • In groups, let the learners discuss the dangers of cutting down forests without replacement. 	

References

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Topic 24: Development of Industry in Africa

Duration: 6 Hours

Competency

The learner knows the main types of industries which have been developed, and to analyse the economic importance and difficulties of industrial development in Africa.

Learning Outcomes	Suggested Teaching and Learning Activities	Suggested Assessment Strategy
<p>The learner should be able to:</p> <ul style="list-style-type: none"> a. know what a manufacturing industry is. b. know the location of some important industrial areas in Africa. c. understand the factors leading to the development of industrial areas. d. understand the benefits manufacturing industries can bring to African countries. e. understand the problems of developing manufacturing industries in African countries. f. draw a map showing 	<p>Manufacturing Industries</p> <ul style="list-style-type: none"> • Revision: Ask the learners about three kinds of industries they studied in East Africa: mining industries, agricultural processing industries and manufacturing industries. Explain that in this topic they are going to look at manufacturing industries. • Ask: What two kinds of manufacturing industries are there (consumer goods and industrial/producer goods)? • Use the map to show examples of the main manufacturing industrial areas in Africa (Accra-Tema, Ghana; Lower Egypt industrial area; Witwatersrand or Rand industrial area, South Africa). The learners draw the map. • Ask the learners to construct a table to compare these industrial areas using suitable headings. • The learners explain for each case study area and country the main industries and the 	<p>The learners choose one industrial area. They draw a map to show its location; explain why it was developed; the industries that are found in the area; the benefits it brings to the country; and the problems it has created.</p>

<p>important industrial areas in Africa.</p> <p>g. use statistics, simple graphs and charts to analyse aspects relating to manufacturing industry.</p>	<p>ownership of industries.</p> <ul style="list-style-type: none"> ● Let the learners use the Internet or other sources to help them compile the above table. ● The learners discuss the advantages of African countries establishing manufacturing industries. 	
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References

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