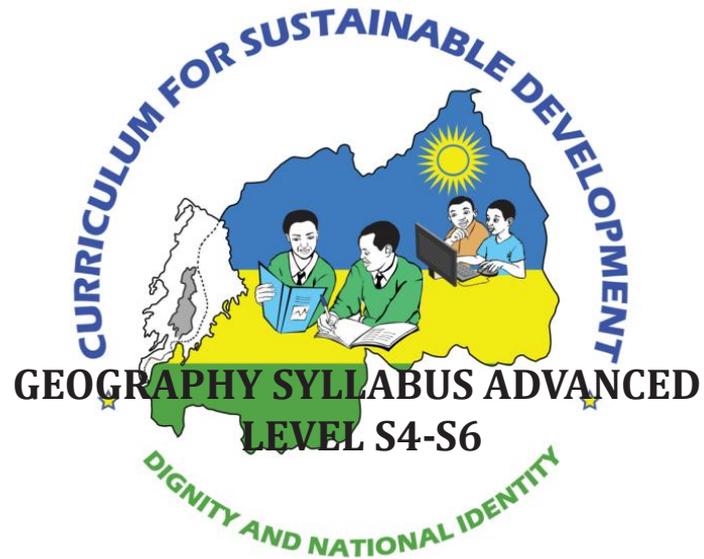


REPUBLIC OF RWANDA



MINISTRY OF EDUCATION



Kigali, 2015

**GEOGRAPHY SYLLABUS  
ADVANCED LEVEL S4-S6**

**Kigali 2015**

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## **FOREWORD**

The Rwanda Education Board is honoured to avail the syllabuses which serve as the official documents and a guide to the competence-based teaching and learning in order to ensure consistency and coherence in the delivery of a quality education across all the levels of general education in the Rwandan schools.

The Rwandan education philosophy is to ensure, that young people at every level of education achieve their full potential in terms of relevant knowledge, skills and appropriate attitudes that prepare them to be well integrated in the society and exploit the employment opportunities.

In line, with the efforts to improve the quality of education, the government of Rwanda, emphasises the importance of aligning the syllabus, teaching and learning and assessment approaches, in order to ensure that the system is producing the kind of citizens the country needs. Many factors influence what children are taught, how well they learn and the competences they acquire, among them the relevance of the syllabus, the quality of teachers' pedagogical approaches, the assessment strategies and the instructional materials available. The ambition to develop a knowledge-based society and the growth of the regional and global competition in the jobs market has necessitated the shift to a competence-based syllabus. With the help of the teachers, whose role is central to the success of the syllabus, the learners will gain appropriate skills and be able to apply what they have learned in their real life situations. Hence they will make a difference not only to their own lives but also to the success of the nation.

I wish to sincerely extend my appreciation to the people who contributed towards the development of this document, particularly REB and its staff who organised the whole process from its inception. Special appreciation goes to the development partners who supported the exercise throughout.

**Mr GASANA I. Janvier**  
**Director General, REB (Rwanda Education Board)**

## **ACKNOWLEDGEMENT'**

I wish to sincerely extend my special appreciation to the people who played a major role in the development of this syllabus. It would not have been successful without the participation of different education stakeholders and the financial support from the different donors that, I would like to express my deep gratitude.

My thanks first go to the Rwanda Education Board staffs, who were involved in the conception and syllabus writing. I wish to extend my appreciation to the teachers from pre-primary to university level, whose efforts during the conception were much valuable.

I owe gratitude to different education partners such as UNICEF, UNFPA, DFID and Access to Finance Rwanda for their financial and technical support.

We also value the contribution of other education partner organisations such as CNLG, AEGIS trust, Itorero ry'Igihugu, Gender Monitoring Office, National Unit and Reconciliation Commission, RBS, REMA, Handicap International, Wellspring Foundation, Right To Play, MEDISAR, EDC/L3, EDC/Akazi Kanoze, Save the Children, Faith Based Organisations, WDA, MINECOFIN and the local and international consultants. Their respective initiative, cooperation and support were basically responsible for the successful production of this syllabus by Curriculum and Pedagogical Material Production Department (CPMD).

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## TABLE OF CONTENTS

|   |     |
|---|-----|
| FOREWORD .....  | i   |
| ACKNOWLEDGEMENT' .....  | ii  |
| THE LIST OF PARTICIPANTS WHO WERE INVOLVED IN THE ELABORATION OF THE SYLLABUS ..... | iii |
| TABLE OF CONTENTS .....   | iv  |
| 1. INTRODUCTION .....   | 1   |
| 1.1 Background to curriculum review .....   | 1   |
| 1.2 Rationale of teaching and learning Geography .....                              | 1   |
| 1.2.1. Geography and the society .....  | 2   |
| 1.2.2. Geography and the learners .....   | 3   |
| 1.2.3. Competences.....   | 3   |
| 2. PEDAGOGICAL APPROACH .....   | 7   |
| 2.1 Role of the teacher .....   | 7   |
| 2.2 Role of the learner.....  | 8   |
| 2.3 Special needs education and inclusive approach.....                             | 8   |
| 3.ASSESSMENT APPROACH .....   | 10  |
| 3.1 Types of assessment.....  | 10  |
| 3.2 Record Keeping .....  | 11  |
| 3.3 Item writing in summative assessment.....                                       | 12  |

|   |     |
|---|-----|
| 3.4 Reporting to parents .....  | 12  |
| 4. RESOURCES.....   | 13  |
| 4.1 Learning/ teaching materials .....                                  | 13  |
| 4.2 Human resource .....  | 14  |
| 5. SYLLABUS UNITS .....   | 15  |
| 5.1 Presentation of the Structure of the Geography Syllabus units ..... | 15  |
| 5.2.GEOGRAPHY SYLLABUS FOR ADVANCED LEVEL: SENIOR FOUR .....            | 16  |
| 5.2.1. Key Competences at the end of Senior four.....                   | 16  |
| 5.2.2. Geography units for Senior Four .....                            | 17  |
| 5.3. GEOGRAPHY SYLLABUS FOR SENIOR FIVE .....                           | 58  |
| 5.3.1. Key competences at the end of Senior Five .....                  | 58  |
| 5.3.2 Geography units for Senior Five .....                             | 59  |
| 5.4. GEOGRAPHY SYLLABUS FOR SENIOR SIX.....                             | 103 |
| 5.4.1. Key competences at the end of Senior Six.....                    | 103 |
| 5.4.2 Geography units for Senior Six.....                               | 104 |
| 6. REFERENCES.....  | 142 |
| 7. APPENDIX.....  | 145 |



# **1. INTRODUCTION**

## **1.1 Background to curriculum review**

Geography is an important subject for the students at an advanced level of education in Rwanda. It has been prepared for the students, with geography as an option in their subject combinations of Science and Humanities. This study will help the learners to use simple enquiry, scientific knowledge, skills, attitudes and values to investigate the geographical and the environmental concepts and processes which will help them make learned decisions about the physical, social and environmental issues that challenge the world today. The study of geography also lays a strong foundation for the learners wishing to pursue geography and other related faculties at the universities and higher institutions of learning. The former curriculum was knowledge based and needed to be modified with the skills of high order thinking.

The upper secondary level curriculum was therefore, reviewed in 2014 to ensure, that it is active and competence based and prepares the learners to become competent with new skills, attitudes and values. This curriculum provides a platform for the learners to explore and discover the content as the independent learners. It also develops educational initiative skills on critical thinking, creativity and innovation, research and problem solving, communication and cooperation, literacy and numeracy.

## **1.2 Rationale of teaching and learning Geography**

Geography is the study of the earth, including all the phenomena which make up the physical and human environment. Geography helps the learners to understand physical and social environment in order to build unity in diversity.

This teaching syllabus is intended to promote uniformity and continuity of content coverage for the advanced level geography. Geography is one of the disciplines that are concerned with the real world in which the learners live and

are capable of solving problems and developing knowledge, skills, attitudes and values which are relevant to their present and future lives.

Geography competence based curriculum motivates the learners to discover about the real world and enables them to recognise the importance of the sustainable development for the future of mankind.

Geography competence based curriculum enables the learners to develop generic competence skills, literacy and numerical skills to interpret the human and physical phenomena, maps, photographs and diagrams.

### **1.2.1 Geography and the society**

Geography is a subject which allows the people to understand the physical and the social environment in which they are growing up. It equips people with knowledge about diverse places, resources, natural and human environments.

Geography provokes and answers questions about the society, using different techniques of inquiry to view them from different perspectives. It develops the knowledge of places and the environment throughout the world. As such, it prepares the young people for adult life and employment.

Geography is a focus within the curriculum for understanding and resolving issues about the environment and sustainable development. It is also an important link between the natural and social sciences. Geographical studies help to acquire the knowledge and understanding about different societies and cultures. This also helps to realise, how nations rely on each other. It can inspire the people to think about their own place in the world, their attitudes, values, their rights and responsibilities towards other people and the environment. It develops a critical understanding about, how interdependent countries and nations are.

### **1.2.2. Geography and the learners**

Geography, as a competence based curriculum, helps the learners to understand the physical and the social environment in which they are growing up and appreciate the diversities/differences and similarities in their communities, country, region, continent and the world.

Geography competence based curriculum will enable the learners to acquire a variety of functional and sustainable knowledge, skills, and experiences, which will help them to develop into citizens with positive attitudes, a sense of curiosity, creativity, capacity and the ability to fit in the local, national, and international community.

Geography competence based curriculum is developed for the purpose of extending the learners' knowledge, sharpen their intellectual capacities, strengthen their study skills and to incorporate the objectives of Rwanda government education sector and the strategic development plans for Rwanda.

This curriculum is also aimed at developing the learners' critical thinking mind that will enable them to participate in the development of their country, and to face the major challenges like environmental degradation and overpopulation.

### **1.2.3 Competences**

A competence is the ability to perform a particular task successfully, resulting from having gained an appropriate combination of the knowledge, skills and attitudes. The national policy documents, based on the national aspirations, identify 'Basic Competences' alongside the 'Generic Competences' that will develop high order thinking skills. Basic competences are addressed in the stated broad subject competences, and in the objectives it is highlighted year on year basis, and in each units of learning. The generic competences and the basic competences that must be emphasised and reflected in the learning process are briefly described below, and the teachers will ensure that the learners are exposed to the tasks that will help the learners to acquire the skills.

## Generic competences

- **Critical and problem solving skills:** The acquisition of such skills will help the learners to think imaginatively, innovatively and broadly to evaluate and find the solutions to problems encountered in our surrounding.
- **Creativity and innovation:** The acquisition of such skills will help the learners to take initiatives and use imagination beyond the knowledge provided in the classroom to generate new ideas and construct new concepts.
- **Research:** This will help the learners to find answers to the questions based on existing information and concepts and use it to explain the phenomena from the gathered information.
- **Communication:** The teachers, irrespective of being the language teachers will ensure the proper use of the language of instruction by the learners. The teachers should communicate clearly and confidently, and convey ideas effectively through spoken and written, by applying appropriate language and relevant vocabulary.
- **Cooperation, inter personal management and life skills:** This will help the learner to cooperate as a team in whatever task is assigned, and to practice positive ethical moral values while respecting rights, feelings and views of the others. Perform practical activities related to environmental conservation and protection. Advocate for personal, family and community health, hygiene and nutrition and respond creatively to a variety of challenges encountered in life.
- **Lifelong learning:** The acquisition of such skills will help the learners to update knowledge and skills with a minimum external support. The learners will be able to cope with the evolution of knowledge advances for personal fulfilment in the areas that are relevant to their improvement and development.

## **Broad Geography competences**

During and at the end of the learning process, the learner can:

- Demonstrate greater understanding of the basic concepts in physical and human geography.
- Categorise different physical geographical phenomena and their impact on the sustainable development.
- Appreciate the relationships between the physical and human aspects in the world, and acquire a commitment to the sustainable development.
- Explain the correlation between the physical environment and man's modifications to it.
- Demonstrate an understanding of the global sustainable growth, conservation, reconstruction and development of the country in the regional and global context.
- Evaluate accurately the socio-economic problems of the world and how to solve them.
- Enable the learners to gain more concrete understanding of the challenges to the development of Rwanda and other countries.
- Demonstrate in a range of skills and techniques, necessary to carry out geographical research and interpretation of the geographical data and information.
- Read and interpret the maps and the photographs using the appropriate geographical techniques.
- Use field work procedures and methods in collecting the geographical data.
- Develop a variety of other skills, including those of the problem solving, critical thinking, communication and cooperation, investigation and how to present their conclusions in the most appropriate way.

## **Geography and developing competences**

The national policy documents based on the national aspirations identify some 'Basic Competences' alongside the 'Generic Competences,' that will develop high order thinking skills, and which will help in subject learning and application of what has been learnt in the real life situations.

Through research, using textbooks and other geographical documents, internet, observation, group discussions and presentations, the learners develop critical thinking, research and problem solving, creativity and innovation, communication and cooperation skills in order to understand and harmonise the findings on the physical and human aspects, and to make conclusions.

## **2. PEDAGOGICAL APPROACH**

The learners understand best when they are actively involved in the learning process through a high degree of participation, contribution and production. Each learner is an individual with his/her own pace of learning, experience and ability. Teaching strategies must therefore be varied and flexible with a well-structured sequence of lessons. Learner-centred education involves full participation of the learners under the guidance of the teacher.

### **2.1 Role of the teacher**

Since the competency based curriculum is about learners' active participation in the learning process, the teachers ought to stick to a learner centred approach where the teacher plays the role of the coach/ facilitator in order to value learners' needs and expectations.

The competence-based curriculum will transform learning; ensuring that learning is deep, active and enjoyable. The teacher shifts from the traditional method of instruction and plays the role of a facilitator. The teacher identifies the needs of the learners, the nature of the learning to be done, and the means to shape the learning experiences accordingly.

The teacher organises the learners in the classroom or outside, and engages them to participate and interact in the learning processes. The teacher guides the learners to work individually or in groups to explore or discover the content. This ensures that the learning is personalised, active, participative and cooperative.

The teacher designs and introduces the tasks to the class for research, discussion and group presentation. The teacher guides the learners in developing their own knowledge, skills, attitudes and values.

The teacher selects and develops an appropriate learning and teaching materials like geographical documents, maps, atlases, local materials, teaching models, charts, talking and tactile materials which the learners will use in their work.

In fieldwork studies, the teacher identifies the appropriate topic for study, the area of study and outlines the methods to be used for the study. He/she organises the study, including any necessary risk assessment and accompanies and guides the learners during the real field study. After the field study, the teacher guides the learners in group discussions and presentations of the findings.

## **2.2 Role of the learner**

The activities of the learners are indicated at each learning unit and they reflect appropriate participation of the learner in the learning process. The teaching/learning process is geared towards creating a learner centred environment based on the learners' capabilities, experiences and interests.

The learners use the textbooks, internet and other resource materials to research for, and make use of the findings to improve their knowledge, skills, attitude and values.

In the fieldwork studies, the learners apply the knowledge and methods acquired to observe, ask questions, interpret and write down the findings from the study. After the field study, the learners discuss in groups and make presentation on the findings.

## **2.3 Special needs education and inclusive approach**

All Rwandans have the right to access education regardless of their different needs. The underpinnings of this provision would naturally hold that all citizens benefit from the same menu of the educational programs. The possibility of this assumption is the focus of the special needs education. The critical issue is that, we have persons/

learners who are totally different in their ways of living and learning as opposed to the majority. The difference can either be emotional, physical, sensory or intellectual learning, challenged traditionally, known as mental retardation.

These learners equally have the right to benefit from the free and compulsory basic education in the nearby ordinary/mainstream schools. Therefore, the schools' role is to enrol them and also set strategies to provide relevant education to them. The teacher therefore is requested to consider each learner's needs during the teaching and learning process. Assessment strategies and conditions should also be standardised to the needs of these learners. Detailed guidance for each category of the learners with special education needs is provided in the guidance for the teachers.

### **3. ASSESSMENT APPROACH**

Assessment is a process of evaluating the teaching and learning processes through collecting and interpreting evidence of an individual learner's progress in learning, and to make a judgment about a learner's achievements measured against the defined standards. Assessment is an integral part of the teaching learning processes. In the new competence-based curriculum, assessment must also be competence-based; whereby a learner is given a complex situation related to his/her everyday life and asked to try and overcome the situation by applying what he/she has learned. Assessment will be organised at the following levels: School-based assessment, District examinations, National assessment (LARS) and National examinations.

#### **3.1 Types of assessment**

##### **3.1.1 Formative and continuous assessment (assessment for learning)**

Continuous assessment involves formal and informal methods used by the schools to check whether the learning is taking place. When a teacher is planning a lesson, he/she should establish the criteria for performance and behaviour changes at the beginning of a unit. Then at the end of every unit, the teacher should ensure that all the learners have mastered the stated key unit competences based on the criteria stated, before going to the next unit. The teacher will assess how well each learner masters both the subject and the generic competences described in the syllabus and from this, the teacher will gain a picture of the all-round progress of the learner. The teacher will use one or a combination of the following: (a) observation (b) pen and paper (c) oral questioning.

##### **3.1.2 Summative assessment (assessment of learning)**

When an assessment is used to record a judgment of a competence or a performance of the learner, it serves as a summative purpose. Summative assessment gives a picture of a learner's competence or progress at any specific moment. The main purpose of summative assessment is to evaluate whether the learning objectives have been achieved, and to use the results for the ranking or grading of the learners, for deciding on the progression, for the selection into the next level of education and for certification. This assessment should have an integrative aspect whereby a student must be able to show mastery in all the competences.

It can be an internal school based assessment or external assessment in the form of the national examinations. School based summative assessment should take place once at the end of each term and once at the end of the year. School summative assessment average scores for each subject will be weighted and included in the final national examinations grade. School based assessment average grade will contribute a certain percentage as the teachers gain more experience and confidence in the assessment techniques, and in the third year of the implementation of the new curriculum it will contribute 10% of the final grade, which will progressively increase. Districts will be supported to continue their initiative to organise a common test per class for all the schools to evaluate the performance and the achievement level of the learners in individual schools. External summative assessment will be done at the end of P6, S3 and S6.

### **3.2 Record Keeping**

This is gathering the facts and evidences from the assessment instruments and using them to judge the student's performance by assigning an indicator against the set criteria or standard. Whatever assessment procedures used, shall generate data in the form of scores which will be carefully recorded and stored in a portfolio. This will contribute for remedial actions, for alternative instructional strategy and for the feedback to the learner and to the parents to check the learning progress, and to advice accordingly or to the final assessment of the students.

This portfolio is a folder (or binder or even a digital collection) containing the student's work as well as the student's evaluation on the strengths and weaknesses of his/her work. The portfolios reflect not only the work produced (such as papers and assignments), but also, it is a record of the activities undertaken over the time as a part of the student's learning. The portfolio output (formative assessment) will be considered for a maximum of three years of the Advanced level. Besides, it will serve as a verification tool for each learner, that he/she attended the whole learning before he/she undergoes the summative assessment for the subject.

### **3.3 Item writing in summative assessment**

Before developing a question paper, a plan or specification of what is to be tested or examined must be elaborated to show the units or the topics to be tested on, the number of questions in each level of Bloom's taxonomy and the marks allocation for each question. In a competence based curriculum, questions from the higher levels of Bloom's taxonomy should be given more weight than those from the knowledge and comprehension level.

Before developing a question paper, the item writer must ensure that the test or examination questions are tailored towards competence based assessment by doing the following:

- Identify topic areas to be tested on, from the subject syllabus.
- Outline subject matter content to be considered as the basis for the test.
- Identify learning outcomes to be measured by the test.
- Prepare a table of specifications.
- Ensure that the verbs used in the formulation of questions do not require memorisation or recall answers only, but testing the broad competences as stated in the syllabus.

#### **Structure and format of the examination:**

There will be 2 papers in Geography subject. Duration: 3 hours each.

#### **Paper I: Physical Geography**

Map Reading and Photographic Interpretation, Physical Geography of Rwanda and General Physical Geography.

#### **Paper II: Human and Economic Geography**

Fieldwork, Statistics, Human and Economic Geography of Rwanda and Human and Economic Geography of the world.

### **3.4 Reporting to parents**

The wider range of learning in the new curriculum means that it is necessary to think again about how to share the learners' progress with parents. A single mark is not sufficient to convey the different expectations of learning which are in the learning objectives. The most helpful reporting is to share what the students are doing well in and where they need to improve.

## **4. RESOURCES**

### **4.1 Learning/ teaching materials**

- Physical, human and economic wall maps of Rwanda, different continents and the world.
- Textbooks, reference books, newspapers, maps, atlas, charts and globes.
- Software materials: computer, video clips, projector and internet.
- Photographs (ground, aerial and oblique).
- Models from the local environment (rocks, minerals, soils samples).
- Ordinary Survey Maps (O.S.M)
- Measuring instruments like rain gauge, thermometer, barometer, hygrometer, wind vane, anemometer, compass, clinometers and GPS.
- Stationary like manila papers, flip charts, etc.
- Adaptive materials like tactile and talking materials like talking globe, tactile maps, tactile illustrations, brailled equipment and materials.

## 4.2 Human resource

For effective and efficient teaching of this geography syllabus, it is to be noted that:

- The teacher should at least have a degree in education with geography as a teaching subject from a recognised university.
- The teacher should have proven ability to use text books, teachers' guide, geographical magazines and other sources of geographical information that are in line with this Advanced level Geography curriculum.
- The teacher should be fluent in English, which is the language of instruction.
- The teacher should have some basic skills and knowledge in special needs education like Rwandan sign language, Braille reading and writing.
- The teacher should be able to modify the methodology to accommodate the diverse needs of the learners in the class.

## 5. SYLLABUS UNITS

### 5.1 PRESENTATION OF THE STRUCTURE OF THE GEOGRAPHY SYLLABUS UNITS

Geography subject is taught and learned in Upper Secondary education as a core subject, i.e. in S4, S5 and S6 respectively. At every grade, the syllabus is structured in Topic Areas, Sub-topic Areas where applicable, and then further broken down into Units. The units have the following elements:

1. Unit is aligned with the Number of Lessons
2. Each Unit has a Key Unit Competency whose achievement is pursued by all teaching and learning activities undertaken by both the teacher and the learners
3. Each Unit Key Competency is broken into three types of Learning Objectives as follows:
  - a) *Type I*: Learning Objectives related to Knowledge and Understanding (also known as Lower Order Thinking Skills or LOTS)
  - b) *Type II and Type III*: These Learning Objectives relates to the acquisition of Skills, Attitudes and Values (also known as Higher Order Thinking Skills or HOTS). These Learning Objectives are actually considered to be the ones targeted by the present reviewed curriculum.
4. Each Unit has a Content which indicates the scope of coverage of what a teacher should teach and the learner should learn in line with stated Learning Objectives.
5. Each Unit suggests Learning Activities that are expected to engage the learners in an interactive learning process as much as possible (learner-centred and participatory approach).
6. Finally, each Unit is linked to Other Subjects, its Assessment Criteria and the Materials (or Resources) that are expected to be used in the teaching and learning process.

In all, the syllabus of Geography for the Advanced Level has got 3 Topic Areas (Practical geography, Physical Geography, and Human and Economic Geography).As for the units, there are 18 in S4, 15 in S5 and 15 in S6.

|                        | <b>S4</b> | <b>S5</b> | <b>S6</b> |
|------------------------|-----------|-----------|-----------|
| <b>Topics areas</b>    | <b>3</b>  | <b>3</b>  | <b>3</b>  |
| <b>Sub-topic areas</b> | <b>10</b> | <b>9</b>  | <b>9</b>  |
| <b>Units</b>           | <b>18</b> | <b>15</b> | <b>15</b> |

## **5.2. GEOGRAPHY SYLLABUS FOR ADVANCED LEVEL: SENIOR FOUR**

### **5.2.1. Key Competences at the end of Senior four**

- Explain different physical geographical phenomena and their impact on the sustainable development in Rwanda
- Explain different problems associated with the physical, human and economic environment of Rwanda and suggest solutions.
- Evaluate the major challenges related to overpopulation and the environmental degradation in Rwanda
- Use appropriate field work techniques to observe, collect, record and analyse geographical data
- Differentiate among the types of cartographic projections and categories of the maps

### 5.2.2. Geography units for Senior Four

| Topic Area: Practical Geography  |   | Sub-topic Area: Field work and statistics   |  |   |
|--|---|---|--|---|
| Year group & Subject: S4 Geography   |   | Unit 1: Field work Techniques   |  | No. of Periods:20   |
| <b>Key unit competency:</b> The learner should be able to use an appropriate field work techniques to collect, record and analyse the geographical data  |   |   |  |   |
| Learning Objectives  |   |   | Content  | Learning Activities   |
| Knowledge and Understanding  | Skills  | Attitudes and Values  |  |   |
| <ul style="list-style-type: none"> <li>- Define the concept of a field work</li> <li>- Identify the various methods used in the data collection during the field work.</li> <li>- State the advantages and disadvantages of each method of a field work.</li> <li>- State the field work procedures from the first day to the last day.</li> </ul> | <ul style="list-style-type: none"> <li>- Explain the concept of a field work</li> <li>- Describe the various methods used in collecting the data during the field work</li> <li>- Evaluate the advantages and disadvantages of the various methods of a field work</li> <li>- Analyse the field work procedures from the first day to the last day</li> </ul> | <ul style="list-style-type: none"> <li>- Desire to carry out the field work in order to learn more about our environment</li> <li>- Show concern for the problems affecting our society and carry out a study to find the causes and the solutions</li> <li>- Show respect for the protection of the natural and man-made features</li> </ul> | <ul style="list-style-type: none"> <li>- Definition of a field work. Field work methods (observation, questionnaire, interview, recording, sampling, measuring).</li> <li>- Advantages and disadvantages of each methods of a field work</li> <li>- Field work procedures (preparation before the field work, pilot study, data collection and follow up).</li> <li>- Fieldwork findings: presentation, organisation, write up and dissemination of information).</li> </ul> | <ul style="list-style-type: none"> <li>- Use the geographical documents, internet, field study to identify the field work methods, the advantages and disadvantages of each methods of a field work, the field work procedures and the presentation of the field work findings (presentation, organisation, write up and dissemination of information). Write down the findings.</li> <li>- In groups, discuss and</li> </ul> |

|   |  |                    |  |   |
|---|--|--------------------|--|---|
|   |  | in our environment | <ul style="list-style-type: none"> <li>- Field work case studies: school area, section of a river valley, landform in an area, urban area, settlements, market area, fishing industry and plantations.</li> <li>- Problems affecting the planning and the implementation of a field work.</li> </ul> | <ul style="list-style-type: none"> <li>- compile the findings for a class presentation followed by Q&amp;A.</li> <li>- Record the findings about the field work techniques for the discussions in reference to the knowledge acquired in the current unit. Draw relevant conclusions in a report</li> </ul> |
| <b>Links to other subjects:</b> <i>It links with calculation of area in mathematics</i>   |  |                    |  |   |
| <b>Assessment criteria:</b> <i>The learners are able to correctly use an appropriate field work techniques to collect, record and analyse the geographical data.</i>        |  |                    |  |   |
| <b>Materials:</b> <i>Documents, maps, cameras, radio recorder, photographs, local environment, tape measures, GPS, talking and tactile materials, objects and internet.</i> |  |                    |  |   |

| Topic Area: Practical Geography   |  |   | Sub-topic Area: Map work interpretation   |  |
|---|--|---|---|--|
| Year group & Subject: S4 Geography  |  | Unit 2: Maps and Cartographic Projections   |   | No. of periods: 14   |
| <b>Key unit competency:</b> The learner should be able to differentiate the types of cartographic projections and the categories of maps  |  |   |   |  |
| Learning Objectives   |  |   | Content   | Learning Activities  |
| Knowledge and Understanding   | Skills   | Attitudes and Values  |   |  |
| <ul style="list-style-type: none"> <li>- Recall the elements of a good map</li> <li>- Identify different types of maps</li> <li>- Outline the categories of the maps</li> <li>- State different cartographic projections</li> <li>- Recall the grid reference systems (coordinates) on a map</li> </ul> | <ul style="list-style-type: none"> <li>- Apply the acquired knowledge to recognise the elements of a good map</li> <li>- Describe the types of cartographic projections</li> <li>- Classify different maps according to the scales</li> <li>- Locate the phenomena on the topographic maps using grid reference systems</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the importance of the use of topographic maps</li> <li>- Develop attitude of using the topographic maps and cross sections</li> <li>- Appreciate the importance of grid references for the location of the phenomena or places on the maps</li> </ul> | <ul style="list-style-type: none"> <li>- Further understanding of the maps</li> <li>- Definition of the maps</li> <li>- Elements of a good map</li> <li>- Types of maps (topographic maps, thematic maps) and examples of the maps: world map, globe maps, sheet maps, regional maps, marine maps etc.</li> <li>- Categories of the maps (small scale map, medium scale map, large scale map and a plan).</li> <li>- Cartographic projections: definition, main types of</li> </ul> | <ul style="list-style-type: none"> <li>- Use different maps to identify the elements of a good map and write down the findings</li> <li>- In groups, discuss the findings for a class presentation.</li> <li>- Use the geographical documents, maps and internet to identify different categories of maps according to the scale and different cartographic projections and their characteristic. Write down the findings.</li> <li>- In groups, discuss the findings for a class presentation, engage in</li> </ul> |

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|  |  |  | projections and their characteristics - azimuthal, conical and cylindrical.<br>- Location of the phenomena (Grid reference system) on the maps | Q&A methodology.<br>- Examine the maps from the various cartographic projections, which one is the best representation of Rwanda; write the findings in a report.<br>- Use the topographic maps to identify easting and northing (grid lines), determine grid references and locate a point /a place or phenomena on the maps using 4 and 6 figure grid references. |
| <b>Links to other subjects:</b> <i>This topic is linked to the graphs (x and y axis) coordinates in Mathematics and drawing in Fine art and Computer Sciences</i>    |  |  |  |   |
| <b>Assessment criteria:</b> <i>The learners are able to correctly interpret different types of cartographic projections; different types and categories of maps.</i> |  |  |  |   |
| <b>Materials:</b> <i>Documents, internet, Globe, tactile and talking materials, topographic maps, drawing kit, graph papers and local environment.</i>               |  |  |  |   |

| Topic Area: Physical Geography   |  |  | Sub-topic Area: Landform evolution and processes  |  |
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| Year group& Subject: S4 Geography  |  | Unit 3: Formation of relief features in Rwanda   |   | No. of periods: 28   |
| <b>Key unit competency:</b> The learner should be able to investigate the formation of major relief regions of Rwanda and evaluate their effects on the human activities   |  |  |   |  |
| Learning Objectives  |  |  | Content   | Learning Activities  |
| Knowledge and Understanding  | Skills   | Attitudes and Values   |   |  |
| <ul style="list-style-type: none"> <li>- Locate Rwanda in Africa</li> <li>- State the area of Rwanda in terms of land and water surface area</li> <li>- Describe the population composition and the administrative divisions of Rwanda</li> <li>- Locate the major relief regions of Rwanda</li> <li>- Identify the major relief features of Rwanda using a</li> </ul> | <ul style="list-style-type: none"> <li>- Observe the map of Rwanda and write down the geographical coordinates and the neighbouring countries</li> <li>- Draw a sketch map of Rwanda and locate the political divisions</li> <li>- Apply the knowledge of geography to make a comparison of the population in the</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the natural beauty and the location of Rwanda</li> <li>- Show respect for the population composition and the diversity in Rwanda</li> <li>- Contribute to the national policy of maintaining a healthy population and safe environment in the country</li> <li>- Appreciate the</li> </ul> | <p><b>Rwanda</b></p> <ul style="list-style-type: none"> <li>- General presentation of Rwanda</li> <li>- Location (geographical coordinates and the neighbouring countries)</li> <li>- Size (land surface, water surface, regional and international comparison).</li> <li>- Administrative divisions (capital city, provinces, districts and sectors).</li> <li>- Population (number, life expectancy,</li> </ul> | <ul style="list-style-type: none"> <li>- Use a map of Africa to locate Rwanda and write down the neighbouring countries.</li> <li>- In groups, discuss the problems related to the geographical location of Rwanda. Identify that Rwanda is landlocked and consider the impacts of this.</li> <li>- Write down the findings from the group discussions and make a class presentation.</li> <li>- Use a map of Rwanda to locate and identify the administrative divisions.</li> <li>- Research using the geographical documents,</li> </ul> |

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| <p>map</p> <ul style="list-style-type: none"> <li>- Outline the endogenic processes leading to the formation of different relief features of Rwanda</li> <li>- Give the importance of the relief features of Rwanda</li> <li>- Identify the problems related to the relief features of Rwanda</li> <li>- Outline the exogenic processes leading to the formation of different relief features of Rwanda.</li> </ul> | <p>different provinces of Rwanda</p> <ul style="list-style-type: none"> <li>- Differentiate among the major relief regions of Rwanda on the map.</li> <li>- Describe the formation of different relief features of Rwanda.</li> <li>- Investigate the importance of different relief features of Rwanda</li> <li>- Evaluate the causes and the effects of weathering in Rwanda</li> <li>- Carry out a research project on the effects of the running water, river</li> </ul> | <p>importance of different relief features of Rwanda</p> <ul style="list-style-type: none"> <li>- Show respect for the processes responsible for the formation of different landforms</li> <li>- Show concern for the causes and the effects of soil erosion, and show continual desire to minimise the dangers of soil erosion.</li> </ul> | <p>standard of living).</p> <ul style="list-style-type: none"> <li>- The relief regions of Rwanda</li> <li>- The Eastern plain, the central plateau, the volcanic region, the Congo-Nile crest/ watershed, the rift valley and Rusizi region (Bugarama plains).</li> <li>- Geomorphologic processes, endogenic processes: <ul style="list-style-type: none"> <li>o The process of folding in Rwanda and the major fold mountains.</li> <li>o The process of faulting in Rwanda and the associated landforms.</li> <li>o The process of volcanicity, earthquakes and the associated landforms.</li> <li>o Importance of the</li> </ul> </li> </ul> | <p>journals and internet about the population size, population composition, standard of living and life expectancy in Rwanda, in groups, discuss the findings for a class presentation and engage in Q&amp;A.</p> <ul style="list-style-type: none"> <li>- Use a map and the diagrams to locate the major relief regions of Rwanda</li> <li>- In a field work tour, observe and record the major relief features of Rwanda</li> <li>- In group presentations locate the different relief features using a sketch map of Rwanda</li> <li>- Use the geographical documents, internet and diagrams to discover the mode of formation of the different relief features of Rwanda.</li> <li>- In groups, discuss about the processes of formation of different relief features of Rwanda and present the findings.</li> </ul> |
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|  | <p>erosion and deposition, wave erosion and deposition, mines and quarries on the relief features of Rwanda.</p> |  | <p>relief features to the development of Rwanda.</p> <ul style="list-style-type: none"> <li>○ Problems related to the relief features of Rwanda</li> <li>- Exogenic processes: <ul style="list-style-type: none"> <li>○ Weathering and the resultant features in Rwanda</li> <li>○ Erosion and the deposition by running water</li> <li>○ River erosion and the deposition</li> <li>○ Wave erosion and the deposition</li> <li>○ Mines and quarries</li> <li>○ Effects of weathering and erosion on the relief features of Rwanda</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>- In a group work, discuss the importance of different relief features of Rwanda and present the findings to the class.</li> <li>- In pairs or individually, examine how does relief vary in Rwanda and what are the reasons for this?</li> <li>- In a field work study, find out the areas affected by the soil erosion and weathering, and write a report of the findings.</li> <li>- Use the geographical documents and internet to research about the processes of weathering and erosion, and write down the findings. In groups, discuss about the erosion, processes and the effects of weathering on the relief features of Rwanda and make a class presentation followed by the interactive Q&amp;A.</li> <li>- In pairs/individually, using evidence gained about the relief of Rwanda and the</li> </ul> |
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|   |  |  |  | <p>processes of weathering and erosion, evaluate how this has made an impact on the population distribution in Rwanda and why do you think it is like this?</p> <p>- Write your findings as a short essay</p> |
| <p><b>Links to other subjects:</b> <i>It is linked to the topics of resources in Economics, pressure and heat in Physics and solubility in Chemistry.</i></p>   |  |  |  |   |
| <p><b>Assessment criteria:</b> <i>The learners are able to describe and explain the location, area, political divisions and some population characteristics of Rwanda; explain the processes responsible for evolution of different relief features and evaluate their effects on the human activities in Rwanda.</i></p> |  |  |  |   |
| <p><b>Materials:</b> <i>Geographical documents, journals, maps, photographs, local environment, concrete objects, recorders, internet, statistical and fieldwork materials and equipment. Talking and tactile materials like tactile maps, smart talking globes, smart tactile atlas and brailled textbooks.</i></p>      |  |  |  |   |

| Topic Area: Physical Geography  |   |   | Sub-topic Area: Rocks and Minerals  |  |
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| Year group & Subject: S4 Geography  |   | Unit 4: Rocks and Minerals in Rwanda  |   | No. of periods: 5  |
| <b>Key unit competency:</b> The learner should be able to compare different types of rocks and minerals of Rwanda and evaluate their importance   |   |   |   |  |
| Learning Objectives   |   |   | Content   | Learning Activities  |
| Knowledge and Understanding   | Skills  | Attitudes and Values  |   |  |
| <ul style="list-style-type: none"> <li>- Identify the different types of minerals and rocks in Rwanda</li> <li>- Locate the major minerals and rocks in Rwanda</li> <li>- Recall the economic importance of rocks and minerals</li> </ul> | <ul style="list-style-type: none"> <li>- Explain the physical properties of the rocks and minerals</li> <li>- Apply knowledge to categorise and identify different types of rocks and minerals found in Rwanda and their characteristics</li> <li>- Draw a sketch map of Rwanda to locate the major minerals and rocks</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate different types of rocks and minerals found in Rwanda</li> <li>- Appreciate the importance of rocks and minerals in Rwanda</li> </ul> | <ul style="list-style-type: none"> <li>- Classification of minerals and rocks in Rwanda</li> <li>- Characteristics of rocks and minerals</li> <li>- Distribution of the major minerals and rocks in Rwanda</li> <li>- Importance of rocks and minerals in Rwanda</li> </ul> | <ul style="list-style-type: none"> <li>- In field study, observe different types of rocks and minerals and write down the findings</li> <li>- In groups, discuss the findings and make a class presentation.</li> <li>- Use the geographical documents and internet to research on the classification and characteristics of rocks and minerals in Rwanda. Write down the findings.</li> <li>- In groups, discuss and present the findings on the rocks and minerals.</li> <li>- Using internet and</li> </ul> |

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|  |  |  |  | <p>textbooks, do research on the industrial value of the minerals and rocks and record the findings.</p> <ul style="list-style-type: none"> <li>- In groups, discuss the findings and make a class presentation followed by Q&amp;A.</li> </ul> |
| <p><b>Links to other subjects:</b> <i>It is linked to chemical properties in Chemistry</i></p>   |  |  |  |   |
| <p><b>Assessment criteria:</b> <i>The learners are able to correctly classify different minerals and rocks in Rwanda and evaluate their economic importance</i></p>                              |  |  |  |   |
| <p><b>Materials:</b> <i>Text books/ brailled textbooks, maps , atlases, tactile and talking materials, photographs, internet/Jaws software, local environment, rock and mineral samples.</i></p> |  |  |  |   |

| Topic Area: Physical Geography   |   |   | Sub-topic Area: Soils in Rwanda   |  |
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| Year group & Subject: S4 Geography   |   | Unit5: Soils in Rwanda  |   | No. of periods: 8  |
| <b>Key unit competency:</b> The learner should be able to compare different soil types and assess their importance in Rwanda   |   |   |   |  |
| Learning Objectives  |   |   | Content   | Learning Activities  |
| Knowledge and Understanding  | Skills  | Attitudes and Values  |   |  |
| <ul style="list-style-type: none"> <li>- State the different types of soils in Rwanda.</li> <li>- Identify the causes and the effects of soil erosion in Rwanda.</li> <li>- Identify the importance of soils in Rwanda.</li> </ul> | <ul style="list-style-type: none"> <li>- Research on the different types of soils in Rwanda and where they are located</li> <li>- Explain the causes and the effects of soil erosion and soil conservation.</li> <li>- Explain the importance of soils in Rwanda</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the value of different types of soils in Rwanda</li> <li>- Show concern for the causes and the effects of soil erosion</li> <li>- Appreciate the importance of soil conservation in Rwanda</li> </ul> | <ul style="list-style-type: none"> <li>- Definition of soil</li> <li>- Types of soils and where they are found</li> <li>- Soil erosion in Rwanda (types, causes and the effects, e.g. landslides)</li> <li>- Soil conservation and the management measures in Rwanda</li> <li>- Importance of soil in Rwanda</li> </ul> | <ul style="list-style-type: none"> <li>- Use a map of Rwanda, the geographical documents and internet to locate and identify different types of soils in Rwanda and write down the findings</li> <li>- In groups, discuss the findings and make a class presentation supported by interactive Q&amp;A.</li> <li>- Use a range of geographical documents and internet to find the causes and the effects of soil erosion and the conservation measures in Rwanda. Write down the findings.</li> <li>- In groups, discuss the findings and make class presentation.</li> </ul> |

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|  |  |  |  | <ul style="list-style-type: none"> <li>- In groups, discuss and write down the importance of soils in Rwanda for a class presentation.</li> <li>- In pairs, examine how the soils vary in Rwanda and produce a table of your findings, showing types of soil, where it is located and why is it located there.</li> <li>- What is the impact of the soil types on the population distribution? Write up your findings as a short essay.</li> </ul> |
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**Links to other subjects:** *This topic is linked to Pedology in Ecology (Biology).*

**Assessment criteria:** *The learners are able to correctly compare different soil types in Rwanda, determine the causes and the effects of soil erosion, the conservation measures and assess the importance of soils in Rwanda.*

**Materials:** *Geographical documents, maps, tactile and talking materials, photographs, internet, local environment, rocks and minerals samples.*

| Topic Area: Physical Geography  |  |   | Sub-topic Area: Weather and Climate  |  |
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| Year group & Subject: S4 Geography  |  | Unit 6: Climate in Rwanda   |  | No. of periods: 10   |
| <b>Key unit competency:</b> The learner should be able to investigate the climate and seasons of Rwanda and explain their impact on the human activities  |  |   |  |  |
| Learning Objectives   |  |   | Content  | Learning Activities  |
| Knowledge and Understanding   | Skills   | Attitudes and Values  |  |  |
| <ul style="list-style-type: none"> <li>- Recall the definition of climate</li> <li>- Identify the various climatic zones and their characteristics in Rwanda</li> <li>- State the factors influencing the climate in Rwanda</li> <li>- State the relationship between the climate and human activities in Rwanda</li> </ul> | <ul style="list-style-type: none"> <li>- Apply the knowledge of climate to describe the different climatic zones of Rwanda</li> <li>- Do research on the factors influencing the climate in Rwanda</li> <li>- Explain the variations of seasons in Rwanda</li> <li>- Investigate the relationship existing between the climate and human activities</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the importance of different climatic zones to Rwandan environment</li> <li>- Show concern for the protection and proper use of the environment</li> <li>- Appreciate the relationship between the climate and human activities</li> </ul> | <ul style="list-style-type: none"> <li>- Climate of Rwanda.</li> <li>- Climatic zones in Rwanda.</li> <li>- Factors that influence the climate of Rwanda (Altitude, latitude, vegetation, presence of water bodies, influence of winds, human activities).</li> <li>Seasons in Rwanda: dry and wet seasons.</li> <li>- Relationship between the climate and human activities.</li> </ul> | <ul style="list-style-type: none"> <li>- Use the climate map of Rwanda and the knowledge from the local environment to find about the location of different climatic zones of Rwanda.</li> <li>- In small groups, discuss the reasons for different climatic regions in Rwanda and make a class presentation.</li> <li>- In groups, use the geographical documents and internet to research about the factors responsible for climatic changes and seasonal</li> </ul> |

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|   |  |  |  | <p>variations and make a class presentation on the findings, supported by Q&amp;A.</p> <ul style="list-style-type: none"> <li>- In groups, discuss the relationship between the climate and human activities and make a class presentation.</li> <li>- In pairs, explain the impact of climate change on agricultural activities in Rwanda. Write an essay of the findings.</li> </ul> |
| <p><b>Links to other subject:</b> <i>It is linked to statistics in Mathematics</i></p>  |  |  |  |  |
| <p><b>Assessment criteria:</b> <i>The learners are able to describe the climate and seasons of Rwanda and explain how they influence the human activities</i></p> |  |  |  |  |
| <p><b>Materials:</b> <i>Geographical documents, brailled textbooks, maps, atlas, tactile and talking materials, photographs and local environment.</i></p>        |  |  |  |  |

| Topic Area: Physical Geography  |  | Sub-topic Area: Vegetation   |  |   |
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| Year group & Subject: S4 Geography  |  | Unit 7: Vegetation in Rwanda   |  | No. of periods: 8   |
| <b>Key unit competency:</b> The learner should be able to explain the importance of different types of vegetation and evaluate the methods of conservation in Rwanda  |  |  |  |   |
| Learning Objectives   |  |  | Content  | Learning Activities   |
| Knowledge and Understanding   | Skills   | Attitudes and Values   |  |   |
| <ul style="list-style-type: none"> <li>- Give the meaning of vegetation</li> <li>- Name the types of vegetation</li> <li>- Give the importance of vegetation</li> <li>- Identify the factors influencing vegetation.</li> <li>- Identify the causes of the destruction of vegetation</li> <li>- Identify the measures of conserving vegetation</li> </ul> | <ul style="list-style-type: none"> <li>- Describe the various types of vegetation.</li> <li>- Explain the importance of vegetation and the factors influencing it.</li> <li>- Explain the causes of the destruction of vegetation</li> <li>- Describe the measures of conserving vegetation</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the importance of vegetation to humankind</li> <li>- Show respect for the continual desire to conserve vegetation</li> </ul> | <ul style="list-style-type: none"> <li>- Definition of vegetation</li> <li>- Types of vegetation in Rwanda (natural and planted).</li> <li>- Importance of vegetation.</li> <li>- Factors influencing the types of vegetation</li> <li>- Causes of the destruction of vegetation</li> <li>- The conservation measures of vegetation</li> </ul> | <ul style="list-style-type: none"> <li>- Use the geographical documents, internet or a field study to find out the types of vegetation, the importance of vegetation and the factors influencing the vegetation distribution in Rwanda. Write down the findings.</li> <li>- In groups, discuss and compile the findings and make a class presentation followed by Q&amp;A.</li> <li>- In groups, use the local environment, observe and discuss the causes</li> </ul> |

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|   |  |  |  | <p>of the vegetation destruction and the conservation measures. Draw relevant conclusions for the class presentation.</p> <ul style="list-style-type: none"> <li>- In pairs, consider how the vegetation destruction affects the climate in Rwanda and write an essay.</li> </ul> |
| <p><b>Links to other subjects:</b> <i>It relates to ecology in Biology.</i></p>   |  |  |  |   |
| <p><b>Assessment criteria:</b> <i>The learners are able to explain the importance of the different types of vegetation in Rwanda and evaluate their conservation measures</i></p> |  |  |  |   |
| <p><b>Materials:</b> <i>Maps, photographs, atlas, textbooks, documentary, diagrams, brailled textbooks, local environment, tactile and talking materials.</i></p>                 |  |  |  |   |

| Topic Area: Physical Geography  |  | Sub-topic Area: Drainage   |   |  |
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| Year group& Subject: S4 Geography   |  | Unit 8: Drainage system in Rwanda  |   | No. of periods: 10   |
| <b>Key unit competency:</b> The learner should be able to describe the drainage system of Rwanda and explain its relationship with the human activities   |  |  |   |  |
| Learning Objectives   |  |  | Content   | Learning Activities  |
| Knowledge and Understanding   | Skills   | Attitudes and Values   |   |  |
| <ul style="list-style-type: none"> <li>- Describe the drainage system of Rwanda</li> <li>- List the major rivers, lakes and swamps in Rwanda.</li> <li>- Describe the relationship between the drainage system and the human activities in Rwanda.</li> </ul> | <ul style="list-style-type: none"> <li>- Distinguish among the different water bodies in Rwanda</li> <li>- Use the acquired knowledge of the drainage system to explain the mode of formation of lakes in Rwanda.</li> <li>- Evaluate the importance of water bodies in the development of the human activities in Rwanda</li> <li>- Explain the relationship between the drainage system and</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the importance of water bodies in Rwanda</li> <li>- Advocate for the need to conserve the water bodies</li> <li>- Appreciate the importance of water resource management and conservation</li> </ul> | <ul style="list-style-type: none"> <li>- Drainage system in Rwanda</li> <li>- Major rivers and the drainage basins</li> <li>- Major lakes and their mode of formation</li> <li>- Wetlands / swamps</li> <li>- Major wetlands in Rwanda</li> <li>- (Kamiranzovu, Rugezi, along the rivers like Nyabarongo, Akanyaru, Akagera)</li> <li>- The importance of wetlands to the development of Rwanda</li> <li>- Wetland destruction: causes and the effects.</li> <li>- Measures to promote the</li> </ul> | <ul style="list-style-type: none"> <li>- Use resources like textbooks, internet, maps, photographs or the local environment to find the major water bodies of Rwanda (rivers, lakes and swamps) and draw a drainage sketch map. In groups, discuss and write down the findings for a class presentation and engage in Q&amp;A session.</li> <li>- In groups, discuss the relationship between the human activities and the drainage system and write down the notes</li> </ul> |

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|  | the human activities in Rwanda. |  | sustainable use of wetlands<br>- Relationships between the drainage system and the human activities | for a class presentation supported by an active Q&A methodology.<br>- In groups, explain how the distribution of water bodies affects the human activities and population distribution in Rwanda. Write an essay. |
| <b>Links to other subjects:</b> <i>It is linked to the calculation of area, speed, and volume in Mathematics.</i>  |                                 |  |   |   |
| <b>Assessment criteria:</b> <i>The learners are able y to describe the drainage distribution of Rwanda and explain its relationship with the human activities.</i>   |                                 |  |   |   |
| <b>Materials:</b> <i>Textbooks, internet, illustrations/diagrams, maps, photographs, slide shows, video clips, local environment, tactile and talking materials.</i> |                                 |  |   |   |

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| <b>Topic Area: Human and Economic Geography</b>   |  | <b>Sub-topic Area: Population</b>   |   |   |
| <b>Year group &amp; Subject: S4 Geography</b>   |  | <b>Unit 9: Population in Rwanda</b>   |   | <b>No. of periods: 14</b>   |
| <b>Key unit competency:</b> The learner should be able to research demographic problems in Rwanda and evaluate their solutions  |  |   |   |   |
| <b>Learning Objectives</b>  |  |   | <b>Content</b>  | <b>Learning Activities</b>  |
| <b>Knowledge and Understanding</b>  | <b>Skills</b>  | <b>Attitudes and Values</b>   |   |   |
| <ul style="list-style-type: none"> <li>- Give the definitions of different concepts of population</li> <li>- State the areas of high and low population densities in Rwanda</li> <li>- Show the population structure and growth in Rwanda.</li> </ul> | <ul style="list-style-type: none"> <li>- Explain the different concepts of population in Rwanda</li> <li>- Analyse the factors for the population distribution and its impact on the resource exploitation</li> <li>- Explain the population structure and the growth in Rwanda</li> <li>- Recognise the causes and the consequences of the rapid population growth and suggest population control measures</li> </ul> | <ul style="list-style-type: none"> <li>- Be aware of the current situation of the population concepts in Rwanda</li> <li>- Be aware of the population explosion and its effects on the economic development.</li> <li>- Adopt necessary control measures for the rapid population growth.</li> <li>- Create an awareness of the policies of controlling population growth.</li> </ul> | <ul style="list-style-type: none"> <li>- Definitions of population concepts (birth rate, death rate, growth rate, fertility rate, life expectancy)</li> <li>- Population of Rwanda.</li> <li>- Population distribution and the density in Rwanda</li> <li>- Factors influencing population distribution in Rwanda</li> <li>- Population structure of Rwanda</li> <li>- Population growth in Rwanda</li> </ul> | <ul style="list-style-type: none"> <li>- Use a population map of Rwanda, documents, internet to identify and write down the areas of high and low population and the factors for population distribution.</li> <li>- In groups, discuss the factors influencing population distribution in Rwanda and make a class presentation.</li> <li>- Use the geographical documents, internet and population graphs to research on the population structure and the factors for the population growth in Rwanda. Write down the findings.</li> <li>- In groups, discuss and</li> </ul> |

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| <ul style="list-style-type: none"> <li>- Identify the causes of the rapid population growth and its effects in Rwanda.</li> <li>- List the types, causes and consequences of migration</li> </ul>  | <ul style="list-style-type: none"> <li>- Evaluate the causes and the effects of migration.</li> </ul> |  | <ul style="list-style-type: none"> <li>- Factors influencing the population growth in Rwanda</li> <li>- Consequences of the population growth in Rwanda</li> <li>- Solutions for the rapid population growth</li> <li>- Migrations: types, causes and consequences</li> </ul> | <p>compile the findings for a class presentation and engage in Q&amp;A methodology.</p> <ul style="list-style-type: none"> <li>- Use the geographical documents, internet or the local environment to research on the consequences and the solutions for the rapid population growth and write down the findings.</li> <li>- In groups, discuss and compile the findings for a well engaged class presentation.</li> <li>- Individually, examine why population migration occurs and its impact in Rwanda. Write an essay.</li> </ul> |
| <p><b>Links to other subjects:</b> <i>It relates to Population in Economics and statistics in Mathematics</i></p>  |   |  |   |   |
| <p><b>Assessment criteria:</b> <i>The learners are able to describe accurately the causes and the effects of the rapid population growth and the migration in Rwanda, and evaluate some measures to control the rapid population growth.</i></p> |   |  |   |   |
| <p><b>Materials:</b> <i>Geographical documents, internet, illustrations/diagrams, maps, photographs, slide shows, video clips, tactile and talking materials and local environment.</i></p>  |   |  |   |   |

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| <b>Topic Area: Human and Economic Geography</b>  |   |   | <b>Sub-topic Area: Settlement and urbanisation</b>  |  |
| <b>Year group &amp; Subject: S4 Geography</b>  |   | <b>Unit 10: Rural and urban Settlement in Rwanda</b>  |   | <b>No. of periods: 26</b>  |
| <b>Key unit competency:</b> The learner should be able to describe, explain and evaluate the impact of the rural and urban settlements on the sustainable development in Rwanda  |   |   |   |  |
| <b>Learning Objectives</b>   |   |   | <b>Content</b>  | <b>Learning Activities</b>   |
| <b>Knowledge and Understanding</b>   | <b>Skills</b>   | <b>Attitudes and Values</b>   |   |  |
| <ul style="list-style-type: none"> <li>- Name the various types of rural settlement</li> <li>- State the factors and the effects of rural settlement</li> <li>- Give the characteristics and the functions of the urban centres in Rwanda.</li> <li>- State the factors favouring the growth of the urban centres in Rwanda</li> <li>- Identify the major urban centres of Rwanda</li> </ul> | <ul style="list-style-type: none"> <li>- Explain the characteristics of the rural settlement</li> <li>- Evaluate the effects of the rural settlement and carry out a research on the Government policy towards the rural settlement schemes (imidugudu).</li> <li>- Explain the characteristics and the functions of the urban centres in Rwanda.</li> <li>- Explain the factors</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the types and the characteristics of rural settlement in Rwanda</li> <li>- Show concern for the importance of the rural settlement schemes in Rwanda.</li> <li>- Appreciate the growth of the urban centres in Rwanda.</li> <li>- Show the resilience for the problems caused by the urbanisation in Rwanda.</li> </ul> | <ul style="list-style-type: none"> <li>- Rural settlements: <ul style="list-style-type: none"> <li>o types and characteristics of rural settlements</li> <li>o factors influencing the rural settlements.</li> <li>o problems and solutions of rural settlements</li> <li>o Government policy towards the rural settlement</li> </ul> </li> <li>- Urban settlement Urbanisation: <ul style="list-style-type: none"> <li>o characteristics of the urban centres</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>- Use the geographical documents, internet, photographs or the local environment to find the types, characteristics, factors, problems and solutions of the rural settlement in Rwanda and write down the findings.</li> <li>- In groups, discuss and compile the findings for a class presentation.</li> <li>- Use the geographical documents, internet, photographs or local environment to find the major urban centres, their characteristics, functions, the factors for growth, problems associated and the solutions of the urban settlement in Rwanda,</li> </ul> |

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| <ul style="list-style-type: none"> <li>- Identify the effects of the urban settlements</li> </ul>   | <p>for the growth of the urban centres in Rwanda</p> <ul style="list-style-type: none"> <li>- Evaluate the effects of the urban settlements.</li> <li>- Carry out an investigation on the causes and problems of the slums</li> </ul> |  | <ul style="list-style-type: none"> <li>o factors favouring urbanisation</li> <li>o major urban centres e.g.: Kigali, Huye, Rubavu, Musanze. (location, population, functions).</li> <li>o Problems of the urban centres in Rwanda and the solutions</li> <li>o Development of the slums (examples, causes, problems and the solutions).</li> </ul> | <p>and write down the findings.</p> <ul style="list-style-type: none"> <li>- In groups, discuss and compile the findings for a class presentation followed by an interactive Q&amp;A.</li> <li>- Examine the impact of the urbanisation on the sustainable development projects. Select a project and write a report.</li> <li>- In groups, use the local environment or photographs to discuss the causes, problems and solutions of the slums in Rwanda and make a class presentation supported by Q&amp;A methodology.</li> <li>- Examine the link between the urbanisation and the growth in slum developments, and write an essay on the causes and the effects of both.</li> </ul> |
| <p><b>Links to other subjects:</b> <i>It is related to population in Economics and General studies</i></p>  |   |  |  |  |
| <p><b>Assessment criteria:</b> <i>The learners are able describe the impact of rural and urban settlements on the sustainable development projects in Rwanda. The learners can explain why the development projects are important and evaluate the success of the projects on long term sustainability.</i></p> |   |  |  |  |
| <p><b>Materials:</b> <i>Textbooks, internet, illustrations/diagrams, maps, photographs, slide shows, video clips, tactile and talking materials and local environment.</i></p>  |   |  |  |  |

| Topic Area: Human and Economic Geography  |  |  | Sub-topic Area: Economic activities   |   |
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| Year group & Subject: S4 Geography  |  | Unit 11: Agriculture in Rwanda   |   | No. of periods: 28  |
| <b>Key unit competency:</b> The learner should be able to investigate the impact of various agricultural activities on the sustainable development in Rwanda  |  |  |   |   |
| Learning Objectives   |  |  | Content   | Learning Activities   |
| Knowledge and Understanding   | Skills   | Attitudes and Values   |   |   |
| <ul style="list-style-type: none"> <li>- Identify the different subsistence crops grown in Rwanda</li> <li>- State the factors favouring the subsistence farming in Rwanda</li> <li>- Outline the advantages and disadvantages of the subsistence farming in Rwanda</li> <li>- Identify the major plantation crops in Rwanda, and their characteristics.</li> <li>- State the factors favouring the plantation farming in Rwanda</li> <li>- Outline the advantages and disadvantages of the plantation farming</li> </ul> | <ul style="list-style-type: none"> <li>- Classify different subsistence crops grown in Rwanda</li> <li>- Explain the factors for the subsistence farming in Rwanda.</li> <li>- Describe the advantages and disadvantages of the subsistence farming in Rwanda</li> <li>- Analyse the characteristics of the major plantation crops in Rwanda</li> <li>- Explain the factors favouring plantation farming in Rwanda</li> <li>- Evaluate the advantages and</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the importance of agriculture to the economy of Rwanda.</li> <li>- Show continual desire to improve the agriculture system in Rwanda.</li> <li>- Understand the factors influencing in keeping smaller animals in Rwanda.</li> <li>- Show respect for keeping</li> </ul> | <ul style="list-style-type: none"> <li>- Crop cultivation</li> <li>- Subsistence cultivation: definition and types (small holder farming, market gardening and horticulture).</li> <li>- Examples of subsistence crops in Rwanda</li> <li>- Factors for the subsistence farming in Rwanda.</li> <li>- Advantages and disadvantages of improved subsistence crop cultivation.</li> <li>- Plantation farming:               <ul style="list-style-type: none"> <li>o major plantation crops and areas</li> <li>o characteristics of plantation farming</li> <li>o factors favouring plantation agriculture in Rwanda</li> <li>o advantages and</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>- Use the geographical documents, internet, photographs, maps or the local environment to research on the different types of cultivation, their characteristics, factors favouring each type of cultivation, advantages and disadvantages of each farming system, and write down the findings.</li> <li>- In groups, discuss and compile the findings for a class presentation.</li> <li>- Examine the impact of agricultural activities on the sustainable development projects. Select a project and write a report.</li> <li>- In the field study, visit a plantation farm and collect the</li> </ul> |

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| <ul style="list-style-type: none"> <li>- State the factors for the agricultural modernisation in Rwanda</li> <li>- Outline the problems limiting the agricultural modernisation in Rwanda</li> <li>- Identify the ways of improving agriculture production in Rwanda.</li> <li>- Identify the different systems of rearing animals in Rwanda, and their characteristics</li> <li>- State the factors hindering the development of dairy farming</li> <li>- Outline the ways of improving livestock farming in Rwanda.</li> <li>- Identify the types of small animals kept in Rwanda</li> <li>- State the factors affecting in keepingsmaller animals</li> <li>- Outline the methods of improving smaller animals</li> <li>- Give the importance of keeping smaller animals</li> </ul> | <p>disadvantages of plantation</p> <ul style="list-style-type: none"> <li>- Explain the factors for agricultural modernisation in Rwanda</li> <li>- Explain the factors hindering the agriculture modernisation in Rwanda</li> <li>- Do research on ways of improving agriculture in Rwanda</li> <li>- Describe the different systems of rearing animals in Rwanda, and their characteristics</li> <li>- Analyse the factors hindering the development of dairy farming in Rwanda</li> <li>- Carry out a research on ways of improving livestock farming in Rwanda</li> <li>- Carry out a research on the factors,</li> </ul> | <p>smaller animals in Rwanda</p> <ul style="list-style-type: none"> <li>- Show concern for the importance of agriculture to the economy of Rwanda.</li> </ul> | <p>disadvantages of the plantation farming</p> <ul style="list-style-type: none"> <li>- Case study: <ul style="list-style-type: none"> <li>o Tea plantation</li> <li>o Sugar cane plantation (Kabuye/Nyacyonga, Nyabarongo valley)</li> </ul> </li> <li>- Agriculture modernisation in Rwanda: <ul style="list-style-type: none"> <li>o definition</li> <li>o factors for the modernisation of agriculture and methods used to modernise the agriculture</li> <li>o problems limiting agriculture modernisation in Rwanda</li> <li>o ways of improving agricultural production in Rwanda</li> </ul> </li> <li>- Livestock farming : <ul style="list-style-type: none"> <li>o definition of ranching, dairying and zerograzing</li> <li>o characteristics of ranching and dairying (types, areas of dairy farming).</li> <li>o factors hindering the development of dairy farming</li> </ul> </li> </ul> | <p>data on the characteristics, factors favouring the plantation, advantages and disadvantages, the problems related to the plantation farming. Compile the findings for the group discussions and class presentation, and prepare a written report.</p> <ul style="list-style-type: none"> <li>- In groups, discuss about the problems limiting agricultural modernisation and suggest the possible ways of developing agriculture in Rwanda. Make a class presentation.</li> <li>- Use the geographical documents, internet, photographs, maps or local environment to research on different types of livestock farming, their characteristics, factors, problems and ways of improving the livestock farming in Rwanda; write down the findings.</li> <li>- In groups, discuss and compile the findings for a class presentation and engage in Q&amp;A.</li> <li>- Examine the link between the crops and livestock farming and write an essay on how they make</li> </ul> |
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| <ul style="list-style-type: none"> <li>- Identify the contributions of the livestock farming to the economy of Rwanda</li> <li>- Identify the problems affecting the livestock farming in Rwanda</li> <li>- State the importance of agriculture on the sustainable development of Rwanda</li> </ul> | <p>methods and the importance of keeping smaller animals in Rwanda.</p> <ul style="list-style-type: none"> <li>- Analyse the contributions and problems associated with the livestock farming in Rwanda</li> <li>- Investigate the importance of agriculture to the economy of Rwanda</li> </ul> |  | <ul style="list-style-type: none"> <li>○ ways of improving the livestock farming in Rwanda</li> <li>○ keeping small animals (pigs, poultry, goats, rabbits and apiculture).</li> <li>○ factors affecting in keeping smaller animals.</li> <li>○ methods of improving in keeping the smaller animals</li> <li>○ importance of keeping smaller animals</li> <li>○ problems affecting the livestock in Rwanda and the solutions</li> <li>○ contributions of the livestock farming to the economy of Rwanda.</li> <li>○ The importance of agriculture to the economy of Rwanda</li> </ul> | <p>an impact on each other.</p> <ul style="list-style-type: none"> <li>- In groups, discuss the contribution of livestock farming to the economy of Rwanda, draw relevant conclusions and make a class presentation.</li> <li>- In groups, use the knowledge acquired from class, documents, internet, photographs, maps or the local environment to research on the contribution of crop cultivation and animal rearing to the economy of Rwanda and make a class presentation.</li> </ul> |
| <p><b>Links to other subjects:</b> <i>It is linked to agricultural production in Economics, statistics in Mathematics and crop production and animal husbandry in Agriculture</i></p>   |  |  |   |   |
| <p><b>Assessment criteria:</b> <i>The learners are able to correctly investigate the impact of agriculture on the sustainable development in Rwanda</i></p>   |  |  |   |   |
| <p><b>Materials:</b> <i>Geographical documents, maps, tactile and talking materials, concrete objects, photographs, internet, GTS, video (audio-visual) clips, local environment and field trip resources.</i></p>  |  |  |   |   |

| Topic Area: Human and Economic Geography  |  |  | Sub-topic Area: Economic activities   |   |
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| Year group & Subject: S4 Geography  |  | Unit12: Forestry in Rwanda   |   | No. of periods : 14   |
| <b>Key unit competency:</b> The learner should be able to investigate the impact of forests and forestry on the sustainable development in Rwanda   |  |  |   |   |
| Learning Objectives   |  |  | Content   | Learning Activities   |
| Knowledge and Understanding   | Skills   | Attitudes and Values   |   |   |
| <ul style="list-style-type: none"> <li>- Define forest and forestry</li> <li>- Identify the major forested areas of Rwanda</li> <li>- List the factors influencing the forest exploitation</li> <li>- State different methods of lumbering in Rwanda</li> <li>- Give the importance of forests and forestry in Rwanda</li> <li>- Outline the products of</li> </ul> | <ul style="list-style-type: none"> <li>- Differentiate forest from forestry</li> <li>- Describe the characteristics of the major forests in Rwanda</li> <li>- Explain the factors influencing the forest exploitation</li> <li>- Describe different methods of lumbering in Rwanda</li> <li>- Apply the knowledge of forestry to discuss the importance of forests and forestry</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the importance of conserving forests in Rwanda</li> <li>- Appreciate the importance of forest and forestry in Rwanda</li> <li>- Show concern for the problems of forest exploitation in Rwanda</li> <li>- Show respect for the forest conservation and the management in Rwanda</li> </ul> | <ul style="list-style-type: none"> <li>- Forest and forestry</li> <li>- Major forested areas in Rwanda and their characteristics</li> <li>- Factors influencing the forest exploitation</li> <li>- Lumbering/ forest exploitation in Rwanda (methods of lumbering)</li> <li>- Importance of forests and forestry in Rwanda</li> <li>- Products from lumbering in Rwanda</li> <li>- Problems affecting the forest</li> </ul> | <ul style="list-style-type: none"> <li>- Use the geographical documents, internet, local environment, maps, photographs, or videos on the major forested areas in Rwanda, the factors influencing the forest exploitation, the methods and the importance of lumbering. Write down the findings.</li> <li>- In groups, discuss the findings for a class presentation followed by Q&amp;A.</li> <li>- Use documents, internet, local environment, maps, photographs, or videos on the problems affecting forest</li> </ul> |

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| <p>lumbering in Rwanda</p> <ul style="list-style-type: none"> <li>- Identify the problems affecting forest exploitation in Rwanda</li> <li>- State the causes and the effects of deforestation in Rwanda</li> <li>- State the measures for forest conservation in Rwanda</li> </ul> | <p>in Rwanda</p> <ul style="list-style-type: none"> <li>- Carry out a research on the forests in Rwanda and find the problems affecting the forests in Rwanda</li> <li>- Examine the causes and the effects of deforestation in Rwanda, and suggest the conservation measures.</li> </ul> |  | <p>exploitation / lumbering in Rwanda</p> <ul style="list-style-type: none"> <li>- Deforestation (causes and the effects of deforestation)</li> <li>- Forest conservation and the management (policy measures) in Rwanda</li> <li>- Case study: <ul style="list-style-type: none"> <li>o Nyungwe forest</li> </ul> </li> </ul> | <p>exploitation, the causes and the effects of deforestation, and the possible control measures for conservation of forests in Rwanda. Write down the findings.</p> <ul style="list-style-type: none"> <li>- In groups, discuss the findings, draw relevant conclusions and prepare a written report.</li> <li>- In a field study, observe and record the findings about the forestry and the forest exploitation, and make group discussions on what was observed in reference to the knowledge acquired in the current unit. Write a report of the findings for a class presentation.</li> </ul> |
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**Links to other subjects:** *This topic is linked to ecology in Biology*

**Assessment criteria:** *The learners are able to investigate the impacts of forest and forestry to the sustainable development*

**Materials:** *Geographical documents, internet, maps, local environment, tactile and talking materials, field work material and video player.*

| Topic Area: Human and Economic Geography  |   | Sub-topic Area: Economic activities  |  |  |
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| Year group & Subject: S4 Geography  |   | Unit 13: Fishing in Rwanda   |  | No. of periods: 10   |
| Key unit competency: The learner should be able to explain the impact of fishing on the sustainable development of Rwanda   |   |  |  |  |
| Learning Objectives   |   |  | Content  | Learning Activities  |
| Knowledge and Understanding   | Skills  | Attitudes and Values   |  |  |
| <ul style="list-style-type: none"> <li>- Define fishing and fish farming.</li> <li>- Identify the major fishing grounds of Rwanda.</li> <li>- Identify the factors favouring fishing in Rwanda.</li> <li>- State different types of fish and methods of fishing used in Rwanda.</li> <li>- State the methods used for the fish conservation and preservation in Rwanda.</li> <li>- Outline the</li> </ul> | <ul style="list-style-type: none"> <li>- Locate the major fishing grounds of Rwanda.</li> <li>- Explain the factors favouring fishing and fish farming in Rwanda.</li> <li>- Describe the methods of fishing in Rwanda.</li> <li>- Evaluate the methods of fish conservation and preservation in Rwanda.</li> <li>- Explain the importance and the problems of</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the importance of fish and fishing in Rwanda.</li> <li>- Show concern for the problems affecting fishing and fish conservation in Rwanda.</li> <li>- Show continual desire to promote fishing and fish farming in Rwanda.</li> </ul> | <ul style="list-style-type: none"> <li>- Definition of fishing.</li> <li>- Major fishing grounds of Rwanda.</li> <li>- Factors favouring fishing in Rwanda.</li> <li>- Types of fish and the methods of fishing used in Rwanda.</li> <li>- Methods of conservation and preservation of fish in Rwanda.</li> <li>- Importance of fish and fishing in Rwanda.</li> <li>- Problems affecting fishing and the</li> </ul> | <ul style="list-style-type: none"> <li>- Use the geographical documents, internet or the local environment to identify the major fishing grounds, types of fishes caught and the methods used, factors favouring fishing; and write down the findings.</li> <li>- In groups, discuss and compile the findings for the class presentation.</li> <li>- In a field study, collect the data on the types of fish, methods of fishing, problems, preservation and conservation methods; and record the findings.</li> <li>- In groups, discuss the findings and write a report for a class presentation.</li> </ul> |

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| <p>importance and the problems of fishing and fish farming in Rwanda.</p> <ul style="list-style-type: none"> <li>- Identify different ways of improving fishing and fish farming in Rwanda.</li> </ul> | <p>fishing and fish farming in Rwanda.</p> <ul style="list-style-type: none"> <li>- Do research on ways of improving fishing and fish farming in Rwanda.</li> </ul> |  | <p>possible solutions.</p> <ul style="list-style-type: none"> <li>- Fish farming in Rwanda.</li> <li>- Factors favouring fish farming.</li> <li>- Problems and prospects for fish farming in Rwanda.</li> <li>- Ways of improving fishing and fish farming in Rwanda (future prospects).</li> <li>- Case study: fishing on lakes - Kivu, Rweru, Ihema.</li> </ul> | <ul style="list-style-type: none"> <li>- In group work, discuss the importance and the problems of fish and fishing to the Rwandans and to the economy of Rwanda. Make a class presentation.</li> <li>- Use the geographical documents and internet to research on the importance and problems of fish farming in Rwanda and write down the findings.</li> <li>- In groups, discuss the findings and make a class presentation followed by Q&amp;A.</li> <li>- In groups, suggest recommendations in improving fishing in Rwanda and set up a demonstration fishpond for fish farming to foster learning and write a report.</li> </ul> |
| <p><b>Links to other subjects:</b> <i>It is linked to fish species in Biology and fish farming in entrepreneurship</i></p>   |   |  |   |   |
| <p><b>Assessment criteria:</b> <i>The learners are able to investigate the impact of the fish and fishing on the sustainable development of Rwanda</i></p>   |   |  |   |   |
| <p><b>Materials:</b> <i>Documents, internet, photographs, local environment, fieldwork materials, brailed textbooks, fishing materials.</i></p>  |   |  |   |   |

| Topic Area: Human and Economic Geography   |  |   | Sub-topic Area: Economic activities   |   |
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| Year group & Subject: S4 Geography   |  | Unit 14: Mining in Rwanda   |   | No. of periods: 7   |
| <b>Key unit competency:</b> The learner should be able to investigate the impact of mining on the sustainable development in Rwanda  |  |   |   |   |
| Learning Objectives  |  |   | Content   | Learning Activities   |
| Knowledge and Understanding  | Skills   | Attitudes and Values  |   |   |
| <ul style="list-style-type: none"> <li>- Identify the major minerals in Rwanda</li> <li>- State the methods used in the mining in Rwanda.</li> <li>- State the factors affecting the exploitation of minerals in Rwanda.</li> <li>- Identify the importance of mining to the economy of Rwanda.</li> <li>- State the problems affecting the mining.</li> </ul> | <ul style="list-style-type: none"> <li>- Create a sketch map of Rwanda to identify and locate the major minerals in Rwanda.</li> <li>- Analyse the methods used in the mining in Rwanda.</li> <li>- Do research on the factors affecting the exploitation of minerals in Rwanda.</li> <li>- Evaluate the importance of mining to the economy of Rwanda.</li> <li>- Analyse the problems affecting</li> </ul> | <ul style="list-style-type: none"> <li>- Show concern for the unequal distribution of minerals in Rwanda.</li> <li>- Appreciate the importance of minerals.</li> <li>- Show concern for the use of environmental friendly methods of mining.</li> </ul> | <ul style="list-style-type: none"> <li>- Types and distribution of the major minerals in Rwanda.</li> <li>- Methods of mining in Rwanda.</li> <li>- Factors affecting the exploitation of minerals in Rwanda.</li> <li>- Importance of mining to the economy of Rwanda.</li> <li>- Products from the minerals in Rwanda.</li> <li>- Problems affecting the mining and the solutions.</li> </ul> | <ul style="list-style-type: none"> <li>- Use documents, internet, map of Rwanda, photographs and the local environment to identify the major mining areas in Rwanda, methods and factors affecting mining; write down the findings.</li> <li>- In groups, discuss and compile the findings for a class presentation followed by Q&amp;A.</li> <li>- Use the geographical documents, internet, map of Rwanda, photographs or field study to research on the importance and problems affecting the mineral exploitation in Rwanda, and the possible solutions to the</li> </ul> |

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|  | <p>the mining in Rwanda and suggest the solutions.</p> |  |  | <p>problems affecting mining in Rwanda. Write down the findings.</p> <ul style="list-style-type: none"> <li>- In groups, discuss and compile the findings, make relevant conclusions and write an essay.</li> <li>- In pairs, discuss whether it is important for the government to regulate and control the mining of Rwanda's resources. Write a report.</li> </ul> |
| <p><b>Links to other subjects:</b> <i>It is linked to chemical properties in Chemistry.</i></p>  |  |  |  |   |
| <p><b>Assessment criteria:</b> <i>The learners are able to correctly analyse the impacts of mining on the sustainable development of Rwanda.</i></p>   |  |  |  |   |
| <p><b>Materials:</b> <i>Text books/ brailled textbooks, journals, photographs, local environment, maps, tactile and talking materials, internet/Jaws software and field study resources.</i></p> |  |  |  |   |

| Topic Area: Human and Economic Geography   |  | Sub-topic Area: Economic activities   |   |   |
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| Year group & Subject: S4 Geography   |  | Unit 15: Power and Energy in Rwanda   |   | No. of periods: 12  |
| <b>Key unit competency:</b> The learner should be able to investigate the impact of Power and Energy production on the sustainable development in Rwanda   |  |   |   |   |
| Learning Objectives  |  |   | Content   | Learning Activities   |
| Knowledge and Understanding  | Skills   | Attitudes and Values  |   |   |
| <ul style="list-style-type: none"> <li>- Recall the forms of energy used in Rwanda and the difference between the renewable and non-renewable energy</li> <li>- State the factors favouring the power production in Rwanda</li> <li>- Give the importance of power and energy in Rwanda</li> <li>- Identify the factors that hinder the potential exploitation of</li> </ul> | <ul style="list-style-type: none"> <li>- Distinguish among different sources of energy used in Rwanda</li> <li>- Analyse the factors that hinder the potential exploitation of rivers in Rwanda in the production of power and energy</li> <li>- Evaluate the importance of power and energy in Rwanda</li> <li>- Investigate the problems hindering the development of</li> </ul> | <ul style="list-style-type: none"> <li>- Show concern for the low levels of energy production in Rwanda</li> <li>- Show resilience for the protection and the appropriate use of different sources of energy</li> <li>- Appreciate the importance of power and energy on the sustainable development of Rwanda</li> <li>- Show respect for the efforts in the development of</li> </ul> | <ul style="list-style-type: none"> <li>- Major sources and forms of energy used in Rwanda (renewable and non-renewable)</li> <li>- Factors favouring the power production in Rwanda.</li> <li>- Importance of power in the development of Rwanda.</li> <li>- Problems hindering the development of energy and the possible solutions in Rwanda</li> </ul> | <ul style="list-style-type: none"> <li>- Use documents, internet, map of Rwanda, photographs or the local environment to identify the major sources of energy used in Rwanda, the factors favouring the power production and the importance of energy, and write down the findings.</li> <li>- In groups, discuss and compile the findings for a class presentation followed by Q&amp;A.</li> <li>- Use internet, textbooks or field study to research on the problems hindering the development of energy and suggest possible solutions,</li> </ul> |

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| rivers in Rwanda in production of the power and energy  | energy and suggest possible solutions | power and energy in the country | <ul style="list-style-type: none"> <li>- Case study: <ul style="list-style-type: none"> <li>o Mukungwa I, Mukungwa II, Rusizi II.</li> </ul> </li> </ul> | <p>Write down the findings.</p> <ul style="list-style-type: none"> <li>- In groups, discuss and compile the findings for a class presentation.</li> <li>- In a field study, observe and record the findings about the power and energy production for the discussions in reference to the knowledge acquired in the current unit, and make a report for a class presentation.</li> <li>- How will Rwanda cope with the increasing demand for power with an increasing population? In pairs, investigate and write a report.</li> </ul> |
| <p><b>Links to other subjects:</b> <i>It is linked to Physics when learning on power and energy</i></p>   |                                       |                                 |  |  |
| <p><b>Assessment criteria:</b> <i>The learners are able to correctly categorise the different sources of energy and investigate the impact of power and energy on the sustainable development of Rwanda</i></p> |                                       |                                 |  |  |
| <p><b>Materials:</b> <i>Text books/ brailled textbooks, journals, photographs, maps, tactile and talking materials, internet/Jaws software and fields study resources.</i></p>                                  |                                       |                                 |  |  |

| Topic Area: Human and Economic Geography   |   | Sub-topic Area: Economic activities  |   |   |
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| Year group & Subject: S4 Geography   |   | Unit 16: Industry in Rwanda  |   | No. of periods: 14  |
| <b>Key unit competency:</b> The learner should be able to explain the impact of industrialisation on the sustainable development in Rwanda   |   |  |   |   |
| Learning Objectives  |   |  | Content   | Learning Activities   |
| Knowledge and Understanding  | Skills  | Attitudes and Values   |   |   |
| <ul style="list-style-type: none"> <li>- Recall the definition of the industry</li> <li>- Name the types of industries in Rwanda</li> <li>- State the factors affecting the location of industries in Rwanda</li> <li>- Identify the importance of industries in Rwanda.</li> <li>- Identify the problems affecting the industrial development in</li> </ul> | <ul style="list-style-type: none"> <li>- Explain the concept of industrialisation.</li> <li>- Differentiate among the types of industries in Rwanda</li> <li>- Explain the factors affecting the location of industries</li> <li>- Explain the importance of industries in Rwanda.</li> <li>- Investigate the problems affecting the industrial development in</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the importance of each type of industry</li> <li>- Show concern for the factors affecting the development of industries in Rwanda</li> <li>- Appreciate the importance of industrial development to the economic growth of the country</li> <li>- Show resilience for the environmental and health problems resulting</li> </ul> | <ul style="list-style-type: none"> <li>- Definition of industry and industrialisation</li> <li>- Types of industries and the industrial products in Rwanda</li> <li>- Factors affecting the location of industries and influencing the industrial development in Rwanda.</li> <li>- Importance of the industries in Rwanda</li> <li>- Problems affecting the industrial development and the solutions, in Rwanda.</li> <li>- Environmental and health issues</li> </ul> | <ul style="list-style-type: none"> <li>- Use the geographical documents, internet, map of Rwanda, photographs or the local environment to identify the types of industries, factors for the location, factors influencing the industrial development and the importance of industries. Write down the findings.</li> <li>- In groups, discuss and compile the findings for a class presentation.</li> <li>- In groups, discuss the problems affecting the industrial development, the environment and the health issues associated and suggest the solutions. Make a class</li> </ul> |

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| <p>Rwanda.<br/>- Outline the environment and health issues associated with industrialisation.</p>   | <p>Rwanda.<br/>- Investigate the environment and the health issues associated with industrialisation</p> | <p>from industrialisation</p> | <p>associated with industrialisation and the ways to mitigate them<br/>- Case study:<br/>o Tea and Coffee factories, Inyange industry, Bugarama cement factory and BRALIRWA.</p> | <p>presentation and engage in Q&amp;A.<br/>- In a field study, observe and record the findings about industrialisation for class discussion in reference to the knowledge acquired in the current unit (location of the industries, associated effects and the ways to mitigate them), and draw relevant conclusions. Write a report.</p> |
| <p><b>Links to other subjects:</b> <i>It is related to industrial production in Economics</i></p>   |  |                               |  |   |
| <p><b>Assessment criteria:</b> <i>The learners are able to correctly explain the factors for the industrial growth and the impact of industrialisation on the sustainable development</i></p>   |  |                               |  |   |
| <p><b>Materials:</b> <i>Textbooks/ brailled textbooks, journals, photographs, maps, local environment, tactile and talking materials, internet/jaws software and field study resources.</i></p> |  |                               |  |   |

| Topic Area: Human and Economic Geography   |   |   | Sub-topic Area: Economic activities  |  |
|--|---|---|--|--|
| Year group & Subject: S4 Geography   |   | Unit 17: Transport, Communication and Trade in Rwanda   |  | No. of periods: 14   |
| <b>Key unit competency:</b> The learner should be able to investigate the impact of Transport, Communication and Trade on the sustainable development of Rwanda  |   |   |  |  |
| Learning Objectives  |   |   | Content  | Learning Activities  |
| Knowledge and Understanding  | Skills  | Attitudes and Values  |  |  |
| <ul style="list-style-type: none"> <li>- State different types of transport in Rwanda</li> <li>- Identify the factors influencing the development of the transport</li> <li>- Give the importance of transport in Rwanda</li> <li>- Outline the advantages and disadvantages of the different types of transport in Rwanda</li> <li>- Identify the problems affecting the transport in Rwanda</li> <li>- List the different means of communication used</li> </ul> | <ul style="list-style-type: none"> <li>- Locate different types of transport in Rwanda</li> <li>- Explain the factors influencing the development of transport in Rwanda</li> <li>- Explain the importance of transport in Rwanda</li> <li>- Evaluate the advantages and disadvantages of the different types of transport in Rwanda</li> <li>- Describe the problems of transport in Rwanda and the future prospects</li> <li>- Differentiate the means</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the importance of transport in Rwanda</li> <li>- Show resilience for the perspectives of transport development in Rwanda</li> <li>- Show respect for the development of transport in Rwanda.</li> <li>- Appreciate the importance of communication in Rwanda</li> </ul> | <p>Transport</p> <ul style="list-style-type: none"> <li>- Major types of transport and their distribution</li> <li>- Factors influencing the development of transport.</li> <li>- Importance of transport on the sustainable development of Rwanda.</li> <li>- Advantages and disadvantages of each type of transport</li> <li>- Problems affecting the transport (land locked position, rugged relief, shortage of capital).</li> <li>- Possible solutions and the future prospects of transport in Rwanda</li> </ul> | <ul style="list-style-type: none"> <li>- Use the geographical documents, internet, map of Rwanda, photographs or the local environment to identify the major types of transport, factors influencing transport, importance of transport, problems and the possible solutions. Write down the findings.</li> <li>- In groups, discuss and compile the findings for a class presentation followed by Q&amp;A.</li> <li>- In groups, discuss about</li> </ul> |

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| <p>in Rwanda</p> <ul style="list-style-type: none"> <li>- Identify the factors influencing the development of communication in Rwanda</li> <li>- Give the importance of communication in Rwanda</li> <li>- Outline the problems affecting communication and the possible solutions.</li> <li>- Define the internal and external trade; importation and exportation in Rwanda.</li> <li>- Identify the factors affecting the trade in Rwanda</li> <li>- Give the importance of trade in Rwanda</li> <li>- Identify imports and exports of Rwanda</li> <li>- Identify the problems affecting the trade in Rwanda.</li> </ul> | <p>of communication used in Rwanda</p> <ul style="list-style-type: none"> <li>- Explain the factors influencing the development of communication</li> <li>- Evaluate the importance of communication in Rwanda</li> <li>- Explain the problems and the solutions of communication</li> <li>- Explain the concepts of internal and external trade; importation and exportation.</li> <li>- Explain the factors affecting the trade in Rwanda</li> <li>- Evaluate the importance of trade in Rwanda</li> <li>- Explain the balance of trade and the balance of payment in Rwanda</li> <li>- Describe and explain the problems affecting the trade in Rwanda and propose the</li> </ul> | <ul style="list-style-type: none"> <li>- Show resilience for the perspectives of development of communication in Rwanda</li> <li>- Show continual desire to use different means of communication for the development.</li> <li>- Appreciate the importance of trade in Rwanda.</li> <li>- Show resilience for the perspectives of development of trade in Rwanda</li> <li>- Show continual desire to acquire entrepreneurial skills in trade for the development in Rwanda.</li> </ul> | <p>Communications</p> <ul style="list-style-type: none"> <li>- Different means of communication</li> <li>- Factors influencing the development of communication in Rwanda.</li> <li>- Importance of communication in Rwanda.</li> <li>- Problems affecting communication and the solutions</li> </ul> <p>Trade</p> <ul style="list-style-type: none"> <li>- Internal and external trade in Rwanda</li> <li>- Factors affecting the trade in Rwanda</li> <li>- Importance of trade in Rwanda</li> <li>- Importation and exportation of the products (balance of trade and balance of payment)</li> <li>- Problems affecting the trade in Rwanda, possible solutions and prospects</li> </ul> | <p>the problems associated to a landlocked position of a country and debate on ways of solving those problems.</p> <ul style="list-style-type: none"> <li>- Use the geographical documents, internet, map of Rwanda, photographs or the local environment to identify the different means of communication, factors influencing the development of communication, importance of communication, problems and possible solutions. Write down the findings.</li> <li>- In groups, discuss and compile the findings for the class presentations.</li> <li>- Use documents, internet, map of Rwanda, photographs or the local environment to identify the factors affecting the trade, the imports and</li> </ul> |
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|   | possible solutions. |  |  | <p>exports, the importance and the problems of trade. Write down the findings.</p> <ul style="list-style-type: none"> <li>- In groups, discuss and compile the findings for a class presentation.</li> <li>- What will be the impact on the sustainable development if Rwanda continues to improve its communication and transport infrastructures? In pairs, write a report.</li> </ul> |
| <p><b>Links to other subjects:</b> <i>It is related to the international trade in Economics, statistics in Mathematics, trade and communication in General paper.</i></p> |                     |  |  |  |
| <p><b>Assessment criteria:</b> <i>The learners are able to properly investigate the impacts of transport, communication and trade on the sustainable development.</i></p> |                     |  |  |  |
| <p><b>Materials:</b> <i>Text books/ brailled textbooks, photographs, local environment, maps, tactile and talking materials, internet/Jaws software.</i></p>              |                     |  |  |  |

| Topic Area: Human and Economic Geography  |  |  | Sub-topic Area: Economic Activities   |  |
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| Year group & Subject: S4 Geography  |  | Unit 18: Environmental Conservation in Rwanda and Tourism  |   | No. of periods: 10   |
| <b>Key unit competency:</b> The learner should be able to investigate the impact of environmental conservation and tourism on the sustainable development of Rwanda   |  |  |   |  |
| Learning Objectives   |  |  | Content   | Learning Activities  |
| Knowledge and Understanding   | Skills   | Attitudes and Values   |   |  |
| <ul style="list-style-type: none"> <li>- Give the definition of environmental conservation</li> <li>- Name the different natural resources of Rwanda</li> <li>- State the reasons and ways for the conservation of environment in Rwanda</li> <li>- Identify the impact of the conservation on the environment in Rwanda</li> </ul> | <ul style="list-style-type: none"> <li>- Apply the knowledge of environmental conservation to protect the environment.</li> <li>Classify the different natural resources of Rwanda.</li> <li>- Explain the reasons and ways for the conservation of environment</li> <li>- Evaluate the impact of conservation on the environment and the</li> </ul> | <ul style="list-style-type: none"> <li>- Show respect for the various tourist attractions available in the country</li> <li>- Appreciate the importance of environmental conservation</li> <li>- Show the concern for the problems affecting the environmental conservation</li> </ul> | Environmental Conservation <ul style="list-style-type: none"> <li>- Definition of environmental conservation</li> <li>- Types of natural resources (abiotic, biotic, renewable and non-renewable)</li> <li>- Reasons for the conservation of natural resources in Rwanda</li> <li>- Ways of conservation of the natural resources (wetlands, forests, wild life, land and minerals, water resources, aquatic</li> </ul> | <ul style="list-style-type: none"> <li>- Use the geographical documents, internet, map of Rwanda, photographs or field study to identify the reasons and ways for the conservation of the environment, the impact of environmental conservation and the problems encountered. Write down the findings.</li> <li>- In groups, discuss and compile the findings for the class presentation.</li> <li>- Use the geographical documents, internet, map of Rwanda, photographs</li> </ul> |

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| <ul style="list-style-type: none"> <li>- Identify the factors and the problems affecting the conservation in Rwanda</li> <li>- Define tourism and eco-tourism</li> <li>- State the major tourist attractions in Rwanda.</li> <li>- State the factors affecting tourism in the world</li> <br/> <li>- Give the importance of tourism in Rwanda</li> <br/> <li>- Identify the problems of tourism in Rwanda.</li> </ul> | <ul style="list-style-type: none"> <li>development</li> <li>- Explain the problems affecting the conservation of environment</li> <li>- Explain the importance of environmental conservation</li> <li>- Explain the concepts of tourism and eco-tourism</li> <li>- Locate the major tourist attractions in Rwanda</li> <li>- Explain the factors affecting the development of tourism in Rwanda</li> <li>- Evaluate the impact of tourism on the environment and development in Rwanda</li> <li>- Explain the problems affecting tourism</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the importance of tourism on the sustainable development</li> <li>- Show concern for the problems affecting the tourism and suggest the solutions</li> </ul> | <ul style="list-style-type: none"> <li>animals) in Rwanda</li> <li>- Impact of conservation on the environment and the development in Rwanda.</li> <li>- Problems encountered in conserving the environment and the solutions in Rwanda</li> <br/> <li>Tourism</li> <li>- Definition of tourism, eco-tourism and the forms of tourism</li> <li>- Major tourist attractions in Rwanda</li> <li>- Factors affecting the development of tourism in Rwanda</li> <li>- Importance and prospects of tourism in Rwanda.</li> <li>- Problems affecting the tourism in Rwanda and the solutions.</li> <li>- Impact of tourism on the environment and the development in Rwanda</li> </ul> | <ul style="list-style-type: none"> <li>or field study to identify the major tourist attractions, the factors affecting the development of tourism, the importance and the problems affecting the tourism. Research also on the impact of tourism on the environment and the development, and write down the findings.</li> <li>- In groups, discuss and compile the findings for a class presentation followed by Q&amp;A.</li> <li>- Investigate the link between the environmental conservation and tourism on the sustainable development in Rwanda. In pairs, write a report.</li> <li>- In a field study, observe and record the findings about the tourism for the discussions in reference to the knowledge acquired in the current unit and draw</li> </ul> |
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| <ul style="list-style-type: none"> <li>- State the impact of tourism on the environment of the country</li> </ul>   | <ul style="list-style-type: none"> <li>- Justify the importance of tourism in the development of the economy</li> </ul> |  | <p>Case study:</p> <ul style="list-style-type: none"> <li>- Nyungwe National Park.</li> <li>- Akagera National Park.</li> <li>- Birunga National Park.</li> </ul> | <p>relevant conclusions in a report.</p> |
| <p><b>Links to other subjects:</b> <i>It is related to ecology in Biology</i></p>   |   |  |   |  |
| <p><b>Assessment criteria:</b> <i>The learners are able to properly investigate the impacts of the environmental conservation and tourism on the sustainable development.</i></p> |   |  |   |  |
| <p><b>Materials:</b> <i>Text books/ brailled textbooks, photographs, local environment, maps, tactile and talking materials, internet/Jaws software.</i></p>                      |   |  |   |  |

### **5.3. GEOGRAPHY SYLLABUS FOR SENIOR FIVE**

#### **5.3.1. Key competences at the end of Senior Five**

- Explain different physical geographical phenomena and their impact on the sustainable development in the world
- Explain different problems associated with the physical, human and economic environment of the world and suggest solutions
- Evaluate the major challenges related to the population growth and exploitation of the resources in the world;
- Compare different modes of development in the world
- Use statistical diagrams and maps to interpret the geographical information

### 5.3.2 Geography units for Senior Five

| Topic Area: Practical Geography  |   |  | Sub-topic Area: Field work and Statistics  |  |
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| Year group & Subject: S5 Geography   |   | Unit1: Statistical Graphs, Diagrams and Maps   |  | No. of periods: 24   |
| <b>Key unit competency:</b> The learner should be able to interpret the statistical data, construct statistical graphs, diagrams and the maps  |   |  |  |  |
| Learning Objectives  |   |  | Content  | Learning Activities  |
| Knowledge and Understanding  | Skills  | Attitudes and Values   |  |  |
| <ul style="list-style-type: none"> <li>- State the advantages and disadvantages of the statistical graphs and the diagrams.</li> <li>- Identify the importance of statistics in geography.</li> <li>- Outline the different statistical methods.</li> <li>- List the advantages and disadvantages of each statistical method.</li> </ul> | <ul style="list-style-type: none"> <li>- Create the statistical graphs and diagrams to present the various geographical data.</li> <li>- Explain the advantages and disadvantages of the various statistical graphs and diagrams.</li> <li>- Draw the different statistical graphs and diagrams.</li> <li>- Interpret the different statistical graphs and diagrams.</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the importance of statistics in geography and in the daily life activities.</li> <li>- Show respect for the statistical data and the statistical methods.</li> </ul> | Introduction to the statistics in Geography. <ul style="list-style-type: none"> <li>- Definition of the statistics.</li> <li>- Importance of the statistical graphs and the diagrams in geography.</li> <li>- Line and curve graphs (simple, group, compound, divergence).</li> <li>- Advantages and disadvantages of each type.</li> <li>- Bar graphs (simple, group, compound, divergence, age and sex graphs, dispersion graphs, circular graphs).</li> </ul> | <ul style="list-style-type: none"> <li>- Use text statistical documents, books and diagrams to research on the definition of statistics, advantages and disadvantages of the statistical graphs and the diagrams. Record the findings.</li> <li>- In groups, discuss the findings and make a class presentation. Use the statistical data and the diagrams to draw and interpret different bar graphs.</li> <li>- Use statistical data and the diagrams to draw and</li> </ul> |

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|   |  |  | <p>Statistical charts</p> <ul style="list-style-type: none"> <li>- Divided circles/ pie charts (simple, proportional),</li> <li>- Divided rectangles (simple, compound).</li> <li>- Repeated symbols (proportional, circles, squares, cubes and spheres).</li> </ul> <p>Statistical diagrams:</p> <ul style="list-style-type: none"> <li>- Statistical maps (dot maps, isoline, map shading, flow maps).</li> <li>- Wind rose (simple, compound).</li> <li>- Advantages and disadvantages of each type.</li> </ul> | <p>interpret the statistical charts (divided circles, divided rectangles and repeated symbols).</p> <ul style="list-style-type: none"> <li>- In groups, make a class demonstration on how to construct the divided circles.</li> <li>- Use the statistical data and the diagrams to draw and interpret different statistical maps and diagrams.</li> <li>- Use the knowledge acquired from different statistical graphs and the diagrams above, to discuss the advantages and disadvantages of each type. Write down the findings and make a class presentation.</li> </ul> |
| <p><b>Links to other subjects:</b> <i>It is related to statistics in Mathematics and Economics</i></p>  |  |  |  |   |
| <p><b>Assessment criteria:</b> <i>The learners are able to correctly draw or construct and interpret the statistical graphs and the diagrams</i></p>          |  |  |  |   |
| <p><b>Materials:</b> <i>Geographical documents, maps, journals, tactile and talking materials, internet, statistical data, diagrams and graph papers.</i></p> |  |  |  |   |

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| <b>Topic Area: Practical Geography</b>   |  | <b>Sub-topic Area: Map reading and photograph interpretation</b>   |  |   |
| <b>Year group &amp; Subject: S5 Geography</b>  |  | <b>Unit 2: Bearings, directions, distances and areas on a map</b>  |  | <b>No. of periods: 14</b>   |
| <b>Key unit competency:</b> The learner should be able to measure the bearings and the directions, calculate distances and areas on a map  |  |  |  |   |
| <b>Learning Objectives</b>   |  |  | <b>Content</b>   | <b>Learning Activities</b>  |
| <b>Knowledge and Understanding</b>   | <b>Skills</b>  | <b>Attitudes and Values</b>  |  |   |
| <ul style="list-style-type: none"> <li>- Identify the places on a topographic map using Easting and Northing</li> <li>- Tell the directions and bearings on the topographic maps</li> <li>- Estimate the distances and areas on the topographic maps</li> <li>- Give the areas on the topographic maps.</li> <li>- Interpret the relief on the maps using contours, spot heights,</li> </ul> | <ul style="list-style-type: none"> <li>- Locate the places using the geographical coordinates/grid reference systems</li> <li>- Calculate the bearings and the directions on the topographic maps</li> <li>- Measure the distances and the surface areas on the topographic maps</li> <li>- Calculate the areas on the topographic maps</li> <li>- Describe the relief on the topographic map</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the importance of using the topographic maps to interpret geographical phenomena and to understand the relationship between relief and the human activities</li> <li>- Appreciate the relationship between the distance on the actual ground and on the topographic map</li> <li>- Appreciate the importance of using</li> </ul> | <ul style="list-style-type: none"> <li>- Location of places using the grid references</li> <li>- State the directions and bearings on the topographic maps</li> <li>- Measure the distance on the maps (straight line, curved line)</li> <li>- Calculate the areas on the topographic maps (regular and irregular</li> </ul> | <ul style="list-style-type: none"> <li>- Use Northing and Easting (grid references) to locate the places on the maps</li> <li>- Use the topographic maps, mathematical set and drawing equipment to identify and connect points or places on a topographic map</li> <li>- Use the geographical documents, mathematical equipment like pair of compasses, rulers, protractors and dividers to calculate the directions and bearings on the topographic maps</li> </ul> |

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| <p>trigonometrical stations and the colours.</p>  |  | <p>the geographical coordinates and the compass in locating places on the topographic maps</p> | <p>shapes)</p> <ul style="list-style-type: none"> <li>- Representation of relief on the map (contours, colouring, shading)</li> <li>- Calculation of the vertical interval and amplitude of relief /spot heights</li> </ul> | <ul style="list-style-type: none"> <li>- Use a topographic map, the key, the scale and the mathematical set to identify the areas, lines, roads or shapes on the maps, and to measure the distances, and calculate areas on a map.</li> <li>- Use a topographic map, geographical documents, internet, the key and a drawing kit (mathematical set) to research on how to draw a cross section, calculate the vertical interval, vertical exaggeration, calculate the gradients and the spot heights.</li> <li>- In groups, discuss the findings and make a class demonstration.</li> </ul> |
| <p><b>Links to other subjects:</b> <i>It is linked to bearings, distances and areas in Mathematics</i></p>  |  |  |   |   |
| <p><b>Assessment criteria:</b> <i>The learners are able to measure clearly the bearings, directions; calculate distances and areas on a map.</i></p>                                  |  |  |   |   |
| <p><b>Materials:</b> <i>Geographical documents, journals, internet, tactile and talking materials, topographic maps, tactile maps, mathematical instruments and graph papers.</i></p> |  |  |   |   |

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| <b>Topic Area: Practical geography</b>   |  | <b>Sub-topic Area: Map reading and photograph interpretation</b>  |  |  |
| <b>Year group &amp; Subject: S5 Geography</b>  |  | <b>Unit 3: Map work interpretation</b>  |  | <b>No. of periods: 14</b>  |
| <b>Key unit competency:</b> The learner should be able to explain the relationship between the physical aspects and human activities on maps   |  |   |  |  |
| <b>Learning Objectives</b>   |  |   | <b>Content</b>   | <b>Learning Activities</b>   |
| <b>Knowledge and Understanding</b>   | <b>Skills</b>  | <b>Attitudes and Values</b>   |  |  |
| <ul style="list-style-type: none"> <li>- Identify the physical and human aspects on the ordinary survey maps.</li> <li>- State the relationship between the physical and human aspects on the topographic maps.</li> </ul> | <ul style="list-style-type: none"> <li>- Describe the physical and human aspects on the topographic map.</li> <li>- Describe the relationship among the physical and human aspects on the topographical maps.</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the importance of using the topographic maps to interpret the geographical phenomena and to understand the relationship between the relief and human activities.</li> </ul> | <ul style="list-style-type: none"> <li>- Interpretation of the physical aspects from the maps e.g. geology, slope, drainage, soils.</li> <li>- Interpretation of the human aspects from the maps e.g. agricultural development, mining, industry and settlement.</li> <li>- Relationship between the physical and human aspects on the maps (drainage patterns, settlement patterns, vegetation, communication networks).</li> </ul> | <ul style="list-style-type: none"> <li>- Use a topographic map and a key to identify the physical aspects. Observe the features critically and interpret them on a map. Record the observations and identify the links between the physical and human features.</li> <li>- Use a topographic map and the knowledge acquired from the above lessons to find the relationship between the physical and human aspects on a map and write a report.</li> </ul> |
| <b>Links to other subjects:</b> <i>It is linked to land use/planning in entrepreneurship and general paper</i>   |  |   |  |  |
| <b>Assessment criteria:</b> <i>The learners are able to analyse and interpret the relationship between the physical and human aspects on the maps</i>  |  |   |  |  |
| <b>Materials:</b> <i>Geographical documents, internet, journals, tactile and talking materials, topographic maps, tactile maps, mathematical instruments.</i>  |  |   |  |  |

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| <b>Topic Area: Physical Geography</b>   |   | <b>Sub-topic Area: Understanding the earth and universe</b>  |  |   |
| <b>Year group &amp; Subject: S5 Geography</b>   |   | <b>Unit 4: The Universe and the Solar System</b>   |  | <b>No. of periods: 7</b>  |
| <b>Key unit competency:</b> The learner should be able to distinguish between the components of the universe and the Solar system   |   |  |  |   |
| <b>Learning Objectives</b>  |   |  | <b>Content</b>   | <b>Learning Activities</b>  |
| <b>Knowledge and Understanding</b>  | <b>Skills</b>   | <b>Attitudes and Values</b>  |  |   |
| <ul style="list-style-type: none"> <li>- Identify the components of the universe and the solar system</li> <li>- Identify the planets in the solar system.</li> <li>- Give the influence of the sun on the Earth.</li> <li>- Outline the characteristics of the different planets</li> <li>- State the effects of the earth's movements.</li> </ul> | <ul style="list-style-type: none"> <li>- Describe the planets and the various components that exist in the universe and in the solar system</li> <li>- Explain the influence of the sun on the earth</li> <li>- Describe the characteristics of the different planets and the peculiar elements of the earth</li> <li>- Explain the consequences of the earth's movements.</li> </ul> | <ul style="list-style-type: none"> <li>- Respect the earth and appreciate the need for the sustainable practices to protect the environment</li> <li>- Develop a curiosity to discover more objects that exist in the universe</li> <li>- Appreciate that the earth is affected by the events and the objects in the space, and its uniqueness in relation to the other planets</li> </ul> | <p>The Universe:</p> <ul style="list-style-type: none"> <li>- Definition of the universe</li> <li>- Components of the universe</li> </ul> <p>The solar system:</p> <ul style="list-style-type: none"> <li>- Components of the solar system: the sun, description of the sun and its influence on the earth (tidal bulges)</li> <li>- Characteristics of the different planets and their positions</li> <li>- Earth: peculiar elements of the earth i.e. atmosphere, biosphere, hydrosphere and lithosphere</li> <li>- Earth's movements: <ul style="list-style-type: none"> <li>o rotation and its effects, plus time zones</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>- Individual research, using internet, textbooks, satellite photos and the diagrams or power point presentation about the universe, the components, the planets and their characteristics. Record the findings.</li> <li>- In groups, discuss and compile the findings for a class presentation.</li> <li>- Use internet and the geographical documents to research about the concept of a light year, the movements of the earth and the related</li> </ul> |

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| <ul style="list-style-type: none"> <li>- State the characteristics of the moon</li> <br/> <li>- Identify other heavenly bodies</li> </ul> | <ul style="list-style-type: none"> <li>- Explain the revolution period, speed, diameter, density, force of gravity and the atmosphere of the moon</li> <li>- Carryout a research to discover the other objects present in the universe</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the importance of the earth's movements</li> </ul> | <ul style="list-style-type: none"> <li>o revolution and its effects</li> <li>o concept of the light year</li> <li>- The Moon : <ul style="list-style-type: none"> <li>o the natural satellite of the earth</li> <li>o characteristics of the Moon (revolution period, the speed of the rotation, average orbit, diameter, density, gravitational force, surface and atmosphere of the moon)</li> <li>o influence of the moon upon the earth (eclipses and tides)</li> </ul> </li> <br/> <li>Other heavenly bodies: <ul style="list-style-type: none"> <li>- Asteroids, comets, meteors and meteorites, constellations and the galaxies e.g. the milky-way</li> </ul> </li> </ul> | <p>consequences. Write down the findings and engage in Q&amp;A session.</p> <ul style="list-style-type: none"> <li>- Make a group discussion and compile the findings for a class presentation.</li> <li>- Use the geographical documents, internet, atlases and satellite photos to research on the moon, its characteristics, movements, phases and its influence on the earth (eclipses). Record the findings.</li> <li>- In groups, discuss the findings and make a class presentation.</li> <li>- Discuss in groups, the other heavenly bodies and present the findings in the class and allow Q&amp;A session.</li> <li>- In pairs, discuss the likelihood of the existence of another planet like the earth in the universe that is capable of supporting</li> </ul> |
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|   |  |  |  | life. Present your findings in a report. |
| <b>Links to other subjects:</b> <i>It is linked to distances, gravity, velocity/gravity and volumes in Physics and Mathematics.</i>                               |  |  |  |  |
| <b>Assessment criteria:</b> <i>The learners are able to correctly describe the components of the universe, locate the earth and the moon in the solar system.</i> |  |  |  |  |
| <b>Materials:</b> <i>Geographical documents, maps, atlas, journals, tactile and talking materials, journals, aerial photographs and internet/Jaws software.</i>   |  |  |  |  |

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| <b>Topic Area: Physical Geography</b>   |   | <b>Sub-topic Area: Understanding the earth and universe</b>   |   |  |
| <b>Year group &amp; Subject: S5 Geography</b>   |   | <b>Unit 5: The Origin of the Earth</b>  |   | <b>No. of periods: 7</b>   |
| <b>Key unit competency:</b> The learner should be able to discuss the theories for the origin of the Earth  |   |   |   |  |
| <b>Learning Objectives</b>  |   |   | <b>Content</b>  | <b>Learning Activities</b>   |
| <b>Knowledge and Understanding</b>  | <b>Skills</b>   | <b>Attitudes and Values</b>   |   |  |
| <ul style="list-style-type: none"> <li>- Explain the origin and gravity of the earth</li> <li>- Outline the evidences to prove that the earth is spherical/geoid</li> <li>- Explain the internal structure, mineral composition and the superficial configuration of the earth.</li> <li>- State the major geological eras and the periods</li> </ul> | <ul style="list-style-type: none"> <li>- Apply the knowledge to explain how the earth came into existence.</li> <li>- Explain the evidences which prove that the earth is spherical/geoid.</li> <li>- Carry out a research to find the internal structure, mineral composition and the superficial configuration of the earth.</li> <li>- Describe the</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the importance of the earth as the only planet in the solar system that supports life.</li> <li>- Show concern in protecting the earth as the only home for flora and fauna.</li> </ul> | <ul style="list-style-type: none"> <li>- Theories which explain the origin of the earth (the big bang theory, the creation, theory/biblical theory)</li> <li>- The characteristics of the earth</li> <li>- The shape and the evidence to prove that the earth is spherical (size, diameter, circumference, volume, mass and gravity of the earth).</li> <li>- The internal</li> </ul> | <ul style="list-style-type: none"> <li>- In individual research, use the documents, internet, the globe and the satellite photos to research on the theories which explain the origin of the earth, the shape of the earth and the evidences to prove that the earth is spherical. Record the findings.</li> <li>- Make groups to discuss the findings and then present in the class, involve the Q&amp;A session.</li> <li>- Do research using internet and textbooks about the internal structure, mineral composition and the superficial configuration of the earth. Write down the findings.</li> </ul> |

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|   | geological time |  | structure of the earth<br>- Mineral composition<br>- Superficial configuration of the earth (continents and oceans)<br>- Geological time scale(definition of key geological terms) | - In groups, discuss and compile the above findings for a class presentation supported by Q&A methodology.<br>- Use the geological tables, internet and text books to find out the geological eras and the periods. Write down the findings, discuss, and make a class presentation. |
| <b>Links to other subjects:</b> <i>It is linked to size, diameter, circumference, volume, mass and gravity in Mathematics and Physics.</i>                                  |                 |  |  |  |
| <b>Assessment criteria:</b> <i>The learners are able to describe and explain the different theories of the earth's origin and the mineral composition.</i>                  |                 |  |  |  |
| <b>Materials:</b> <i>Geographical materials, maps, tactile and talking materials, globes, atlases, journals, photographs, internet/Jaws software and local environment.</i> |                 |  |  |  |

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| <b>Topic Area: Physical Geography</b>   |  | <b>Sub-topic Area: Landform evolution and processes</b>   |  |  |
| <b>Year group &amp; Subject : S5 Geography</b>  |  | <b>Unit 6: Internal landform Processes</b>  |  | <b>No. of periods: 12</b>  |
|   |  | <b>6.1. Faulting</b>  |  |  |
| <b>Key unit Competency:</b> The learners should be able to examine the internal processes responsible for the evolution of different relief landforms   |  |   |  |  |
| <b>Learning Objectives</b>  |  |   | <b>Content</b>   | <b>Learning Activities</b>   |
| <b>Knowledge and Understanding</b>  | <b>Skills</b>  | <b>Attitudes and Values</b>   |  |  |
| <ul style="list-style-type: none"> <li>- Recall the processes leading to the formation of different faulted features</li> <li>- Identify the major types of faults and the impact of faulting on the landscape and the drainage</li> <li>- Identify the influence of faulting impact to the man</li> <li>- Identify the other areas that are associated with the faulting in the world</li> </ul> | <ul style="list-style-type: none"> <li>- Explain the processes responsible for the formation of different faulted landforms</li> <li>- Investigate the impact of different faulted landforms on the landscape and the drainage</li> <li>- Describe the influence of faulting impact to the man</li> <li>- Locate the different areas associated with faulting</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the impact of the internal processes on the landscape</li> <li>- Appreciate the impact of faulted landscapes to the man.</li> </ul> | <ul style="list-style-type: none"> <li>- Faulting: definition</li> <li>- Processes leading to the formation of different faulted features</li> <li>- Types of faults.</li> <li>- Influence of faulting on the landscape</li> <li>- Influence of faulting on the drainage</li> <li>- Impact of faulting to the man (positive and negative impacts)</li> <li>- Distribution of the landforms associated with faulting</li> </ul> | <ul style="list-style-type: none"> <li>- Use a range of different geographical sources and the materials like internet, text books research on the processes of faulting, types of faults and the major faulted landforms. Write down the findings.</li> <li>- In group work, discuss the findings and make a class presentation.</li> <li>- Use the knowledge acquired from the previous lesson and research from the text books and internet to</li> </ul> |

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|  |  |  |  | <p>find about the impacts of faulting on drainage and the man, and the distribution of faulting in the world. Record the findings.</p> <p>- In groups, discuss the findings and make a class presentation.</p> |
| <p><b>Links to other subjects:</b> <i>It is linked to compressional and tensional forces in Physics and drawing and design in Fine Art.</i></p>  |  |  |  |  |
| <p><b>Assessment criteria:</b> <i>The learners are able to correctly interpret the internal processes responsible for the evolution of different faulted landforms.</i></p>            |  |  |  |  |
| <p><b>Materials:</b> <i>Geographical documents, photographs, maps, journals, atlas, local environment, charts, internet website /jaws software, tactile and talking materials.</i></p> |  |  |  |  |

| Topic Area: Physical Geography   |  |  | Sub-topic Area: Landform evolution and processes   |  |
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| Year group & Subject : S5 Geography  |  |  | Unit 6: Internal Landform Processes<br>6.2. Folding and Warping  | No. of periods: 12   |
| <b>Key unit competency:</b> The learner should be able to examine the internal processes responsible for the evolution of different relief landforms   |  |  |  |  |
| Learning Objectives  |  |  | Content  | Learning Activities  |
| Knowledge and Understanding  | Skills   | Attitudes and Values   |  |  |
| <ul style="list-style-type: none"> <li>- Recall the processes of the folding, types of folds and its influence on the drainage</li> <li>- Identify the major landforms associated with the folding</li> <li>- Define warping and the associated landforms</li> <li>- State the influence of warping on the drainage</li> </ul> | <ul style="list-style-type: none"> <li>- Explain the processes responsible for the folding</li> <li>- Explain the impact of the different folded landscapes</li> <li>- Explain the impact of warping and associated landforms</li> <li>- Describe the influence of warping on the drainage.</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the importance of folding on the landscape</li> <li>- Understand other perspectives responsible for the formation of different folded landforms</li> </ul> | <ul style="list-style-type: none"> <li>- Folding:               <ul style="list-style-type: none"> <li>o definition</li> <li>o processes of folding (types and its influence on the drainage)</li> <li>o impact of folding on the landscape</li> <li>o distribution of land form associated with folding.</li> </ul> </li> <li>- Warping:               <ul style="list-style-type: none"> <li>o definition, types and causes of warping</li> <li>o landforms associated with warping</li> <li>o influence of warping on the drainage</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>- Use a range of different geographical sources and the materials like internet, text books to research on the processes of folding and warping, impacts of folding and warping on the landscape, drainage and the man. Write down the findings.</li> <li>- In groups, discuss the findings from the above research and make a class presentation followed by Q&amp;A.</li> </ul> |
| <b>Links to other subjects:</b> <i>It is linked to drawing and design in Fine Art.</i>   |  |  |  |  |
| <b>Assessment criteria:</b> <i>The learners are able to correctly describe the internal processes responsible for the evolution of different folded and warped landforms.</i>  |  |  |  |  |
| <b>Materials:</b> <i>Geographical documents, maps, atlas, photographs, tactile and talking materials, journals, internet website /jaws software and local environment.</i>   |  |  |  |  |

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| <b>Topic Area: Physical Geography</b>  |   | <b>Sub-topic Area: Landform evolution and processes</b>  |   |   |
| <b>Year group &amp; Subject: S5 Geography</b>  |   | <b>Unit 6: Internal Landform Processes<br/>6.3. Volcanicity and Earthquakes</b>  |   | <b>No. of periods: 12</b>   |
| <b>Key unit competence:</b> The learner should be able to examine the internal processes responsible for the evolution of different relief landforms   |   |  |   |   |
| <b>Learning Objectives</b>   |   |  | <b>Content</b>  | <b>Learning Activities</b>  |
| <b>Knowledge and Understanding</b>   | <b>Skills</b>   | <b>Attitudes and Values</b>  |   |   |
| <ul style="list-style-type: none"> <li>- Define volcanicity, volcanicity and recall the volcanic processes.</li> <li>- Identify the major landforms associated with volcanicity and volcanicity</li> <li>- State the types of volcanoes and their characteristics</li> <li>- State the impact of volcanicity on the drainage and to the man</li> <li>- Identify the major volcanic regions in the world</li> </ul> | <ul style="list-style-type: none"> <li>- Explain the processes responsible for the formation of different intrusive and extrusive landforms</li> <li>- Describe the different relief landforms associated with the intrusive and extrusive processes</li> <li>- Carry out a research on the types and characteristics of</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the importance of volcanicity in shaping the landscape</li> <li>- Appreciate the perspectives responsible for the formation of different volcanic landforms</li> <li>- Show concern for the causes and the consequences of earthquakes, and devise emergency and preparedness measures.</li> </ul> | Volcanicity and Earthquake. <ul style="list-style-type: none"> <li>- Processes of volcanicity and volcanicity, materials of volcanicity (magma, lava, gases).</li> <li>- Intrusive and extrusive features</li> <li>- Types of volcanoes and their characteristics (active, dormant, extinct).</li> <li>- Influence of volcanicity on the drainage</li> <li>- Impact of volcanicity to the man (positive and negative)</li> <li>- World distribution of volcanoes</li> </ul> | <ul style="list-style-type: none"> <li>- Use a range of different geographical sources and the materials like internet, text books to research on the process of volcanicity, volcanicity, the materials of volcanicity, intrusive and extrusive features and the types of volcanoes.</li> <li>- In group work, discuss the findings from the above research and make a class presentation.</li> <li>- Use the knowledge</li> </ul> |

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| <ul style="list-style-type: none"> <li>- Define the concept of earthquakes</li> <li>- Explain the causes and consequences of earthquakes</li> <li>- Identify the measures to curb the earthquake effects</li> <li>- Identify the major earthquake zones of the world</li> </ul> | <p>volcanoes</p> <ul style="list-style-type: none"> <li>- Explain the impact of different volcanic landforms</li> <li>- Locate the major volcanic regions</li> <li>- Explain the concept of the earthquake</li> <li>- Investigate the causes and the effects of the earthquakes</li> <li>- Propose possible measures to regulate earthquake effects</li> <li>- Locate the major earthquake zones of the world</li> </ul> |  | <p>Earthquakes</p> <ul style="list-style-type: none"> <li>- Definition of the concepts: focus, epicenter, magnitude, intensity, tremors and the measurement</li> <li>- Causes and the consequences of earthquakes</li> <li>- Measures to curb earthquake effects</li> <li>- World distribution of the earthquakes (zones of subduction, volcanic regions, pacific ring of fire).</li> </ul> | <p>acquired from the previous lesson and do research from the textbooks and internet on the impact of volcanicity on the drainage and the man; and the distribution of volcanoes in the world. Record the findings.</p> <ul style="list-style-type: none"> <li>- In groups, discuss the findings and make a class presentation supported by Q&amp;A session.</li> <li>- Individually, use the internet, geographical documents, maps, diagrams and the photographs to research on the concept of the earthquakes, its causes, and consequences, areas of earthquake occurrence and the measures to curb the earthquake</li> </ul> |
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|  |  |  |  | <p>effects. Record the findings.</p> <ul style="list-style-type: none"> <li>- In groups, use the above findings for a class presentation followed by the well engaged Q&amp;A.</li> <li>- Examine the relationship between the faulting, volcanic activities and the earthquakes. Present your findings in a report.</li> </ul> |
| <p><b>Links to other subjects:</b> <i>It is linked to waves (primary and secondary waves), magnitude, intensity, convective currents, heat and pressure in Physics.</i></p>                        |  |  |  |   |
| <p><b>Assessment criteria:</b> <i>The learners are able to investigate the causes and consequences of vulcanicity and earthquakes on the landscape.</i></p>  |  |  |  |   |
| <p><b>Materials:</b> <i>Geographical documents, journals, tactile and talking materials, maps, atlas, photographs, local environment, charts, avocado and internet website /jaws software.</i></p> |  |  |  |   |

| Topic Area: Physical Geography   |   | Sub-topic Area: Soils   |   |   |
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| Year group & Subject: S5 Geography   |   | Unit 7: Soils   | No. of periods: 7   |   |
| <b>Key unit competency:</b> The learner should be able to investigate the different constituents and morphological properties of the soil                    |   |   |   |   |
| Learning Objectives  |   |   | Content   | Learning Activities   |
| Knowledge and Understanding  | Skills  | Attitudes and Values  |   |   |
| <ul style="list-style-type: none"> <li>- State the constituents of the soil</li> <li>- Outline the different morphological properties of the soil</li> </ul> | <ul style="list-style-type: none"> <li>- Investigate the constituents of the soil</li> <li>- Describe the properties of the soil</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the importance of soil constituents and the morphological properties of the soil</li> <li>- Arrange and categorise the soils according to their morphological properties</li> </ul> | <p>Soils.</p> <ul style="list-style-type: none"> <li>- Soil constituents (air, humus, water, rock particles, living organisms).</li> </ul> <p>Morphological properties of soil:</p> <ul style="list-style-type: none"> <li>- Soil structure, texture, colour, porosity, pH, soil consistency,</li> <li>- Soil profile and soil catena.</li> <li>- Soil fertility (factors affecting soil fertility).</li> </ul> | <ul style="list-style-type: none"> <li>- Research from the textbooks and internet to find the constituents of the soil and the morphological properties of the soil. Write down the findings.</li> <li>- In groups, discuss the findings for a class presentation.</li> <li>- In groups, discuss the concepts of soil profile, soil structure, soil texture, soil porosity, soil pH, soil catena and the soil fertility. Write down the findings and make a class presentation supported by Q&amp;A.</li> </ul> |
| <b>Links to other subjects:</b> <i>It is linked to acids and bases in Chemistry and Pedology in Biology</i>  |   |   |   |   |
| <b>Assessment criteria:</b> <i>The learners are able to investigate the soil constituents and their morphological properties</i>                             |   |   |   |   |
| <b>Materials:</b> <i>Documentaries, journals, soil maps, soil samples, photographs, atlas, internet, local environment, tactile and talking materials.</i>   |   |   |   |   |

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| <b>Topic Area: Physical Geography</b>   |   | <b>Sub-topic Area: Weather and climate</b>   |   |  |
| <b>Year group &amp; Subject: S5 Geography</b>   |   | <b>Unit 8: Weather and Climate of the world</b>  | <b>No. of periods: 21</b>   |  |
| <b>Key unit Competency:</b> The learner should be able to appreciate the importance of the atmosphere, weather and the impact of climate on the environment and human activities in the world   |   |  |   |  |
| <b>Learning Objectives</b>  |   |  | <b>Content</b>  | <b>Learning Activities</b>   |
| <b>Knowledge and Understanding</b>  | <b>Skills</b>   | <b>Attitudes and Values</b>  |   |  |
| <ul style="list-style-type: none"> <li>- Define the atmosphere.</li> <li>- State the layers of the atmosphere.</li> <li>- Define the structure of the atmosphere.</li> <li>- Identify the importance of the atmosphere.</li> <li>- Identify the composition of the atmosphere.</li> <li>- Define the concept of weather and climate and identify their elements.</li> </ul> | <ul style="list-style-type: none"> <li>- Infer the influence of the layers of the atmosphere to the changes in the atmosphere's conditions.</li> <li>- Explain the structure of the atmosphere.</li> <li>- Explain the importance of the atmosphere.</li> <li>- Describe the composition of the atmosphere.</li> <li>- Differentiate weather from climate and identify</li> </ul> | <ul style="list-style-type: none"> <li>- Show resilience for the changes in the atmosphere and the desire to protect it.</li> <li>- Appreciate the importance of the weather elements on the human activities.</li> <li>- Show the continual desire to interpret the weather conditions based on the knowledge acquired from the topic of the</li> </ul> | <p>The atmosphere:</p> <ul style="list-style-type: none"> <li>- Definition of the atmosphere.</li> <li>- The structure of the atmosphere (troposphere, stratosphere, mesosphere, thermosphere), description, composition and the importance of the atmosphere.</li> <li>- Weather and Climate.</li> <li>- Concept of the weather and the climate.</li> </ul> <p>Elements of weather and climate:</p> <ul style="list-style-type: none"> <li>- Temperature: measurement and</li> </ul> | <ul style="list-style-type: none"> <li>- Do research the concept of the atmosphere, using geographical documents and internet. Record the findings.</li> <li>- In groups, discuss the findings and make a class presentation.</li> <li>- In groups, use the geographical documents, internet and the local environment to research the reasons for the changes in the atmospheric conditions and record the findings.</li> <li>- Make a class presentation followed by Q&amp;A.</li> <li>- Use the geographical documents, textbooks,</li> </ul> |

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| <ul style="list-style-type: none"> <li>- Define the temperature.</li> <li>- Outline the factors for the variation of the temperature of a place</li> <li>- Measure and record the temperature</li> <li>- Define the concept of precipitation and rainfall</li> <li>- Define water cycle.</li> <li>- State the types of rainfall</li> <li>- Outline the factors for the rainfall formation.</li> <li>- Measure and record the rainfall</li> <li>- Define the concept of winds</li> <li>- Measure and record the wind speed, the strength and the direction</li> <li>- Identify the factors influencing the nature and the movement of the</li> </ul> | <p>the weather elements.</p> <ul style="list-style-type: none"> <li>- Examine the factors responsible for the temperature variation of a place.</li> <li>- Describe the measurement and the recording of the temperature.</li> <li>- Describe the forms of precipitation.</li> <li>- Explain the process of water cycle.</li> <li>- Illustrate and explain the formation of the different types of rainfall.</li> <li>- Describe the factors influencing the rainfall formation.</li> <li>- Describe the measurement and the recording of the rainfall.</li> <li>- Explain the concept of winds.</li> <li>- Illustrate the measurement and</li> </ul> | <p>weather and the climate.</p> <ul style="list-style-type: none"> <li>- Show concern for the causes and the effects of climate change and the desire to preserve or retain the stability of the atmosphere.</li> </ul> | <p>recording of the temperature, factors influencing the temperature, terms related to temperature (temperature range, mean temperature), impact of the temperature on the environment.</p> <ul style="list-style-type: none"> <li>- Rainfall: forms of precipitations: rainfall, snow, fog, dew, hail, rime, haze and sleet. <ul style="list-style-type: none"> <li>o water cycle: global water supply system and the mechanics of condensation and precipitation.</li> <li>o types of rainfall: orographic rain fall, convective rainfall and frontal rainfall.</li> <li>o Factors influencing the rainfall formation.</li> <li>o measurement and the recording of the rainfall, presenting the rainfall distribution on the diagrams and isohyets.</li> </ul> </li> <li>- Winds:</li> </ul> | <p>internet, maps and photographs to research on the concepts of the weather and climate. Record the findings.</p> <ul style="list-style-type: none"> <li>- In groups, discuss the findings and make a class presentation on the harmonised concepts.</li> <li>- Use the knowledge acquired from the previous lesson and the additional research from textbooks, diagrams, photographs and internet, to write about the elements of the weather and climate. Record the findings.</li> <li>- In group work, use the knowledge acquired from the above researches to discuss, and note down how to measure and record the temperature, factors for variation in temperature and the impact of temperature on the environment.</li> <li>- Use research done on the elements of weather, and an additional research from the documents and internet to</li> </ul> |
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| <p>winds</p> <ul style="list-style-type: none"> <li>- Identify the major types of winds</li> <li>- Give the influence of winds on weather conditions and on the human activities</li> <li>- Define air masses and state their characteristics, formation and the effects.</li> <li>- Give the meaning of cyclones, anti-cyclones and outline their characteristics.</li> <li>- Outline the effects of cyclones and anti-cyclones on the environment</li> <li>- Define the concept of humidity</li> <li>- Identify the major types of humidity</li> <li>- Outline the factors influencing the humidity and state its significance to</li> </ul> | <p>recording of the winds.</p> <ul style="list-style-type: none"> <li>- Explain the factors influencing the nature and the movement of the winds.</li> <li>- Describe the major types of winds and their characteristics.</li> <li>- Explain the influence of the winds on the weather conditions and on the human activities.</li> <li>- Describe the major types of air masses, their characteristics, formation and the effects.</li> <li>- Compare the different types of cyclones, anti-cyclones and describe their characteristics.</li> <li>- Demonstrate the</li> </ul> |  | <ul style="list-style-type: none"> <li>o measurement and the recording of the wind (speed, direction, strength)</li> <li>o factors influencing the nature and the movement of the winds.</li> <li>o types of winds: global or planetary winds (trade winds, westerlies, monsoon); local winds (anabatic, katabatic, breezes, fohn /chinook, sirocco).</li> <li>o influence of the winds on the weather conditions and on the human activities.</li> <li>o air masses: types, characteristics, formation, and the effects of air masses on the environment.</li> <li>o cyclones: areas of cyclones in the world; characteristics of cyclones; formation of the cyclones (depressions); the effects of the cyclones</li> </ul> | <p>write down the types of precipitations and the factors for rainfall formation.</p> <ul style="list-style-type: none"> <li>- In groups, discuss and compile the findings for a class presentation.</li> <li>- In groups, use the geographical documents and internet to research on the factors influencing the nature and the movement of the winds. Write down the findings for a class presentation.</li> <li>- In groups, discuss the types of winds, its measurement ,recording, influence of winds on weather and on the human activities; and present the findings in the class.</li> <li>- Do research using previous notes, textbooks and internet on the types and characteristics of air masses, their effects on the environment, the types and characteristics of cyclones, anti-cyclones and their effects on the weather and on the human activities. Record the</li> </ul> |
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| <p>the environment</p> <ul style="list-style-type: none"> <li>- Identify the major types of clouds and outline their characteristics and the factors for their formation</li> <li>- State the effects of the clouds on the weather.</li> <li>- Define the concept of sunshine</li> <li>- State the factors influencing the amount of solar radiation and its influence on the environment.</li> <li>- Define the concept of the atmospheric pressure</li> <li>- Outline the factors influencing the distribution of the atmospheric pressure.</li> <li>- Name different world pressure belts.</li> <li>- List the factors that</li> </ul> | <p>measurement and recording of the humidity.</p> <ul style="list-style-type: none"> <li>- Explain the factors influencing the humidity and clarify its significance to the environment.</li> <li>- Describe the different types of clouds and the factors influencing their formation.</li> <li>- Explain the effects of the clouds on the weather.</li> <li>- Demonstrate the measurement and recording of the sunshine.</li> <li>- Describe the factors influencing the amount of solar radiation and its effects on the environment.</li> <li>- Illustrate the measurement and the recording of the</li> </ul> |  | <p>on the environment.</p> <ul style="list-style-type: none"> <li>o Anticyclones: areas of anticyclones; occurrence; characteristics of the anticyclones; the effects of the anticyclones on the environment.</li> <li>- Humidity: <ul style="list-style-type: none"> <li>o measurement and recording of the humidity;</li> <li>o types of humidity: absolute and relative humidity.</li> <li>o factors influencing humidity.</li> <li>o the significance of the humidity to the environment.</li> </ul> </li> <li>- Cloud cover: <ul style="list-style-type: none"> <li>o types of clouds and their characteristics.</li> <li>o factors influencing the formation and the shape of the clouds.</li> <li>o The effects of clouds on the weather.</li> </ul> </li> <li>- Sunshine: <ul style="list-style-type: none"> <li>o measurement and the</li> </ul> </li> </ul> | <p>findings.</p> <ul style="list-style-type: none"> <li>- In groups, discuss the findings and make a class presentation.</li> <li>- Use the previous research on the elements of weather; use internet and other additional geographical documents to do a research on the types of humidity, measurement and recording of humidity, factors influencing humidity and its significance on the environment. Write down the findings.</li> <li>- In groups, discuss and compile the above findings and make a class presentation.</li> <li>- In groups, use internet and geographical documents to research on the types of clouds, factors influencing cloud formation and their effects on the weather.</li> <li>- In groups, discuss and compile the above findings and make a class presentation followed by Q&amp;A.</li> </ul> |
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| <p>influence the world climates</p> <ul style="list-style-type: none"> <li>- Name the major climatic zones of the world and outline the characteristics of each zone</li> </ul> | <p>atmospheric pressure.</p> <ul style="list-style-type: none"> <li>- Describe the factors influencing the distribution of the atmospheric pressure.</li> <li>- Locate the major pressure zones of the world.</li> <li>- Explain the factors influencing the climate of the world.</li> <li>- Locate the major climatic zones on the world map and describe the characteristics of each climatic zone.</li> </ul> |  | <p>recording of the sunshine.</p> <ul style="list-style-type: none"> <li>o factors influencing the amount of solar radiation.</li> <li>o influence of sunshine on the environment.</li> <li>- Atmospheric pressure: <ul style="list-style-type: none"> <li>o measurement and the recording of the atmospheric pressure.</li> <li>o factors influencing the distribution of the atmospheric pressure.</li> <li>o location of the different world pressure belts and their characteristics.</li> </ul> </li> <li>- Factors that influence world climate: <ul style="list-style-type: none"> <li>o latitude, altitude, presence/absence of water bodies, ocean currents, wind circulation (polar winds, westerlies, trade winds, and monsoon).</li> </ul> </li> <li>- Types of climate and their characteristics: <ul style="list-style-type: none"> <li>o Tropical zones:</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>- Use the previous research on the elements of weather. other additional documents and internet to find about the solar radiation, measurement, recording of the sunshine and its influence on the environment.</li> <li>- In groups, discuss and compile the above findings and make a class presentation.</li> <li>- Use the geographical documents and internet to research on the atmospheric pressure, location of the major pressure zones and their characteristics. Record the findings.</li> <li>- In groups, discuss and compile the above findings and make a class presentation.</li> <li>- Use internet and the geographical documents to research on the major climatic zones of the world, their characteristics, factors influencing the climate and the influence of climate on</li> </ul> |
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| <ul style="list-style-type: none"> <li>- State the influence of climate on human activities.</li> </ul>   | <ul style="list-style-type: none"> <li>- Explain the influence of the climate on the human activities.</li> </ul> |  | <p>(equatorial, tropical, desert, monsoon).<br/>Temperate zones: (mediterranean, marine, continental).</p> <ul style="list-style-type: none"> <li>o Cold zone: polar climate, mountain climate.</li> </ul> <ul style="list-style-type: none"> <li>- Influence of the climate on the human activities.</li> </ul> | <p>the human activities. Record the findings.</p> <ul style="list-style-type: none"> <li>- In groups, discuss and compile the above findings and make class presentation followed by Q&amp;A.</li> <li>- In pairs, investigate whether the climate change is having an impact on the weather of the world. Support your argument with evidences and record your findings in a report.</li> </ul> |
| <p><b>Links to other subjects:</b> <i>It links to Meteorology, measurement and recording in Physics and Mathematics</i></p>   |   |  |  |  |
| <p><b>Assessment criteria:</b> <i>The learners are able to interpret the atmospheric phenomena and investigate the impact of the weather and climate on the environment and on the human activities</i></p> |   |  |  |  |
| <p><b>Materials:</b> <i>Documents, internet, maps, local environment, instruments (thermometer, rain gauge, barometer), atlas, journals, tactile and talking materials, diagrams and photographs</i></p>    |   |  |  |  |

| Topic Area: Physical Geography   |  | Sub-topic Area: Vegetation   |   |  |
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| Year group & Subject: S5 Geography   |  | Unit 9: Natural Vegetation of the world  |   | No. of periods: 12   |
| <b>Key unit competence:</b> The learner should be able to appreciate the distribution of different types of vegetation in the world  |  |  |   |  |
| Learning Objectives  |  |  | Content   | Learning Activities  |
| Knowledge and Understanding  | Skills   | Attitudes and Values   |   |  |
| <ul style="list-style-type: none"> <li>- Recall the locations of different types of natural vegetation.</li> <li>- Identify the factors influencing the vegetation distribution.</li> <li>- Outline the importance of the natural vegetation.</li> </ul> | <ul style="list-style-type: none"> <li>- Examine the classifications of the major types of natural vegetation.</li> <li>- Describe the characteristics of each type of natural vegetation.</li> <li>- Explain the location of the major vegetation zones of the world.</li> <li>- Explain the factors influencing the vegetation distribution.</li> <li>- Explain the importance of the natural vegetation.</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the importance of the various types of vegetation in the world.</li> <li>- Show resilience for the various types of vegetation and the desire to protect and manage the natural vegetation.</li> </ul> | Classification of the natural vegetation. <ul style="list-style-type: none"> <li>- Forests and their characteristics:               <ul style="list-style-type: none"> <li>o Tropical vegetation: equatorial rain forests, tropical monsoon forests, tropical mountain forests.</li> <li>o Temperate vegetation: mediterranean forest, coniferous, deciduous forests.</li> </ul> </li> <li>- Grasslands and their characteristics:               <ul style="list-style-type: none"> <li>o Tropical zone: savanna humid and savanna dry /steppe.</li> <li>o Temperate zone:</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>- Use the geographical documents, internet, maps, power point presentation and photographs to research on the types of vegetation, location and their characteristics, and write down the findings.</li> <li>- In groups, discuss and write down the findings and make a class presentation followed by Q&amp;A.</li> <li>- Use documents, text books, internet, maps and photographs to research on the factors influencing the vegetation distribution</li> </ul> |

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|   |  |  | <p>steppe, prairies, pampas, downs and veld).</p> <ul style="list-style-type: none"> <li>○ Desert vegetation and their characteristics: cold desert vegetation, Tundra; hot desert vegetation.</li> <li>○ Mountain vegetation and their characteristics.</li> <li>○ Aquatic/ marsh vegetation and their characteristics: swamp vegetation e. g. mangrove vegetation.</li> </ul> <ul style="list-style-type: none"> <li>- Factors influencing the vegetation distribution.</li> <li>- Importance of the natural vegetation.</li> </ul> | <p>and the importance of vegetation. Record the findings.</p> <ul style="list-style-type: none"> <li>- In groups, discuss the findings and make a class presentation.</li> <li>- Are deforestation and logging activities having an impact on the atmosphere? Support your answer with evidences.</li> <li>- In pairs, record your findings as a poster or a presentation.</li> </ul> |
| <p><b>Links to other subjects:</b> <i>It relates to Ecology and Botany (plant species) in Biology</i></p>   |  |  |   |   |
| <p><b>Assessment criteria:</b> <i>The learners are able to clearly examine the classification and the characteristics of different natural vegetation of the world</i></p>                      |  |  |   |   |
| <p><b>Materials:</b> <i>Geographical documents, internet websites, journals, maps, photographs, atlas, tactile and talking materials, documentary films, diagrams and local environment</i></p> |  |  |   |   |

| Topic Area: Human and Economic Geography  |   |   | Sub-topic Area: Population   |  |
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| Year group & Subject: S5 Geography  |   | Unit 10: Population Growth in the world   |  | No. of periods: 18   |
| <b>Key unit competence:</b> The learner should be able to discuss the problem of the population growth and the ways of controlling the population growth in the world. Explain the impacts of early sex, HIV/Aids, health risks and STDs on the world's population.   |   |   |  |  |
| Learning Objectives   |   |   | Content  | Learning Activities  |
| Knowledge and Understanding   | Skills  | Attitudes and Values  |  |  |
| <ul style="list-style-type: none"> <li>- Mention the population diversity</li> <li>- Define population concepts</li> <li>- Locate the population distribution and state the factors that account for the population distribution</li> <li>- Define under population and overpopulation</li> <li>- Outline the population problems of the</li> </ul> | <ul style="list-style-type: none"> <li>- Explain the population diversity</li> <li>- Differentiate among the concepts of population (optimum population, under population, over population)</li> <li>- Explain the factors influencing the population distribution</li> <li>- Compare the concepts of under population and over population</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the importance of human diversity in development.</li> <li>- Show resilience for the diversities in human population.</li> <li>- Show respect to the various policies for controlling the population growth.</li> <li>- Show concern for the causes, effects and the control measures of</li> </ul> | <ul style="list-style-type: none"> <li>- Human diversities (race, religion, languages and states).</li> <li>- Population concepts: optimum population, under population, over population.</li> <li>- World population distribution and the density: densely populated areas and sparsely populated areas.</li> <li>- Factors for the population distribution</li> <li>- Under population, overpopulation and the related effects.</li> </ul> | <ul style="list-style-type: none"> <li>- Use internet, geographical documents, population maps and photographs to research on the population concepts, world population distribution and the factors for distribution. Record the findings.</li> <li>- In groups, discuss the findings and make a class presentation followed by Q&amp;A.</li> <li>- Use geographical documents, internet, maps and photographs to research on the meaning and the effects of under population, overpopulation and, the population problems of the developing and developed countries. Write down the</li> </ul> |

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| <p>developing and developed countries</p> <ul style="list-style-type: none"> <li>- Identify the factors influencing the birth and the death rates</li> <li>- Outline the factors for a rapid population growth</li> <li>- List the causes and the effects of a rapid growth, and suggest the control measures</li> <li>- State the policies of controlling population growth and migration.</li> <li>- Explain the causes, the effects and the possible control measures for an early sex, health risks, HIV/Aids and STDs in the world.</li> </ul> | <ul style="list-style-type: none"> <li>- Describe the problems of population in both developed and developing countries</li> <li>- Explain the factors associated with the birth and death rates</li> <li>- Describe the factors responsible for a rapid population growth.</li> <li>- Explain the effects of a rapid population growth and the control measures.</li> <li>- Apply the knowledge acquired to minimise the rapid population growth</li> <li>- Investigate the impact of early sex, health risks, HIV/Aids, STDs and propose different ways of their</li> </ul> | <p>international migration.</p> | <ul style="list-style-type: none"> <li>o effects of under population.</li> <li>o effects of overpopulation,</li> <li>o population problems of the developed countries ageing population, urbanisation, small work force, rural depopulation).</li> <li>o population problems of the developing countries.</li> <li>- Population growth : <ul style="list-style-type: none"> <li>o factors influencing birth rate, death rate and the rate of population growth.</li> <li>o causes of rapid population growth.</li> <li>o effects associated with the rapid population growth.</li> <li>o ways of controlling the population growth.</li> </ul> </li> <li>- Population structure and the composition (age, sex, population pyramid,</li> </ul> | <p>findings.</p> <ul style="list-style-type: none"> <li>- In groups, discuss and compile the findings for a class presentation followed by Q&amp;A.</li> <li>- Use the geographical documents, internet, maps and photographs to research on the factors influencing the birth and death rates, causes and the effects of a rapid population growth and the control measures. Record the findings.</li> <li>- In groups, discuss and compile the findings for a written report.</li> <li>- Use text books, documents on population, internet, population maps and photographs to find about the population structure and composition, population policies in the world and the effects of the above policies on the population growth. Record the findings.</li> <li>- In groups, discuss and compile the findings for a class presentation.</li> <li>- Discuss in groups, the effects of early sex, health risks, HIV/Aids, STDs in the world and suggest the possible prevention</li> </ul> |
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| <ul style="list-style-type: none"> <li>- Identify the causes and the effects of international migration</li> <li>- Relate the population concepts of different countries</li> </ul> | <p>prevention in the world.</p> <ul style="list-style-type: none"> <li>- Explain the causes and the effects of the international migration</li> <li>- Make a comparison between the population in the developing and the developed countries</li> </ul> |  | <p>active population, inactive population, education, standard of living).</p> <ul style="list-style-type: none"> <li>- Population policies in the world: <ul style="list-style-type: none"> <li>o population policies in the developed countries and the developing countries.</li> <li>o effects of population policies on the population growth.</li> <li>o impact of early sex, health risks, HIV/Aids, STDs in the world and the possible prevention measures.</li> <li>o migration: types, causes and the effects of migrations, control measures of migrations.</li> </ul> </li> <li>- Case studies on population: Germany, U.S.A. China, Nigeria, Gabon, Bangladesh.</li> </ul> | <p>measures. Make a class presentation.</p> <ul style="list-style-type: none"> <li>- Do research using the geographical documents and internet about the types of migration, causes and the effects and the control measures. Record the findings.</li> <li>- In groups, discuss and compile the findings for a class presentation followed by Q&amp;A.</li> <li>- Use text books and internet to research on the population of selected countries in reference to the knowledge acquired in the current unit and write down the findings.</li> <li>- In groups, discuss and compile the findings on the population concepts of the selected countries and make a class presentation followed by Q&amp;A.</li> <li>- Which areas of the world have overpopulation and under population, and what are the reasons? What are the consequences for these countries? In pairs, write a report to address these questions.</li> </ul> |
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**Links to other subjects:** *It links to population in Economics*

**Assessment criteria:** *The learners are able to explain the problem of the population growth and the ways of controlling the population in the world*

**Materials:** *Geographical documents, internet websites, maps and photographs, local environment, atlas, journals, tactile and talking materials, documentary films, population diagrams and statistical graphs.*

| Topic Area: Human and Economic Geography  |  | Sub-topic Area: Settlement and urbanisation   |  |  |
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| Year group& Subject: S5 Geography   |  | Unit 11: Urbanisation in the world  |  | No. of periods: 14   |
| <b>Key unit competency:</b> The learner should be able to discuss the impact of settlement and urbanisation on the sustainable development of different countries   |  |   |  |  |
| Learning Objectives   |  |   | Content  | Learning Activities  |
| Knowledge and Understanding   | Skills   | Attitudes and Values  |  |  |
| <ul style="list-style-type: none"> <li>- Identify the major types of settlements.</li> <li>- Outline the factors, the effects and the solutions of rural settlements.</li> <li>- Define the terms related to urbanisation.</li> <li>- Identify the major urban centres and the factors influencing the urban development in the world</li> <li>- State the functions of the world's major cities and ports</li> </ul> | <ul style="list-style-type: none"> <li>- Explain the major types of settlements.</li> <li>- Explain the factors influencing the rural settlements</li> <li>- Explain the effects of the rural settlements.</li> <li>- Explain the terms related to urbanisation.</li> <li>- Describe the major urban centres and the factors influencing the urban development in the world</li> </ul> | <ul style="list-style-type: none"> <li>- Show concern for the effects of the rural settlement and the devised measures for the proper rural settlement</li> <li>- Show concern for the problems caused by the urbanisation on the environment.</li> </ul> | <ul style="list-style-type: none"> <li>- Rural settlement.               <ul style="list-style-type: none"> <li>o types of rural settlement</li> <li>o factors influencing the rural settlement</li> <li>o effects of rural settlements</li> <li>o solutions to the problems affecting the rural settlement</li> </ul> </li> <li>- Urbanisation in the world               <ul style="list-style-type: none"> <li>o definition of the terms: trading centres, town, town board, municipality, city, agglomeration, conurbation,</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>- Use the geographical documents, text books and internet to research about the types of rural settlements, factors influencing the rural settlements, the effects and the solutions to rural settlements. Write down the findings.</li> <li>- In groups, discuss the findings for a class presentation and engage in Q&amp;A.</li> <li>- Use the geographical documents, textbooks and internet to research on the concept of</li> </ul> |

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| <ul style="list-style-type: none"> <li>- Describe the impact of the world urbanisation on the environment</li> <li>- Identify the major cities in the developed and developing countries.</li> <li>- Relate urbanisation issues of different countries.</li> </ul> | <ul style="list-style-type: none"> <li>- Explain the functions of the world's major cities and ports</li> <li>- Evaluate the impact of the world's urban centres on the environment</li> <li>- Describe the characteristics of the cities in the developed and developing countries.</li> <li>- Compare urbanisation of different countries</li> </ul> |  | <ul style="list-style-type: none"> <li>megalopolis, suburbs, slums, green city.</li> <li>○ location of the major world urban centres and ports.</li> <li>○ factors influencing the urban development in the world.</li> <li>○ functions of the urban centres and the ports</li> <li>○ impact of the world urbanisation on the environment</li> <li>- Case studies: <ul style="list-style-type: none"> <li>○ developed countries: London, New York and Tokyo.</li> <li>○ developing countries: Brasilia, Johannesburg and Nairobi.</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>urbanisation, terms used, types of urban centres, functions, factors influencing the urban development, the effects of urbanisation on the environment and the measures to urban problems. Write down the findings.</li> <li>- In groups, discuss the findings for a class presentation.</li> <li>- Use the knowledge acquired from the previous lesson, textbooks and internet to research on the urbanisation concepts/ issues of selected countries (under case studies). Record the findings.</li> <li>- In groups, discuss and write a report on the findings for a class presentation.</li> <li>- Is urbanisation in the</li> </ul> |
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|  |  |  |  | <p>world creating overpopulated cities? What are the impacts and how can this problem be addressed? In pairs, write a report on the conclusions.</p> |
| <p><b>Links to other subjects:</b> <i>It links to the urban planning and the development in entrepreneurship</i></p>   |  |  |  |  |
| <p><b>Assessment criteria:</b> <i>The learners are able to clearly explain the impact of the rural and urban settlement on the sustainable development.</i></p>  |  |  |  |  |
| <p><b>Materials:</b> <i>Geographical documents, internet websites, photographs, local environment, atlas, journals, tactile and talking materials, documentary films, urban diagrams and statistical graphs.</i></p> |  |  |  |  |

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| <b>Topic Area: Human and Economic Geography</b>  |   | <b>Sub-topic Area: Economic activities and development studies</b>  |   |   |
| <b>Year group&amp; Subject: S5 Geography</b>   |   | <b>Unit 12 : Agriculture in the world</b>   |   | <b>No. of periods: 24</b>   |
| <b>Key unit competency:</b> The learners should be able to explain the impact of agricultural activities on the sustainable development of different countries in the world  |   |   |   |   |
| <b>Learning Objectives</b>   |   |   | <b>Content</b>  | <b>Learning Activities</b>  |
| <b>Knowledge and Understanding</b>   | <b>Skills</b>   | <b>Attitudes and Values</b>   |   |   |
| <ul style="list-style-type: none"> <li>- Name the different types of crop cultivation methods.</li> <li>- Outline the characteristics of the different crop cultivation systems.</li> <li>- State the different types of farming in China.</li> <li>- Outline the factors responsible for increasing the agricultural production.</li> </ul> | <ul style="list-style-type: none"> <li>- Describe the characteristics of the different crop cultivation methods</li> <li>- Describe the farming methods in China and Russia</li> <li>- Explain the factors influencing the agricultural activities</li> <li>- Evaluate the problems affecting the agricultural system in the</li> </ul> | <ul style="list-style-type: none"> <li>- Show continual desire to grow different crops using different methods of farming</li> <li>- Appreciate the reasons for increasing the agriculture production.</li> <li>- Appreciate the different types of livestock farming.</li> <li>- Show respect for the ways of improving the livestock farming</li> </ul> | <p>Crop Cultivation</p> <ul style="list-style-type: none"> <li>- types of crop cultivation methods and their characteristics</li> <li>- subsistence cultivation (shifting cultivation, bush fallowing, small holder, cooperative, plantation), advantages and disadvantages, market gardening and horticulture.</li> <li>- truck farming, factory farming</li> <li>- intensive subsistence agriculture(collectivisation, communes in China, cooperative farming)</li> </ul> | <ul style="list-style-type: none"> <li>- Use geographical documents, text books and internet to research about the different methods of crop cultivation and their characteristics, advantages and disadvantages. Record the findings.</li> <li>- In groups discuss and compile the findings from the above research for a class presentation.</li> <li>- Use geographical documents, textbooks and internet to research about the collectivisation, communal farming in China and cooperative farming in Russia. Write down the findings.</li> </ul> |

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| <ul style="list-style-type: none"> <li>- State the problems affecting the agriculture in the developing countries.</li> <li>- Outline the different plantation crops in different countries.</li> <br/> <li>- State the different types of livestock farming.</li> <li>- List different ways of improving the livestock.</li> <li>- Outline the factors and problems affecting the livestock farming.</li> </ul> | <ul style="list-style-type: none"> <li>developing countries.</li> <li>- Compare the plantation agriculture in the different countries of the world</li> <br/> <li>- Locate different types of livestock.</li> <br/> <li>- Explain the ways of improving the livestock farming</li> <br/> <li>- Explain the factors, problems and the solutions of the livestock farming in the different countries</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the reasons for rearing a specific type of animals like sheep, cattle.</li> </ul> | <ul style="list-style-type: none"> <li>- factors for increasing the agricultural production</li> <li>- problems affecting the agriculture in the developing countries</li> <li>- Case studies: <ul style="list-style-type: none"> <li>o Sugar cane grown in South Africa.</li> <li>o Rubber grown in Liberia.</li> <li>o Coffee grown in Brazil.</li> <li>o Cotton grown in Sudan.</li> </ul> </li> <li>Livestock Farming</li> <li>- types of livestock farming: <ul style="list-style-type: none"> <li>pastoralism: pure nomadism, free Range and transhumance.</li> <li>- ranching, dairy farming.</li> <li>- ways of improving the livestock farming.</li> </ul> </li> <li>- Factors and problems affecting the livestock farming and ways of improving the livestock farming.</li> </ul> | <ul style="list-style-type: none"> <li>- In groups, discuss and compile the findings from the above research and make a class presentation.</li> <li>- Use documents, textbooks and internet to research about the factors for increasing agricultural production and the problems affecting agriculture in the developing countries. Record the findings.</li> <li>- In groups, discuss and compile the findings and make a class presentation.</li> <li>- Use internet, text books , documents, photographs, diagrams and maps to research about the conditions, characteristics, advantages, disadvantages, problems and policies of either; rubber growing in Liberia, sugar cane growing in South Africa, coffee growing in Brazil or cotton growing in Sudan. Write a report on the findings.</li> <li>- In groups, discuss and compile the findings from the above</li> </ul> |
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| <ul style="list-style-type: none"> <li>- Identify the livestock farming methods in the selected countries.</li> </ul> | <ul style="list-style-type: none"> <li>- Research on different types of livestock farming in the selected countries of the world.</li> </ul> |  | <ul style="list-style-type: none"> <li>- Case studies:             <ul style="list-style-type: none"> <li>○ Ranching in Botswana.</li> <li>○ Dairy farming in Holland.</li> <li>○ Sheep rearing in Australia.</li> </ul> </li> </ul> | <p>research and prepare a written report.</p> <ul style="list-style-type: none"> <li>- Use the geographical documents, internet and text books to research on the types of livestock farming methods, ways of improving the livestock, factors and problems affecting the livestock. Record the findings.</li> <li>- In groups, discuss and compile the findings from the above research and make a class presentation.</li> <li>- Use internet, textbooks, documents, photographs, diagrams and maps to research about the ranching in Botswana, dairy farming in Holland or sheep rearing in Australia in reference to the knowledge acquired in the current unit.</li> <li>- In groups, discuss and compile the findings from the above research and write a report.</li> <li>- Can scientists continually improve the crop yield and</li> </ul> |
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|  |  |  |  | <p>combat parasites; Is this an important issue with the growing world population?;Is the growing, demands for meat in our diet creating unethical livestock farming methods? Investigate in pairs, and write a report on the findings.</p> |
| <p><b>Links to other subjects:</b> <i>This links to statistics in Maths subject; production trends in Economics; the animal and crop species in Biology.</i></p> |  |  |  |   |
| <p><b>Assessment criteria:</b> <i>The learners are able to critically explain the impact of agricultural activities on the sustainable development.</i></p>      |  |  |  |   |
| <p><b>Materials:</b> <i>Geographical documents, maps, internet, tactile and talking materials, diagrams, journals, internet and documentaries.</i></p>           |  |  |  |   |

| Topic Area: Human and Economic Geography   |   |  | Sub-topic Area: Economic activities  |  |
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| Year group & Subject: S5 Geography   |   | Unit13: Forestry in the world  |  | No. of periods: 18   |
| <b>Key unit competency:</b> The learner should be able to explain the impact of forests and forestry on the sustainable development  |   |  |  |  |
| Learning Objectives  |   |  | Content  | Learning Activities  |
| Knowledge and Understanding  | Skills  | Attitudes and Values   |  |  |
| <ul style="list-style-type: none"> <li>- Identify the major types of forests in the world</li> <li>- List the characteristics of the different type of forests</li> <li>- State the factors leading to the forest distribution and exploitation in the world</li> <li>- Recall the importance of forestry to the economy of the countries</li> <li>- Outline the problems affecting lumbering.</li> <li>- List the products of lumbering from the</li> </ul> | <ul style="list-style-type: none"> <li>- Locate major types of forests in the world</li> <li>- Describe the characteristics of each type of forests in the world</li> <li>- Examine the factors of forest distribution and the exploitation in the world</li> <li>- Explain the importance of forestry to the economy of the countries</li> <li>- Discuss the problems affecting the forest exploitation and the</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the importance of lumbering in different countries.</li> <li>- Show the concern for the risks of over-exploitation of the forests in different countries and suggest the likely results.</li> <li>- Communicate the factors influencing the forest distribution, forest conservation and the management in the selected countries of the world.</li> </ul> | <p>Forestry</p> <ul style="list-style-type: none"> <li>- Major types of forests in the world (equatorial, monsoon, temperate hard wood, temperate soft wood and coniferous/boreal forests).</li> <li>- Characteristics of each type of forests</li> <li>- Factors influencing the forest distribution.</li> <li>- Importance of forests and the problems affecting lumbering</li> </ul> <p>Harvesting of the Forest</p> <ul style="list-style-type: none"> <li>- Lumbering/ forest exploitation (products from lumbering, the</li> </ul> | <ul style="list-style-type: none"> <li>- Use internet, a range of text books and photographs to find out the different types of forests, their characteristics, and the factors influencing the distribution, problems and importance of forests, methods and factors influencing lumbering. Record the findings.</li> <li>- In groups, discuss the findings and make a class presentation.</li> <li>- Use internet, a range of text books and photographs to research on the products from lumbering, methods of exploitation, the factors hindering the effective</li> </ul> |

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| <p>different countries</p> <ul style="list-style-type: none"> <li>- Relate the economic importance of the forestry in Rwanda and problems limiting forest exploitation</li> <li>- Identify the forest exploitation methods of the different countries</li> <li>- State the conservation measures in different countries</li> </ul> | <p>possible solutions</p> <ul style="list-style-type: none"> <li>- Classify the products from lumbering</li> <li>- Relate the economic importance of forestry in Rwanda and the problems limiting their exploitation</li> <li>- Explain the forest exploitation methods of the different countries</li> <li>- Explain the forest conservation measures in different countries</li> </ul> |  | <p>importance of forest exploitation, problems limiting the forest exploitation, methods of forest exploitation and forest conservation measures).</p> <ul style="list-style-type: none"> <li>- Cases studies: <ul style="list-style-type: none"> <li>o Forestry in Gabon</li> <li>o Forestry in Scandinavia</li> <li>o Forestry in Sweden</li> <li>o Forestry in British Columbia</li> </ul> </li> </ul> | <p>exploitation of the forests and forest conservation measures. Write down the findings.</p> <ul style="list-style-type: none"> <li>- In groups, discuss the findings for a class presentation.</li> <li>- Use the above presentations to note down the factors and problems of forest exploitation and suggest the conservation measures.</li> <li>- Use internet or geographical documents to research on the importance of forest exploitation, problems limiting forest exploitation, methods of forest exploitation and the forest conservation measures in Gabon, Scandinavian countries and the British Columbia. Record the findings.</li> <li>- In groups, use knowledge acquired from the above researches to discuss about the forestry in the above countries and write a report on the findings.</li> </ul> |
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|  |  |  |  | <ul style="list-style-type: none"> <li>- Is the growing demand for wood reducing the tree population to a critical level in the world?;How can this trend be reversed and what is the impact of having a fewer trees in the world?; In pairs, address these questions and write a report.</li> </ul> |
| <p><b>Links to other subjects:</b> <i>It is linked to the ecology in Biology and statistics in Mathematics subject</i></p>   |  |  |  |  |
| <p><b>Assessment criteria:</b> <i>The learners are able to explain correctly the impact of the forests and forestry on the sustainable development</i></p>                             |  |  |  |  |
| <p><b>Materials:</b> <i>Geographical documents, photographs, maps, local environment, tactile and talking materials, journals, internet websites/jaws software and newspapers.</i></p> |  |  |  |  |

| Topic Area: Human and Economic Geography   |   |   | Sub-topic Area: Economic activities   |  |
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| Year group& Subject: S5 Geography  |   | Unit 14 : Fishing in the world  |   | No. of periods: 18   |
| <b>Key unit competency:</b> The learner should be able to explain the impact of fishing on the sustainable development of different countries of the world   |   |   |   |  |
| Learning Objectives  |   |   | Content   | Learning Activities  |
| Knowledge and Understanding  | Skills  | Attitudes and Values  |   |  |
| <ul style="list-style-type: none"> <li>- Identify the major marine fishing grounds</li> <li>- Identify the major freshwater/inland fisheries</li> <li>- Outline the different methods of catching fish</li> <li>- Name the major types of fishes caught</li> <li>- Outline the factors favouring fishing</li> <li>- State the importance of fish and fishing</li> <li>- List the problems of fishing in the world</li> </ul> | <ul style="list-style-type: none"> <li>- Clarify the location of major fishing grounds</li> <li>- Describe the methods of catching fish</li> <li>- Classify the major types of fishes caught</li> <li>- Explain the factors influencing the development of fishing</li> <li>- Assess the contribution of fishing to the economic development</li> </ul> | <ul style="list-style-type: none"> <li>- Understand the methods of fishing used for inland and marine fisheries</li> <li>- Appreciate the importance of catching and eating fish</li> <li>- Appreciate the importance of fishing to the economic development of some countries</li> <li>- Show concern to the problems affecting fishing and call for fish</li> </ul> | Fishing <ul style="list-style-type: none"> <li>- The major fishing grounds of the world</li> <li>- Major marine fishing grounds (South East Pacific, North West Pacific, North West Atlantic, North East Atlantic, North East Pacific and the African Marine fisheries).</li> <li>- Inland fishing grounds: Lakes, rivers and swamps.</li> <li>- Methods used in fishing.</li> <li>- Types of fishes and fishing in the world</li> <li>- Factors influencing the development of fishing.</li> </ul> | <ul style="list-style-type: none"> <li>- Use internet, the geographical documents, fishing maps and photographs to research on the major fishing grounds, the methods used for fishing and the types of fishes caught. Record the findings.</li> <li>- In groups, discuss and compile the findings and make a class presentation.</li> <li>- Use the geographical documents and internet to research on the factors favouring</li> </ul> |

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| <ul style="list-style-type: none"> <li>- State the methods of conserving and preserving fishes</li> <li>- Explain fishing in the selected countries of the world</li> </ul> | <ul style="list-style-type: none"> <li>- Explain the problems of fishing and suggest the future prospects</li> <li>- Explain the methods used to conserve and preserve fishes in the world</li> <li>- Do research on the fishing in the selected countries of the world</li> </ul> | <p>conservation measures</p> | <ul style="list-style-type: none"> <li>- Importance of fish and fishing</li> <li>- Problems affecting the marine fisheries and the solutions/future prospects.</li> <li>- Problems of inland fisheries and the solutions/future prospects</li> <li>- Fish conservation and preservation</li> <li>- Case studies: <ul style="list-style-type: none"> <li>o Norway (North East Atlantic)</li> <li>o Japan (North West Pacific)</li> <li>o Peru (South East Pacific).</li> <li>o Morocco (West Africa).</li> <li>o South Africa (South East Atlantic)</li> </ul> </li> </ul> | <p>the development of fishing, importance of fish and fishing, problems and solutions associated with fishing. Record the findings. Do group discussions on the findings and make a class presentation supported by Q&amp;A.</p> <ul style="list-style-type: none"> <li>- In groups, use textbooks and internet to research on fish conservation and preservation methods and write down the findings</li> <li>- In groups, compile the findings and make a group presentation.</li> <li>- In groups, use internet, textbooks and other geographical documents to research on the fishing in Norway, Japan, Peru or Morocco for</li> </ul> |
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|  |  |  |  | <p>discussions in reference to the knowledge acquired in the current unit and write a report on the findings.</p> <ul style="list-style-type: none"> <li>- Is overfishing causing a bad effect on the ecosystems of our oceans?; What is the impact of overfishing, and how can we address this problem?; In pairs, write a report on the options available of the fishing nations.</li> </ul> |
| <p><b>Links to other subjects:</b> <i>It is linked to Aquatic life in Biology and fish farming project in entrepreneurship.</i></p>  |  |  |  |  |
| <p><b>Assessment criteria:</b> <i>The learners are able to clearly explain the impact of fishing on the sustainable development of different countries of the world.</i></p>                       |  |  |  |  |
| <p><b>Materials:</b> <i>Geographical documents, photographs, local environment, internet websites/jaws software, statistical diagrams and graphs, journals, tactile and talking materials.</i></p> |  |  |  |  |

| Topic Area: Human and Economic Geography   |  |   | Sub-topic Area: Economic activities   |  |
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| Year group & Subject: S5 Geography   |  | Unit 15: Mining in the world  |   | No. of periods: 18   |
| <b>Key unit competency:</b> The learner should be able to explain the impact of mining on the sustainable development of different countries in the world  |  |   |   |  |
| Learning Objectives  |  |   | Content   | Learning Activities  |
| Knowledge and Understanding  | Skills   | Attitudes and Values  |   |  |
| <ul style="list-style-type: none"> <li>- Identify the distribution of minerals in the world</li> <li>- List the methods used for mining in the world</li> <li>- State the factors affecting the mineral exploitation</li> <li>- Outline the effects of mining to the economies of the world</li> <li>- Explain mining in relation to the selected countries</li> </ul> | <ul style="list-style-type: none"> <li>- Locate the major minerals of the world on a map.</li> <li>- Explain the methods used for mining</li> <li>- Describe the factors affecting the mineral exploitation</li> <li>- Explain the effects of mining to the economy of a country</li> <li>- Apply the knowledge to research on the role played by minerals in the</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the role played by nature in the distribution of the minerals in different areas of the world</li> <li>- Appreciate the importance of minerals for the sustainable development of different areas of the world</li> </ul> | <p>Mining</p> <ul style="list-style-type: none"> <li>- World distribution of the major minerals</li> <li>- Methods used for mining.</li> <li>- Factors affecting mineral exploitation</li> <li>- The effects of mining to the economies of the world.</li> <li>- Case study:               <ul style="list-style-type: none"> <li>o U.S.A</li> <li>o Russia</li> <li>o China</li> <li>o Middle East</li> <li>o Nigeria</li> <li>o South Africa</li> <li>o Zambia</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>- Use internet and textbooks, to research on the major minerals of the world, methods used for mining, factors affecting mineral exploitation and the effects of mining. Write down the findings.</li> <li>- In groups, discuss the findings for a class presentation.</li> <li>- In groups, use internet, textbooks and other geographical documents to research on the mining in Russia, China, Middle</li> </ul> |

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|   | <p>sustainable development of different economies of the world</p> |  |  | <p>East, Nigeria, South Africa and Zambia for discussions in reference to the knowledge acquired in the current unit and write a report on the findings.</p> <ul style="list-style-type: none"> <li>- Does mining always create greater wealth distribution in mineral rich countries?;Is man over mining the earth?; In pairs, answer these questions supporting your ideas with evidence in your report.</li> </ul> |
| <p><b>Links to other subjects:</b> <i>It is linked to the minerals and alloys in Chemistry</i></p>  |  |  |  |   |
| <p><b>Assessment criteria:</b> <i>The learners are able to correctly clarify the minerals and explain the impact of mining on the sustainable development of different countries in the world</i></p> |  |  |  |   |
| <p><b>Materials:</b> <i>Geographical documents, maps, tactile and talking materials, atlases, journals, photographs, local environment, internet/Jaws software and samples of minerals</i></p>        |  |  |  |   |

## **5.4. GEOGRAPHY SYLLABUS FOR SENIOR SIX**

### **5.4.1. Key competences at the end of Senior Six**

- Explain different physical geographical phenomena and their impact on the sustainable development in the world
- Explain different problems associated with the physical, human and economic environment of the world and suggest solutions.
- Evaluate the major challenges related to the exploitation of resources in the world
- Compare different modes of development in the world
- Interpret physical and human features on the maps and the photographs

### 5.4.2 Geography units for Senior Six

| Topic Area: Practical Geography  |   |   | Sub-topic Area: Map work interpretation   |   |
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| Year group & Subject: S6 Geography   |   | Unit 1: Cross sections and Sketch maps  |   | No. of periods: 8   |
| <b>Key unit competency:</b> The learner should be able to draw cross sections and sketch maps by reduction or enlargement  |   |   |   |   |
| Learning Objectives  |   |   | Content   | Learning Activities   |
| Knowledge and Understanding  | Skills  | Attitudes and Values  |   |   |
| <ul style="list-style-type: none"> <li>- Identify the contours on a map</li> <li>- Define the concept of the gradient, vertical interval, exaggeration, amplitude and the inter-visibility</li> <li>- Identify the number of times to reduce or enlarge the map</li> <li>- Define the sketch of the reduced or enlarged map</li> </ul> | <ul style="list-style-type: none"> <li>- Analyse the appearance of the contours on the topographic map</li> <li>- Draw cross sections using contours</li> <li>- Calculate the vertical exaggeration, vertical interval, gradient and the amplitude of relief.</li> <li>- Determine the inter-visibility on the maps</li> <li>- Determine the scale of the sketch map</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the importance of the contours on the topographic map</li> <li>- Develop an attitude of using the topographic map and the cross sections to interpret relief</li> <li>- Appreciate the importance of drawing sketch sections and sketch maps</li> <li>- Appreciate the importance of</li> </ul> | <p>Cross section</p> <ul style="list-style-type: none"> <li>- Define the contours, contour interval and the importance of contours</li> <li>- Cross section or sketch section.</li> <li>- Determining the vertical exaggeration, the gradient, amplitude and inter-visibility.</li> <li>- Drawing sketch maps.</li> <li>- Enlargement and reduction of the maps by a number of times and scale</li> </ul> | <ul style="list-style-type: none"> <li>- In groups, use topographic maps to identify the contours lines, the vertical interval, and draw a cross-section or a sketch section.</li> <li>- In groups, describe the relief using the sketch section.</li> <li>- In groups, use the findings to calculate the vertical exaggeration, vertical interval, the gradient, the amplitude and show inter-visibility.</li> </ul> |

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|   | - Make a sketch map of the reduced or enlarged map | sketch map and the ability for the representation of the earth |  | - In groups, use the topographic maps, identify the map coordinates and the scale to draw sketch map by enlargement and reduction. |
| <b>Links to other subjects:</b> <i>It is linked to drawing of the graphs (x and y axes) in Mathematics; Fine Art and Computer Sciences.</i>   |  |  |  |  |
| <b>Assessment criteria:</b> <i>The learners are able to correctly draw the cross sections and sketch maps by reduction or enlargement.</i>  |  |  |  |  |
| <b>Materials:</b> <i>Sample topographic maps, tactile or talking maps drawing equipment, magnifying lenses, local environment, Brail drawing materials/equipment, mathematical instruments.</i> |  |  |  |  |

| Topic Area: Practical Geography   |  |  | Sub-topic Area: Photographic interpretation  |  |
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| Year group & Subject: S6 Geography  |  | Unit 2 : Interpretation of Photographs and video images  |  | No. of Periods:8   |
| <b>Key unit competency:</b> The learner should be able to interpret photographs, video images and draw sketches by reduction or enlargement of the photographs  |  |  |  |  |
| Learning Objectives   |  |  | Content  | Learning Activities  |
| Knowledge and Understanding   | Skills   | Attitudes and Values   |  |  |
| <ul style="list-style-type: none"> <li>- Define a photograph</li> <li>- Identify the different types of photographs</li> <li>- Identify the physical and human aspects on a photograph and the video images</li> <li>- State the sections of a photograph</li> <li>- Identify different techniques for drawing a sketch of a photograph by reduction and</li> </ul> | <ul style="list-style-type: none"> <li>- Analyse different types of photographs</li> <li>- Differentiate among the types of photographs</li> <li>- Interpret physical and human aspects on a photograph and video images</li> <li>- Describe the different sections of a photograph</li> <li>- Apply knowledge to draw a sketch of a photograph</li> <li>- Analyse the relationship between</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the importance of the photographs</li> <li>- The relationship between the physical and human aspects</li> <li>- Appreciate the use of the photographs and sketches of the photographs</li> <li>- Appreciate the relationship between the physical and human aspects on photographs or</li> </ul> | Photographic Interpretation <ul style="list-style-type: none"> <li>- Definition of a photograph (horizon, dead ground)</li> <li>- Types of photographs (ground and aerial)</li> <li>- Interpretation of the physical and human aspects on the photographs and video images</li> <li>- Sections of a photograph (foreground, middle ground and background)</li> <li>- Drawing sketches of the photographs by reduction</li> </ul> | <ul style="list-style-type: none"> <li>- Use photographs, geographical documents, diagrams and internet to research on the types of photographs, the sections of a photograph.</li> <li>- In groups, discuss the findings and determine the types of photograph, the sections of a photograph and create a sketch of a photograph by reduction or</li> </ul> |

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| <p>enlargement</p> <ul style="list-style-type: none"> <li>- State the relationship between the physical and human aspects on the photographs or video images</li> </ul>                                      | <p>the physical and human aspects on the photographs or video images</p> | <p>video images</p> | <p>or enlargement</p> <ul style="list-style-type: none"> <li>- The relationship between the physical and human aspects on the photographs and video images</li> </ul> | <p>enlargement.</p> <ul style="list-style-type: none"> <li>- Use photographs or video images to identify the physical and human aspects on the photographs and their inter-relationships.</li> <li>- In groups, discuss the findings and determine the different physical and human aspects on the photographs and video images.</li> </ul> |
| <p><b>Links to other subjects:</b> <i>It is linked to drawings in Fine art.</i></p>  |  |                     |   |   |
| <p><b>Assessment criteria:</b> <i>The learners are able to correctly interpret the physical and human aspects on the photographs and draw sketches by reduction or enlargement of the photographs.</i></p>   |  |                     |   |   |
| <p><b>Materials:</b> <i>Geographical documents, photographs, video images, cameras, internet, drawing equipment, magnifying lenses, GIS materials, local environment, tactile and talking materials.</i></p> |  |                     |   |   |

| Topic Area: Physical Geography  |  | Sub-topic Area: Understanding the earth and universe  |   |  |
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| Year group & Subject: S6 Geography  |  | Unit 3: The origin and distribution of the continents   |   | No. of periods: 14   |
| Key unit competency: The learner should be able to discuss the theories of the origin and the distribution of the continents  |  |   |   |  |
| Learning Objectives   |  |   | Content   | Learning Activities  |
| Knowledge and Understanding   | Skills   | Attitudes and Values  |   |  |
| <ul style="list-style-type: none"> <li>- Name the theories of origin and distribution of the continents and ocean basins</li> <li>- Outline the evidences of the continental drift</li> <li>- State the major types of plate boundaries and tectonic plates</li> <li>- Explain the effects of tectonics plate on the landscape</li> </ul> | <ul style="list-style-type: none"> <li>- Describe the origin and distribution of the continents and ocean basins</li> <li>- Apply the knowledge to explain the shapes and the current positions of the continents and ocean basins</li> <li>- Justify the view that the continents really drifted.</li> <li>- Explain the effects of the continental drift on the landscape</li> <li>- Do research on the causes of the continental drift and the distribution of</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the origin and the distribution of the continents and ocean basins</li> <li>- Show concern to the causes, the effects of the continental drift and the desire to understand the distribution of the continents and ocean basins.</li> </ul> | <p>Continental drift</p> <ul style="list-style-type: none"> <li>- Theories of the origin and distribution of the continents and ocean basins (Wegner’s theory, Taylor’s theory, Hess’ theory).</li> <li>- The theory of Isostasy</li> <li>- Evidences of the continental drift</li> <li>- Effects of the continental drift on the evolution of the physical features</li> <li>- The concept of tectonics plate (types of tectonic plates, movements/boundaries, characteristics of tectonic plates).</li> </ul> | <ul style="list-style-type: none"> <li>- Use the geographical documents, maps, photographs and internet to research on the theories of the origin of the continents and ocean basins, their distribution, evidences of continental drift and the effects of continental drift on the landscape.</li> <li>- In groups, discuss and write down the findings for a class presentation.</li> <li>- Use the geographical documents, maps and internet to research on the theories of isostasy,</li> </ul> |

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|  | <p>continents relative to one another</p> <ul style="list-style-type: none"> <li>- Evaluate the effects of plate tectonism</li> </ul> |  | <ul style="list-style-type: none"> <li>- The major tectonic plates of the world: North American plates, South American plate, African plate, Eurasian plate, Australian plate, Pacific plate, Caribbean plate, Antarctic plate, Philippines plate.</li> <li>- Effects of the tectonics plate</li> </ul> | <p>tectonic plates; the characteristics of tectonic plates and its effects on the land.</p> <ul style="list-style-type: none"> <li>- In groups, discuss and compile the findings and make a class presentation supported by Q&amp;A.</li> <li>- In pairs, examine the theories of Wegner, Taylor and Hess on the origin and distribution of the continents. How do they differ and which theory is most plausible. Document your answers and write a report.</li> </ul> |
| <p><b>Links to other subjects:</b> <i>It links to the forces of compression and tension in Physics</i></p>   |   |  |   |   |
| <p><b>Assessment criteria:</b> <i>The learners are able to correctly explain the origin and distribution of the continents</i></p>                             |   |  |   |   |
| <p><b>Materials:</b> <i>Geographical documents, maps, globe, journals, tactile and talking materials, atlases, photographs and internet/Jaws software.</i></p> |   |  |   |   |

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| <b>Topic Area: Physical Geography`</b>   |  | <b>Sub-topic Area: Landform evolution and processes</b>  |   |  |
| <b>Year group &amp; Subject: S6 Geography</b>  |  | <b>Unit 4: External landform processes and related features</b>  |   | <b>No. of periods: 36</b>  |
| <b>Key unit competence:</b> The learner should be able to demonstrate an understanding of the different features resulting from the external processes and their relationships with the human activities   |  |  |   |  |
| <b>Learning Objectives</b>   |  |  | <b>Content</b>  | <b>Learning Activities</b>   |
| <b>Knowledge and Understanding</b>   | <b>Skills</b>  | <b>Attitudes and Values</b>  |   |  |
| <ul style="list-style-type: none"> <li>- Explain the external processes of weathering</li> <li>- State the major factors influencing the weathering</li> <li>- Identify the major features resulting from the weathering in the Karst regions</li> <li>- Outline the features resulting from the weathering</li> </ul> | <ul style="list-style-type: none"> <li>- Recognise the different weathering processes.</li> <li>- Describe the factors affecting the weathering.</li> <li>- Evaluate the relationship/interdependence between the physical and the chemical weathering processes in different regions</li> <li>- Explain the major features resulting from the weathering in the Karst regions</li> <li>- Explain the major features resulting from weathering in the humid tropical and the desert regions</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the importance of the landforms resulting from the weathering</li> <li>- Appreciate the interdependence between the physical and chemical weathering processes in the different regions</li> <li>- Develop a curiosity to understand the role of the glaciers and the interactive processes in the formation of the landforms</li> </ul> | <p>Landforms associated with external processes:</p> <ul style="list-style-type: none"> <li>- Weathering <ul style="list-style-type: none"> <li>o definition of weathering</li> <li>o types and processes of weathering</li> <li>o factors influencing weathering (climate, nature of rock, man’s activities, vegetation, relief, animals and duration /time</li> <li>o interdependence of the chemical and physical weathering</li> </ul> </li> <li>- Weathering in limestone regions: karsts landforms</li> </ul> | <ul style="list-style-type: none"> <li>- Use documents, internet, video clips, maps, photographs or the local environment to identify different types and processes of weathering and the factors influencing weathering.</li> <li>- In groups, discuss the findings and make a class presentation.</li> <li>- Use textbooks, internet, photographs and video clips to research on the different features resulting from the weathering in different regions (the limestone</li> </ul> |

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| <p>in the humid tropical and the desert areas</p> <ul style="list-style-type: none"> <li>- Explain the processes of weathering in the glaciated areas</li> <li>- List the features resulting from weathering in the glaciated areas</li> </ul> | <ul style="list-style-type: none"> <li>- Describe the processes of weathering in the glaciated areas and the associated landforms</li> </ul> | <ul style="list-style-type: none"> <li>- Demonstrate the formation of various landforms resulting from glaciation</li> <li>- Show concern for the causes and the effects of mass wasting</li> <li>- Appreciate the relationship between different weathering landforms and the human activities</li> </ul> | <p>such as caverns, stalagmites, stalactites, pillar, dolines, limestone pavements uvalas, poljes and the conditions for the formation of the above karsts land forms</p> <ul style="list-style-type: none"> <li>- Weathering in the humid tropical regions and the resultant landforms</li> <li>- Weathering in the arid regions(desert and semi desert areas) and the resultant landforms</li> <li>- Weathering in the glaciated cold regions (concept of glaciation) and the resultant landforms (ice formation, types of glaciers, types of glacial flow)</li> <li>- Factors for the formation and the movement of the glaciers</li> <li>- The work of a glacier (erosion, transportation and deposition)</li> <li>- Landforms resulting from glaciation (pyramidal peak, cirques, arêtes,</li> </ul> | <p>regions, the humid tropical regions, the desert and semi desert areas and the glaciated cold regions).</p> <ul style="list-style-type: none"> <li>- In groups, discuss and compile the findings for a class presentation.</li> <li>- Use text books, internet, photographs and video clips to research about the weathering in the glaciated areas, causes of glacial formation, action of glaciers, and the landforms associated with glaciation.</li> <li>- In groups, discuss and write down the findings for a class presentation and engage in Q&amp;A session.</li> <li>- In groups, demonstrate using heaps of clay soil to demonstrate the formation of the various landforms on the landscape.</li> <li>- Use the geographical documents, internet,</li> </ul> |
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| <ul style="list-style-type: none"> <li>- Identify the different types of mass wasting in different areas, their causes and the effects</li> <li>- Identify the relationship between weathering landforms and the human activities</li> </ul> | <ul style="list-style-type: none"> <li>- Evaluate the causes and the effects of mass wasting</li> <li>- Explain the relationship between weathering landforms and the human activities</li> </ul> |  | <ul style="list-style-type: none"> <li>hanging valleys)</li> <li>- Peri-glacial landforms/glacial deposition features (drumlins, eskers, kames, out wash plain).</li> <li>- Impact of the glaciation on the landscape and to the human activities</li> <li>- Mass wasting <ul style="list-style-type: none"> <li>o definition and types</li> <li>o slow movements (soil creep, solifluction).</li> <li>o rapid movements: rock fall, mud flows, landslides, slumping/slipping, rock slides, talus creep, avalanches.</li> <li>o causes of mass wasting, effects of mass wasting, measures to control mass wasting</li> </ul> </li> <li>- The relationship between the weathering landforms and the human activities</li> </ul> | <ul style="list-style-type: none"> <li>maps, photographs and the local environment to research on the types of mass wasting, causes, its effects and the measures to control mass wasting. Write down the findings.</li> <li>- In groups, discuss and compile the findings for a class presentation.</li> <li>- In groups, discuss the relationship between weathering and the human activities and make a presentation to the class and derive conclusions.</li> <li>- Has climate change increased the effect of weathering and consequently the human activity? Investigate this assertion in pairs and write a statement on your conclusions.</li> </ul> |
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**Links to other subjects:** *It is linked to the solubility/solvent action and chemical equations in Chemistry; force/pressure in Physics.*

**Assessment criteria:** *The learners are able to correctly differentiate among the weathering landforms and their relationships with the human activities; and evaluate the causes and the effects of mass wasting.*

**Materials:** *Geographical documents, maps, photographs, journals, tactile and talking materials, local environment, charts, internet website and fieldwork materials.*

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| <b>Topic Area: Physical Geography</b>   |   | <b>Sub-topic Area: Landform evolution and processes</b>   |   |   |
| <b>Year group &amp; Subject: S6 Geography</b>   |   | <b>Unit 5: Wave erosion and Deposition</b>  |   | <b>No. of periods: 24</b>   |
| <b>Key unit competency:</b> The learner should be able to categorise different features resulting from the wave action and their relationships with the human activities  |   |   |   |   |
| <b>Learning Objectives</b>  |   |   | <b>Content</b>  | <b>Learning Activities</b>  |
| <b>Knowledge and Understanding</b>  | <b>Skills</b>   | <b>Attitudes and Values</b>   |   |   |
| <ul style="list-style-type: none"> <li>- Identify the types of coasts</li> <li>- Explain the process of wave erosion and deposition</li> <li>- Identify the factors influencing the formation of the coastal landforms.</li> <li>- Name the major features associated with the wave erosion and depositional processes</li> </ul> | <ul style="list-style-type: none"> <li>- Recognise the different landforms resulting from the wave erosion and depositional processes</li> <li>- Relate the types of coasts and how they influence the human activities</li> <li>- Explain the factors influencing the coastal landforms</li> </ul> | <ul style="list-style-type: none"> <li>- Show the continual desire to understand the different types of coasts</li> <li>- Appreciate the importance of the different landforms created by the wave erosion and the deposition</li> <li>- Appreciate the importance of the coastal landforms created by the wave action</li> </ul> | Coastal landforms <ul style="list-style-type: none"> <li>- Definition of key terms: coast, shore, waves, long shore drift</li> <li>- Types of waves (plunging waves, spilling waves)</li> <li>- Factors determining the strength of the waves/energy of waves).</li> <li>- Wave action processes: erosion, transportation and deposition</li> <li>- Factors influencing the formation of the coastal landform</li> <li>- Landforms produced by the wave erosion</li> <li>- Landforms produced by the wave deposition</li> </ul> | <ul style="list-style-type: none"> <li>- Use a range of geographical documents, internet, maps, diagrams and photographs to research on the processes of wave erosion, wave deposition, factors influencing the formation of coastal landforms, landforms resulting from wave erosion and deposition and the importance of coastal landforms, and write down the findings.</li> </ul> |

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| <ul style="list-style-type: none"> <li>- State the importance of the coast landforms created by the wave action</li> <li>- State the different types of coasts resulting from changes in the sea level</li> <li>- Identify the major types of coral reefs</li> <li>- Define isostatic and eustatic changes in the sea level</li> <li>- List the features resulting from the rise and fall in the sea level</li> </ul> | <ul style="list-style-type: none"> <li>- Evaluate the importance of the coastal landforms created by the wave action</li> <li>- Differentiate the types of coasts resulting from the changes in the sea level.</li> <li>- Do research using the internet websites for the types of coral reefs</li> <li>- Differentiate between isostatic and eustatic changes in the sea level and the resultant features</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the effects of isostatic and eustatic changes on the coast</li> </ul> | <ul style="list-style-type: none"> <li>- Importance of coast landforms produced by the wave action</li> <li>- Types of coasts: <ul style="list-style-type: none"> <li>o submerged coasts (rias, fiord, estuaries, deltas)</li> <li>o emerged coasts (cliffs, beaches, caves).</li> </ul> </li> <li>- Coral reefs: <ul style="list-style-type: none"> <li>o nature, types and the formation of the coral reefs.</li> <li>o conditions influencing the coral formation e.g. coral polyps, salt water.</li> <li>o Theories on the origin of the coral reefs (the subsidence theory, antecedence theory and the glaciated control theory).</li> <li>o impact of coral reefs.</li> <li>o problems facing the development and the growth of coral reefs.</li> </ul> </li> <li>- Isostatic and Eustatic changes (rise and fall in the sea level) on the coast.</li> <li>- Definition of the sea level change</li> </ul> | <ul style="list-style-type: none"> <li>- In groups, discuss and compile the findings for the class presentation.</li> <li>- Use documents, internet, maps, diagrams and photographs to research on the types of coasts and coral reefs, formation of coral reefs, theories of the origin of coral reefs, factors influencing coral reefs and impact of coral reefs.</li> <li>- In groups, discuss and compile the findings for the class presentation.</li> <li>- Use documents, internet, maps, diagrams and photographs to research on the sea level changes, types, causes, associated features, evidences, effects and write down the findings.</li> <li>- In groups, discuss and compile the findings for</li> </ul> |
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|  |  |  | <ul style="list-style-type: none"> <li>- Types of sea level changes (emergence/submergence)</li> <li>- Causes of the sea level changes.</li> <li>- Evidences of the sea level changes (Eustatic and Isostatic sea level changes)</li> <li>- Features resulting from the sea level changes: raised beaches, wave cut platform, raised cliffs.</li> <li>- Effects of the sea level changes</li> </ul> | <p>a class presentation and draw conclusions.</p> <ul style="list-style-type: none"> <li>- Is tourism having a deleterious effect on the coral reefs around the world? Should we prevent humans from visiting these reefs? Comment on the reliability of these statements.</li> </ul> |
| <p><b>Links to other subjects:</b> <i>It is Linked to oscillations, gravitational force and power in Physics.</i></p>  |  |  |   |   |
| <p><b>Assessment criteria:</b> <i>The learners are able to correctly differentiate the features resulting from the wave action and their relationship with the human activities.</i></p> |  |  |   |   |
| <p><b>Materials:</b> <i>Geographical documents, maps, atlas, journals, photographs, diagrams, talking and tactile materials, local environment, charts and internet.</i></p>             |  |  |   |   |

| Topic Area: Physical Geography   |   |  | Sub-topic Area: Rocks and Minerals   |  |
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| Year group & Subject: S6 Geography   |   | Unit 6: Rocks and Minerals   |  | No. of periods: 14   |
| <b>Key unit competence:</b> The learner should be able to assess the economic importance of the rocks and the minerals   |   |  |  |  |
| Learning Objectives  |   |  | Content  | Learning Activities  |
| Knowledge and Understanding  | Skills  | Attitudes and Values   |  |  |
| <ul style="list-style-type: none"> <li>- Identify the various types of rocks in the world and their characteristics</li> <li>- Identify different components of the rocks</li> <li>- State the economic importance of the rocks</li> <li>- Identify the various types of minerals in the world</li> <li>- Identify the physical and the chemical properties of the minerals</li> </ul> | <ul style="list-style-type: none"> <li>- Classify the different types of rocks and their characteristics.</li> <li>- Explain the various components of the rocks.</li> <li>- Evaluate the economic importance of the rocks</li> <li>- Explain the physical and the chemical properties of the rocks</li> <li>- Apply the knowledge to categorise and identify the different types of minerals</li> <li>- Explain the physical and the chemical</li> </ul> | <ul style="list-style-type: none"> <li>- Show concern for the various types of rocks and their characteristics</li> <li>- Appreciate the importance of rocks.</li> <li>- Appreciate the importance of minerals in the manufacture of the different useful products</li> <li>- Appreciate the importance of different products extracted from the minerals</li> </ul> | <ul style="list-style-type: none"> <li>- Rocks: definition, types and their characteristics</li> <li>- Rock composition</li> <li>- Physical and chemical properties of the rocks.</li> <li>- Impact of the rocks (advantages and disadvantages) on the landscape and on the man</li> <li>- Minerals: types and properties of minerals; value of the minerals and the manufactured</li> </ul> | <ul style="list-style-type: none"> <li>- Use textbooks, internet and photographs to research on the types of rocks, their characteristics, the composition and the importance of the rocks. Write down the findings.</li> <li>- In groups, discuss and compile the findings for a class presentation.</li> <li>- In groups, observe the types of rocks around the school environment and categorise them for a group presentation.</li> <li>- Carry out a field trip in any one of the mining areas; find out the</li> </ul> |

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| <ul style="list-style-type: none"> <li>- Identify the industrial products extracted (manufactured) from the minerals</li> </ul> | <p>properties of the minerals</p> <ul style="list-style-type: none"> <li>- Evaluate the importance of the industrial products extracted from the minerals</li> </ul> |  | <p>products</p> | <p>characteristics of the different minerals present in this area and write down the findings for a group discussions and a class presentation.</p> <ul style="list-style-type: none"> <li>- Using the internet and the textbooks do a research on the industrial value of the minerals and the manufactured products and write down the findings.</li> <li>- In groups, discuss the findings for a class presentation.</li> <li>- If a man continues to mine the earth for ore and the minerals at the current rate of extraction. and continues to use the rocks for the construction purposes, what is the long term implication of these actions on the earth? In pairs, write your findings proposing the solutions.</li> </ul> |
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**Links to other subjects:** *It is linked to chemical properties in Chemistry*

**Assessment criteria:** *The learners are able to correctly categorise the rocks and the minerals and their economic importance*

**Materials:** *Geographical documents, maps, atlases, tactile or talking materials, photographs, local environment, internet /Jaws software, mining sites for field study, rock and mineral samples.*

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| <b>Topic Area: Physical Geography</b>   |   | <b>Sub-topic Area: Soils</b>  |   |   |
| <b>Year group &amp; Subject : S6 Geography</b>  |   | <b>Unit 7 : Classification of Soils and Soil formation</b>  |   | <b>No. of periods : 8</b>   |
| <b>Key unit competency:</b> The learner should be able to explain the factors and the processes responsible for the formation of the soil   |   |   |   |   |
| <b>Learning Objectives</b>  |   |   | <b>Content</b>  | <b>Learning Activities</b>  |
| <b>Knowledge and Understanding</b>  | <b>Skills</b>   | <b>Attitudes and Values</b>   |   |   |
| <ul style="list-style-type: none"> <li>- Differentiate between the zonal, azonal and inter-zonal soils.</li> <li>- Identify the major types of soils in the world.</li> <li>- Identify the processes of the soil formation.</li> <li>- List the factors responsible for the soil formation.</li> <li>- Outline the causes and the effects of the soil erosion.</li> </ul> | <ul style="list-style-type: none"> <li>- Classify the major types of soil in the world.</li> <li>- Investigate the distribution of the major types of soil in the world.</li> <li>- Describe the processes of the soil formation.</li> <li>- Explain the factors favouring the formation of the soils.</li> <li>- Explain the causes and the effects of the soil erosion in the world.</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the distribution of the major soil types in the world.</li> <li>- Appreciate the economic importance of the soils in the world.</li> <li>- Show respect for the soil conservation measures in the world.</li> </ul> | <ul style="list-style-type: none"> <li>- Classification of the major types of soil in the world (Zonal, Azonal, Intrazonal).</li> <li>- Distribution of the major types of soil in the world.</li> <li>- Processes of the soil formation (humidification, mineralisation, weathering, leaching, eluviation, illuviation, lateralisation and calcification).</li> <li>- Factors favouring the formation of the soils.</li> <li>- Soil erosion: causes and</li> </ul> | <ul style="list-style-type: none"> <li>- Use internet, a range of text books, maps of soils and the photographs to research on the classification, the types of soils and their distribution, the processes and the factors favouring the formation of the soils. In groups, discuss and compile the findings for a class presentation.</li> <li>- Use internet, a range of text books, maps, photographs and the local environment to</li> </ul> |

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| <ul style="list-style-type: none"> <li>- Outline the appropriate soil conservation measures in the world.</li> <li>- Give the importance of soils.</li> </ul>                                 | <ul style="list-style-type: none"> <li>- Evaluate the appropriate soil conservation measures in the world.</li> <li>- Recognise the economic importance of the soils in the world.</li> </ul> |  | <p>the effects.</p> <ul style="list-style-type: none"> <li>- Areas of severe soil erosion.</li> <li>- Appropriate soil management and the conservation measures.</li> <li>- Economic importance of the soil.</li> </ul> | <p>research on the causes, the effects of soil erosion, and the measures for soil conservation.</p> <ul style="list-style-type: none"> <li>- In groups, discuss and compile the findings for a class presentation and draw the relevant conclusions.</li> <li>- In groups, discuss the economic importance of the soils and make a class presentation. Also engage in active Q&amp;A session.</li> </ul> |
| <p><b>Links to other subjects:</b> <i>This topic is linked to Pedology in Biology</i></p>   |   |  |   |  |
| <p><b>Assessment criteria:</b> <i>The learners are able to correctly explain the factors and the processes responsible for the formation of soil</i></p>                                      |   |  |   |  |
| <p><b>Materials:</b> <i>Geographical documents, maps, atlases, journals, tactile or talking materials, photographs, local environment, internet /Jaws software and local environment.</i></p> |   |  |   |  |

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| <b>Topic Area: Physical Geography</b>   |   | <b>Sub-topic Area: Weather and climate</b>  |   |   |
| <b>Year group &amp; Subject: S6 Geography</b>   |   | <b>Unit 8: Climate Change</b>   |   | <b>No. of periods: 8</b>  |
| <b>Key unit competency:</b> The learner should be able to discuss the climate change and its impact on Rwanda and the other countries   |   |   |   |   |
| <b>Learning Objectives</b>  |   |   | <b>Content</b>  | <b>Learning Activities</b>  |
| <b>Knowledge and Understanding</b>  | <b>Skills</b>   | <b>Attitudes and Values</b>   |   |   |
| <ul style="list-style-type: none"> <li>- Define the concept of climate change</li> <li>- State the causes of climate change</li> <li>- Identify the effects of climate change</li> <li>- Locate the areas most affected by the climate change in the world</li> <li>- Identify the causes and the effects of global warming and green house</li> <li>- Outline the measures of the climate adaptation and mitigation</li> </ul> | <ul style="list-style-type: none"> <li>- Explain the causes of climate change</li> <li>- Evaluate the effects of climate change.</li> <li>- Explain the causes and the effects of global warming and green house</li> <li>- Examine the ways of adaptation and mitigation to climate change</li> <li>- Examine the causes and the effects of desertification</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the importance of adaptation and mitigation on climate change</li> <li>- Show concern for the man’s contribution towards the climate degradation</li> <li>- Show concern for the impact of climate change</li> <li>- Show concern for the impact of global warming and green house effects</li> </ul> | <p>Climatic change</p> <ul style="list-style-type: none"> <li>- Definition of climate change</li> <li>- Causes of climate change.</li> <li>- Effects of climate change in the world (global, Africa, Rwanda).</li> <li>- Global warming and the green house phenomena (definition, causes and the effects).</li> <li>- Adaptation measures for the climate change</li> <li>- Measures for mitigating</li> </ul> | <ul style="list-style-type: none"> <li>- Use the geographical documents, internet, maps, and photographs to identify the causes and the effects of climate change; measures of the climate adaptation, and write down the findings.</li> <li>- In groups, discuss and compile the findings for a class presentation.</li> <li>- In groups, discuss the measures for mitigating the climate change and make a class presentation followed by Q&amp;A.</li> <li>- Use the geographical documents, internet, maps and photographs to research about the causes and the impact of global warming and the greenhouse effect. Record the findings for a class presentation.</li> <li>- In groups, use the geographical</li> </ul> |

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| <ul style="list-style-type: none"> <li>- Identify the causes and the effects of desertification</li> </ul>   |  |  | <p>the climate change</p> <ul style="list-style-type: none"> <li>- Desertification (definition, causes, effects).</li> </ul> | <p>documents, internet, maps and photographs to research on the causes and the effects of the desertification.</p> <ul style="list-style-type: none"> <li>- Write down the findings for a class presentation and engage in active Q&amp;A.</li> <li>- Using the internet, research to find out how can we ensure that the member countries abide by the climate change targets like the emissions of greenhouse gases. How can we monitor if countries are achieving their targets? Comment on these statements in pairs, and propose possible solutions.</li> </ul> |
| <p><b>Links to other subjects:</b> <i>It is linked to the greenhouse gases in Chemistry</i></p>  |  |  |  |  |
| <p><b>Assessment criteria:</b> <i>The learners are able to critically investigate the causes and the effects of climate change and propose ways of adaptation and mitigation to climate change</i></p> |  |  |  |  |
| <p><b>Materials:</b> <i>Documents, brailled textbooks, maps, atlases, tactile or talking materials, photographs, internet /Jaws software and local environment.</i></p>                                |  |  |  |  |

| Topic Area: Physical Geography  |   | Sub-topic Area: Drainage   |   |   |
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| Year group & Subject: S6 Geography  |   | Unit 9: Global Drainage Systems  |   | No. of periods: 32  |
| <b>Key unit competency:</b> The learner should be able to investigate the economic importance of the global drainage systems and the reasons for their conservation   |   |  |   |   |
| Learning Objectives   |   |  | Content   | Learning Activities   |
| Knowledge and Understanding   | Skills  | Attitudes and Values   |   |   |
| <ul style="list-style-type: none"> <li>- Identify the different drainage patterns of the world.</li> <li>- Outline the characteristics of a river profile</li> <li>- Identify the landforms resulting from the work of a river</li> <li>- Explain river capture and river rejuvenation</li> <li>- State different drainage patterns.</li> </ul> | <ul style="list-style-type: none"> <li>- Explain the different drainage patterns in the environment</li> <li>- Examine the characteristics of a river profile</li> <li>- Describe the landforms resulting from the work of a river</li> <li>- Differentiate between the river capture and river rejuvenation</li> <li>- Describe different drainage patterns</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the importance of the global drainage</li> <li>- Appreciate the classification of the drainage patterns</li> <li>- Appreciate the distribution of the global water bodies in the world</li> <li>- Show concern for the causes and the effects of the ocean currents and the tides</li> <li>- Show continual</li> </ul> | <p>Rivers</p> <ul style="list-style-type: none"> <li>- Definition of a river and the associated terms (discharge, velocity, watershed/divide, catchment area, river basin).</li> <li>- Types of rivers</li> <li>- River system (the work of a river/triple function of a river)</li> <li>- The river profile and its characteristics (youthful, mature and lower stages of a river)</li> <li>- Formation of the landforms in its youthful stage (waterfalls, rapids).</li> <li>- Formation of the landforms in its mature stage (meanders)</li> </ul> | <ul style="list-style-type: none"> <li>- Use geographical documents, maps, photographs and internet or the local environment to research on the river profile and its associated landforms.</li> <li>- In groups, discuss the findings for a class presentation.</li> <li>- In groups, discuss the impact of the rivers and make a class presentation. Also engage in an interactive Q&amp;A methodology.</li> <li>- Use textbooks, diagrams, photographs and internet</li> </ul> |



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| <ul style="list-style-type: none"> <li>- State the characteristics of the ocean currents, their causes and the effects</li> <li>- State the types, causes and the effects of the tides.</li> <li>- Identify the importance of the oceans and seas and the reasons for the protection of the water bodies</li> </ul> | <ul style="list-style-type: none"> <li>- Explain the characteristics of the ocean currents, their causes and the effects</li> <li>- Explain the causes and the effects of the tides</li> <li>- Explain the importance of oceans and seas and the reasons for protection of global water bodies</li> </ul> |  | <ul style="list-style-type: none"> <li>- Marine Relief</li> <li>- Case studies in Australia on the ocean management projects. The Great Barrier Reef.</li> <li>- Ocean currents: definition, location, types, causes, characteristics and their influence on the climate and the adjacent lands.</li> <li>- Tides: definition, types, causes and the effects.</li> <li>- Importance of the oceans and the seas</li> <li>- Reasons for the protection of the global water bodies.</li> </ul> | <p>compile the findings for a class presentation and draw the relevant conclusions.</p> <ul style="list-style-type: none"> <li>- In groups, discuss the importance of the global water bodies for a class presentation supported by Q&amp;A.</li> </ul> |
| <p><b>Links to other subjects:</b> <i>It links to the solution and salinity in Chemistry; velocity, volume and depth, oscillation in Physics.</i></p>   |   |  |   |   |
| <p><b>Assessment criteria:</b> <i>The learners are able to investigate the economic importance of the global drainage systems and the reasons for their conservation.</i></p>   |   |  |   |   |
| <p><b>Materials:</b> <i>Documents, brailed textbooks, maps, atlases, tactile or talking materials, photographs, internet //Jaws software and local environment.</i></p>   |   |  |   |   |

| Topic Area: Human and Economic Geography  |  |  | Sub-topic Area: Economic activities  |   |
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| Year group& Subject: S6 Geography   |  | Unit 10: Power and Energy Production in the world  |  | No. of periods: 14  |
| <b>Key unit competence:</b> The learner should be able to evaluate the success of the sustainable development projects in the power and energy production in different parts of the world   |  |  |  |   |
| Learning Objectives   |  |  | Content  | Learning Activities   |
| Knowledge and Understanding   | Skills   | Attitudes and Values   |  |   |
| <ul style="list-style-type: none"> <li>- Identify the major world's sources of energy.</li> <li>- Explain the factors affecting the power production.</li> <li>- Explain the importance of the power and energy in the world.</li> <li>- State the problems hindering the development of the power and energy and suggest the solutions.</li> </ul> | <ul style="list-style-type: none"> <li>- Carry out a research to find out the alternative environmental friendly power and energy sources.</li> <li>- Describe the factors affecting the power production in the world.</li> <li>- Evaluate the importance of the power and energy.</li> <li>- Explain the problems hindering the development of the power and energy and propose</li> </ul> | <ul style="list-style-type: none"> <li>- Show concern for the low levels of power and energy production in the world and the desire to develop the alternative sources of the power and energy.</li> <li>- Appreciate the importance of the power and energy on the sustainable development of the world's economy.</li> <li>- Show respect for the efforts in the development of</li> </ul> | <ul style="list-style-type: none"> <li>- Sources and forms of energy used in the world (renewable and non-renewable energy sources).</li> <li>- Non-renewable energy sources: fossil fuels (coal, oil, natural gas), uranium (Nuclear energy), peat coal.</li> <li>- Renewable energy sources: wind energy, water solar energy.</li> <li>- Fuel woods: charcoal and fire wood.</li> <li>- Waste products (biogas).</li> <li>- Geothermal.</li> </ul> | <ul style="list-style-type: none"> <li>- Use the geographical documents, maps, photographs, internet, video clips or the local environment to identify the different sources of power and energy used in the world, the factors favouring the power production, the importance of power in the development and the problems hindering the development of the power and energy. Write down the findings.</li> <li>- In groups, discuss and compile the findings for a</li> </ul> |

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|   | the possible solutions. | power and energy in the world. | <ul style="list-style-type: none"> <li>- Factors favouring the power and energy production in in the world.</li> <li>- Importance of power in the development in the world.</li> <li>- Problems hindering the development of the power and energy and the possible solutions in the world.</li> </ul> | <p>class presentation followed by Q&amp;A.</p> <ul style="list-style-type: none"> <li>- In groups, discuss on the possible solutions to the problems hindering the development of power and energy and make a class presentation.</li> <li>- Our reliance on a decreasing stock of the fossil fuels is increasing, the demand for the energy is also increasing and the production of the renewable energy is increasing very slowly, how as a world do we manage this impending crises?</li> </ul> |
| <p><b>Links to other subjects:</b> <i>It is linked to the power and energy in Physics.</i></p>  |                         |                                |   |   |
| <p><b>Assessment criteria:</b> <i>The learners are able to correctly evaluate the impact of the sustainable development projects on the power and energy industries of the world.</i></p> |                         |                                |   |   |
| <p><b>Materials:</b> <i>Geographical documents, brailled textbooks, maps, atlases, tactile or talking materials, photographs, internet /Jaws software and local environment.</i></p>      |                         |                                |   |   |

| Topic Area: Human and Economic Geography  |  |  | Sub-topic Area: Economic activities  |   |
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| Year group & Subject: S6 Geography  |  | Unit 11: Industrialisation in the world  |  | No. of periods: 14  |
| <b>Key unit competency:</b> The learner should be able to evaluate the success of the sustainable development projects in the industry in different parts the world   |  |  |  |   |
| Learning Objectives   |  |  | Content  | Learning Activities   |
| Knowledge and Understanding   | Skills   | Attitudes and Values   |  |   |
| <ul style="list-style-type: none"> <li>- Identify different types of industries</li> <li>- State the factors influencing the location and localisation of the industries</li> <li>- Name the major industrial regions of the world</li> <li>- Give the importance of the industrial development in the world</li> <li>- Identify the problems affecting the industries and the effects of industrial development</li> </ul> | <ul style="list-style-type: none"> <li>- Classify different types of industries</li> <li>- Evaluate the factors influencing the location and localisation of the industries</li> <li>- Locate the major industrial regions of the world</li> <li>- Evaluate the importance of the industrial development in the world</li> <li>- Evaluate the problems affecting the industries and the effects of the industrial</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the distribution of the industries and their impact on the sustainable development</li> <li>- Show concern for the effects of industrialisation and the desire to protect the environment</li> </ul> | <ul style="list-style-type: none"> <li>- Definition and classification of the industries</li> <li>- Factors influencing the location of the industries and the industrial development(localisation )</li> <li>- Major world industrial regions (developed countries e.g. Japan, USA, Russia and developing countries e.g. Egypt, South Africa, China, South Korea).</li> <li>- Importance of the industrial development</li> <li>- Problems affecting the industrial development</li> <li>- Problems resulting from</li> </ul> | <ul style="list-style-type: none"> <li>- In groups, discuss about the different industrial products and make classification of the industries</li> <li>- Use the geographical documents, internet, maps, photographs or the local environment to research on the factors influencing the location of the industries and the industrial development, the major world industrial regions, the importance of the industrial development, the problems affecting and resulting from the industrial development, and write down the</li> </ul> |

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|  | <p>development in the world, and suggest the solutions.</p> |  | <p>the industrial development and the possible ways to mitigate them.</p> <ul style="list-style-type: none"> <li>- Case studies: <ul style="list-style-type: none"> <li>o Developed countries: USA, Japan</li> <li>o Developing countries: China, South Africa and South Korea</li> </ul> </li> </ul> | <p>findings.</p> <ul style="list-style-type: none"> <li>- In groups, discuss and compile the findings to make a class presentation and engage in Q&amp;A methodology.</li> <li>- Use documents, maps, internet and photographs to research about the industrialisation in the selected countries.</li> <li>- In groups, discuss the findings and write a report.</li> <li>- Is the strength of the industrialised western economies affecting the pace of change in the developing economies? In pairs, consider the above statement and write a report on your conclusions.</li> </ul> |
| <p><b>Links to other subjects:</b> <i>It is linked to industrial revolution in History and industries and firms in Economics</i></p>   |   |  |   |   |
| <p><b>Assessment criteria:</b> <i>The learners are able to evaluate the success of the sustainable development projects in the industry in different parts the world.</i></p>        |   |  |   |   |
| <p><b>Materials:</b> <i>Geographical documents, brailled textbooks, maps, atlases, tactile or talking materials, photographs, internet /Jaws software and local environment.</i></p> |   |  |   |   |

| Topic Area: Human and Economic Geography   |  |   | Sub-topic Area: Economic activities   |   |
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| Year group & Subject: S6 Geography   |  | Unit 12: Transport and Communication in the world   |   | No. of periods: 14  |
| <b>Key unit competency:</b> The learner should be able to analyse the impact of the transport and communication projects on the sustainable development of the different countries in the world  |  |   |   |   |
| Learning Objectives  |  |   | Content   | Learning Activities   |
| Knowledge and Understanding  | Skills   | Attitudes and Values  |   |   |
| <ul style="list-style-type: none"> <li>- Give the meaning of transport and communication</li> <li>- Identify the major types of transport.</li> <li>- Identify the factors influencing the development of the different types of transport</li> <li>- Outline the advantages and disadvantages of the different types of transport</li> <li>- Give the importance of transport</li> <li>- State the different</li> </ul> | <ul style="list-style-type: none"> <li>- Explain the meaning of the transport and communication</li> <li>- Describe the major types of transport</li> <li>- Explain the factors influencing the development of the different types of transport</li> <li>- Explain the advantages and disadvantages of the different types of transport</li> <li>- Evaluate the importance of</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the importance of the different types of transport</li> <li>- Use the available resources like the inland waterways, airports, roads to compare the transport in Rwanda with the other countries.</li> <li>- Appreciate the advantages and the disadvantages of all types of transport and communication</li> </ul> | Transport and Communication <ul style="list-style-type: none"> <li>- Meaning of transport and Communication</li> </ul> <b>Transport</b> <ul style="list-style-type: none"> <li>- Types of transport: (Human and animal portage, road, railway, pipeline, water and air transport).</li> <li>- Factors influencing the development of different types of transport</li> <li>- Advantages and disadvantages of each type of transport</li> <li>- Importance of transport</li> </ul> | <ul style="list-style-type: none"> <li>- Use the geographical documents, internet, maps, photographs or the local environment to research on the different types of transport, the factors influencing the development of the transport, the advantages and the disadvantages of each type of transport, the importance of transport and the challenges facing the different types of transport. Record the findings.</li> <li>- In groups, discuss and compile the findings for a</li> </ul> |

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| <p>types of communication</p> <ul style="list-style-type: none"> <li>- Give the importance of communication</li> <li>- Identify the problems affecting the communication</li> </ul> | <p>transport</p> <ul style="list-style-type: none"> <li>- Explain the different types of communication</li> <li>- Evaluate the importance of communication</li> <li>- Explain the problems affecting the communication and propose the solutions</li> </ul> | <ul style="list-style-type: none"> <li>- Show concern for the challenges encountered in the transport and communication and the desire to improve the transport and communication means</li> </ul> | <p>to the development of the countries</p> <ul style="list-style-type: none"> <li>- Problems/challenges affecting the different types of transport</li> <li>- Case studies: <ul style="list-style-type: none"> <li>o Tanzam railway</li> <li>o Trans- African Highway.</li> <li>o Trans- Siberian railway.</li> <li>o Rotterdam (Euro port).</li> <li>o St. Lawrence sea way.</li> </ul> </li> </ul> <p><b>Communication</b></p> <ul style="list-style-type: none"> <li>- Types and forms of communication: (satellites, television, radio, telephone, internet).</li> <li>- Importance of communication</li> <li>- Problems affecting communication and the possible solutions</li> </ul> | <p>class presentation followed by Q&amp;A.</p> <ul style="list-style-type: none"> <li>- Use the geographical documents, internet, maps and photographs to research on the transport on water, roads and railways in the selected countries</li> <li>- In groups, discuss and compile the findings and write a report.</li> <li>- Is the continual reliance on the road and air transport in many countries increasing the emissions of greenhouse gases? In pairs, investigate this issue and suggest ways in a report.</li> <li>- Use the geographical documents, internet, maps and photographs or the local environment to research on the different types and the forms of communication, the importance of</li> </ul> |
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|  |  |  |  | <p>communication and the problems affecting the communication.</p> <ul style="list-style-type: none"> <li>- In groups, discuss and compile the findings for a class presentation.</li> <li>- Have the mobile phone and the internet provided the developing nations with a communication infrastructure? In pairs, examine this assertion and write a report.</li> </ul> |
| <p><b>Links to other subjects:</b> <i>It is linked to Transport and Communication in Entrepreneurship, and Economics.</i></p>  |  |  |  |  |
| <p><b>Assessment criteria:</b> <i>The learners are able to analyse the impact of transport and communication projects on the sustainable development of the different countries in the world</i></p> |  |  |  |  |
| <p><b>Materials:</b> <i>Geographical documents, brailled textbooks, maps, atlases, tactile or talking materials, photographs, internet /Jaws software and local environment.</i></p>                 |  |  |  |  |

| Topic Area: Human and Economic Geography  |  |   | Sub-topic Area: Economic activities   |   |
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| Year group & Subject: S6 Geography  |  | Unit13: Trade and Commerce in the world   |   | No. of Periods:14   |
| <b>Key unit competency:</b> The learner should be able to evaluate the impact of trade and commerce on the sustainable development of different countries in the world.   |  |   |   |   |
| Learning Objectives   |  |   | Content   | Learning Activities   |
| Knowledge and Understanding   | Skills   | Attitudes and Values  |   |   |
| <ul style="list-style-type: none"> <li>- Define trade and commerce</li> <li>- Identify the different types of trade and commerce</li> <li>- Outline the factors influencing the international trade.</li> <li>- Give the importance of the international trade</li> <li>- State the major financial centres of the world</li> <li>- Identify the major trading patterns and the world trading blocks</li> </ul> | <ul style="list-style-type: none"> <li>- Explain the meaning of trade and commerce</li> <li>- Discuss the different types of trade and commerce</li> <li>- Describe the factors influencing the trade and commerce</li> <li>- Explain the advantages and disadvantages of the international trade.</li> <li>- Explain the</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the importance of trade and commerce.</li> <li>- Show the continual desire to improve trade and commerce.</li> <li>- Appreciate the importance of the major financial centres and trading blocks.</li> <li>- Appreciate the importance of the regional integration</li> </ul> | <ul style="list-style-type: none"> <li>- Meaning of Trade and Commerce</li> <li>- Types of trade (international and internal)</li> <li>- Factors influencing the international trade</li> <li>- Causes of the low levels of international trade in LDC<sup>s</sup>.</li> <li>- Importance of the international trade in the development</li> <li>- Major financial centres of the world I.M.F, World Bank etc.).</li> </ul> | <ul style="list-style-type: none"> <li>- Use internet, maps and a range of text books to research on the different types of trade and commerce, factors influencing trade and commerce, importance of international trade, major financial centres of the world, world trading blocks and the regional integration.</li> <li>- In groups, discuss and compile the findings for a class presentation followed by Q&amp;A.</li> <li>- In groups, discuss the problems affecting the trade and commerce and propose the solutions.</li> <li>- What are the particular problems to the trade and commerce in the developed countries and the</li> </ul> |

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| <ul style="list-style-type: none"> <li>- State the problems affecting the international trade</li> </ul>  | <p>financial centres of the world</p> <ul style="list-style-type: none"> <li>- Describe the major trading patterns and the trading blocks of the world</li> <li>- Explain the problems affecting the international trade and propose the solutions</li> </ul> |  | <ul style="list-style-type: none"> <li>- World trading blocs and the regional integration (definition, advantages and disadvantages).</li> <li>- Factors affecting the regional integration</li> <li>- Problems affecting the international trade and the possible solutions</li> <li>- Case studies on the trading blocks and the regional integration: EAC, ECOWAS, OPEC AND EU.</li> </ul> | <p>developing countries? How can these countries overcome their problems?</p> <ul style="list-style-type: none"> <li>- In pairs, discuss these questions and write a report.</li> <li>- Use documents, maps, internet photographs to research about trade and commerce in the selected countries.</li> <li>- In groups, discuss the findings and write a report.</li> <li>- Many regional integration communities do not attain all of their objectives. What are the challenges encountered by the regional integration communities in the developed countries and the developing countries?</li> <li>- In pairs, investigate this issue and write a report on your conclusions.</li> </ul> |
| <p><b>Links to other subjects:</b> <i>It is linked to the statistics and the frequency in Mathematics, and trade in Economics</i></p>               |   |  |   |  |
| <p><b>Assessment criteria:</b> <i>The learners are able to evaluate the impact of trade and commerce on the sustainable development</i></p>         |   |  |   |  |
| <p><b>Materials:</b> <i>Geographical documents, internet, photographs, maps, local environments, tactile and talking materials and journals</i></p> |   |  |   |  |

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| <b>Topic Area: Human and Economic Geography</b>   |   | <b>Sub-topic Area: Economic activities</b>   |   |   |
| <b>Year group &amp; Subject: S6 Geography</b>   |   | <b>Unit 14 : World Multipurpose River Projects</b>   |   | <b>No. of periods: 14</b>   |
| <b>Key unit competency:</b> The learner should be able to evaluate the impact of the multipurpose river projects on the sustainable development of the different countries in the world   |   |  |   |   |
| <b>Learning Objectives</b>  |   |  | <b>Content</b>  | <b>Learning Activities</b>  |
| <b>Knowledge and Understanding</b>  | <b>Skills</b>   | <b>Attitudes and Values</b>  |   |   |
| <ul style="list-style-type: none"> <li>- Give the meaning of the multipurpose river projects</li> <li>- Explain the aims and the importance of multipurpose river projects</li> <li>- Identify the problems affecting the multipurpose river projects</li> <li>- Identify the major multipurpose river projects of the world</li> </ul> | <ul style="list-style-type: none"> <li>- Explain the meaning of the multipurpose river projects</li> <li>- Explain the importance of the multipurpose river projects</li> <li>- Evaluate the problems affecting the multipurpose river projects and suggest the possible solutions</li> <li>- Carry out a research on the selected</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the aims and the importance of the multipurpose river projects</li> <li>- Show respect for the effects of the multipurpose river projects on the development</li> <li>- Show concern for the problems affecting the multipurpose river projects and devise the possible solutions</li> </ul> | <p>World Multipurpose river projects:</p> <ul style="list-style-type: none"> <li>- Definition</li> <li>- Aims and the importance of the multipurpose river projects</li> <li>- Problems affecting the multipurpose river projects and the solutions</li> <li>- Case studies: <ul style="list-style-type: none"> <li>o The Tennessee Valley Authority</li> <li>o Akasombo dam (Volta) Ghana</li> <li>o Aswan high dam</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>- Use the geographical documents, internet and maps to research on the major multipurpose river projects, their aims, importance, problems affecting the multipurpose river projects and the solutions. Record the findings.</li> <li>- In groups, discuss and compile the findings for a class presentation followed by Q&amp;A.</li> <li>- Do the multipurpose river projects increase the risks of flooding, soil erosion, silt loads and population growth? In pairs, research the case studies</li> </ul> |

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|   | <p>multipurpose river projects in the world to describe and explain their effects on the sustainable development</p> | <p>- Conceptualise the need for the multipurpose river projects and show the concern for their development</p> | <p>Egypt.<br/>         ○ Hwang-ho (Huang He) river project- China.</p> | <p>and write your conclusions in a report.<br/>         - Use the geographical documents, maps, internet and photographs to research on the effects of the different multipurpose river projects. In groups, discuss the findings from the above research for a class presentation.<br/>         - Do multipurpose river projects counter the irregular rainfall patterns in some countries? Research and comment on your findings.</p> |
| <p><b>Links to other subjects:</b> <i>It is linked to power and energy production in Physics; land use and resource utilisation in Entrepreneurship.</i></p>                      |  |  |  |   |
| <p><b>Assessment criteria:</b> <i>The learners are able to evaluate the impact of the multi-purpose river projects on the sustainable development.</i></p>                        |  |  |  |   |
| <p><b>Materials:</b> <i>Geographical documents, tactile and talking materials, maps, photographs, internet/Jaws software and field study resources and local environment.</i></p> |  |  |  |   |

| Topic Area: Human and Economic Geography  |  |   | Sub-topic Area: Economic activities  |  |
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| Year group & Subject:<br>S6 Geography   |  | Unit 15: Environmental Conservation and Tourism   |  | No. of periods: 24   |
| <b>Key unit competency:</b> The learner should be able to evaluate the impact of the conservation of natural resources and tourism on the sustainable development in the different countries of the world   |  |   |  |  |
| Learning Objectives   |  |   | Content  | Learning Activities  |
| Knowledge and understanding   | Skills   | Attitudes and values  |  |  |
| <ul style="list-style-type: none"> <li>- Give the meaning of the term environment</li> <li>- Identify the various components of the environment</li> <li>- State the factors for the environmental degradation</li> <li>- Identify the consequences of the environmental degradation and the methods for</li> </ul> | <ul style="list-style-type: none"> <li>- Describe the concept of the environment and its components</li> <li>- Examine the various types of environmental degradation.</li> <li>- Explain the causes of the environmental degradation.</li> <li>- Explain the consequences of the environmental degradation and the methods for environmental conservation.</li> <li>- Justify the reasons for conserving our</li> </ul> | <ul style="list-style-type: none"> <li>- Appreciate the various components of the environment</li> <li>- Show the concern for the environmental degradation and the desire to improve the environment.</li> <li>- Appreciate the importance of environmental conservation.</li> <li>- Show the concern for the</li> </ul> | Environmental Conservation: <ul style="list-style-type: none"> <li>- Environment: definition, components of the environment</li> <li>- Factors accountable for the environmental degradation.</li> <li>- Consequences of the environmental degradation.</li> <li>- Methods of environmental conservation</li> <li>- Pollution: definition, types, causes, effects of pollution and solutions.</li> </ul> | <ul style="list-style-type: none"> <li>- Use the geographical documents, internet, maps, photographs to research on the components of the environment, factors and the effects of the environmental degradation, and the methods of environmental conservation.</li> <li>- In groups, discuss and compile the findings for a class presentation.</li> <li>- Initiate the environmental clubs at</li> </ul> |

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| <p>the environmental conservation.</p> <ul style="list-style-type: none"> <li>- Give the importance of environmental conservation.</li> <li>- Identify the types of catastrophes.</li> <li>- Identify the causes and the effects of the catastrophes.</li> <li>- Identify the major tourist areas in the world.</li> <li>- State the factors affecting the tourism in the world</li> <li>- Give the importance of the tourism on the economic development.</li> <li>- Identify the problems of</li> </ul> | <p>environment.</p> <ul style="list-style-type: none"> <li>- Differentiate among the types of catastrophes.</li> <li>- Evaluate the causes and the effects of the catastrophes and propose the solutions.</li> <li>- Locate the major tourist areas in the world</li> <li>- Explain the factors affecting the development of tourism in the world</li> <li>- Justify the importance of tourism in the development of the economy.</li> <li>- Explain the problems of tourism and propose the possible solutions.</li> <li>- Evaluate the impact of tourism on the environment and the development of a country.</li> </ul> | <p>effects of the catastrophes and devise preventive measures.</p> <ul style="list-style-type: none"> <li>- Appreciate the importance of tourism on the sustainable development.</li> <li>- Show the concern for the problems affecting tourism and suggest the solutions.</li> </ul> | <ul style="list-style-type: none"> <li>- Importance of the environmental conservation.</li> <li>- Catastrophes: natural catastrophes (earthquakes, drought, floods, tsunamis, wind, volcanic eruptions and diseases).</li> <li>- Non-natural calamities: wars, famine, fire.</li> <li>- Causes, the effects and the solutions of the catastrophes.</li> </ul> <p>Tourism</p> <ul style="list-style-type: none"> <li>- Definition of term tourism and the major tourist areas of the world.</li> <li>- Factors affecting the development of tourism in the world</li> <li>- Importance of tourism in the world</li> <li>- Problems affecting the tourism in the world</li> </ul> | <p>the school to promote the methods for the environmental conservation and the awareness through planting trees, grass, flowers, etc.</p> <ul style="list-style-type: none"> <li>- Use textbooks, internet, photographs and video clips to research on the various types of catastrophes, their causes and the effects.</li> <li>- In groups, discuss the findings for a class presentation and also engage in Q&amp;A methodology.</li> <li>- Do research on the major catastrophes in the last 5 years that has happened in the world. List them and research on how they have contributed to the environmental degradation?</li> <li>- How can catastrophes be</li> </ul> |
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| <p>tourism</p> <ul style="list-style-type: none"> <li>- State the impact of tourism on the environment and the development of a country</li> </ul> |  |  | <p>and the prospects</p> <ul style="list-style-type: none"> <li>- Impact of tourism on the environment</li> <li>- Case studies: East Africa, USA (tourism in Florida), Switzerland.</li> </ul> | <p>averted? In pairs, write a report on your findings.</p> <ul style="list-style-type: none"> <li>- Use the geographical documents, internet, maps, photographs and the local environment to research on the major tourist areas of the world, the factors affecting the development of tourism, the importance of tourism, the problems affecting the tourism in the world and the possible solutions; impact of tourism on the environment and development of the world.</li> <li>- In groups, discuss and compile the findings for a class presentation followed by Q&amp;A.</li> <li>- Use the geographical documents, maps, internet and photographs to research on the</li> </ul> |
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|  |  |  |  | <p>tourism in the selected countries.</p> <ul style="list-style-type: none"> <li>- In groups, discuss the findings and write a report.</li> <li>- Do research on the countries with the most developed tourism industries. What are the reasons for the high level of tourism? What are the impacts of tourism in these countries? How can the tourism industry be developed in a country? In pairs or individually choose a country with a high tourism levels and conduct a case study. Write a report of your findings.</li> </ul> |
| <p><b>Links to other subjects:</b> <i>It is linked to the ecosystem and bio-diversity in Biology</i></p>   |  |  |  |   |
| <p><b>Assessment criteria:</b> <i>The learners are able to evaluate the impact of conservation of natural resources and tourism on the sustainable development</i></p> |  |  |  |   |
| <p><b>Materials:</b> <i>Maps, photographs, internet, geographical documents, textbooks, maps, local examples.</i></p>  |  |  |  |   |

## 6. REFERENCES

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## 7. APPENDIX

### Weekly allocation

In the Advanced Level, geography subject shall be allocated 7 periods per week; each period takes forty minutes i.e. geography will be allocated two hundred and eighty minutes per week.

### Subjects and weekly time allocation for advanced level

| Subjects in Secondary 4-6 | Number of periods per week<br>(1 period = 40 min.) |    |    |
|---------------------------|--|----|----|
|                           | S4   | S5 | S6 |
| <b>Core subjects</b>      |  |    |    |
| 1. Mathematics            | 7  | 7  | 7  |
| 2. Physics                | 7  | 7  | 7  |
| 3. Computer Science       | 7  | 7  | 7  |
| 4. Chemistry              | 7  | 7  | 7  |
| 5. Biology                | 7  | 7  | 7  |
| 6. Geography              | 7  | 7  | 7  |
| 7. History                | 7  | 7  | 7  |
| 8. Economics              | 7  | 7  | 7  |
| 9. Literature in English  | 7  | 7  | 7  |
| 10. Kinyarwanda major     | 7  | 7  | 7  |
| 11. Kiswahili major       | 7  | 7  | 7  |
| 12. French major          | 7  | 7  | 7  |
| 13. Religion major        | 7  | 7  | 7  |
| 14. Entrepreneurship      | 6  | 6  | 6  |

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|--|-----------------------|---|---|---|
| 15. General Studies and Communication Skills |                       | 3 | 3 | 3 |
| 16. Subsidiary Mathematics                   |                       | 3 | 3 | 3 |
| Electives Subjects                           | 17. English minor     | 4 | 4 | 4 |
|  | 18. French minor      | 4 | 4 | 4 |
|  | 19. Kinyarwanda minor | 4 | 4 | 4 |
|  | 20. Kiswahili minor   | 4 | 4 | 4 |
| Co-curricular Activities                     | Religious activities  | 2 | 2 | 2 |
|  | Sports/ Clubs         | 2 | 2 | 2 |
|  | Computer/library      | 2 | 2 | 2 |