

LONGHORN  
SECONDARY

# GEOGRAPHY

TEACHER'S  
GUIDE

4



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APPROVED BY MoES, NOT FOR SALE

Adapted to the New Competence Based Curriculum

expanding minds

Longhorn  
Secondary  
**Geography**

Teacher's Guide 4



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# Preface

The purpose of this teacher's guide is to help you to implement the senior Four Geography syllabus. It is designed to stimulate you to create exciting and meaningful teaching programs and lessons by enabling you to choose relevant and purposeful teaching activities.

It will encourage you to research and look for new and challenging ways of facilitating learning in Geography.

The teacher's guide supports the syllabus. The syllabus states the learning outcomes for the subject and subtopics; and outlines the content and skills that students will learn, and the assessment requirements.

The teacher's guide provides direction for you in using the learner centred approach in your classroom.

In this guide a variety of suggested learning and teaching activities will provide you with ideas to motivate students to learn and to make learning relevant, interesting and enjoyable.

The guide helps you relate learning in Geography to real people, issues and the local environment. Teaching using meaningful contexts and ensuring students participate in appropriate practical activities assists students to gain knowledge and understanding, and demonstrate skills in Geography.

It also provides detailed information on criterion-referenced assessment. At the end of the chapter, the assessment grid guides you on how to score and record student's scores and how to report against the learning outcomes.

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## Introduction

### Prelude

Geography is a compulsory subject from senior one to four. Nearly all aspects of our lives are influenced by the environment in which we live both naturally and humanly. In turn our lives have effects on the environment. Geography deals with this inter-relationship between humans and their environment. This relationship is becoming increasingly important as the population of the world grows and world resources remain finite. The key issues of geography are becoming more and more important for example, landform formation and their causes, population growth, soil degradation and conservation, the use and reservation of water resources, the food shortages, rural urban drift, urbanisation, causes and problems, problems of pollution, the conservation of wildlife and many other related issues.

### Aims and Goal /Focus of the Subject

The teaching of geography focuses on the development of the learners ability to explore the world around them. Therefore the role of the teacher is to build on the learners knowledge and experience by posing problems to the learners so they look for solutions. This helps them to think about their own ideas and experiences as well as adding new knowledge and skills what they already have. Learners need to interact with real life situations inside and outside the classroom to be responsible for their own learning. They also begin to think for themselves and form their own ideas and opinions. They also become critical thinkers ready to protect the environment and make good use of it.

### **A SUMMARY NOTE ON THE ACTIVITY BASED AS OPPOSED TO KNOWLEDGE BASED TEACHING AND LEARNING**

This Competency-Based Curriculum is a move from knowledge-based curriculum to a competency and skill-based curriculum. Young people need to look knowledge and develop their ability to apply what they learn with confidence. They should be able to use the knowledge gained creatively other than acquiring it. So, this calls for an active learner centered approach rather than a passive one where the teacher was the "know it all". So geography will help to end poverty, protect the environment and ensure that people enjoy the best that the earth can present. Since the learner needs to interact with real situations inside and outside classroom, this exposes him/her to a variety of learning experiences such as interviewing, fieldwork, pacing, research, field study statistical graph drawing, studying pictures, and analyzing diagrams etc, to help him/her find geographical information on his/her own. Learners use their own wordings, they discuss and demonstrate what they have studied in geographical terms thus they will be responsible for their own learning, think for themselves and form their own ideas and opinions. This creates critical thinkers who are ready to face new geographical challenges and geographical situations by themselves and also find solutions to geographical problems from the field.

## **A Note on the Competency/Activity-Based Teaching of Geography**

The Competency/Activity-Based approach of teaching is basically a skill-based approach to learning geography. It promotes values and attitudes, effective learning and acquisition of skills in order to reduce unemployment among school graduates. It also aims at reducing content overload and contact hours in class so as to create time for research, project work and creativity in the geographical field. This will enable learners to make informed choices as they apply the knowledge and skills so as to compete favorably in this global job market world. This will totally change the old school curriculum which was academic based; only preparing students for higher education.

This one will serve both who will continue with the education and those who may choose to join the workforce. This new mode of teaching geography will enable learners to acquire specific subject skills that they can use once they enter the world of work and thus protection of the environment.

### **Generic Skills**

During the teaching of geography, the following skills have to be developed among learners. They include communication, critical thinking and problem solving, creativity and innovation, cooperation & self-directed learning, and mathematical computation and ICT proficiency.

Therefore in geography, the learner needs to be helped to think critically, learn how to solve problems at school and at home. They should be able to study situations, analyse information, identify problems, seek solutions predict outcomes and evaluate them all. They should also be creative and innovative. They should use imaginations to explore geographical possibilities, suggest and develop new solutions geographically about how the world works, to understand the world from both a scientific and literary point of view. Encourage cooperation through teamwork. Build creativity and innovation through facilitating the learners to carry out projects. Try to be innovative with the available resources to find new geographical solutions. Cooperation and self directed learning should be made possible when you assist them to work efficiently in various teams, meaningful interaction, working independently, and managing goals without wasting time. They should be able to observe, interview and explain ideas geographically, discuss geographical issues and present geographical information that should also be able to present geographical information statistically on graphs and also make use of the available technology to justify geographical facts.

## **A Note on KUSVA in the teaching and learning of Geography**

This acronym, KUSVA, stands for Knowledge, Understanding, Skills, Values and Attitude. In the course of learning of geography, expose the learner to available knowledge and understanding; guide the learners to use this knowledge and understanding together with the skills to solve problems in society. Realise how things look like geographically and why they work the way they are. You should let the learning experiences obtained prepare the learner to carry out a hands on activity on his/her own. This will help him/her gain a skill. You can help the learner face real-life situations from which they draw

conclusions so as to help them and the community. For example, by carrying out field work, team work, sharing information, they build on their values and attitudes. Be advised that each of your lesson should help learners to believe in themselves and in what they would have come up with.

## Crosscutting Issues

These are issues that the young generation need to learn from geography as a subject. They help the learners to understand the connection between the subject and complexities of life. They include environmental awareness, environmental protection, pandemic outbreaks and health awareness, life skills, citizenship and patriotism, integrity, socioeconomic challenges, mixed abilities and involvement, love and care for fellow human beings around us and those far away.

When teaching geography, spice your learning aids with video clips, newspaper reports, field trips interviews, research and presentations that can get learners sensitised to the cross-cutting issues. Outsiders can also be used because these can be inspirational to the learner thus causing behavioral change.

## The Structure of the Teacher's Guide

### About this Guide

This is a manual to guide you on what and how to conduct the lesson and its instructions are a proposal to help you to follow the procedure to conduct the lessons successfully. Therefore, using your professional expertise as a supplement, you will be able to conduct classroom activities. You know your learners better, so as to plan the classroom activities basing on the available environment. Please note that this is learner centered approach. So let the learner discover on his/her own and you may guide to help them not to go astray.

The book comprises chapters commensurate to those in the Learner's Book. Each chapter is preceded with an appropriate preamble which you ought to study and understand before you commence teaching. This preamble is made up of the overview, teacher preparation and introduction. The Overview captures the background knowledge of the learner about the chapter being introduced and what the chapter is about by highlighting the target competency of the whole topic/chapter it pointing out the number of activities entailed and the suggested steps by which you ought to instruct learners per given activity. "Teacher Preparation" clarifies the possible teaching/learning resources you ought to make available in teaching a given topic, proposed skills (sub-competences) you need to emphasise, knowledge to be obtained and values to be promoted and experienced throughout the provided activities. In this very sub-section still, suggested points of formal assessment you need to follow during the activity are given to direct you to likely areas of achievement the learner may need.

The "Introduction" guides you on how best you may introduce the topic. Be advised to study each activity at least five (5) days before "lesson-planning" for it because most of these activities are painstakingly demanding. For example, some activities require that learners go to the field so there is need to ask for permission from the

authorities and money to facilitate their moving, some may involve the making use of the available technology (cyber labs) so if not well prepared you may fail to achieve the desired goals.

### Using the Guide

In each and every geography lesson to be conducted there is an activity which the learner has to get involved in. The activity is the heart of each lesson. It is not your activity but the learner's. So, try as much as possible to follow up the proposed activity, stage by stage. Each activity has been subdivided into three; pre activity, during the activity and post activity. At each stage, there is what the learner and you, the teacher, should be doing. Try to follow the proposed tasks for each stage. You may add to and/or subtract from these suggestions depending on your class and classroom context. Make sure you have made available all that is required for each activity. It is advisable to draw your lesson plan following these subdivisions per activity (see sample lesson plan). The possible responses for each task in the "during stage" are not definite. Therefore, endeavour to add to the suggested answers giving learners a vast opportunity to find information on their own and express it in their own words. The **post-activity** usually indicates a feedback session where the learners share their learning experience from the given activity. Decide on how this should be done effectively. Should you need to collect the learners activity books for assessment, ensure that you use this chance to establish the learning needs of each individual.

Time management is critical in the Activity-Based Teaching. Therefore, ensure that you prepare and organise the learners to do everything within the given time. It is prudent to leave at least 3 minutes before the end of the lesson as an interlude between lessons.

### A Note on Assessment and Record Keeping

It should be noted right from the start, the teaching-learning process in this curriculum is activity based as opposed to the outgoing curriculum that is more of theoretical and exam-oriented. Therefore, much of the content in the Learner's Book is determined by activities. All Activities should be carried out during the lesson and assessment therefore starts right away during the lesson or at the end of your lesson in form of formative assessment and then at the end of a given chapter in form of summative assessment. This is the Activity of integration.

In the competency-based curriculum every subject requires the teacher to ensure that there is self-discovery among the learners. It is not merely theoretical. Therefore, most of the lessons are activity-based and they need to be translated into real life situations. So, there is need for the learner to develop life skills and values that will enable one to be relevant in real life. This is where the teacher's input becomes necessary. The area of emphasis may rotate around the development of the following skills;

**Critical Thinking:** - One has to look at the situation around him /her to make an informed decision.

**Creativity and Innovation:** - The learner should be trained to be creative and this in way of the tasks the teacher gives.

**Communication skills:** - One has to be trained on the most appropriate ways of communicating and conveniently drive the point home without any hindrance.

**Self-directed learning:** - The learner should be guided on how to discover things on his/her own.

This has been captured in the Learner's Book. In many instances, the learner will be doing tasks on his/her own and the teacher will simply guide or facilitate, and also assess where necessary. This will be accompanied by triangulation.

**Cooperation and collaborative skills:** This can be acquired by emphasizing team work where learners will work in groups or even in pairs and even carry out project work.

On the other hand, there are values that need to be emphasized and developed in the learner like: - honesty, integrity, empathy, appreciation, kindness, self-respect and respect for others, tolerance, sharing and responsible behaviour. As the teacher prepares for a given activity, he/she generates the awareness of the learner about it, then make the learner to develop interest to participate. The desire for this activity should be generated naturally, then finally the real action can be assessed for tangible results, output or progress.

In a nut shell, the proposed activity should possess the aspect of DEAA for it to enhance meaningful and purposeful learning.

The teacher should also note that in all activities, there must be time for the learner to discover, explain analyse and apply. As the learner tries to discover, explain, analyse and apply, your role as a teacher COP. That is, you converse with the learners, observe them to get the final intended product. These should form the core for lesson development and assessment.

The Learner has to benefit from whatever is taught and should be able to apply them in real life.

## ACTIVITY OF INTEGRATION

The activity of integration is a new term in the teaching-learning process under the revised lower level curriculum. It involves developing a situation or scenario in real life and directs the learner to mobilize the different resources and even the cognitive ability to overcome a challenge at hand. The resources here include the knowledge, understanding, skills, values and attitudes to solve a problem.

This is the last activity to solve a given problem through the integration of knowledge, skills and behavior acquired in the chapter. Therefore, the activities carried out in class depending on a particular chapter should enable the learner to demonstrate the competency stated in the Introduction. Every introduction to a given chapter in the Learner's Book has got the competency stated.

Therefore, the Activity of Integration forms the basis of assessment and evaluation more especially at the end of every chapter. Each Learner's Book is made up of a given number of chapters. Each chapter has got an activity of Integration. These are proposed Activities of Integration. You can develop an activity of integration different from the one in the learner's book for any chapter.

It should be noted that the difference between this curriculum and the former curriculum is in methodology and assessment. The teacher has to shift from telling the learner what he or she knows to what this learner can practically do in order to solve a future problem. This partly explains why the teacher has to plan adequately for every lesson before the actual teaching takes place. So, the Scheme of work and lesson plan should be prepared adequately and they should be well coordinated to enhance meaningful learning.

The main aim of the Activity of Integration is to solve a society problem. It is an individual activity done immediately a chapter is covered. A society problem can be a scenario in real life situations. When one critically observes the activities of Integration in the Learner's Book, they all address real life situations. So, the role of the teacher is to prepare the learner to do this activity basing on prescribed steps in the lesson plan and then assess the learner at each stage

Therefore, in the Activity of Integration, there should be three main issues: -

- ^ The Situation or scenario. This is the problem or challenge in society in line with the chapter learners have covered. Its based on real life.
- ^ Support materials to drive the message with ease to the learner.
- ^ The task to be performed by the learner.

These have been clearly highlighted in the Learner's Book. The role of the teacher is to set an enabling environment for this activity to be done as he/she facilitates and observes the learner, after which the teacher uses the criterion referenced system to carry out evaluation of learner's ability..

### **Criterion-Referenced Assessment for the purpose of Evaluation**

What is Criterion Referenced Assessment?

It is the kind of assessment that follows a set standard to assess and evaluate the learner. The teacher bases on a given kind of standard to award scores at each stage of the activity of integration. The teacher should be aware that in this curriculum, no learner fails. One should focus on the best that a learner can do and then award scores accordingly. Therefore, the learner should know what the teacher wants him/her to do.

In order to effectively carry out this kind of evaluation, the teacher must have a guide. This is called as assessment grid. This guide should base on the following criterion: -

- ^ The Relevance: - How relevant are the responses of the learner to the activity in question.
- ^ Accuracy: - Has the learner accurately brought the right ideas required in the activity or not?
- ^ Coherence: - Are the items or responses presented by the learner relating well with the activity in question or not? Do they have any logical flow to realize the purpose for which this activity is made?
- ^ Excellence: - What unique and quality item or response has the outstanding learner given

- This guide is abbreviated as RACE and it leads the teacher to come up with an assessment grid for the activity of Integration. The assessment grid will provide the basis for evaluating the learner.

### Sample evaluation grid

Expected output	Basis of evaluation	Relevance	Accuracy	Coherence	Excellence
A business plan of about 200 words advising him/her on trade route.	industrial development in China.	<p>The learner earns:</p> <p>3 points if the learner gives 8-7 industrial development in China.</p> <p>2 points if the learner gives 4-5 industrial development in China.</p> <p>1 point if the learner gives 3 industrial development in China.</p>	<p>The learner earns:</p> <p>3 points if 8-7 industrial development in China. are correctly identified</p> <p>2 points if 4-5 industrial development in China. are correctly identified</p> <p>1 point if 3 industrial development in China. are correctly identified</p>	<p>The learner earns:</p> <p>3 points if 8-7 industrial development in China. are logically well-linked</p> <p>2 points if 4-5 industrial development in China. are logically well-linked</p> <p>1 point if 3 industrial development in China. is logically well-linked</p>	<p>I score if the learner gives unique responses</p>
Total scores/19		/3	/3	/3	/1

It should be noted that at this point unlike in the outgoing curriculum where summative evaluation is conducted by Uganda National Examination Board at the end of four years of Ordinary Level, with the revised curriculum, evaluation starts in S.1. So, in this case the Teacher is required to submit 20% of the learner's assessment record per year to UNEB. At the end of the learner's four year education cycle, UNEB will subject the Learner to a National Exam that will be assessed out of 80% marks.

The assessment grid following the RACE Guide: -

Under this grid, there should be the desired output of the activity, in other words: - What is expected of the learner in this activity.

Secondly, there should be a basis of evaluation. In this case the teacher should identify key performance targets in achieving the expected result or output. This depends on the levels, steps or stages. They should be between two to three levels.

Thirdly is the criterion of evaluation under the format of relevancy, accuracy coherence and excellence.

The Learner earns 1-3 scores depending on the level of achievement and this applies under the slots of relevance, accuracy and coherence. When it comes to excellence, the learner scores only one, in case one qualifies for it.

Descriptor	Identifier
Some learning outcome achieved-but not sufficient for overall achievement	1
Most learning outcomes achieved-enough for overall achievement	2
All learning outcomes achieved-achievement with ease	3

## SAMPLE SCHEME OF WORK FOR GEOGRAPHY

SCHOOL: ABS Secondary School

TEACHER'S NAME: PAULINE MUSAAZI

CLASS: Senior Four

SUBJECT: Geography

TERM: I

Wk	Period	Topic	Competency	Learning Outcome	T/L	Method(s)	Ref	Rmk
1	6	Mining and industrial development in China	The learner understands why and how industries developed in China, the industries which developed and how they have evolved	a Know the minerals found in China  (b) Know the types of industries in China  (c) Draw a map and indicate the main mining and industrial areas in China	Resources -Local environment -ICT tools such as internet, -passages, articles in news papers	Question and response -Group discussion -brainstorming -survey and interviewing	LB4  TG 4	

**Sample Lesson Plan for Geography**

School: ABS Secondary School	Date: 2nd April, 2021.
Subject: GEOGRAPHY	Time: 07:00-08:20am Duration: 80 minutes
Teacher: PAULINE MUSAAZI	Term: I
Class: Senior Four	Number of learners: 50 Girls: 25 Boys: 25

Theme:	Mining and industrialisation in Africa and other parts of the world
Topic	Mining and industrial development in China
Sub-topic:	Minerals and mining in China
Competency:	The learner understands why and how industries developed in China, the industries which developed and how they have evolved
Learning outcomes:	<p>By the end of the lesson, the learner should be able to:</p> <ul style="list-style-type: none"> <li>▲ Know the minerals found in China</li> <li>▲ Know the types of industries in China</li> <li>▲ Draw a map and indicate the main mining and industrial areas in China</li> </ul>
Method(s)	Discussion, observation, question and response
T/Learning Material:	Computers, projectors, maps and textbooks
Activity:	Know the minerals found in China, know the types of industries in China, draw a map and indicate the main mining and industrial areas in China
Generic Skills:	<ul style="list-style-type: none"> <li>▲ Talk confidently and explain information confidently.</li> <li>▲ Classify and Organise work graphically, draw maps be able to classify what is before them geographically.</li> </ul>

Pre-requisite Knowledge:	Learners already have knowledge about industries in East Africa and Africa
Subject matter:	Possible Responses Minerals mined in China
Value/Attitude/Understanding:	Patience; listening attentively when other groups learners are presenting their views; and tolerance for various individual opinions.
Crosscutting Issue(s):	Using communication technology in the different fields of operation in our society; for example, school; study, research, government and building relationships.

Teacher's Ref: Teacher's Guide 4

Learner's Ref: Learner's Book 4

#### Evaluation:

#### SAMPLE LESSON DEVELOPMENT

TIME/ DURATION	STAGE/ STEP	TEACHER'S ACTIVITY	LEARNER'S ACTIVITY
7:00-7:15am (15 Minutes)	Pre-Activity	<ul style="list-style-type: none"> <li>-Organises learners in groups.</li> <li>-Informs the learners about the subtopics of the lesson.</li> <li>-Asks the learners to read the introduction of this topic in their learner's book.</li> <li>-Instructs them to briefly share/brainstorm what they have seen in the introduction</li> </ul>	<ul style="list-style-type: none"> <li>-Learners get into groups.</li> <li>-Listen intently.</li> <li>- Observe and inspect the gadgets.</li> <li>- Silently, read.</li> <li>-Share among themselves about the insights provided by the introduction.</li> </ul>

7:15-8:00am (45 Minutes)	During the activity	<ul style="list-style-type: none"> <li>(a) Learners study maps in figure 27.1</li> <li>(b) Learners identify the main minerals and mining areas in China</li> <li>(c) Learners copy figure 27.1 into their notebooks</li> <li>(d) Learners explain the importance of minerals in the development of industries in China</li> </ul>	<ul style="list-style-type: none"> <li>(a) Listens to the learners. -Encourages them to take their own notes.</li> <li>(b) Walks around observing the learners discussions. -Encourages them to take notes.</li> <li>(c) -Checks the learners explanations. -Takes note of the learners points of need that shall require re address.</li> <li>(d) Encourages the learners to use the notes they have compiled on their own to fill the table. -Observes and takes note of the learners ability to apply the specified writing subskills.</li> <li>(e) Instructs them to write the explanations in their activity books. - Observes and takes record of the various opportunities, weaknesses and areas that need improvement.</li> </ul>
8:00-8:17am (17 Minutes)	Post-activity	<ul style="list-style-type: none"> <li>-Asks learners to Organise representatives who are going to take a minute to share their groups responses for the tasks.</li> <li>-Ends the lesson at 8:17 to allow learners to prepare for the next lesson at 8:20am</li> </ul>	<ul style="list-style-type: none"> <li>-Respond by choosing their own representative.</li> <li>-Take note in their activity books.</li> <li>-Collect their books for assessment.</li> <li>-Clear their groups and reorganise the classroom for the next lesson.</li> </ul>

## Mineral Resources and Mining in Africa

Period: 16 (Learner's Book Pages 1-18)



### Key words

- ▲ capital-intensive
- ▲ derrick
- ▲ extraction
- ▲ minerals
- ▲ mining
- ▲ open cast mining
- ▲ underground mining

After studying this chapter, the learner should be able to;

- ▲ understand the use of mineral resources in the development of any two industries in Uganda
- ▲ recognise types and consequences of mining from photographs
- ▲ appreciate the positive and negative contribution of mineral resources to development
- ▲ understand why most mining is capital intensive
- ▲ understand why much of the mining in Africa is controlled by overseas companies
- ▲ draw a map to show the main mining areas in Africa
- ▲ draw diagrams to show the main methods of mining
- ▲ appreciate the dangers that most people may not benefit from mining in the countries where it takes place

## Introduction

**Guide learners to read the introduction (Learner's Book page 2)**

Look at the things around you, at school and at home, such as utensils, furniture, stationery and many more. You realise that they are made from different materials. Many of them are made from minerals. Mining refers to all attempts to extract valuable minerals, both solid and liquid from the earth's crust.

The mining industry of Africa includes the mining of various minerals; it produces relatively little of the industrial metals such as copper, lead, and zinc. According to an estimate Africa has a percentage of world reserves 40% of gold, 60% of cobalt, and 90% of the world's platinum. There are three types of minerals: metallic minerals, non-metallic minerals and minerals which are sources of power.

In Senior two, you learnt about mineral resources of East Africa, the methods used to extract the minerals, and factors that favour mining. You also learnt the challenges faced by the mining sector and its contribution to the East African economy. In this chapter you will learn about the main mineral resources in Africa and how minerals can contribute to the development of African countries.

It is important that you use a number of interactive methods to enable learners acquire and develop the different skills reflected in the different activities throughout the chapter. It is necessary to ensure that all learners participate in pair, group and class discussions. The use of ICT is one of the learning components, so it is advisable that you make use of it as may be required.

## Minerals in Africa (Learner's Book pages 2-3)

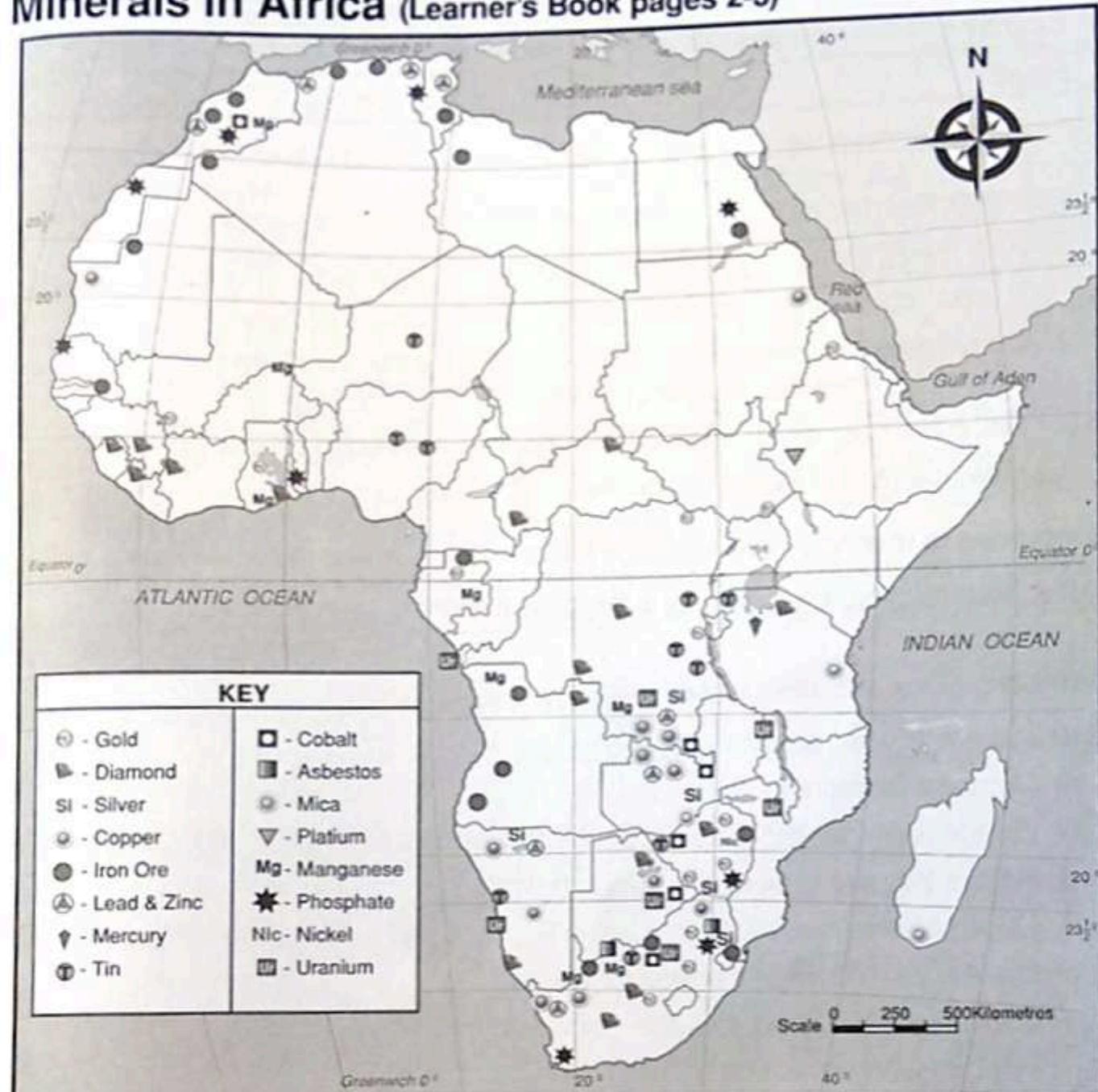


Figure 25.1: Map showing distribution of minerals in Africa

Africa has some large industries due to the presence of a variety of minerals. Do you know that many countries in Africa depend on mining and that mining has led to the development of such countries? After doing tasks in activity 25.1, you will know the different minerals and main mining areas in Africa.

### Activity 25.1 Discovering the different minerals and main mining areas in Africa

In pairs, study the map in figure 25.1 showing minerals and main mining areas in Africa and use it to do the following tasks.

Table 25.1: Minerals and main mining areas in Africa

Country	Minerals
Egypt	Phosphate, Iron ore

- 1 Copy table 25.1 in your notebook and, complete it by filling in minerals mined in each country to help you with this, the first row has been filled for you.
- 2 Copy figure 25.1 into your notebook and fill in the names of the mining Countries which you have identified in (1) above.
- 3 Swap your work with other pairs and make comments on each other's work.
- 4 Make corrections where necessary

**Resources to use:** Map provided in the learner's book, writing materials, library, internet

**Skills:** Map reading, interpersonal skills, critical thinking, communication, forming own opinions.

**Methods:** Think-pair, discussion

#### Instructions to the teacher

- (a) Organise learners in pairs.
- (b) Provide learners with the learner's book and tell them the page on which the tasks are.
- (c) Instruct learners to study the map and do the tasks that follow.
- (d) Observe learners as they discuss in their groups and assist them as they do the task.
- (e) Make sure everyone is actively involved.
- (f) Converse with learners as they do the activity.
- (g) Instruct learners to present their work.
- (h) Encourage the learners to explain and defend their views.
- (i) Assess the learners' work and give them feedback.

#### Suggested responses

- 1 Map in Figure 25.1
- 2 Table 25.1

Country	Minerals
Egypt	Phosphate, Iron ore
South Africa	Gold, diamonds, uranium, manganese

Democratic republic of Congo	Oil, diamonds
Sudan	Oil, copper, iron ore
Algeria	Gas, oil production

You have realised that Africa has minerals which are metallic such as tin, zinc and lead, and non-metallic minerals such as salt, sulphur and phosphates. The continent also has energy minerals such as petroleum, natural gas, and uranium. Minerals are extracted from either underground or under water while some are on the surface.

## Methods of mining (Learner's Book pages 3-9)

In Senior Two, you learnt that the nature and depth at which the mineral occurs determine the method of mining used. After doing tasks in activity 25.2, you will understand the main methods used to extract minerals in Africa.

### Open Cast Mining (Learner's Book pages 3-5)

This method of mining is used to extract minerals that occur near the earth's surface. After doing tasks in activity 25.2, you will understand more about open cast mining.

#### Activity 25.2 Understanding open cast mining

In groups, study photographs A-C in figure 25.2 showing some mining methods and do the tasks that follow.



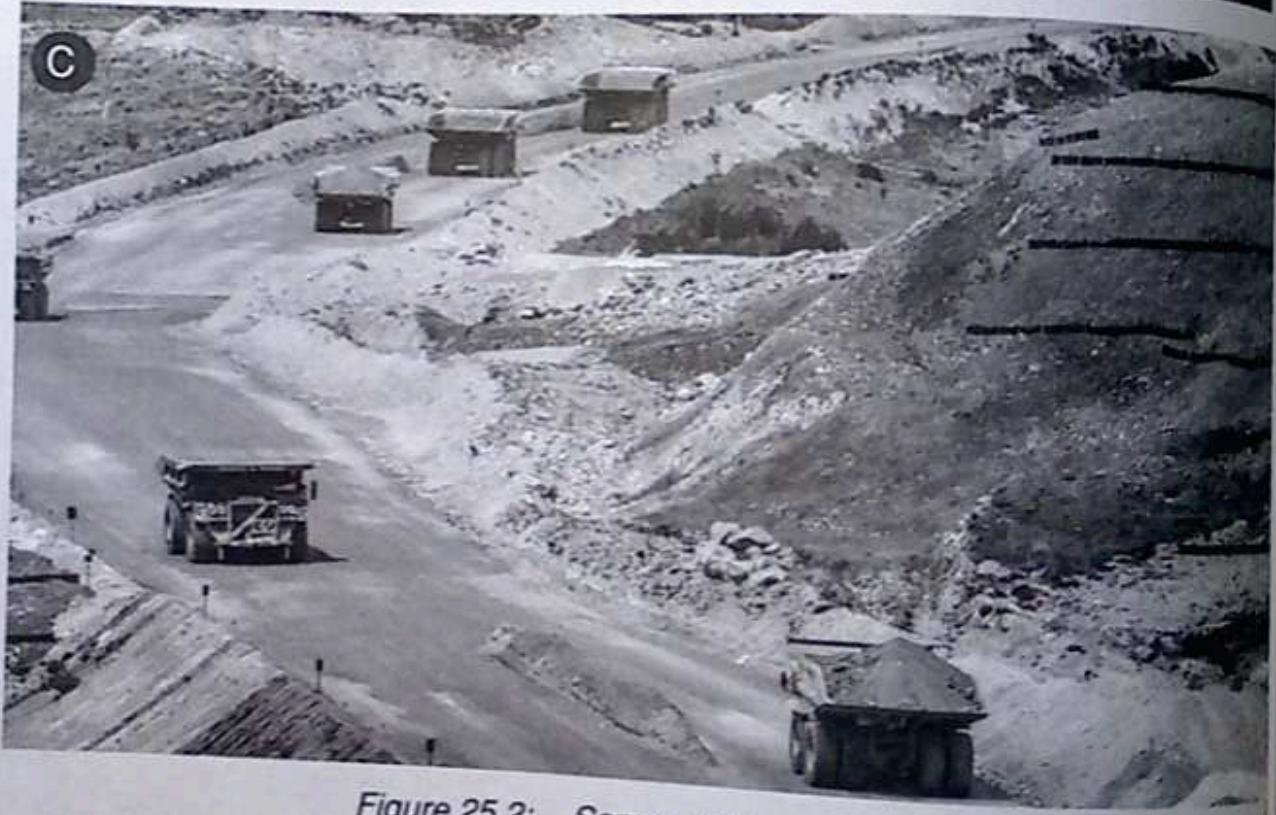
**B****C**

Figure 25.2: Some mining methods

- 1 Which of the photographs in figure 25.2 shows open cast mining?
- 2 Suggest minerals which can be mined using this method.
- 3 With the aid of diagrams, describe the process of open cast mining.
- 4 What are the advantages and disadvantages of this method of mining?
- 5 Present your work to the rest of the class through discussion.

**Resources to use:** Photographs provided in the learner's book, writing materials  
**Skills:** Photographic interpretation, interpersonal skills, critical thinking, communication, forming own opinions.

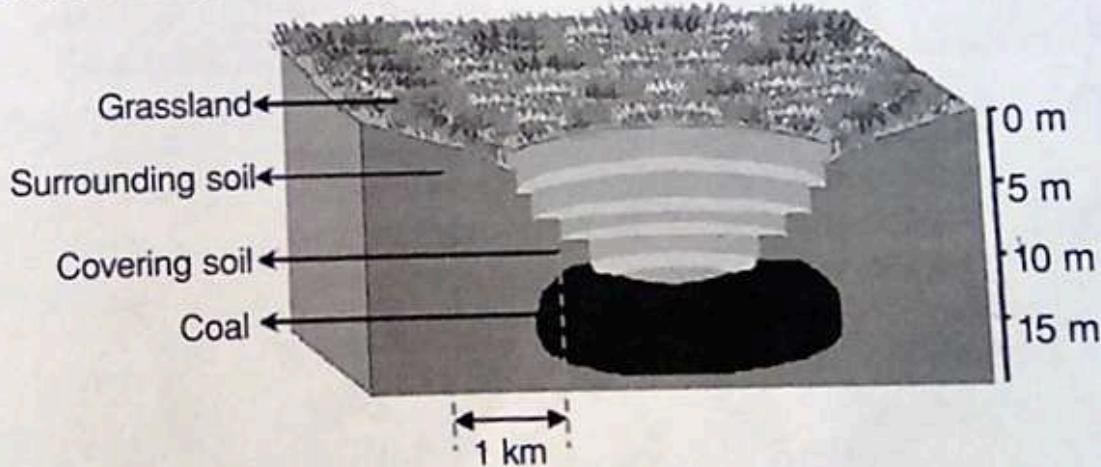
**Methods:** Group and class discussion

### Instructions to the teacher

- Organise learners.
- Provide learners with the learner's book and tell them the page on which the tasks are.
- Instruct learners to study photographs and do the tasks that follow.
- Observe learners as they discuss in their groups and assist them as they do the task.
- Make sure everyone is actively involved.
- Converse with learners as they do the activity.
- Instruct learners to present their work.
- Encourage the learners to explain and defend their views.
- Assess the learners' work and give them feedback.

### Suggested responses

- Photograph A and C
- Limestone ,Diamonds ,Fluorspar, Coal
- This method is used when the mineral is at or close to the surface of the earth. If the mineral is at the surface, it is extracted or quarried directly using simple machines. If it is covered by other rocks, these are scraped off to expose the mineral. Excavators break down the mineral ore, which is then loaded onto lorries that take it to a processing plant.



#### 4. Advantages of open cast mining

- ▲ It is cheap
- ▲ It is faster because the mineral is near the surface.
- ▲ It is used to mine low-grade minerals over a wide area.
- ▲ **Large machinery can be used because of a wide space.**

#### Disadvantages

- ▲ Natural vegetation is destroyed exposing the soil.

- Pits are created and water collects in them encouraging breeding of mosquitoes which spread malaria
- Heaps of waste are created

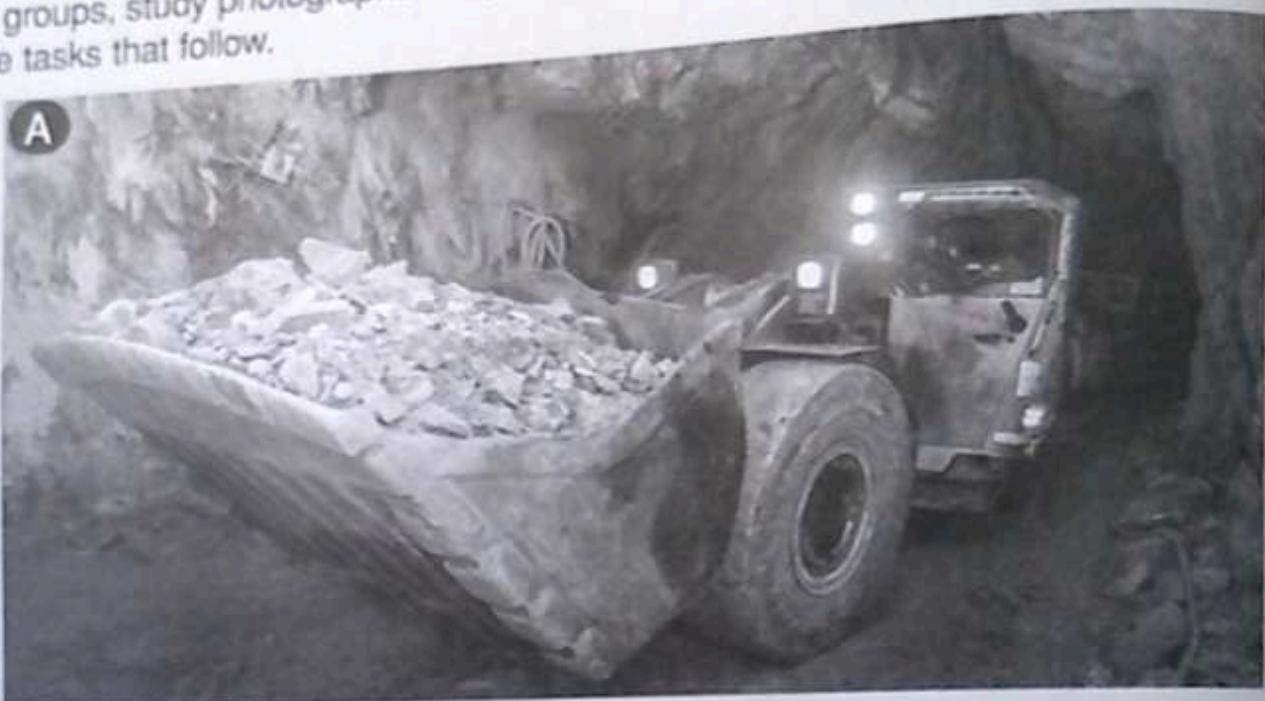
### • Underground Mining (Learner's Book pages 5-7)

In Senior Two you learnt about underground mining. After doing tasks in activity 25.3, you will learn more about underground mining.

#### Activity 25.3 Exploring underground mining

In groups, study photographs in figure 25.3 showing some mining methods and do the tasks that follow.

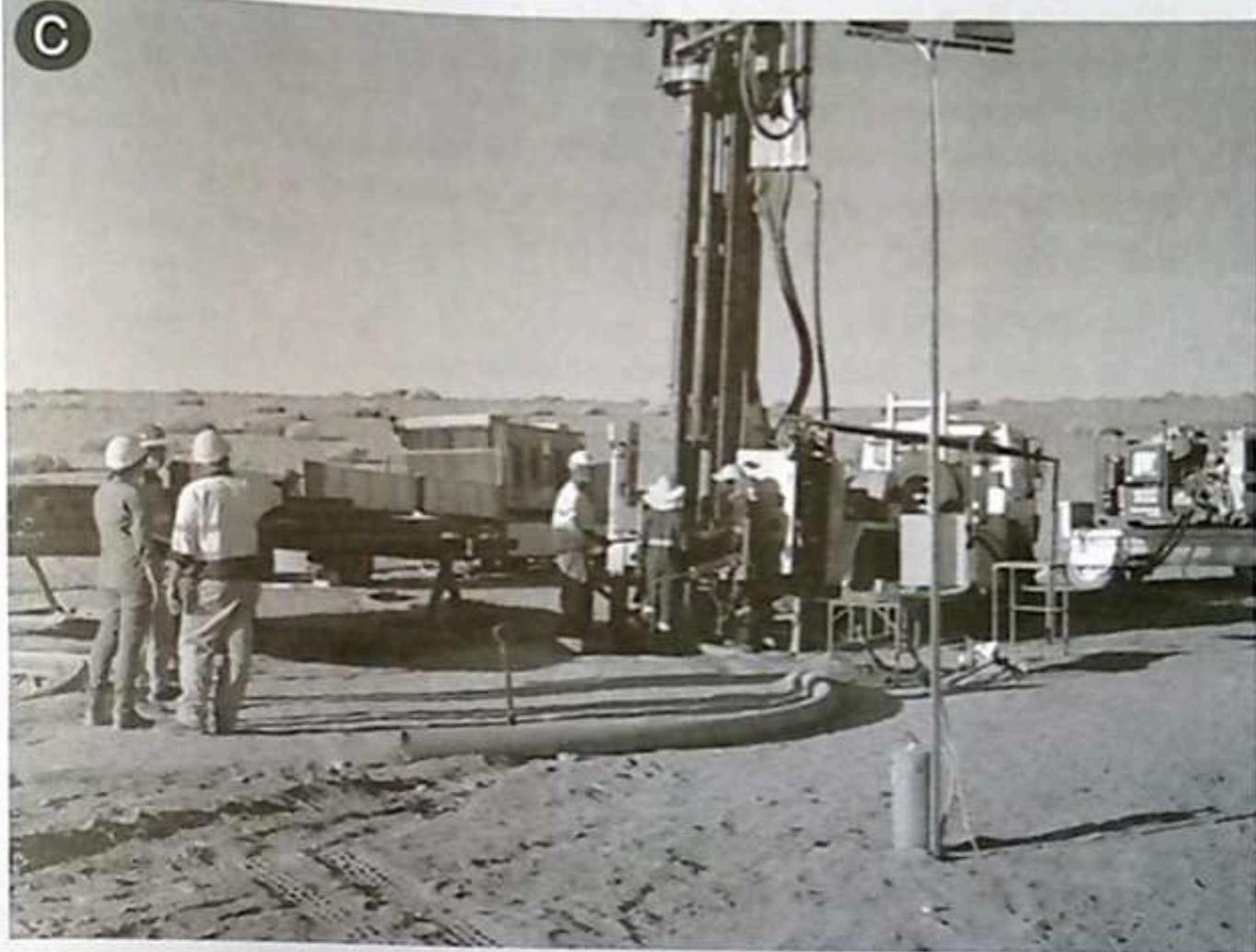
A



B



C



*Figure 25.3: Some mining methods*

- 1 Which of the photographs in figure 25.3 shows underground mining?
- 2 Suggest minerals which can be mined using this method.
- 3 With the aid of diagrams, describe underground mining.
- 4 What are the advantages and disadvantages of this method of mining?
- 5 Present your work to the rest of the class through discussion.

**Resources to use:** Photographs provided in the learner's book, writing materials

**Skills:** Photographic interpretation, interpersonal skills, critical thinking, communication, forming own opinions.

**Methods:** Group, brainstorming and class discussion

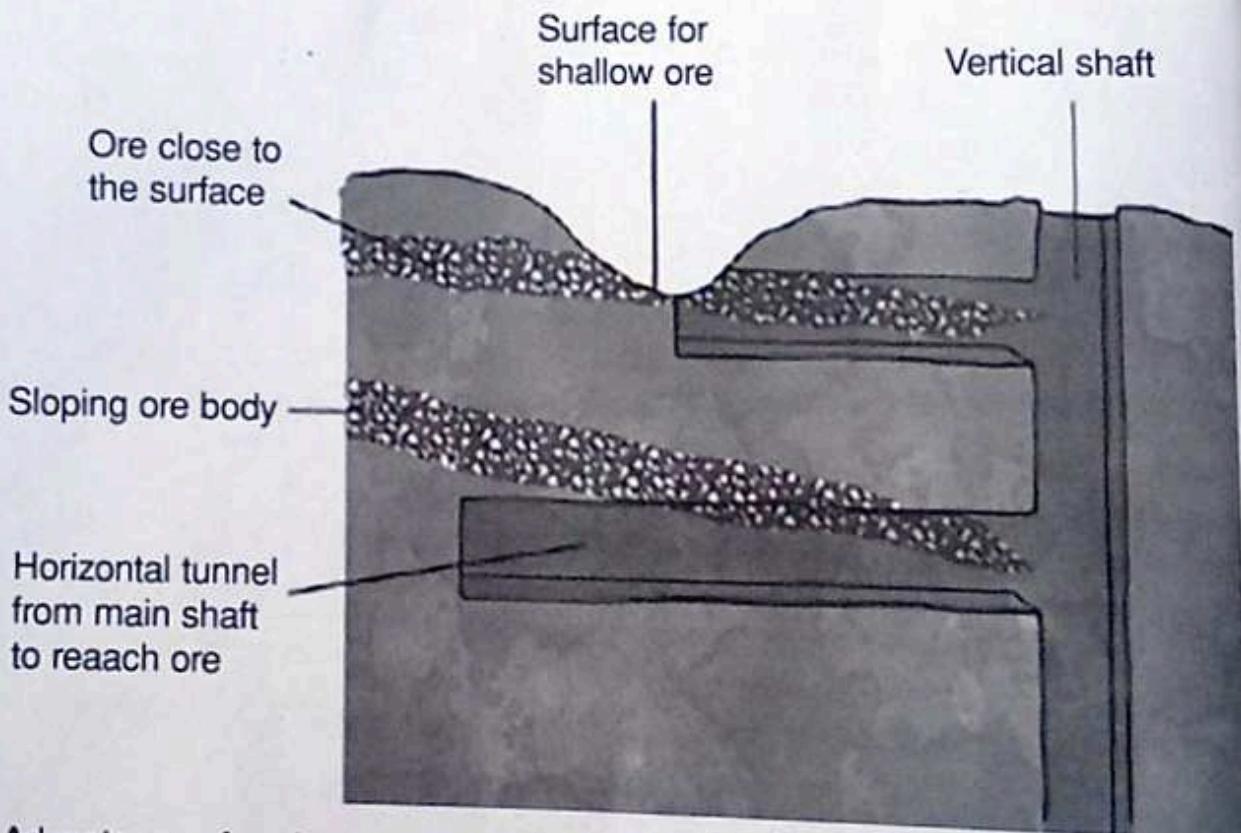
## ● Instructions to the teacher

- (a) Organise learners.
- (b) Provide learners with the learner's book and tell them the page on which the tasks are.
- (c) Instruct learners to study photographs and do the tasks that follow.
- (d) Observe learners as they discuss in their groups and assist them as they do the task.

- (e) Make sure everyone is actively involved.
- (f) Converse with learners as they do the activity.
- (g) Instruct learners to present their work.
- (h) Encourage the learners to explain and defend their views.
- (i) Assess the learners' work and give them feedback.

### Suggested responses

- 1 Photograph A and B
- 2 Gold, silver, iron, copper, zinc, nickel, tin and lead
- 3 Underground mining is used to extract ore from below the surface of the earth safely, economically and with as little waste as possible. The entry from the surface to an underground mine may be through a horizontal or vertical tunnel, known as a shaft or decline. Shafts are sunk to often very great depths in deep mines (sometimes more than 3 km deep) to access various resources deep under the ground. Drives and crosscuts connect to the shaft at various levels. Shafts are used for access by personnel and equipment, ventilation, and ore or waste haulage.



- 4 Advantages of underground mining
  - ▲ Minerals that occur deep underground are mined
  - ▲ The earth's surface is not destroyed

## Disadvantages of underground mining

- ▲ Accidents due to collapse of tunnels

- ▲ Landslides due to instability of the land
- ▲ Air pollution within tunnels causing deaths

### Drilling Method (Learner's Book pages 7-9)

This method is used in the extraction of oil and natural gas from the ground on to the surface. After doing tasks in activity 25.4, you will understand more about drilling method.

#### Activity 25.4 Drilling mining method

In groups; study photographs in figure 25.4 showing some mining methods and do the task that follow.





*Figure 25.4: Some mining methods*

- 1 Which of the photographs in figure 25.4 shows drilling mining method?
- 2 With the aid of diagrams, describe drilling mining method.
- 3 What are the advantages and disadvantages of this method of mining.
- 4 Present your work to the rest of the class through discussion.

**Resources to use:** Photographs provided in the learner's book, writing materials

**Skills:** Photographic interpretation, interpersonal skills, critical thinking, communication, forming own opinions.

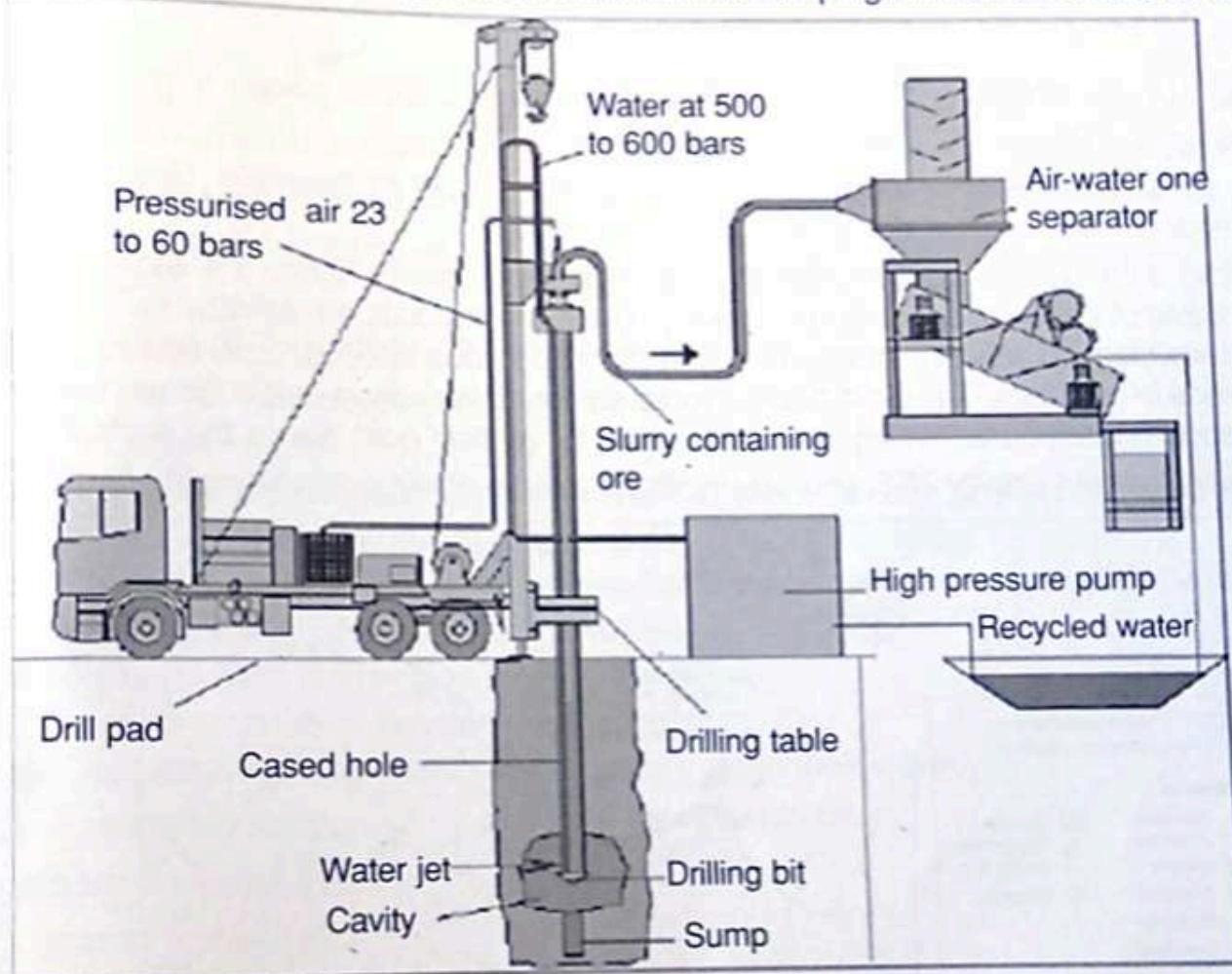
**Methods:** Group, brainstorming and class discussion

**Instructions to the teacher**

- (a) Organise learners.
- (b) Provide learners with the learner's book and tell them the page on which the tasks are.
- (c) Instruct learners to study photographs and do the tasks that follow.
- (d) Observe learners as they discuss in their groups and assist them as they do the task.
- (e) Make sure everyone is actively involved.
- (f) Converse with learners as they do the activity.
- (g) Instruct learners to present their work.
- (h) Encourage the learners to explain and defend their views.
- (i) Assess the learners' work and give them feedback.

**Suggested responses**

- 1 Photograph C
- 2 Oil (petroleum)
- 3 This method is used to extract liquids and fluids from the ground; these include oil and gases. A drill is sunk into the ground and upon reaching the liquid, the mineral flows surface-ward due to differences. Pumping the fluid out is also done.

**4 Advantages of drilling method**

- They are easy to set up and organise in terms of numbers and equipment.
- They are easy to monitor.
- Many can be used as purely fitness activities.
- Players are unable to hide in many of them because they are quite structured and tightly-controlled.

**Disadvantages**

- Accidents due to collapse of tunnels
- Landslides due to instability of the land
- Air pollution within tunnels causing deaths

You have learnt that in drilling method, oil in the underground is trapped under pressure, when the drill reaches the oil or the gas bearing rock, the oil flows upwards to the surface. Where pressure is low, a derrick is constructed to pump the oil or gas to the surface.

## Case studies of Major mining countries in Africa

(Learner's Book pages 9-15)

Some of the major mining countries in Africa include south Africa, Democratic Republic of Congo, Zambia, Nigeria, Angola and Libya.

### Gold mining in South Africa (Learner's Book pages 9-11)

South Africa is one of the African countries whose development is associated with minerals such as gold. South Africa is the leading gold producer in the world. Gold is a shiny yellowish mineral that does not rust or fade in colour.

Gold is the world's most valuable mineral throughout history. Today it is widely used as a basis of the world's money and jewelry. The main deposits are at Witwatersrand gold mines close to Johannesburg, a city that developed due to Gold. Gold occurs as small grains in hard rock. The Gold-bearing rocks are found very deep below the earth surface; hence underground mining method is used for getting gold ore to the surface. After doing tasks in activity 25.5, you will understand more about gold mining in south Africa.

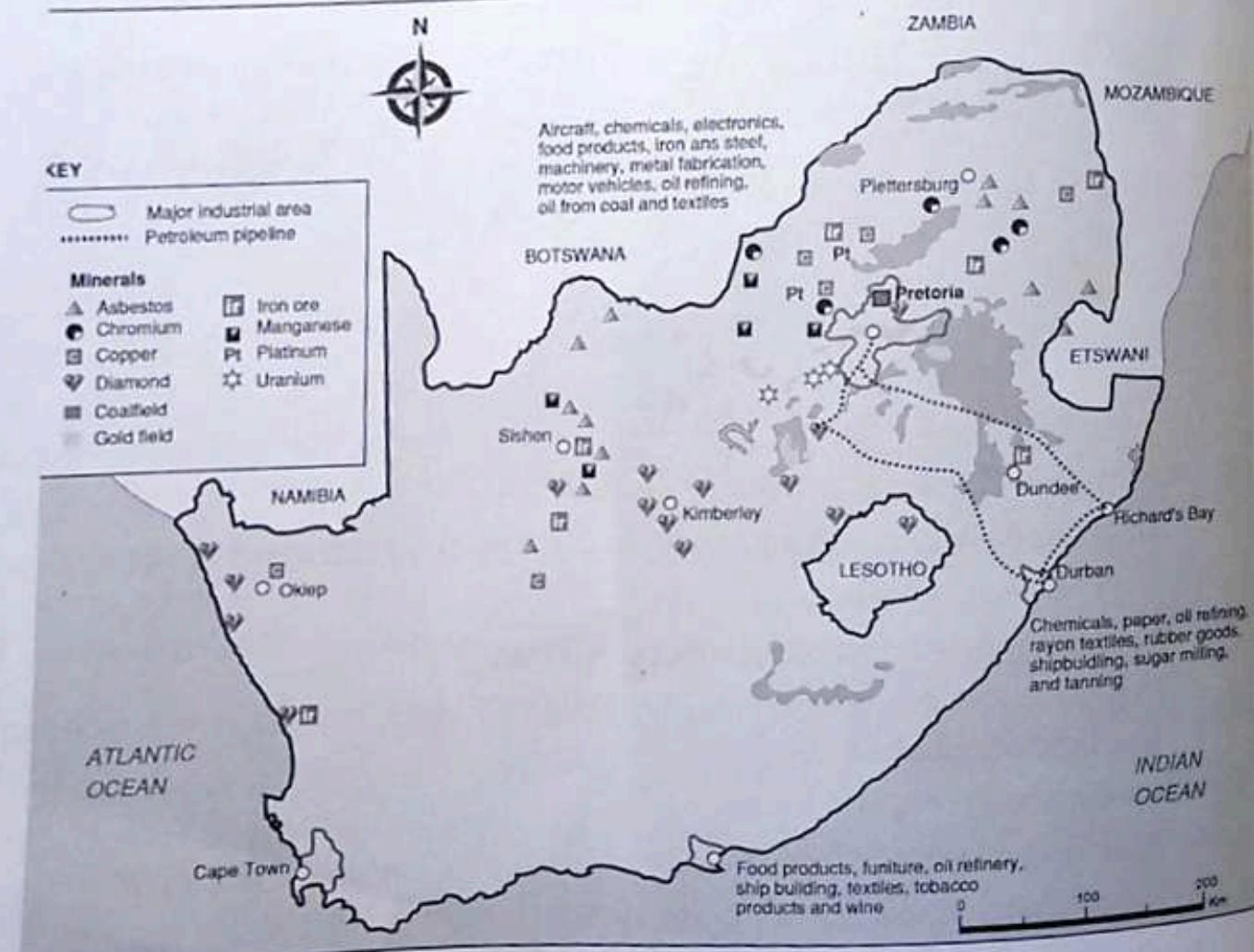


Figure 25.5: A map showing mining in South Africa

**Activity 25.5**

**Discovering the different minerals and main mining areas in Africa**  
 Study the map in Figure 25.5 showing mining in South Africa and do the following tasks.

- 1 Copy the map in Figure 25.5 showing mining in South Africa into your notebook.
- 2 Identify other minerals which are mined in South Africa and where they are mined?
- 3 Suggest methods of mining used in the extraction of gold in south Africa?
- 4 Why do you think gold mining is important to the development of South Africa?
- 5 Explain the problems affecting gold mining in South Africa?
- 6 Present your work to the rest of the class through discussion.

**Resources to use:** Map provided in the learner's book, writing materials, library, internet

**Skills:** Map reading, interpersonal skills, critical thinking, communication, forming own opinions.

**Methods:** Group, brainstorming and class discussion

**Instructions to the teacher**

- (a) Organise learners.
- (b) Provide learners with the learner's book and tell them the page on which the tasks are.
- (c) Instruct learners to study the map and do the tasks that follow.
- (d) Observe learners as they discuss in their groups and assist them as they do the task.
- (e) Make sure everyone is actively involved.
- (f) Converse with learners as they do the activity.
- (g) Instruct learners to present their work.
- (h) Encourage the learners to explain and defend their views.
- (i) Assess the learners' work and give them feedback.

**Suggested responses**

- . 1. Map in figure 25.2
- 2 Diamonds, Platinum, Chromite and Iron ore.
- 3 Under ground mining
- 4 It leads to the development of infrastructure such as roads, hospitals and power lines
  - ↗ It leads to the generation of government revenue
  - ↗ It has led to the development of social services
  - ↗ It is a source of employment
  - ↗ It leads to economic diversity
  - ↗ Sources of income through employment
  - ↗ It is a source of foreign exchange
- 5 Poor transport network which hinders the transportation of minerals and access to the mined sites.

- ▲ Political instabilities and terrorist attacks greatly negatively affect the mining process
- ▲ Inadequate skilled labor forcing the industry to almost entirely depend on imported labor which makes it costly and lowers the productivity.
- ▲ Most minerals exist in small scattered quantities therefore uneconomical to mine. There is inadequate power supply which hinders processing of the minerals for value addition
- ▲ Corruption and embezzlement of funds by the government officials
- ▲ Profit repatriation by foreign mining companies

You have found out that mining is a very important economic activity in South Africa. The country has a lot of mineral resources including gold, copper, diamonds, iron ore, manganese and platinum as shown in table. South Africa is one of the leading producers of many of these minerals in the world. Minerals make up over 85% of her exports.

Table 25.2: Sector contributions to mineral exports in South Africa (2016)

Minerals	Quantity in percentage
Gold	17
PGM	26
Iron ore	20
Coal	18
Diamonds	03
Manganese	06
Chrome	02
Other	08

Source: chamber of mines estimates; stats SA (2016)

## ● Copper mining in Zambia (Learner's Book pages 11-12)

Zambia is one of the leading mining countries in tropical Africa as well as the in Tropical world. The most important mineral mined in Zambia is copper; extracted from Katanga copper belt that extends from Democratic Republic of Congo. Copper mines in Zambia are controlled by Zambia consolidated copper corporation. Copper is the highest export earner of Zambia's foreign exchange. Apart from copper Zambia has other important minerals as you are going to discover.

The Zambian copper belt alone covers a zone of about 110km long by 50km wide. Zambia's copper accounts for 10% of the world's total production. Copper industries are the largest consumers of electricity generated from Kariba and Kafue power generation stations. Smelting is done to get rid of some impurities by melting. After doing tasks in activity 25.6, you will learn more about copper mining in Zambia.

Copper/Cobalt
Gold
Lead Zinc
Nickel
Tin
Manganese
Iron
AQ
Ed
AM

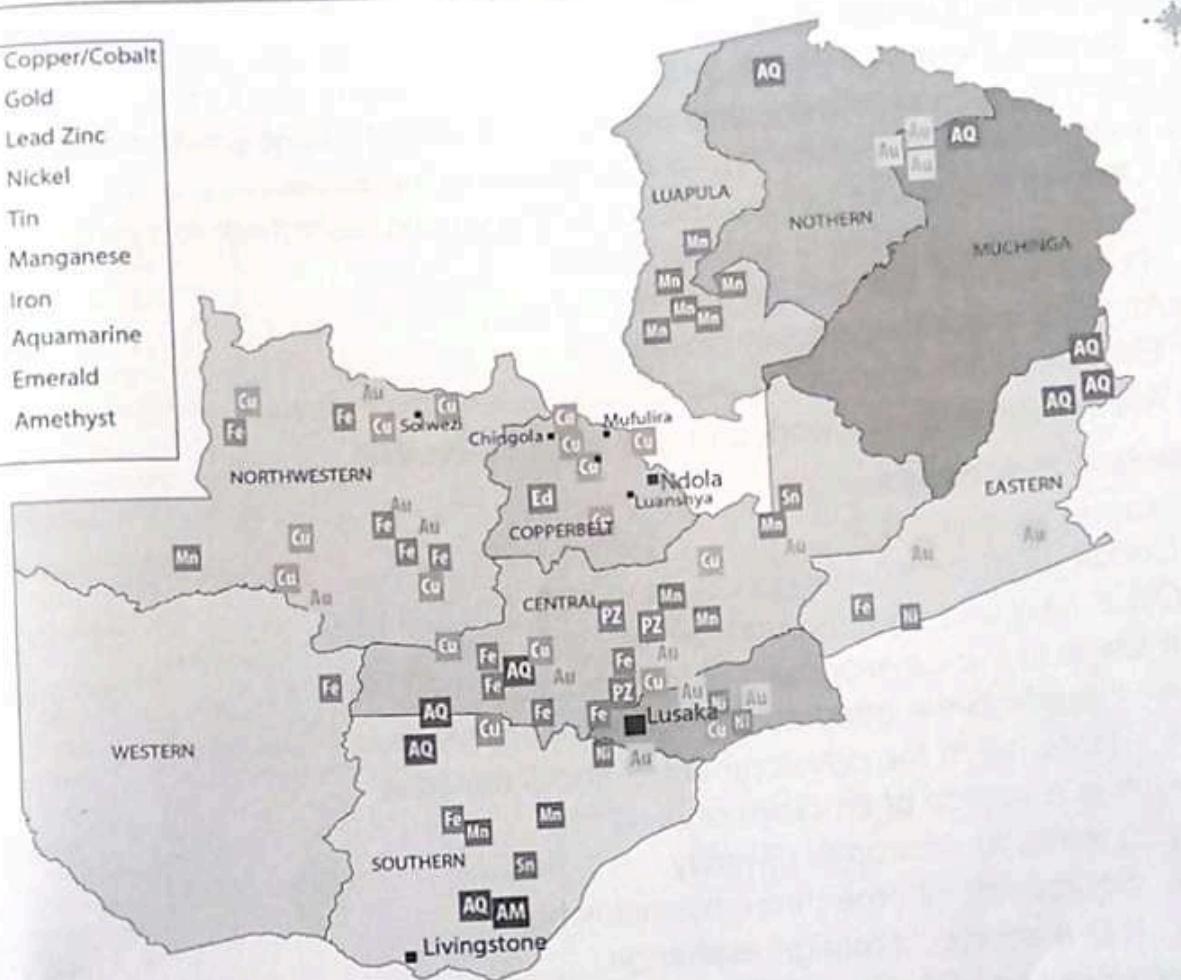


Figure 25.6: A map showing major mining centres in Zambia

### Activity 25.6 Understanding copper mining in Zambia

In groups, study the map in figure 25.6 showing the major mining centres in Zambia and do the following tasks.

- 1 Copy the map in figure 25.6 showing the mining centres in Zambia into your notebook.
- 2 Make a list of minerals are mined in Zambia?
- 3 Which methods of mining used in the extraction of copper in Zambia ?
- 4 How is copper mining important to the development of Zambia?
- 5 What are the problems affecting copper mining in Zambia?
- 6 Swap your work with other groups and make comments.

**Resources to use:** Map provided in the learner's book, writing materials, library, internet

**Skills:** Map reading, interpersonal skills, critical thinking, communication, forming own opinions.

**Methods:** Group and class discussion

**Instructions to the teacher**

- (a) Organise learners
- (b) Provide learners with the learner's book and tell them the page on which the tasks are
- (c) Instruct learners to study map and do the tasks that follow.
- (d) Observe learners as they discuss in their groups and assist them as they do the task.
- (e) Make sure everyone is actively involved.
- (f) Converse with learners as they do the activity.
- (g) Instruct learners to present their work.
- (h) Encourage the learners to explain and defend their views.
- (i) Assess the learners' work and give them feedback.

**Suggested responses**

1. Map in figure 25.6
2. Cobalt, coal, silver, manganese and zinc.
3. Open cast and underground mining
4. It leads to the development of infrastructure
  - ▲ It leads to the generation of government revenue
  - ▲ It has led to the development of social services
  - ▲ It is a source of employment
  - ▲ It leads to economic diversity
  - ▲ Sources of income through employment
  - ▲ It is a source of foreign exchange
5. Poor transport network which hinders the transportation of minerals and access to the mined sites.
  - ▲ Political instabilities and terrorist attacks greatly negatively affect the mining process
  - ▲ Inadequate skilled labor forcing the industry to almost entirely depend on imported labor which makes it costly and lowers the productivity.
  - ▲ Most minerals exist in small scattered quantities therefore uneconomical to mine. There is inadequate power supply which hinders processing of the minerals for value addition
  - ▲ Corruption and embezzlement of funds by the government officials.
  - ▲ Profit repatriation by foreign mining companies.

You have found out that Zambia depend mostly on the exploitation and export of copper.

Methods used to mine copper ore are both open cast and underground shaft mining.

## **Copper mining in Democratic Republic of Congo (Learner's Book pages 13-14)**

Congo is one of the countries with various minerals. Unfortunately most of her minerals are not fully utilised and exploited, the major mineral mined is copper.

Copper constitutes 30% of Congo's mineral export and the major mining town is Lubumbashi. Other than copper, Congo has other important minerals as you are going to learn. After doing tasks in activity 25.7

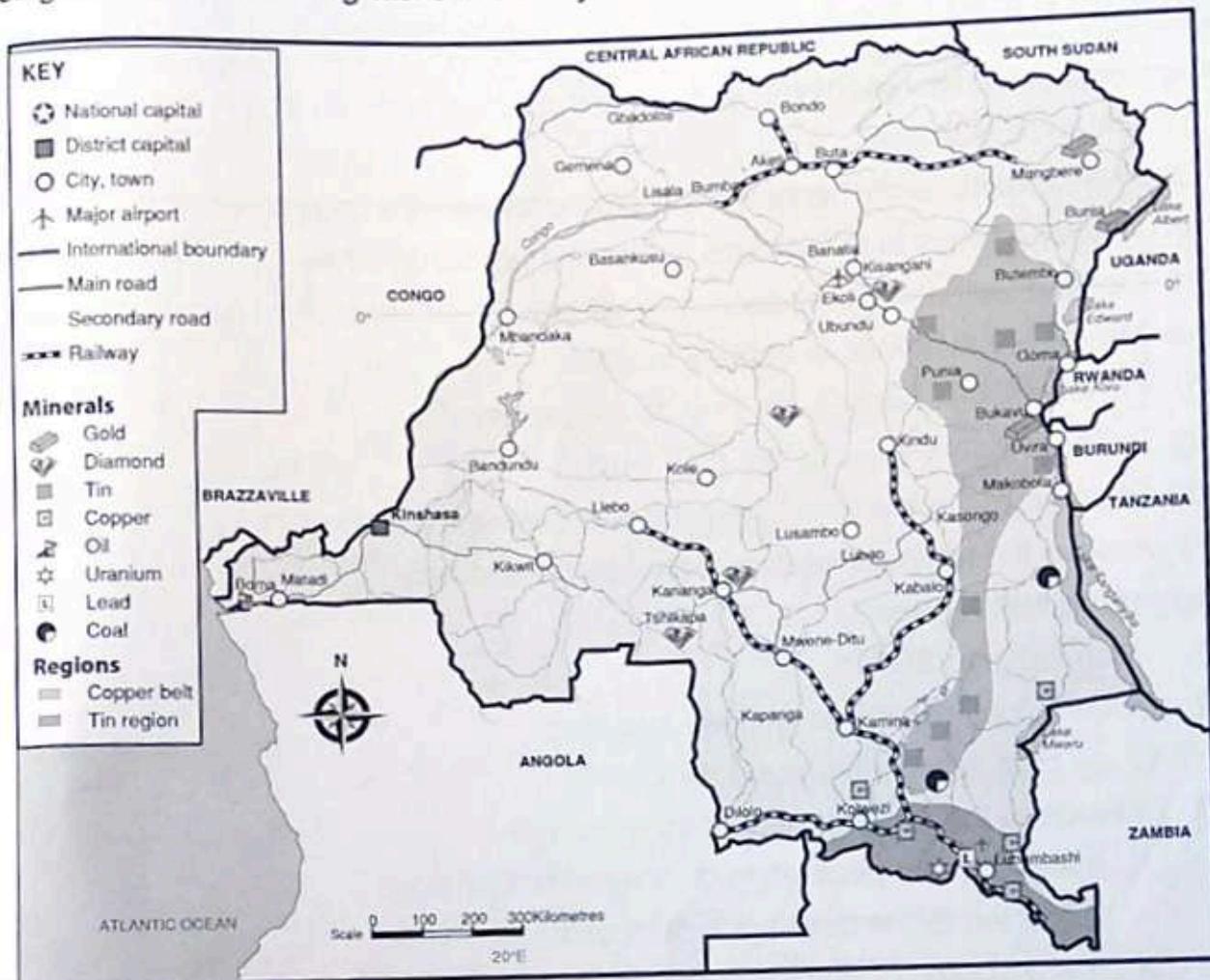


Figure 25.7: A map showing major mining centres in Congo

### Activity 25.7 Understanding copper mining in Congo

In pairs, Study the map in figure 25.7 showing the major mining centres in Congo and do the following tasks.

In pairs, study the map in figure 25.7 showing the major mining centres in Congo and do the following tasks.

- 1 Copy the map in Figure 25.7 showing mining in Congo into your notebook.
- 2 Identify minerals mined in Congo
- 3 Suggest methods of mining used in the extraction of copper in Congo.
- 4 How is copper mining important to the development of Congo
- 5 What are the problems affecting copper mining in Congo?
- 6 Swap your work and comment on each other's group work.

**Resources to use:** Map provided in the learner's book, writing materials, library, internet.

**Skills:** Map reading, interpersonal skills, critical thinking, communication, forming own opinions.

**Methods:** Think-pair group and class discussion

#### Instructions to the teacher

- Organise learners.
- Provide learners with the learner's book and tell them the page on which the tasks are.
- Instruct learners to study maps and do the tasks that follow.
- Observe learners as they discuss in their groups and assist them as they do the task.
- Make sure everyone is actively involved.
- Converse with learners as they do the activity.
- Instruct learners to present their work.
- Encourage the learners to explain and defend their views.
- Assess the learners' work and give them feedback.

#### Suggested responses

- Map in figure 25.7
- Cobalt, coal, silver, manganese and zinc.
- Open cast and underground mining
- It leads to the development of infrastructure
  - ↗ It leads to the generation of government revenue
  - ↗ It has led to the development of social services
  - ↗ It is a source of employment
  - ↗ It leads to economic diversity
  - ↗ Sources of income through employment
  - ↗ It is a source of foreign exchange
- Poor transport network which hinders the transportation of minerals and access to the mined sites.
  - ↗ Political instabilities and terrorist attacks greatly negatively affect the mining process
  - ↗ Inadequate skilled labor forcing the industry to almost entirely depend on imported labor which makes it costly and lowers the productivity.
  - ↗ Most minerals exist in small scattered quantities therefore uneconomical to mine. There is inadequate power supply which hinders processing of the minerals for value addition
  - ↗ Corruption and embezzlement of funds by the government officials.
  - ↗ Profit repatriation by foreign mining companies

## Oil mining in Nigeria (Learner's Book pages 14-15)

In Senior Two, you learnt about oil drilling in East Africa, where you realised that oil is extracted from underground. You further learnt that Oil is a very important resource which supports the development of a country's economy. Today, Nigeria is the largest producer and exporter of oil in Africa. Natural gas, coal, tin, and columbite are other minerals mined in Nigeria. After doing tasks in activity 25.8, you will understand about oil mining in Nigeria.

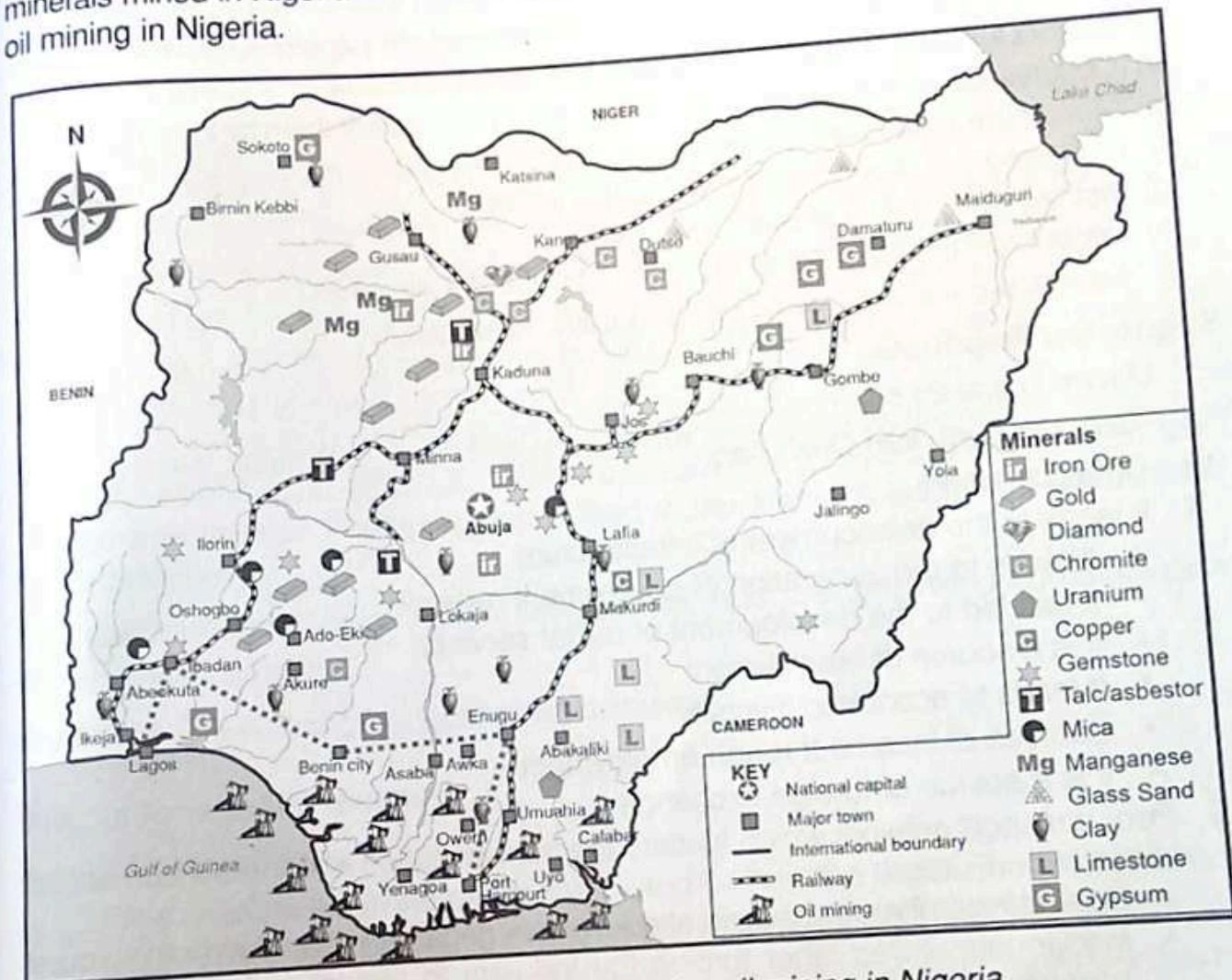


Figure 25.8: A map showing oil mining in Nigeria

### Activity 25.8 Understanding oil mining in Nigeria

In pairs, Study the map in figure 25.8 a map showing oil mining in Nigeria and do the following tasks.

1. Copy the map in Figure 25.8 into your notebook..
2. Make a list of other minerals mined in Nigeria
3. What methods of mining are used in the extraction of oil in Nigeria?
4. Why is oil mining important to the development of Nigeria?.

**Resources to use:** Map provided in the learner's book, writing materials, library, internet  
**Skills:** Map reading, interpersonal skills, critical thinking, communication, forming own opinions.

**Methods:** Think-pair and share ,group, and class discussion

### Instructions to the teacher

- Organise learners.
- Provide learners with the learner's book and tell them the page on which the tasks are.
- Instruct learners to study map and do the tasks that follow.
- Observe learners as they discuss in their groups and assist them as they do the task.
- Make sure everyone is actively involved.
- Converse with learners as they do the activity.
- Instruct learners to present their work.
- Encourage the learners to explain and defend their views.
- Assess the learners' work and give them feedback.

### Suggested responses

- Map in Figure 25.8
- Talc, Gypsum, Iron Ore, Lead.
- Drilling method
- It leads to the development of infrastructure
  - It leads to the generation of government revenue
  - It has led to the development of social services
  - It is a source of employment
  - It leads to economic diversity
  - Sources of income through employment
  - It is a source of foreign exchange
- Poor transport network which hinders the transportation of minerals and access to the mined sites.
  - Political instabilities and terrorist attacks greatly negatively affect the mining process
  - Inadequate skilled labor forcing the industry to almost entirely depend on imported labor which makes it costly and lowers the productivity.
  - Most minerals exist in small scattered quantities therefore uneconomical to mine. There is inadequate power supply which hinders processing of the minerals for value addition
  - Corruption and embezzlement of funds by the government officials.
  - Profit repatriation by foreign mining companies

You have found out that oil is mined by the drilling method. An important equipment used in this activity is called a **derrick**. This is sunk underground and the oil is pumped on to the surface. Oil is drilled with many impurities; this kind of unprocessed oil is called **crude oil**. It is thick and bulky and needs to be refined before it can be used. From the oil fields, oil is transported by pipeline to the refineries.

Nigeria is also involved in mining other minerals like coal, tin, iron ore, phosphates and limestone

## Benefits of mining in Africa (Learner's Book page 15)

Mineral resource extraction has contributed to the development of Africa. Large mining operations in Africa have generated big profits for foreign companies, however most of the mineral-rich countries in Africa enjoyed a mining boom between 2002 and 2007 as metal and oil prices nearly tripled. After doing tasks in activity 25.9, you will understand the benefits of mining in Africa.

### Activity 25.9 Understanding the benefits of mining in Africa

In groups; carry out a textbook or internet research on the benefits of mining in Africa and do the following tasks.

- 1 What are the benefits of mining to the development of Africa?
- 2 Explain why the economic benefits discussed in (1) above do not always benefit the people of Africa.
- 3 Present your work to the rest of the class through discussion.

**Resources to use:** Photographs provided in the learner's book, writing materials, library, internet

**Skills:** Photographic interpretation, interpersonal skills, critical thinking, communication, forming own opinions.

**Methods:** Research, group and class discussion

### Instructions to the teacher

- (a) Organise learners.
- (b) Provide learners with the learner's book and tell them the page on which the tasks are.
- (c) Instruct learners to study map and do the tasks that follow.
- (d) Observe learners as they discuss in their groups and assist them as they do the task.
- (e) Make sure everyone is actively involved.
- (f) Converse with learners as they do the activity.
- (g) Instruct learners to present their work.
- (h) Encourage the learners to explain and defend their views.
- (i) Assess the learners' work and give them feedback.

### Suggested responses

- 1 It leads to the development of infrastructure
  - ^ It leads to the generation of government revenue

- It has led to the development of social services
  - It is a source of employment
  - It leads to economic diversity
  - Sources of income through employment
  - It is a source of foreign exchange
- 2 The main reason is that most of the minerals are exported to outside countries and the industries within are owned by investors
- 3 Mining is a capital-intensive industry, with new mine developments typically requiring extensive ground preparation, the construction of plant, the acquisition of specialised equipment and the creation of facilities for the disposal of mine waste.

You have found out that mining benefits African countries. However, most of the benefits of mining are not enjoyed by the African people. This is because most of the mining companies are owned by foreign people and companies because it requires a lot of capital which African countries can not afford. Mining is **capital intensive**. The foreign companies send the profits back to their home countries. This is called **profit reparation**.

## Negative impacts of mining in Africa (Learner's Book pages 15-16)

Across the world, mining affects the environment negatively. After doing tasks in activity 25.10, you will understand the negative impacts of mining in Africa.

### Activity 25.10

Understanding the negative impacts of mining in Africa

In groups; Study photographs A-D in Figure 25. 5 and do the following tasks.





*Figure 25.9: Effects of mining on the environment*

- 1 Explain how mining affects the environment in each of the photographs in figure 25.5.
- 2 Suggest any other ways in which mining can affect the environment.
- 3 Present your work to the rest of the class through discussion.

**Resources to use:** Photographs provided in the learner's book, writing materials

**Skills:** Photographic interpretation, interpersonal skills, critical thinking, communication, forming own opinions.

**Methods:** Group and class discussion

#### Instructions to the teacher

- (a) Organise learners.
- (b) Provide learners with the learner's book and tell them the page on which the tasks are.
- (c) Instruct learners to study photographs and do the tasks that follow.
- (d) Observe learners as they discuss in their groups and assist them as they do the task.
- (e) Make sure everyone is actively involved.
- (f) Converse with learners as they do the activity.
- (g) Assess the learners' work and give them feedback.
- (h) Encourage the learners to explain and defend their views.
- (i) Assess learner's work and give them feedback.

#### Suggested responses

- 1 Photograph A- Leaving open pits behind
  - ▲ Photograph B- deforestation
  - ▲ Photograph C-flooding
  - ▲ Photograph D-dust pollution
- 2 Erosion
  - ▲ Contamination and alteration of soil profiles
  - ▲ Contamination of local streams and wetlands
  - ▲ An increase in noise level

You have learnt that to establish a mine vegetation is cleared, this causes deforestation, soil erosion and loss of biodiversity which has an impact on the environment.

## Problems faced by mining in Africa (Learner's Book pages 16-17)

In Senior Two, you learnt about problems facing mining in East Africa, you realised that mining was referred to as a robber industry. What do you remember about robber industries? Africa is a continent that is highly endowed with minerals, these minerals are not fully utilised. This is because of a number of factors that limit the development of the mining sector. After doing tasks in activity 25.11, you will understand the problems affecting the mining industry in Africa.

### Activity 25.11

Understanding the problems affecting the mining industry in Africa

In groups,

- 1 Explain the problems facing mining in Africa.
- 2 Suggest possible solutions to the problem affecting the mining industry in Africa.
- 3 Present your work to the rest of the class

**Resources to use:** writing materials

**Skills:** interpersonal skills, critical thinking, communication, forming own opinions.

**Methods:** Group discussion

### Instructions to the teacher

- (a) Organise learners.
- (b) Provide learners with the learner's book and tell them the page on which the tasks are.
- (c) Observe learners as they discuss in their groups and assist them as they do the task.
- (d) Make sure everyone is actively involved.
- (e) Converse with learners as they do the activity.
- (f) Instruct learners to present their work.
- (g) Encourage the learners to explain and defend their views.
- (h) Assess the learners' work and give them feedback.

### Suggested responses

- 1 Inadequate skilled labor forcing the industry to almost entirely depend on imported labor which makes it costly and lowers the productivity.
  - Most minerals exist in small scattered quantities therefore uneconomical to mine. There is inadequate power supply which hinders processing of the minerals for value addition.
  - Over exploitation of minerals in some cases leading to exhaustion and a threat of closure of some mines for example Kilembe mines in Kasere Uganda.
  - Most of the mineral resources appear in small quantities and are of low quality.
  - Most minerals are buried deep underground and it becomes expensive to

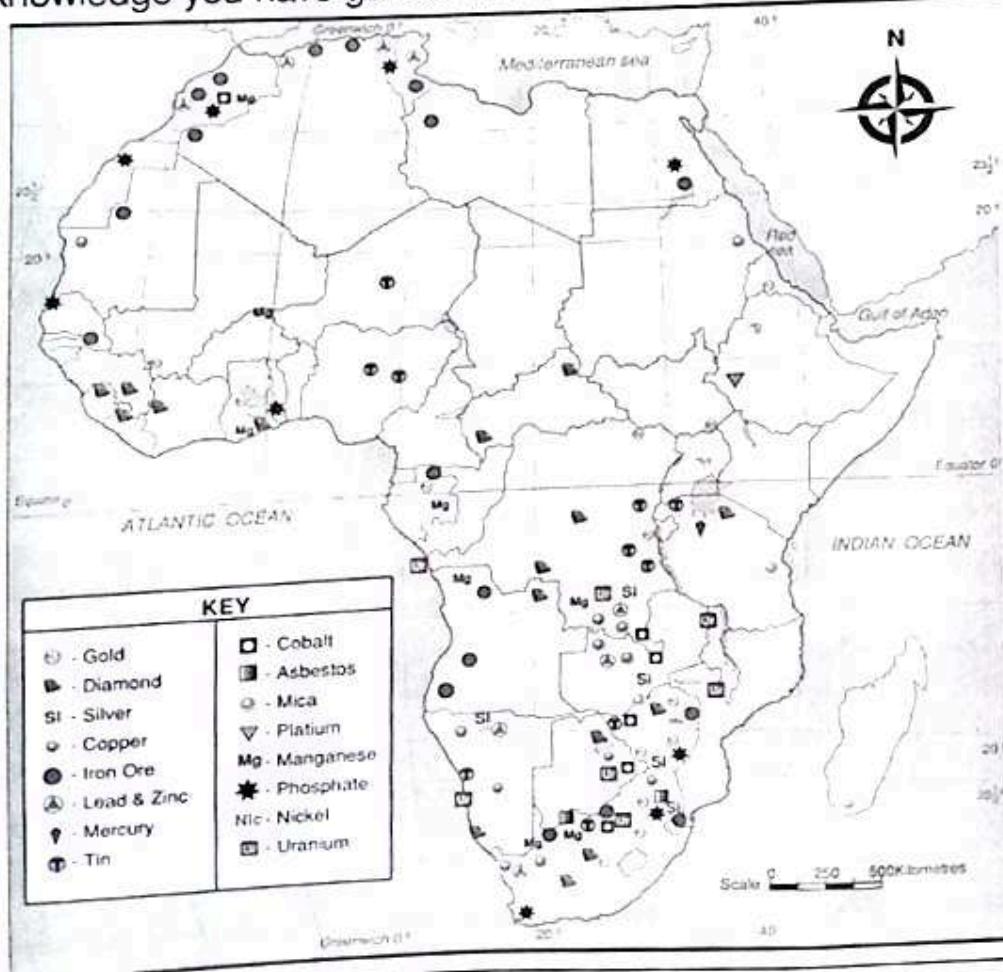
- extract them since it requires the use of tunnel or adit mining.
- The minerals are located in remote and inaccessible areas, of seasonal roads.
  - Price fluctuations of mineral products on world market because most minerals are of low grade and this discourages their mining.
- 2 Inadequate skilled labour can be solved by focusing on the use of machines.
- Minerals being located in remote areas can be overcome by developing the transport and communication networks.
  - Price fluctuations on market can be solved by the government setting minimum and maximum price.

You have found out that although mining is carried out in Africa, it still experiences problems that affect the development of the mining sector. There are many accidents in the mines which causes loss of lives and equipment. You have also learnt that mining leads to pollution of air, land and water resulting from dumping of wastes.

### Sample Activity of Integration (Learner's Book page 17)

Mr. George Barrow is an American who would like to invest in the mining in Africa. Similar investors have tried and failed to implement their investments plans in the mining industry because of many challenges.

Using the knowledge you have gained in this chapter,

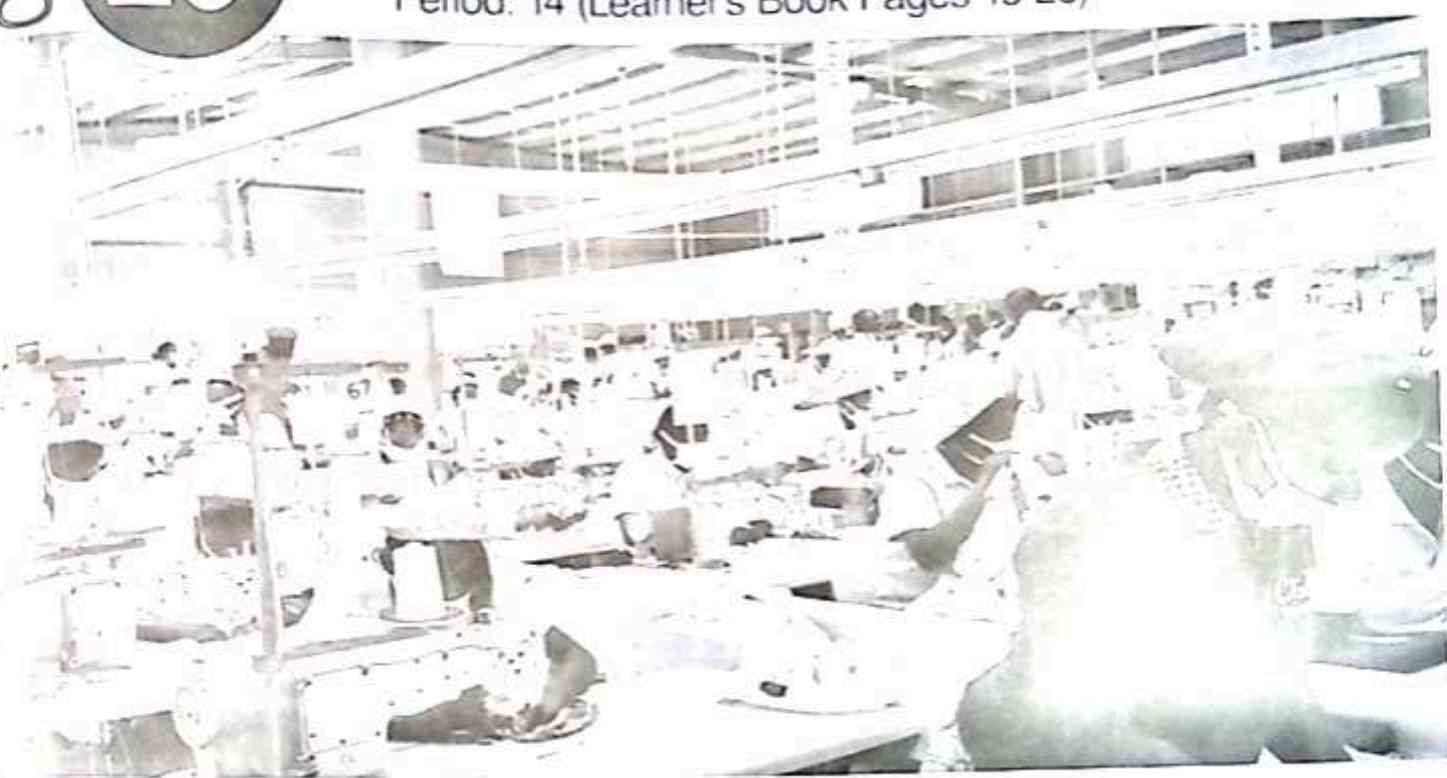


Task : Write an advice note of 600 words that will help Mr. George Barrow to implement his plans.

Expected output	Basis of evaluation	Relevance	Accuracy	Coherence	Excellence
An advice note of about 600.	Main minerals in Africa and mining methods	The learner earns: 3 points if the learner gives 7-6 main minerals in Africa and mining methods 2 points if the learner gives 4-5 main minerals in Africa and mining methods 1 point if the learner gives 3 main minerals in Africa and mining methods	The learner earns: 3 points if 7-6 main minerals in Africa and mining methods are correctly identified 2 points if 4-5 main minerals in Africa and mining methods are correctly identified 1 point if 3 main minerals in Africa and mining methods are correctly identified	The learner earns: 3 points if 7-6 main minerals in Africa and mining methods are logically well-linked 2 points if 4-5 main minerals in Africa and mining methods are logically well-linked 1 point if 3 main minerals in Africa and mining methods are logically well-linked	The learner earns: I score if the learner give unique responses
	How they contribute to development	The learner earns: 3 points if the learner gives 7-6 the how they contribute to development 2 points if the learner gives 4-5 how they contribute to development 1 point if the learner gives 3 how they contribute to development	The learner earns: 3 points if the learner gives 7-6 the how they contribute to development 2 points if the learner gives 4-5 how they contribute to development 1 point if the learner gives 3 how they contribute to development	The learner earns: 3 points if the learner gives 7-6 how they contribute to development 2 points if the learner gives 4-5 how they contribute to development 1 point if the learner gives 3 how they contribute to development	
	Impacts of mining	The learner earns: 3 points if the learner gives 7-6 impacts of mining 2 points if the learner gives 4-5 impacts of mining 1 point if the learner gives 3 impacts of mining	The learner earns: 3 points if 7-6 impacts of mining are correctly identified 2 points if 4-5 impacts of mining are correctly identified 1 point if 3 impacts of mining are correctly identified	The learner earns: 3 points if 7-6 impacts of mining are logically well-linked 2 points if 4-5 impacts of mining are logically well-linked 1 point if 3 impacts of mining are logically well-linked	
Total scores/28		/9	/9	/9	/1

# Industrial development in Africa

Period: 14 (Leamer's Book Pages 19-26)

**Key words**

- ↗ manufacturing industries
- ↗ heavy industry
- ↗ light industries
- ↗ consumer goods
- ↗ primary goods
- ↗ industrial goods/producer goods
- ↗ minimum wage
- ↗ economic diversification
- ↗ raw materials
- ↗ rural urban migration
- ↗ pollution
- ↗ exports
- ↗ products

**After studying this chapter, the learner should be able to;**

- ↗ know the meaning of manufacturing industries.
- ↗ understand the factors that influence the distribution and development of any three manufacturing industries
- ↗ understand the effects of manufacturing industries on the environment
- ↗ understand the use of energy resources in the development of manufacturing industries in Uganda or the rest of East Africa
- ↗ visit a local factory to find out how it works and its effects on the environment
- ↗ appreciate the contribution of manufacturing industries in transforming primary products
- ↗ understand the benefits manufacturing industries can bring to African countries
- ↗ understand the problems of developing manufacturing industries in African countries
- ↗ study, through research, examples of areas with manufacturing industries
- ↗ draw a map showing important industrial areas in Africa
- ↗ appreciate why many African countries are trying to develop manufacturing industries

**Introduction (Leamer's Book Page 20)****Guide learners to read the introduction.**

Did you know that most of the things you use in your daily life are manufactured or processed by industries? Is there any manufacturing industry near your home or school? What does it manufacture?

In this chapter you are going to understand the importance and difficulties of industrial development in Africa. You will also know the main types of industries that have been developed on the continent and their distribution.

It is important that you use a number of diverse interactive methods to enable learners acquire and develop the different skills reflected in the different activities throughout the chapter. It is necessary to ensure that all learners participate in pair, group and class discussions. The use of ICT is one of the learning components, so it is advisable that you make use of it as may be required.

**Manufacturing industries in Africa (Leamer's Book Page 20)**

In senior two, you learnt about the development of manufacturing industries in East Africa. You also learnt that manufacturing industries process raw materials into finished goods. Which manufacturing industry do you remember and what does it process? After doing tasks 26.1 you understand the types of manufacturing industries in Africa.

**Activity 26.1 Describing the types of manufacturing Industries in Africa**

In groups, use the knowledge gained from studying the development of manufacturing industries in East Africa in Senior Two and do the following tasks

1. What do you understand by manufacturing industries?
2. Describe the types of manufacturing industries.
3. Identify the goods manufactured by each type of industry mentioned in 2 above
4. Present your work to the rest of the groups through discussion.

**Resources to use:** Notebooks and pens

**Skills:** critical thinking, analysis, information gathering, creative thinking, reporting, interactive skills.

**Methods:** Brainstorming and group discussion

**Instructions to the teacher**

- (a) Organise learners into manageable groups.
- (b) Provide learners with the leamer's book and tell them the page on which the tasks are.
- (c) Instruct learners to read through the tasks that follow.

- (d) Observe learners as they discuss in their groups and assist them as they do the task.
- (e) Make sure everyone is actively involved.
- (f) Converse with learners as they do the activity.
- (g) Instruct learners to present their work.
- (h) Encourage the learners to explain and defend their views.
- (i) Assess the learners' work and give them feedback.

**Suggested responses:**

- 1 Manufacturing industries are industries that process raw materials into finished goods.
- 2 Primary industries  
Tertiary industries  
Secondary industries.  
Industries are further divided into consumer goods and producer goods
- 3 Industrial or producer goods,  
Consumer goods

You have learnt that manufacturing industries are classified according to the goods they process or manufacture. You have also found out that some manufacture light goods and others manufacture heavy goods.

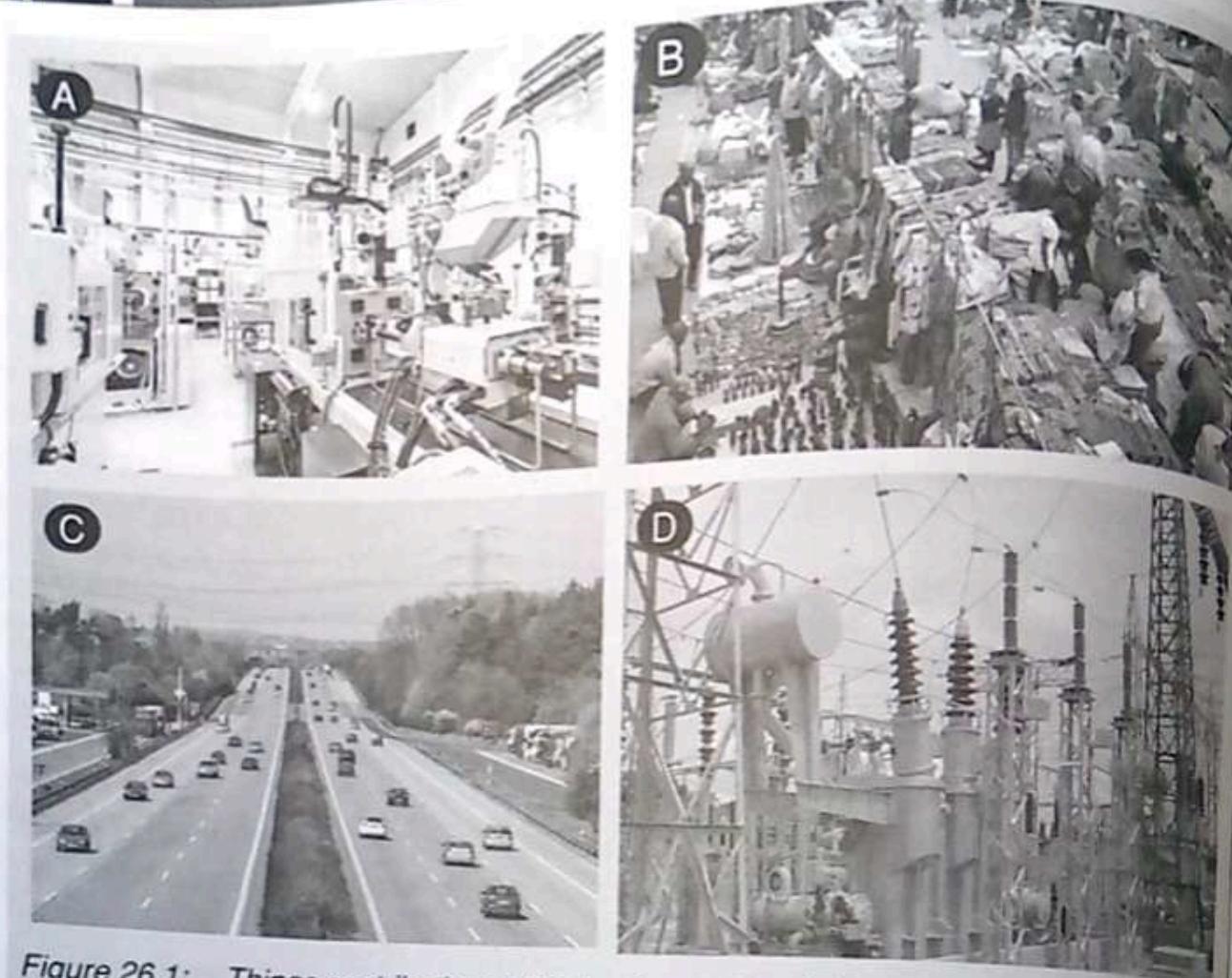
**• Factors influencing the development and distribution of manufacturing industries in Africa (Leamer's Book Pages 20-21)**

In Senior Two, you learnt that the development and distribution of manufacturing industries in East Africa is influenced by a number of factors. Which factors do you remember? Similarly, the development and distribution of industries in Africa is influenced by a number of factors. After doing tasks in activity 26.2, you will be able to understand the factors that influence the development and distribution of manufacturing industries in Africa.

**Activity 26.2**

Finding out the factors that influence the development and distribution of manufacturing industries in Africa.

Study photographs A-D in figure 26.1 showing things contributing to the development and distribution of manufacturing industries and do the tasks that follow.



*Figure 26.1: Things contributing to the development and distribution of manufacturing industries*

- 1 Identify what is shown in the photographs A-D in figure 26.1
- 2 How do the things which you have identified in (1) influence the distribution and development of manufacturing industries in Africa?
- 3 What other factors influence the distribution and development of manufacturing industries in Africa?
- 4 How are energy resources used in developing manufacturing industries in East Africa specifically Uganda?
- 5 Share your work to the rest of the class through discussion

**Resources to use:** Photographs provided in the learner's book, writing materials, library, internet

**Skills:** Photographic interpretation, interpersonal skills, critical thinking, communication, forming own opinions.

**Methods:** Brainstorming and group discussion  
**Instructions to the teacher**

- (a) Organise learners into manageable groups.
- (b) Provide learners with the learner's book and tell them the page on which the tasks are.

- (c) Instruct learners to study the photographs and do the tasks that follow.
  - (d) Observe learners as they discuss in their groups and assist them as they do the task.
  - (e) Make sure everyone is actively involved.
  - (f) Converse with learners as they do the activity.
  - (g) Instruct learners to present their work.
  - (h) Encourage the learners to explain and defend their views.
  - (i) Assess the learners' work and give them feedback.

### Suggested responses



You have learnt that the development and distribution of manufacturing industries include; presence of power, good government policies and presence of raw materials.

**Major industrial areas in Africa** (Leamer's Book Pages 21-23)  
Africa has a number of industrial areas distributed throughout the continent. Similarly,

**Major industrial areas in Africa** (Learners Booklet 3)

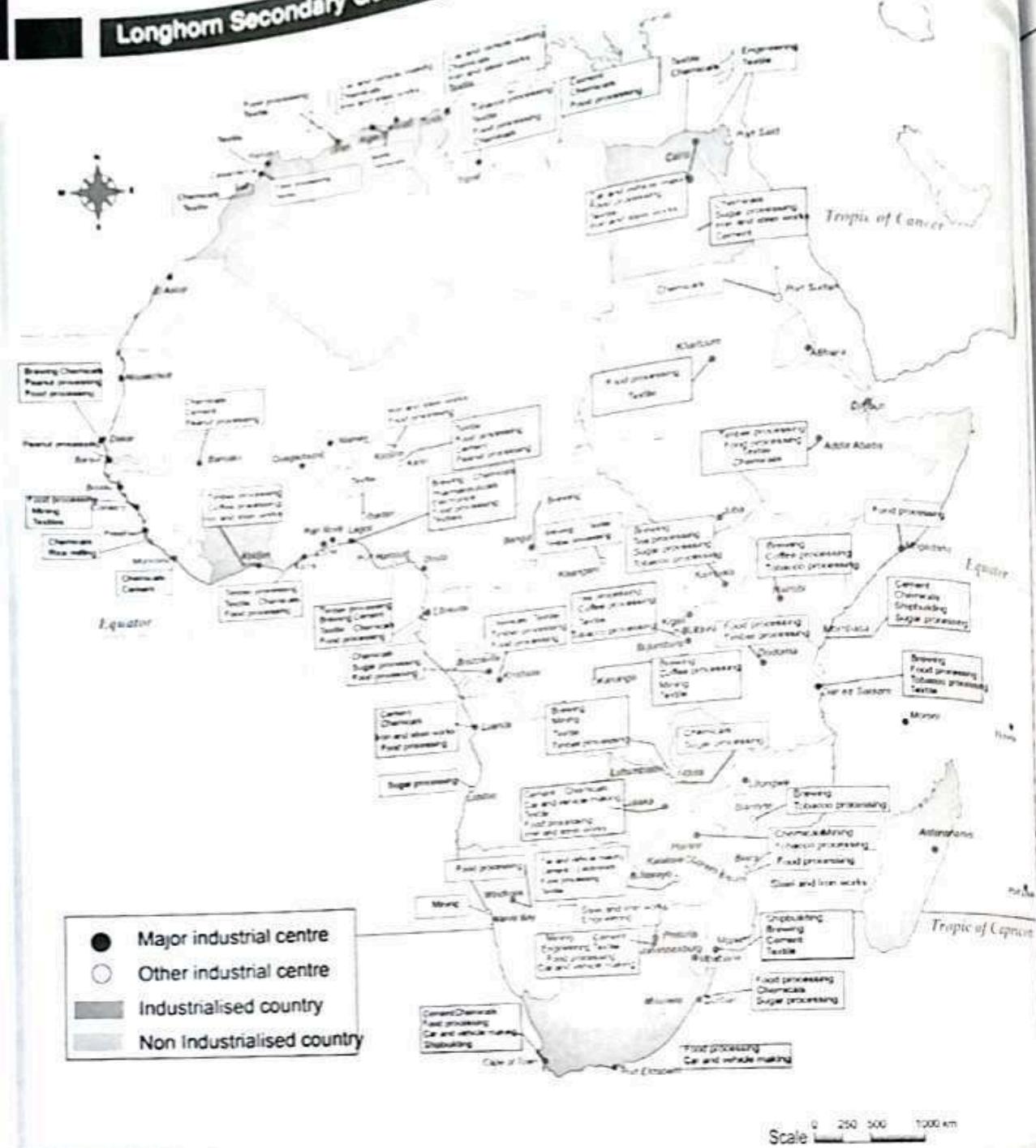
You now know that East Africa has a number of industrial areas distributed throughout the region in different countries. Which industrial area do you remember? Similarly, there are a number of industrial areas distributed throughout the continent.

Africa has a number of industrial areas distributed throughout the continent. These areas have industries such as textile, agro-based, vehicle assembling, steel and tube and electronics industries. After doing tasks in activity 26.3, you will be able to discover the major industrial areas in Africa.

### Activity 26.3

Discovering the major industrial areas of Africa

**Activity 26.3** Discovering the major industrial areas of Africa  
Study map in figure 26.2 showing the industrial areas Africa and do the tasks that follow.



**Figure 26.2: Industrial areas of Africa**

- 1 Copy the map in figure 26.2 in your notebooks
- 2 Identify the major industrial areas of Africa shown on the map in figure 26.2
- 3 Why are African countries trying to develop industries?
- 4 Swap your work with your neighbour and comment on each other's work.
- 5 Present your work to the rest of the class through discussion.

**Resources to use:** Map provided in the learner's book, writing materials, library, internet

**Skills:** Map reading, interpersonal skills, critical thinking, communication, forming own opinions.

**Methods:** Brainstorming and group discussion

**Instructions to the teacher**

- Organise learners.
- Provide learners with the learner's book and tell them the page on which the tasks are.
- Instruct learners to study map and do the tasks that follow.
- Observe learners as they discuss in their groups and assist them as they do the task.
- Make sure everyone is actively involved.
- Converse with learners as they do the activity.
- Instruct learners to present their work.
- Encourage the learners to explain and defend their views.
- Assess the learners' work and give them feedback.

**Suggested responses**

- Map 26.2 in the learner's book
- Cape town, Durban, Mombasa, Khartoum, Casablanca, Brazzaville, Accra, Lagos, Johannesburg.
- To add value on their goods instead of exporting raw materials which earn low income

Africa is becoming one of the most respected continents due to its growing economies and sectors. Countries like Nigeria, Angola and South Africa are experiencing a large growth in their economies due to working industries and growing sectors. Many sub-Saharan African countries including Ethiopia, Ghana, Tanzania, Zambia, and Mozambique have enjoyed high levels of sustained growth. This growth has been broadly based across different sectors of the economy, with industrial output doubling within a decade in several cases.

**● Benefits of manufacturing industries in the development of African countries (Leamer's Book Page 23)**

You have probably realised that manufacturing industries can lead to the development of a country. In chapter thirteen you noted that industries play an important role in the development of a country. Which benefits do you recall? After doing tasks in activity 26.4, you will understand the benefits of manufacturing industries to African countries.

**Activity 26.4      Understanding the benefits of manufacturing industries in the development of African countries**

In groups, carry out a textbook or internet research on the benefits of manufacturing industries and do the following

1. What are the benefits of manufacturing industries to the development of African countries?
2. Write your findings in your notebooks
3. Present your work to the teacher for further guidance.

**Resources to use:** Library, Computers, pens, notebooks and pencils

**Skills:** Recording information, critical thinking, ICT, reporting, problem solving and communication.

**Methods:** Research, group and class discussion

#### Instructions to the teacher

- (a) Organise learners into manageable groups.
- (b) Provide learners with the learner's book and tell them the page on which the tasks are.
- (c) Instruct learners to go the library computer laboratory and carry-out research the tasks that follow.
- (d) Observe learners as they discuss in their groups and assist them as they do the task.
- (e) Make sure everyone is actively involved.
- (f) Converse with learners as they do the activity.
- (g) Instruct learners to present their work.
- (h) Encourage the learners to explain and defend their views.
- (i) Assess the learners' work and give them feedback.

#### Suggested response

- Provision of employment opportunities to the people of Africa
- Provision of market to the raw materials in Africa
- Provision of government revenue through taxation
- They are sources of foreign exchange through exportation of manufactured products
- They lead to the development of transport infrastructures
- They promote international relationship with countries where manufactured goods are exported

You have realised manufacturing industries have led to the development of African countries since they provide employment opportunities, market for raw material, development of transport networks and international friendship to the countries where products are exported.

#### ● Problems facing manufacturing industries in Africa (Learner's Book Pages 23-24)

Manufacturing industries face a number of challenges in processing, transporting and marketing their products. These challenges hinder their growth and development. After doing tasks in activity 26.5 you will be able to find out the problems facing manufacturing industries in Africa.

### Activity 26.5

Understanding the problems facing manufacturing industries in Africa

In groups, carry out a textbook or internet on the problems facing manufacturing industries in Africa research and do the tasks that follow.

- 1 What are the problems faced by Africa in developing manufacturing industries?
- 2 Write your findings in your notebooks.
- 3 Present your work to the rest of the class through discussion.

**Resources to use:** Library, Computers, pens, notebooks and pencils

**Skills:** Recording information, critical thinking, ICT, reporting, problem solving and communication.

**Methods:** Research, group and class discussion

#### Instructions to the teacher

- (a) Organise learners into manageable groups.
- (b) Provide learners with the learner's book and tell them the page on which the tasks are.
- (c) Instruct learners to go the library computer laboratory and carry-out research the tasks that follow.
- (d) Observe learners as they discuss in their groups and assist them as they do the task.
- (e) Make sure everyone is actively involved.
- (f) Converse with learners as they do the activity.
- (g) Instruct learners to present their work.
- (h) Encourage the learners to explain and defend their views.
- (i) Assess the learners' work and give them feedback.

#### Suggested response

- ^ Competition with other countries that produce the same products.
- ^ High costs of transportation of produced goods to the market.
- ^ Inadequate skilled labour to work in the industries.
- ^ Limited power to operate the machines used in industry
- ^ Inadequate capital for buying inputs and paying workers

You have learnt that much as Africa has abundant local raw materials, it still imports a large share of manufactured products, including cement and refined petroleum. This has hindered the growth and development of manufacturing industries in Africa.

## Effects of manufacturing industries on the environment (Leamer's Book Pages 24)

Even though industrialisation is important for the economic growth and development of African countries, it is also harmful to the environment, amongst other things industrial process can cause climate change, pollution to water, air and land. After doing tasks in activity 26.6 you will explore the effects of manufacturing industries on the environment.

### Activity 26.6 Exploring the effects of manufacturing industries on the environment

In groups, conduct a field study on a factory in your community and do the following tasks

- 1 Observes activities taking place in the factory?
- 2 Identify different products produced in the factory visited
- 3 Identify the positive and negative impacts of the factory on the people, environment and the economy and cop and fill table 26.1.

Table 26.1 effects of manufacturing industries to the people, environment and economy

The people	The environment	The economy
The positive impacts	The positive impacts	The positive impacts
The negative impacts	The negative impacts	The negative impacts

- 4 Write a report of your findings.
- 5 Present your report to the teacher for further guidance.

**Resources to use:** Local factory, pens, notebooks and pencils

**Skills:** Recording information, critical thinking, reporting, problem solving and communication

**Methods:** Field work, group and class discussion

**Instructions to the teacher**

- (f) Organise learners into manageable groups.
- (g) Move with them to the nearby industry.
- (h) Observe learners as they do research and assist them as they do the task.
- (i) Make sure everyone is actively involved.
- (j) Converse with learners as they do the activity.
- (k) Instruct learners to present their work.
- (l) Encourage the learners to explain and defend their views.
- (m) Assess the learners' work and give them feedback.

**Suggested responses**

It will depend on the factories the learners will visit.

**Textile manufacturing industries.**

1. Fibre production.

Yarn production.

Fabric production.

Pre-treatment.

Dyeing and printing.

Finishing treatments.

Manufacturing, transport, sales and retail.

2. Carpets and rugs, towels, curtains and sheets, cord and twine, furniture and automotive upholstery, and industrial belts and fire hoses.

**Advantages**

- The textile industry is one of the leading industries and this industry can surely accelerate the growth of the economy of a nation.
- A lot of labour work is required in the textile industries and that's why this industry creates a lot of employment.
- The national and international market demands for the textile goods are excellent. That's why this industry is an asset for the national and international trading.

**Disadvantages**

- The main disadvantage of the textile industries is the pollution. The textile industries create a lot of air and water pollution.
- The water consumption of the textile industries is very high and that's why a lot of water resource is depleted by the textile industry.

You have found out that manufacturing industries have a big effect on the environment; for example vegetation is cut down in search for land for setting up industries, water and land are polluted due to poor disposal of industrial wastes and air pollution is caused by the fumes from manufacturing industries.

**● Industrialisation in South Africa (Leamer's Book Page 25)**

South Africa is the leading industrialized nation in Africa. It earns a big percentage from the industrial sector. The main industries include chemicals, food, transport equipment, iron and steel. The metal and engineering sector employs an estimated 325000 people by over 900 companies.

Many other southern African countries such as Namibia and Botswana have industrial development programs in place, which are frequently reviewed by the southern African development community. After doing tasks in activity 26.7 you will find out more about manufacturing industries in South Africa.

**Activity 26.7**

Understanding industrialisation in south Africa

In groups, carry out a library or textbook research on industrialisation in south Africa and do the tasks that follow.

- 1 Draw a sketch map of south Africa and on it mark and name the major;
  - (a) Industrialised areas.
  - (b) industries in south Africa
  - (c) What are the factors that lead to their growth?

Table 26.2: Major industrialised areas, major industries and factors for the growth of the industries

Major industrialised areas	Major industries	Factors for the growth of the industries.

2. Copy table 26.2 and complete it.
3. Explain the benefits of industrialisation to south Africa.
4. Discuss the problems resulting from Industrialisation.
5. Present your work to the rest of the class.

**Resources to use:** Map provided in learners book, pens, notebooks and pencils

**Skills:** Recording information, critical thinking, reporting, map reading, problem solving and communication.

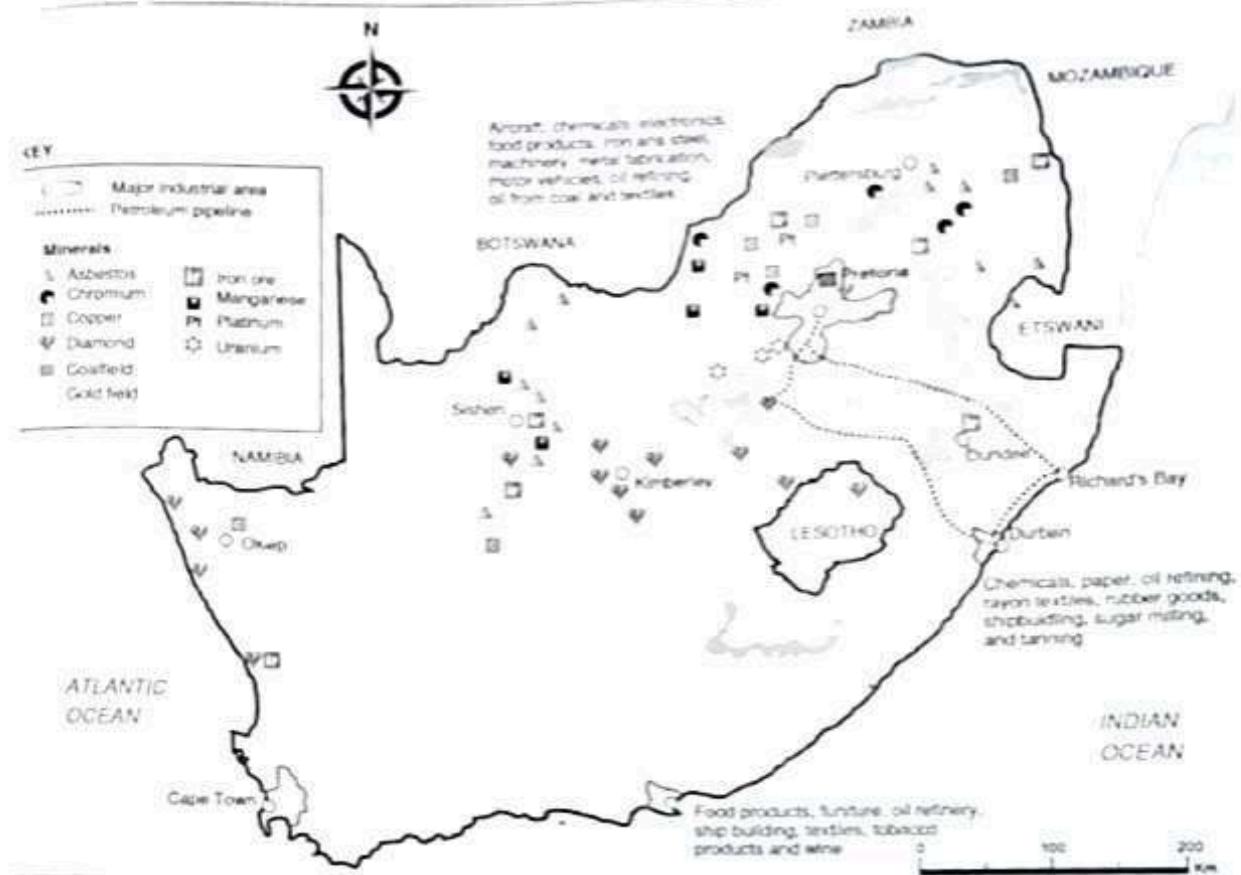
**Methods:** Research and class discussion

**Instructions to the teacher**

- (a) Organise learners into manageable groups.
- (b) Provide learners with the learner's book and tell them the page on which the tasks are.
- (c) Instruct learners to go the library computer laboratory and carry-out research the tasks that follow.
- (d) Observe learners as they discuss in their groups and assist them as they do the task.
- (e) Make sure everyone is actively involved.
- (f) Converse with learners as they do the activity.
- (g) Instruct learners to present their work.
- (h) Encourage the learners to explain and defend their views.
- (i) Assess the learners' work and give them feedback.

**Suggested responses**

1.



2.

Table 26.2: Major industrialised areas, major industries and factors for the growth of the industries.

Major industrialised areas	Major industries	Factors for the growth of the industries.
Cape town	Food products, furniture, oil refining, textiles, tobacco products and wine	Raw materials
Port Elizabeth	Motor vehicle assembly, textiles and tires	Power
East London	Motor vehicle assembly, textiles pharmaceuticals and food processing	Fresh water
Durban	Chemical, paper, oil, textiles, shipbuilding and sugar milling	Land
Johannesburg	Aircraft, chemicals, food products, iron and steel and machinery	Relief
		Transport
		Capital
		Labor

South Africa is heavily industrialized because it was in contact with the developed countries for a long time before many other African countries. The Dutch settled in South Africa and developed the country. Therefore, as industries were developing in Europe, they were also developing in South Africa. Manufacturing industries are the biggest contributors to South Africa's national income.

### Sample Activity of Integration (Learner's Book Page 26)

Your sister has been given funding of 800 million to start up any industry of her choice in her community. The community has a variety of resources most of which are not exploited. The local community lives in poverty.



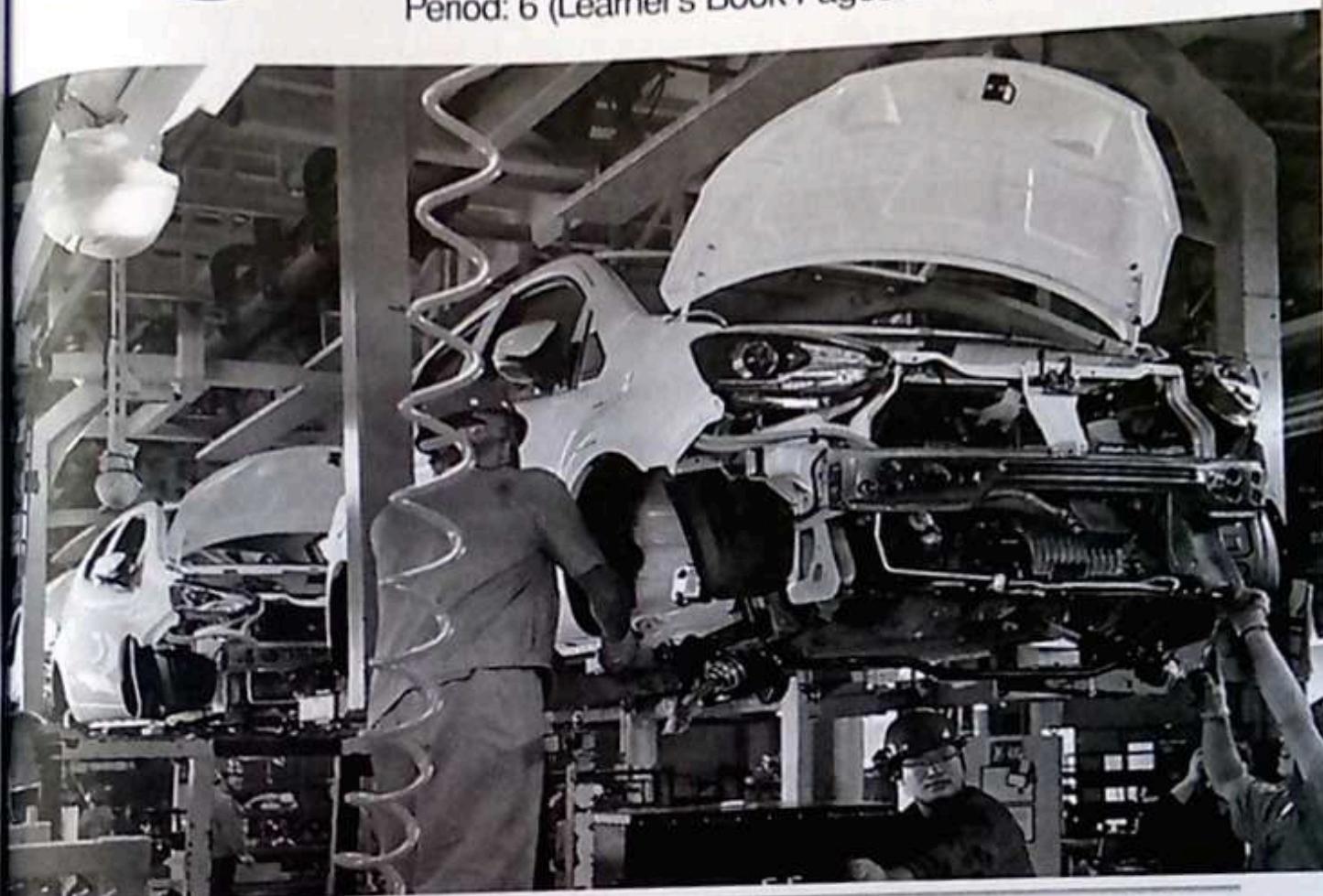
Task: As a president of the geography club in your school write an advice note of about 700 words to your sister.

### Sample Assessment Grid

Expected output	Basis of Evaluation	Relevance	Accuracy	Coherence	Excellency
Advice note	Importance of industries	3 scores if the learner gives all the 8-6 importances of industries 2 scores if the learner gives 5-3 importances of industries 1 score if the learner gives 2-1 importances of industries	3 scores if the learner gives 8-6 importances of industries correctly 2 scores if 5-3 importances of industries correctly 1 scores if 2-1 importances of industries correctly	3 scores if the learner explains 8-6 importances of industries 2 scores if the learner explains 5-3 importances of industries 1 scores if the learner explains 2-1 importances of industries	1 score if the learner gives unique responses
	difficulties faced by industries	3 scores if the learner gives 8-6 difficulties faced by industries 2 scores if the learner gives 5-3 difficulties faced by industries 1 score if the learner gives 2-1 difficulties faced by industries	3 scores if 8-6 difficulties faced by industries correctly stated; 2 scores if 5-3 difficulties faced by industries correctly 1 scores if 2-1 difficulties faced by industries are correctly	3 scores if 8-6 difficulties faced by industries 2 scores if the learner explains 5-3 difficulties faced by industries 1 scores if the learner explains 2-1 difficulties faced by industries	
Total scores / 19	/6	/6	/6	/6	/1

## Mining and Industrial Development in China

Period: 6 (Learner's Book Pages 27-34)



### Key words

- ▲ Minerals
- ▲ Mining
- ▲ Extraction
- ▲ Industry
- ▲ Great leap forward

### After studying this chapter, the learner's should be able to;

- ▲ know the minerals found in China
- ▲ know the types of industries in China
- ▲ draw a map to show the main mining and industrial areas in China
- ▲ understand how China developed industries
- ▲ realise the role of the government and central planning in industrial development
- ▲ understand changes in industries in China
- ▲ understand the importance of Africa as a market for Chinese goods and investment
- ▲ appreciate the growing importance of China in the economic development of Africa

## Introduction (Leamer's Book Page 28)

Guide learners to read the introduction (Leamer's Book Page 28). In Senior Two and in chapter twenty six you learnt about the importance of developing manufacturing industries, the types and location of manufacturing industries, problems of developing manufacturing industries. China started its industrialisation process in the early 1900s. This process was interrupted by the long-term wars in the following years. China then undertook a special industrialisation path in the years following the founding of the People's Republic of China in 1949. Different strategies were adopted at different stages since then, including prioritising heavy industry, balancing development of heavy and light industries, and re-prioritising heavy industry. In this chapter, you are going to learn about why and how industries developed in China, the industries which developed and how they have evolved. You will also learn about minerals and mining in China.

It is important that you use a number of interactive methods to enable learners acquire and develop the different skills reflected in the different activities throughout the chapter. It is necessary to ensure that all learners participate in pairs, groups and class discussions. The use of ICT is one of the learning components, so it is advisable that you make use of it as may be required.

## Minerals and Mining in China (Leamer's Book Pages 28-29)

You have already learnt about mining in East Africa and Africa in Senior Two and in chapter twenty-five. China also carries out mining because it has mineral deposits. It has coal in abundance. You can name other countries in Africa that have coal. After doing tasks in activity 27.1, you are going to understand minerals and mining in China.

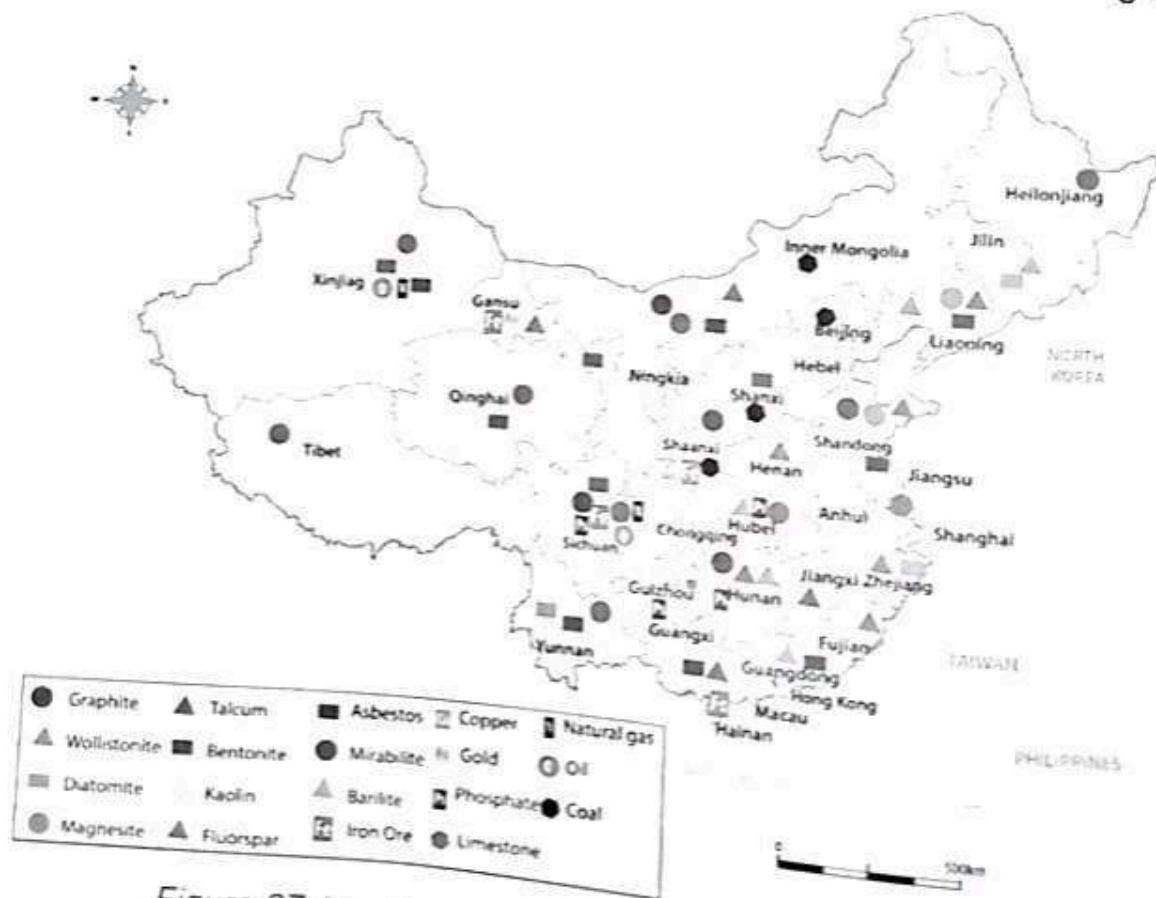


Figure 27.1: A map showing mining areas of China

**Activity 27.1**

Understanding minerals and mining in China

Study the map of China showing mining areas in Figure 27.1 and the tasks that follow.

- 1 Copy the map in Figure 27.1 into your notebooks.
- 2 Using the map you have drawn in (1), identify the mining areas in China and the minerals mined.
- 3 Present your findings in a table form like in table 27.1

Table 27.1: Mining areas and minerals mined in China.

Mining area	Minerals mined
1. Shanxi	Coal, Kaolin and Asbestos

- 4 Explain the importance of minerals in the development of industries in China.
- 5 Present your findings to the rest of the class through discussion.

**Resources to use:** map provided in learners book, note book, pens, and pencils

**Skills:** map reading, critical thinking, creative thinking, collaboration, communication.

**Methods:** Class discussion, brainstorming

#### Instructions to the teacher

- (a) Organise learners into manageable groups.
- (b) Provide learners with the learner's book and tell them the page on which the tasks are.
- (c) Instruct learners to study the map and do the tasks that follow.
- (d) Observe learners as they discuss in their groups and assist them as they do the task.
- (e) Make sure everyone is actively involved.
- (f) Converse with learners as they do the activity.
- (g) Emphasise that each group comes up with a write-up.
- (h) Instruct learners to present their work.
- (i) Encourage the learners to explain and defend their views.
- (j) Assess the learners' work and give them feedback.

#### Suggested responses

1. Map 27.1 in the Learner's Book
2. Table 27.1: Mining areas and minerals mined in China.

Mining area	Minerals mined
1. Shanxi	Coal, Kaolin and Asbestos
2. Gansu	Iron ore, Fluorspar
3. Tibet	Mirabilite

3. Source of energy

- ▲ Industrial development
- ▲ Increase in employment
- ▲ Agricultural development

You have learnt that China has huge mineral resources such as oil, natural gas and coal which provide raw materials which favour industrial development. These raw materials also run the machines in the factories.

## ● Industrial Development in China (Learner's Book Pages 29-31)

In the beginning China was an agricultural country with a few industries. However, since there is abundance of coal, oil, natural gas and iron reserves a lot of efforts were made to industrialise China with the rise to power of the communists in 1949.

## ● The main Industrial Regions of China (Learner's Book Pages 29-31)

There are seven major industrial regions in China with different types of industries. Most of these industries are located in the Northeast, East, North, Central south and Southwest regions of China. After doing tasks in activity 27.2, you are going to find out the main types of industries and industrial regions in China.



Figure 27.2: A map showing the industrial regions in China

**Activity 27.2**

Finding out the main types of industries and industrial regions in China

In groups, study the map of China showing industrial areas in Figure 27.2 and do the tasks that follow.

- 1 Copy the map of China showing the main types of industries and industrial regions China.
- 2 Copy table 27.2 in your note books and fill in the main industrial areas and the main types of industries in China.

Table 27.2: main industrial areas and types of industries in China.

Main industrial areas	Main types of industries

- 3 What are the advantages of developing industries in China?
- 4 How has China benefited from the establishment of industries.
- 5 Present your work to the rest of the class through discussion.

**Resources to use:** map provided in learners book, note book, pens, and pencils.  
**Skills:** map reading, critical thinking, creative thinking, collaboration, communication.

**Methods:** Group and class discussion.

**Instructions to the teacher**

- (a) Organise learners into manageable groups.
- (b) Provide learners with the learner's book and tell them the page on which the tasks are.
- (c) Instruct learners to study the map and do the tasks that follow.
- (d) Observe learners as they discuss in their groups and assist them as they do the task.
- (e) Make sure everyone is actively involved.
- (f) Converse with learners as they do the activity.
- (g) Emphasise that each group comes up with a write-up.
- (h) Instruct learners to present their work.
- (i) Encourage the learners to explain and defend their views.
- (j) Assess the learners' work and give them feedback.

**Suggested responses**

1. Map 27.2 in the Learner's Book
- 2.

Main industrial areas	Main types of industries
1 Manchurian	Steel industry, lubricating oil, chemical industry
2 Beijing and Tientsin	Engineering, steel and machinery
3 Lower Yangtze	Flour and oil mill, cotton textile mills, oil refining

### 3. Employment opportunities

- ▲ Foreign exchange earnings
- ▲ Stimulation of development of other sectors
- ▲ Development of infrastructure
- ▲ Diversification

From activity 27.2, you learnt that China has a number of industries such as automobiles, electronics, pharmaceuticals and textiles. Today, China is the world's largest manufacturing country. It produces nearly 50 percent of the world's major industrial goods, including steel, cement, coal and vehicles. You should note that China's per capita income was only one-third of that of sub-Saharan Africa. China is also the world's largest producer of ships, high-speed trains, robots, tunnels, bridges, highways, chemical fibers, machine tools, computers and cellphones.

You have also learnt that industries provide employment opportunities, government revenue, foreign exchange through exportation and international relationships.

## ● Evolution of industries in China (Leamer's Book Pages 31-33)

You have learnt that industries evolve. The industrial revolution began around the 1920s. What is happening in China is not its first attempt at industrialisation but the fourth over the past 120 years.

The first attempt was made between 1861 and 1911. It came on the heels of China's defeat in 1860 by the British in the Second Opium War. Deeply humiliated by unequal treaties imposed by Western industrial powers, the Qing monarchy that was then in control in China embarked on a series of ambitious programs to modernize its backward economy, including establishing a modern navy and industrial system.

This attempt started eight years earlier than the Meiji Restoration that triggered Japan's successful industrialization. After doing tasks in activity 27.3, you will understand how industries evolved in China.

### Activity 27.3 Understanding the evolution of industries in China

In groups, read the extract below and do the tasks that follow.

China's industrialisation can be roughly divided into three stages. The first stage ranges from 1953 to 1978 when China prioritised heavy industry through the command economy, with the intention of accomplishing a Second Five Year Plan and catching up with the developed world (Lin 2004). This stage can be further divided into four periods

The first period corresponded to the first five-year plan (1953-1957) when China focused its efforts on the construction of 694 large and medium-sized industrial projects, including 156 supported by the Soviet Union (Wu 1999).

Through these considerable efforts, China laid the primary foundations for industrialisation to provide material and technological support to restore/build the national economy. During the second period, from 1958 to 1960, China implemented a Second Five Year Plan industrialisation strategy. The Chinese government mobilized massive amounts of investment funds and manpower to support industrial development, which emphasised heavy industry in general, and the iron and steel industry in particular.

The hope was to industrialise by making use of the huge supply of cheap labor and avoid having to import heavy machinery. For various reasons, the years of the Second Five Year Plan in fact saw economic decline and material shortages. The policy failures prompted the government to re-think and adjust its policies from 1961 to 1965. During this period, China began to adopt a development strategy of coordinated and balanced development of agriculture, light industry and heavy industry.

The imbalanced economic structure that resulted from the great leap forward was gradually improved and China's economic output greatly increased. During the fourth period or the Cultural Revolution from 1966 to 1978, China had implemented a strategy of three-front construction.

The country was divided into three fronts, roughly corresponding to the three regions: coastal, central and western. As 15 most new industrial projects were located in the third-front areas, the industrial expansion in these areas has been known as the third front program. Though China concentrated on heavy industry, the entire third-front build-up was dictated by considerations of military strategy rather than economic efficiency. About 95 percent of China's basic construction investment funds were allocated to construction of defense-oriented industries.

The share of heavy industry increased from 51 percent to 55.8 percent within this period. However, this policy resulted in further differences between light and heavy industry in the total economic structure and regional imbalances in industrial distribution and production. The second stage, the period of 1979 to 1999, witnessed a more balanced development of China's industries. In 1979, China adopted the opening up policy and started to adjust the strategy of prioritising industrial development. The roles of the market and private businesses in promoting industrialisation were emphasised and encouraged industrialisation. The Chinese economy has moved back into a development phase of industrialisation through heavy industry (Ye & Yu 2014). Many local governments have combined physical and financial resources for the launch of large-scale projects in an attempt to drive economic growth. From 2000 to 2012, heavy industry in China grew much faster than light industry.

The third stage starts from 2000 when China saw the reappearance of heavy industries. The proportion of heavy industry increased from 53.8 percent in 1999 to 71.8 percent in 2012, while that of the light industry fell to 30 percent. The contribution rate of heavy industry to total industrial profits reached more than 72 percent in 2012. It can be seen that industrial growth during this phase largely relied on heavy industrialisation.

### By Prof. Dr. Li Xiao Yun

- 1 How did industries evolve in China.
- 2 Explain what was in the Second Five Year Plan.
- 3 Identify the industries which developed in China.
- 4 Explain the role of the government of China in planning industrial development?
- 5 Share your work with the rest of the class through discussion.

**Resources to use:** article, note book, pens, and pencils

**Skills:** information gathering, critical thinking, creative thinking, collaboration, communication.

**Methods:** Class and group discussion.

### Instructions to the teacher

- (a) Organise learners into manageable groups.
- (b) Provide learners with the learner's book and tell them the page on which the tasks are.
- (c) Instruct learners to read the article and do the tasks that follow.
- (d) Observe learners as they discuss in their groups and assist them as they do the task.
- (e) Make sure everyone is actively involved.
- (f) Converse with learners as they do the activity.
- (g) Emphasise that each group comes up with a write-up.
- (h) Instruct learners to present their work.
- (i) Encourage the learners to explain and defend their views.
- (j) Assess the learners' work and give them feedback.

### Suggested responses

- 1 China compressed the several centuries of Western and Japanese development into three decades. Its path to industrialization has gone through three major phases; 1978-1988: **proto-industrialisation**. In 1988-1998: **first industrial revolution and a second industrial revolution**.
- 2 Second Five Year Plan of the People's Republic of China (PRC) was an economic and social campaign led by the Chinese Communist Party (CCP) from 1958 to 1962. Chief changes in the lives of rural Chinese people included the incremental introduction of mandatory agricultural collectivization

- 3 Light and heavy industries
- 4 Foreign exchange earnings
  - Stimulation of development of other sectors
  - Development of infrastructure
  - Diversification

State plays a role in utilizing both qualitative and quantitative ideas in China's industrial development. In the long run, it might consolidate itself as a form of strategic planning, and as a key structural characteristic of market socialism.

You have learnt that China's path to industrialization has gone through three major phases: The phase which featured the sprouting of millions of rural enterprises across China's vast countryside and small towns is known as **Proto-industrialisation**. The phase which featured mass production of labor-intensive light consumer goods across China's rural and urban areas, relying first mainly on imported machinery is known as **First industrial revolution** and the **Second industrial revolution** was a phase which featured the mass production of the means of production.

## **Role of Africa in China's development** (Learner's Book Page 33)

You learnt that Africa plays a very big role in China's development. Africa has emerged as a potential market for many Chinese businesses, both state-owned and private. Remember the number of items used in your home, how many are labelled "made in China", this is exactly how Africa has supported China's industrial development. After doing tasks in activity 27.4, you will understand the role of Africa in China's development.

### **Activity 27.4      Understanding the role of Africa to China's development**

In pairs, carry out a textbook or internet research on the role of Africa to China's development and do the following tasks

- 1 Discuss the importance of Africa as a market for Chinese goods and investment.
- 2 Identify any four Chinese products that are sold in Uganda.
- 3 Identify any projects in Uganda where Chinese are investing.
- 4 What are the advantages and disadvantages of Chinese investment in Uganda?
- 5 Of what importance is Africa in the economic development of China.
- 6 Present your work to the rest of the class through discussion.

**Resources to use:** textbooks, internet, note book, pens, and pencils.

**Skills:** critical thinking, creative thinking, collaboration, communication.

**Methods:** Think-pair, discussion and brainstorming

**Instructions to the teacher**

- (a) Organise learners into manageable groups.
- (b) Provide learners with the learner's book and tell them the page on which the tasks are.
- (c) Instruct learners to go to the library computer laboratory and carry-out research the tasks that follow.
- (d) Observe learners as they discuss in their groups and assist them as they do the task.
- (e) Make sure everyone is actively involved.
- (f) Converse with learners as they do the activity.
- (g) Instruct learners to present their work.
- (h) Encourage the learners to explain and defend their views.
- (i) Assess the learners' work and give them feedback.

**Suggested responses**

- 1 Provides market for their products
  - ↗ Provides investment opportunities
  - ↗ Exports raw materials to China
- 2 Shoes, cars, computers and phones
- 3 Infrastructure projects, industrial development projects
- 4 Uganda's growth trajectory has been strongly supported by increased economic engagement with China, particularly through commodity exports and infrastructure funding.
  - ↗ the relocation of manufacturing value chains from China to countries with an abundant supply of labour.
  - ↗ access to alternative forms of development financing that centre on formerly under-financed sectors such as infrastructure and energy
  - ↗ increased trade and Foreign Domestic Investment.

You have learnt that trade between China and Africa has increased. The majority of this trade is Chinese exports to Africa. China's largest exports are machinery and electrical equipment. In 2020, Africa accounted for 4 percent of China's trade with the world (4.4 percent for its exports and 3.6 percent for its imports). In 2019, the continent accounted for just 2.9 percent of Chinese direct investment flows in the world. Since Africa is made up of 54 countries, 53 of which recognize Beijing, economic relations are even less important by country.

**Sample Activity of Integration (Learner's Book Page 34)**

A progressive trader in your community basically deals in agricultural produce. He/she basically gets items from Kampala and sells them in Juba. He/she wants to change the trade route to Kampala- China.



**Task:**

Write down a business plan of about 200 words that can guide him /her in changing the trade route.

**Sample evaluation grid**

Expected output	Basis of evaluation	Relevance	Accuracy	Coherence	Excellence
A business plan of about 200 words advising him/her on trade route.	industrial development in China.	<p>The learner earns: 3 points if the learner gives 8-7 industrial development in China.  2 points if the learner gives 4-5 industrial development in China.  1 point if the learner gives 3 industrial development in China.</p>	<p>The learner earns: 3 points if 8-7 industrial development in China. are correctly identified  2 points if 4-5 industrial development in China. are correctly identified  1 point if 3 industrial development in China. are correctly identified</p>	<p>The learner earns: 3 points if 8-7 industrial development in China. are logically well-linked  2 points if 4-5 industrial development in China. are logically well-linked  1 point if 3 industrial development in China. is logically well-linked</p>	<p>The learner earns: 1 score if the learner gives unique responses</p>
Total scores/19		/3	/3	/3	/1

# Population and Urbanisation in Africa

Period: 22 (Leamer's Book Pages 35-53)

**Key words**

- ▲ population
- ▲ birth rate
- ▲ death rate
- ▲ census
- ▲ population density
- ▲ urbanisation
- ▲ abstinence
- ▲ demographic transition
- ▲ distribution
- ▲ migration
- ▲ rural
- ▲ rapid

**After studying this chapter, the learner should be able to;**

- ▲ understand the concepts related to population
- ▲ understand the relationship between population, resources and the provision of services
- ▲ understand the demographic transition model and how this relates to the historical growth and population structures of East Africa
- ▲ understand the factors which have led to rapid population increase in Uganda and the rest of East Africa
- ▲ use maps, statistics, graphs, and diagrams to analyse population
- ▲ know the areas of high, moderate and low population density in Africa
- ▲ locate and name some major urban areas in Africa
- ▲ understand the distribution of population in Africa and the factors that influence the distribution.
- ▲ appreciate the advantages and problems of having a large or rapidly increasing population in a country
- ▲ understand the methods which can be used to control the rate of population growth
- ▲ appreciate the need for and use of population control methods
- ▲ use statistics and graphs to show rapid urban development
- ▲ understand rural-urban migration and the reasons for this type of migration
- ▲ understand the rapid growth of urban areas, problems facing urban areas and effects of urbanisation on the environment
- ▲ draw maps to show the main areas of high density of population and main urban areas of Africa
- ▲ appreciate the need for planning urban areas and urban growth
- ▲ understand the relationship between a rapidly growing population and urbanisation

**Introduction**

**Guide learners to read the introduction Learner's Book Page 36)**

In Senior Two, you learnt about population and urbanisation in East Africa. You might have probably realised that population contributes to the development of urban centres, countries, regions and continents. Africa is rapidly urbanising: it is the most important structural transformation underway in the region.

By 2050, almost regardless of government policies, its urban population will have tripled. In Africa population is unevenly distributed due to different reasons. In this chapter you will understand the growth rates and distribution of population in Africa, reasons for rapid urbanisation and its consequences.

It is important that you use a number of interactive methods to enable learners acquire and develop the different skills reflected in the different activities throughout the chapter. It is necessary to ensure that all learners participate in pairs, groups and class discussions. The use of ICT is one of the learning components, so it is advisable that you make use of it as may be required.

## **Population growth and size in Africa (Learner's Book Pages 36-37)**

In Senior Two, you learnt about population and urbanisation in East Africa. You might have come across various concepts related to population. Define some of them. Similarly, the same concepts are used in reference to Africa. To understand population, different population concepts must be understood first which include **birth rates, death rates and mortality**. After doing tasks in activity 28.1, you will understand different concepts related to population.

### **Activity 28.1**

#### **Understanding Concepts related to population**

**. In groups, discuss about concepts related to population and do the following tasks.**

**1 Write short notes on the following terms;**

- |                      |                              |                |
|----------------------|------------------------------|----------------|
| (a) Population size. | (f) Life expectancy.         | (k) Sex ratio. |
| (b) Birth rate.      | (g) Population density.      |                |
| (c) Death rate.      | (h) Population distribution. |                |
| (d) Mortality.       | (i) Population growth rate.  |                |
| (e) Fertility.       | (j) Population structure.    |                |

**2 Present your findings to the rest of the class through discussion.**

**3 Present your work to the teacher for further guidance.**

**Resources to use:** Writing materials

**Skills:** interpersonal skills, critical thinking, communication, forming own opinions, communication.

**Methods: Brainstorming and discussion****Instructions to the teacher**

- (a) Organise learners into manageable groups.
- (b) Provide learners with the learner's book and tell them the page on which the tasks are.
- (c) Instruct learners to discuss on the concepts related to population using the knowledge they gained in S.2 and do the tasks that follow.
- (d) Observe learners as they discuss in their groups and assist them as they do the task.
- (e) Make sure everyone is actively involved.
- (f) Converse with learners as they do the activity.
- (g) Emphasise that each group comes up with a write-up.
- (h) Instruct learners to present their work.
- (i) Encourage the learners to explain and defend their views.
- (j) Assess the learners' work and give them feedback.

**Suggested responses**

- (a) This is the number of people in an area
- (b) This refers to the annual number of children born per 1000 people of the total population of a country
- (c) This refers to the ratio of deaths to the population of a particular area or during a particular period of time, usually calculated as the number of deaths per one thousand people per year
- (d) This is death especially on a large scale
- (e) This is the natural capacity to conceive a child.
- (f) This is the number of years a person is expected to live
- (g) This is the average number of people living in a unit area
- (h) This is the way people are spread out or dispersed in an area or country
- (i) This is the rate at which population changes either by decreasing or increasing overtime and its normally expressed in percentages.
- (j) This is described according to age and sex (gender)
- (k) The number of males per 100 females in a population.

In Senior Two, you could have learnt that the population of an area increases with time. It can either be positive or negative growth. It is directly linked to birth, fertility and death rates in Africa. After doing tasks in activity 28.2, you will understand population growth in Africa and the factors influencing growth rates.

**Activity 28.2** Describing Population Growth in Africa

Study table 28.1 showing population of Africa 1955-2020 and do the following tasks.

Table 28.1: Population of Africa 1955-2020

Year	Population	Yearly growth rate (%)
2020	1,340,598,147	2.54
2015	1,182,438,784	2.61
2010	1,039,304,033	2.55
2005	916,154,288	2.47
2000	810,984,226	2.49
1995	717,270,078	2.62
1990	630,349,639	2.82
1985	548,626,148	2.86
1980	476,386,273	2.81
1975	414,674,688	2.67
1970	363,447,518	2.57
1965	320,147,257	2.47
1960	283,361,209	2.31
1955	252,748,903	2.10

Source: World meter ([www.Worldometers.info](http://www.Worldometers.info))

- 1 Draw a graph to represent the information given in table 28.1.
- 2 Identify the years Africa had;
  - (i) a low population growth.
  - (ii) a high population growth
- 3 Describe the population growth rates from 1955 to 2020
- 4 Suggest reasons as to why there was a rapid population growth in the years identified in (2).
- 5 Present your work to the rest of the class through discussion.
- 6 Present your work to the teacher for further guidance.

**Resources to use:** writing materials

**Skills:** interpersonal skills, critical thinking, communication, forming own opinions

**Methodology:** Class discussion

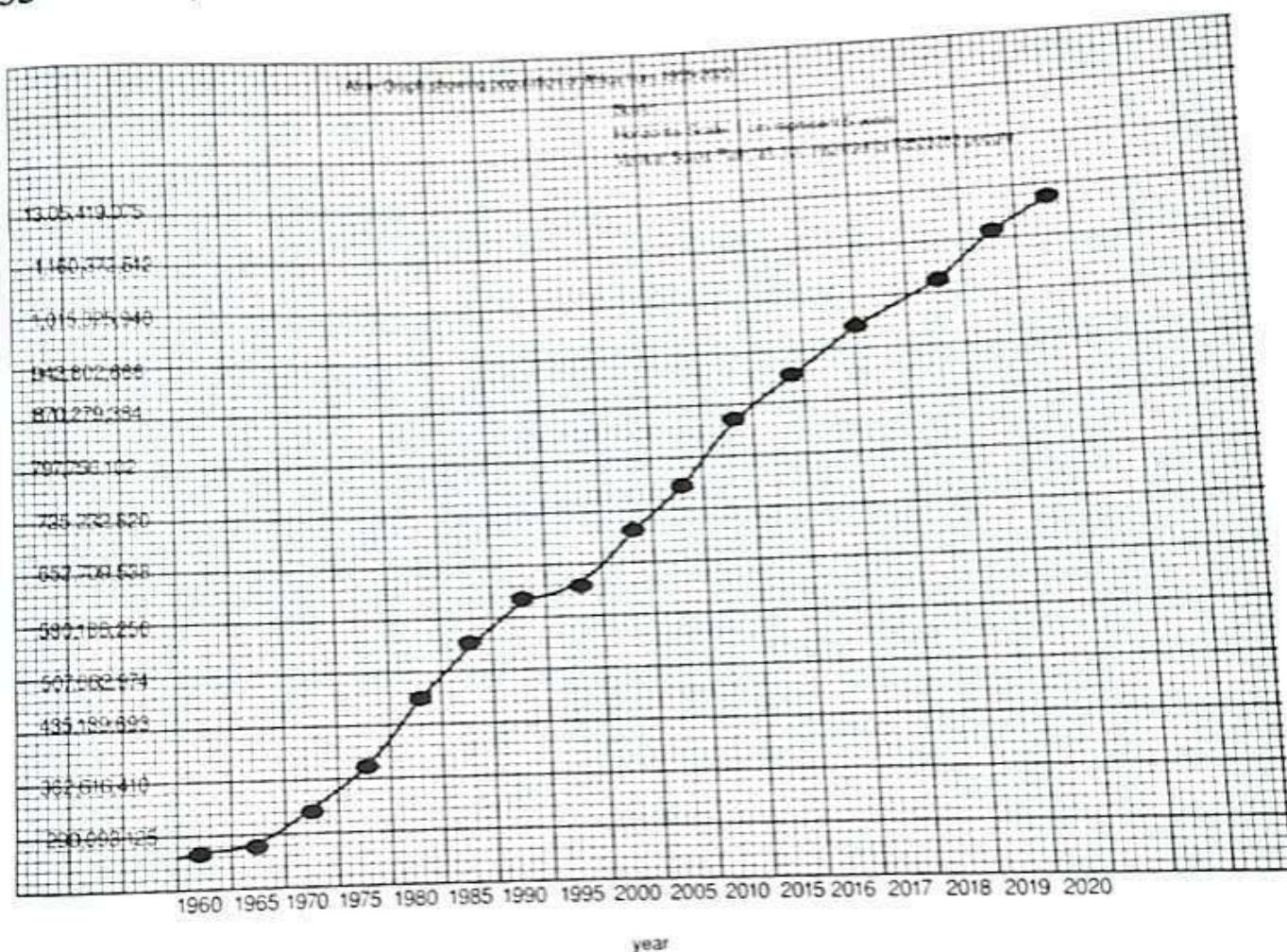
**Instructions to the teacher**

- (a) Organise learners into manageable groups.

- (b) Provide learners with the learner's book and tell them the page on which the tasks are.
- (c) Instruct learners to study the table and do the tasks that follow.
- (d) Observe learners as they discuss in their groups and assist them as they do the task.
- (e) Make sure everyone is actively involved.
- (f) Converse with learners as they do the activity.
- (g) Emphasise that each group comes up with a write-up.
- (h) Instruct learners to present their work.
- (i) Encourage the learners to explain and defend their views.
- (j) Assess the learners' work and give them feedback.

### Suggested responses

1.



2.

- (a) 1955- 1960
- (b) 2010- 2020

- 3 .The Yearly Population Growth Rate chart plots the annual percentage changes in population registered on July 1 of each year, from 1950 to 2020. This value can differ from the Yearly (%) Change shown in the historical table, which shows the last year equivalent percentage change assuming homogeneous change in the preceding five-year period. There is an even increase in the population.

4. High fertility rates, low death rates, improved health services. You have learnt that in 2020, the population of Africa grew by 2.49 percent compared to the previous year. The population growth rate in the continent has been constantly over 2.45 percent from 2000 onwards, and it peaked at 2.62 percent between 2012 and 2014. In 2021, Africa had over 1.36 billion inhabitants. Despite a slowdown in the growth rate, the continent's population will continue to increase significantly in the coming years, reaching nearly 2.5 billion people by 2050. Population.

Several factors are responsible for the rapid growth: a drop in mortality rates, a young population, improved standards of living, and attitudes and practices which favor high fertility. Africans view large families as an economic asset and as a symbol of worth and honor, and parents see it as security during old age.

## ● Factors leading to rapid Population growth in Africa (Learner's Book Page 38)

You learnt about population growth in East Africa, you should have noted that factors of population growth and growth rate which affect East Africa also affect Africa. You can discuss them with your neighbour. After doing tasks in activity 28.3, you will understand the factors Influencing Rapid Population growth in Africa.

### Activity 28.3 Understanding factors leading rapid population growth in Africa

In groups, discuss on the factors leading to rapid population increase and do the following tasks.

- 1 What are the factors influencing rapid population increase in Africa?
- 2 Why is the population of some countries growing faster than others?
- 3 Present your work to the teacher for further guidance

**Resources to use:** writing materials

**Skills:** interpersonal skills, critical thinking, communication, forming own opinions

**Methods:** Class and group discussion

#### Instructions to the teacher

- (a) Organise learners into manageable groups.
- (b) Provide learners with the learner's book and tell them the page on which the tasks are.
- (c) Instruct learners to discuss on the concepts related to population using the knowledge they gained in S.2 and do the tasks that follow.
- (d) Observe learners as they discuss in their groups and assist them as they do the task.
- (e) Make sure everyone is actively involved.
- (f) Converse with learners as they do the activity.
- (g) Emphasise that each group comes up with a write-up.
- (h) Instruct learners to present their work.

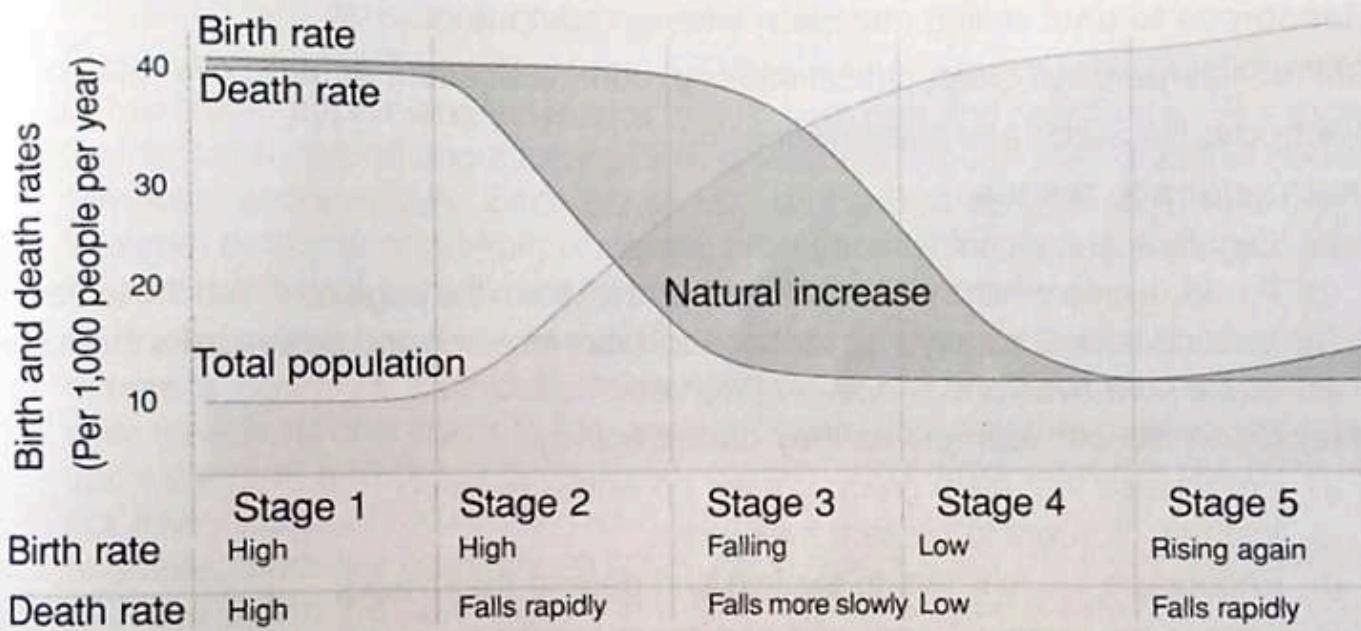
- (i) Encourage the learners to explain and defend their views.
- (j) Assess the learners' work and give them feedback.

### Suggested responses

- 1 Early marriage
  - ↳ Low education services among females
  - ↳ Poverty
  - ↳ Low contraceptive use
  - ↳ General low social economic status of women
  - ↳ Political statement that encourages large families
  - ↳ Improved standards of living
- 2 Population in some countries grow faster than others because;
  - ↳ Some countries have higher standards of living than others
  - ↳ Some countries have favourable climate than others
  - ↳ Economic growth in some countries

## Stages of Population Growth (Learner's Book Pages 38-39)

### Demographic transition model



*Figure 28.1: Stages of demographic transition*

You might have known that, population growth takes place in different stages; pre-industrial, transition, industrial, and post-industrial. In the pre-industrial stage, crude birth rates and crude death rates remain close to each other keeping the population relatively level. During the transition stage, however, improvements in health care delivery and medicines, coupled with investments in sanitation and infrastructure, bring a sharp drop in the crude death rates. During the industrial stage, crude death rates continue to decline, and it is theorized that economic development within the

society bring incentives to bring the crude birth rates down slightly. In the post-industrial stage, the population growth begins to level off because the crude birth rates have reduced to closely follow the crude death rates. After doing tasks in activity 28.4, you will understand the stages of population growth.

#### Activity 28.4 Describing the stages of population growth

In groups; Carry out a library or internet research on the stages of population growth and do the following tasks.

- 1 Discuss the factors that lead to;
  - (i) High death rates. (iii) Low death rates.
  - (ii) High birth rates. (iv) Low birth rates.
- 2 At what stage of the demographic transitional model are countries of East Africa. Give reasons for your answer.
- 3 How is the demographic transition model related to the historical growth and population structures of East Africa?
- 4 Present your findings to the rest of the class through discussion.

**Resources to use:** writing materials, internet, computers

**Skills:** interpersonal skills, critical thinking, communication, forming own opinions

**Methods:** Research and class discussion

#### Instructions to the teacher

- (a) Organise learners into manageable groups.
- (b) Provide learners with the learner's book and tell them the page on which the tasks are.
- (c) Instruct learners to carryout a textbook or library research and do the tasks that follow.
- (d) Make sure everyone is actively involved.
- (e) Converse with learners as they do the activity.
- (f) Emphasise that each group comes up with a write-up.
- (g) Instruct learners to present their work.
- (h) Encourage the learners to explain and defend their views.
- (i) Assess the learners' work and give them feedback.

#### Suggested responses

- 1 (i) Hereditary diseases
  - ^ Drug abuse
  - ^ Health facilities
  - ^ Nutritional levels
- (ii) Early and universal marriages
  - ^ Prevalence of a certain sex of children

- ▲ Joint family system
- ▲ Climatic factors
- ▲ Security purposes
- (iii) Disease control medicine
  - ▲ Public health programs
  - ▲ Medical facilities
  - ▲ Spread of education
- (iv) Social structure
  - ▲ Religious beliefs
  - ▲ Economic prosperity
  - ▲ Urbanization
  - ▲ Race

- ▲ Poverty
- ▲ High infant mortality rate

- ▲ Status of women
- ▲ Food supply

- ▲ Cost of raising children
- ▲ Impact of migration
- ▲ Contraceptives

2. Stage two; because the death rates in east Africa has dropped because in continued immunization of the young children, there has been improvement in food supplies, improvement in medical services this has reduced on the rate at which the nationals are getting affected by diseases, there is also improved education and sensitisation of the masses.

3. The Demographic Transition Model (DTM) is based on historical population trends of two demographic characteristics that is birth rate and death rate . To suggest that a country's total population growth rate cycles through stages as that country develops economically. Each stage is characterized by a specific relationship between birth rate or number of annual births per one thousand people and death rate or number of annual deaths per one thousand people.

As these rates change in relation to each other, their produced impact greatly affects a country's total population. Within the model, a country will progress over time from one stage to the next as certain social and economic forces act upon the birth and death rates. Every country can be placed within the DTM, but not every stage of the model has a country that meets its specific definition. For example, there are currently no countries in Stage 1, nor are there any countries in Stage 5, but the potential is there for movement in the future.

You have learnt that Stage one of demographic transition model took place in the pre-industrial period; death rates and birth rates are high and roughly in balance. Population growth was slow and constant.

Stage two is called the transition stage, it is a characteristic of many developing countries, the death rates drop quickly due to improvements in food supply and sanitation, which increase life expectancies and reduce disease.

Stage three is known as the industrial stage. Death rates are low and birth rates diminish, as a rule accordingly of enhanced economic conditions, an expansion in women's status and education, and access to contraception. Birth rates fall due to various fertility factors such as access to contraception.

Stage four is known as the Post-industrial stage. There are both low birth rates and low death rates. Birth rates may drop to well below replacement level as has happened in countries like Germany, Italy, and Japan. Stage five includes countries in which fertility rates have fallen significantly below replacement level (2 children) and the elderly population is greater than the youthful population.

## Effects of Population growth in Africa Learner's Book Pages

(39-40)

Population growth can lead to changes in a population of a given region or country. Increase in population brings negative and positive effects. The rapid increase in population means that there will be an increase in the dependency ratio. This implies that the country concerned will have to allocate increasing resources to feed, clothe, house and educate the useful component of the population which consumes but does not produce goods and services. After doing tasks in activity 28.5, you will be able to understand the effects of population growth in Africa.

### Activity 28.5 Understanding the effects of population growth in Africa

In groups; carry out a textbook or internet search on the effects of population growth in Africa and do the following tasks.

- 1 What are the advantages of a rapidly increasing population in Africa?
- 2 What problems are most likely to result from a rapidly increasing population in Africa.
- 3 Present your findings to the rest of the class through discussion.

**Resources to use:** writing materials, internet, computers

**Skills:** interpersonal skills, critical thinking, ICT communication, forming own opinions

**Methods:** Research and class discussion

#### Instructions to the teacher

- (a) Organise learners into manageable groups.
- (b) Provide learners with the learner's book and tell them the page on which the tasks are.
- (c) Instruct learners to carry out a textbook or library research and do the tasks that follow.
- (d) Make sure everyone is actively involved.
- (e) Converse with learners as they do the activity.
- (f) Emphasise that each group comes up with a write-up.
- (g) Instruct learners to present their work.
- (h) Encourage the learners to explain and defend their views.
- (i) Assess the learners' work and give them feedback.

#### Suggested responses

- 1 Increasing population is a source of market for locally produced goods leading

to high production and employment to the locals.

- ▲ Provision of large labour for agriculture and other sectors of the economy
  - ▲ Lead to increased tax base of the country that leads to development of social and economic development
  - ▲ Stimulates exploitation of natural resources leading to economic growth of the country
  - ▲ it is the source of security to defend the country against robberies and rebel activities
  - ▲ it brings about innovativeness and inventiveness of the people as they try to satisfy the increasing demands
- 2 It leads to shortage of land resulting into land fragmentation hence low productivity
- ▲ Shortage of social services leading to overcrowding on the existing amenities.
  - ▲ High crime rate due to unemployment, leads to easy spread of diseases due to overcrowding, under employment and un employment
  - ▲ Leads to rural urban migration and its associated problems, problem of shortage of housing facilities leading to growth of slum
  - ▲ High rates of immorality like prostitution and theft
  - ▲ High government expenditure on the provision of social services
  - ▲ Environmental destruction that is destruction of vegetation, pollution
  - ▲ Source of taxes for the government which is used to develop infrastructure

You have learnt that a rapidly growing population has serious impact for the provision of productive employment .Since the rapid population growth is normally accompanied by a proportionate increase in the supply of the labour force, it means that the rate of job creation should match the rate of supply of the labour force. Increases in population also cause a number of serious problems on political and social conflicts among different ethnic, religious, linguistic and social groups.

As population growth increases there will be increasing demands for governmental services in health, education, welfare and other functions. Cause of or even the major contributing factor to violence aggression as the large proportions of young people, particularly those unemployed or have little hope for a satisfactory future. They might form disruptive and potentially explosive political force

## ● Possible ways to control Rapid Population growth in Africa (Learner's Book Pages 40-41)

You could have learnt that Africa is one of the three leading continents in terms of population growth. You also learnt that there are many problems associated with a rapidly growing population that is why many countries are struggling to control population. After doing tasks in activity 28.6, you will understand possible ways to control rapid population growth in Africa.

**Activity 28.6**

Understanding possible ways of controlling rapid population growth in Africa

In groups; read the dialogue and do the tasks that follow.

Mrs. Catherine: Good morning Mr. James. how are you doing?

Mr. James: Good morning Mrs. Catherine. I am well thank you. As you are rushing

what is the problem?

Mrs. Catherine: I am in a hurry taking some stuff to our neighbour in the hospital, she gave birth.

Mr. James: Congratulations to her, isn't that her 13<sup>th</sup> child now?

Mrs. Catherine: Yes, she has a total of 13 children now. And the husband has other children from different women. Actually, this village has families with too many children, women are constantly giving birth. This has increased the population making most of the resources like water, food, land scarce due to the increasing number of people.

Mr. James: I think we should talk to the village chairperson such that we organise a day and sensitise people on how to control this increasing population and the advantages of a low population as well.

Mrs. Catherine: This is a big task Mr. James because we have to involve doctors or nurses who will have to teach them about different family planning methods, so I think we need some time to organise.

Mr. James: You are right but there are so many other measures besides family planning, for instance encouraging monogamy, encouraging formal education, poverty reduction policies, increasing the age of marriage among others. Therefore, even in the absence of nurses or doctors the sensitization can go on.

Mrs. Catherine: In addition, we can as well find ways of increasing incentives for small families and taxes for bigger families. By so doing the increasing population can be reduced.

Mr. James: All is right Mrs. Catherine, we shall meet again when you get back from the hospital, we talk to the chairperson and organise the day.

Mrs. Catherine: Thank you Mr. James, see you then.

- 1 Identify ways of controlling rapid population growth mentioned in the dialogue.
- 2 What other methods can be used to control rapid population growth in Africa and are not mentioned in the dialogue.
- 3 What are the advantages of the methods identified in (1) and (2)?
- 4 Present your findings to the rest of the class through discussion.

**Resources to use:** writing materials and dialogue provided in the learners book.  
**Skills:** interpersonal skills, critical thinking, communication, forming own opinion.

**Methods: Class discussion****Instructions to the teacher**

- (a) Provide learners with the learner's book and tell them the page on which the tasks are.
- (b) Instruct learners to study the dialogue and do the tasks that follow.
- (c) Observe learners as they discuss in their groups and assist them as they do the task.
- (d) Make sure everyone is actively involved.
- (e) Converse with learners as they do the activity.
- (f) Instruct learners to present their work.
- (g) Encourage the learners to explain and defend their views.
- (h) Assess the learners' work and give them feedback.

**Suggested responses**

- 1 Monogamy
  - ↳ Encouraging formal education
  - ↳ Poverty reduction policies
  - ↳ Increasing the age of marriage
- 2 Spend more time at school delays time for marriage
  - ↳ Government provides social and economic incentives to small families as a means of discouraging people from having large families
  - ↳ Government can also impose taxes so to regulate the maximum number of children a couple is allowed to have so as to discourage large families
  - ↳ Government can also impose social and economic disincentives on large families for example high medical charges taxes on children, high school fees
  - ↳ Encourage emigrations so that the excess population moves to other countries

You have learnt that birth rates are mainly responsible for rapid population growth. Therefore, measures which can reduce the birth rate should be adopted mainly for example birth control pills, vasectomy, emergency contraception and tubal ligation.

## **● Population Distribution and Population Density in Africa**

(Learner's Book Pages 41-43)

When you move around your community, you will realise that people are many in some areas and few in other areas. The way how people occupy or settle in a given area is known as **population distribution**. Population distribution in Africa are not uniform. Population distribution maybe dense where people are many and sparse where people a few.

Population distribution is influenced by a number of factors which are both physical and human. After doing tasks in tasks in activity 28.7, you are going to understand the factors responsible for population distribution in Africa

**Activity 28.7**

Finding out the factors population distribution in Africa

In groups,

Explain how the following factors that influence population distribution in Africa.

- a) Relief
- b) Climate
- c) Vegetation
- d) Soils

Suggest factors that influence population distribution in Africa.

Present your work to the rest of the class through discussion

**Resources to use:** writing materials.

**Skills:** interpersonal skills, critical thinking, communication, forming own opinions.

**Methods:** Brainstorming and class discussions.

**Instructions to the teacher**

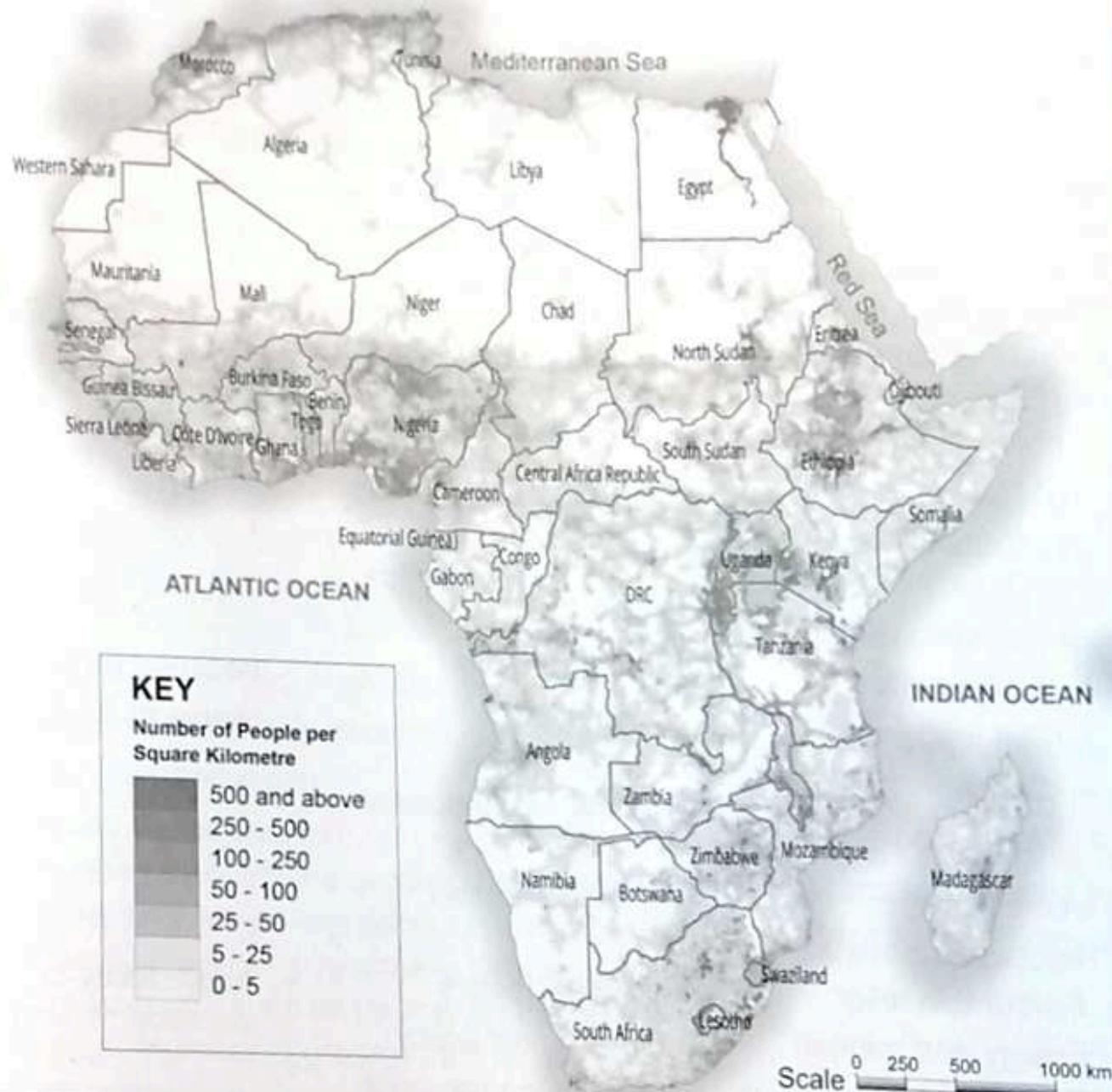
- (a) Organise learners into manageable groups.
- (b) Provide learners with the learner's book and tell them the page on which the tasks are.
- (c) Instruct learners to discuss using the knowledge they gained in S.2 and do the tasks that follow.
- (d) Observe learners as they discuss in their groups and assist them as they do the task.
- (e) Make sure everyone is actively involved.
- (f) Converse with learners as they do the activity.
- (g) Emphasise that each group comes up with a write-up.
- (h) Instruct learners to present their work.
- (i) Encourage the learners to explain and defend their views.
- (j) Assess the learners' work and give them feedback.

You have learnt that for people to live, they need resources from the environment. This means that areas with plenty of resources attract more people and those with limited or no resources attract less or no people.

The concentration of people per unit area is known as **population density**. The density figures assume that people are evenly distributed all over the area even in those places where people do not live in like swamps, rivers and steep slopes. After doing tasks in activity 28.8 you will be able to understand population density.

**Activity 28.8****Understanding Population Density in Africa**

In groups, study the map in figure 28.2 showing the population density in Africa and do the tasks that follow.



*Figure 28.2: Map showing population density in Africa*

- 1 Identify the main areas of;
  - (iii) High density.
  - (ii) Moderate density.
  - (iii) Low density
- 2 Suggest reasons for high, moderate and low population in the areas you have identified in (1).
- 3 Explain the factors which affect population density in Africa.
- 4 Present your findings to the rest of the class through discussion.

**Resources to use:** writing materials, map

**Skills:** Map reading, interpersonal skills, critical thinking, communication, forming own opinions

**Methods:** Brainstorming and class discussions

**Instructions to the teacher**

- (a) Provide learners with the learner's book and tell them the page on which the tasks are.
- (b) Instruct learners to study the map and do the tasks that follow
- (c) Observe learners as they discuss in their groups and assist them as they do the task.
- (d) Make sure everyone is actively involved.
- (e) Converse with learners as they do the activity.
- (f) Instruct learners to present their work.
- (g) Encourage the learners to explain and defend their views.
- (h) Assess the learners' work and give them feedback..

- 1 (i) Nile Delta, Niger delta in Nigeria, lake shores of East Africa, Maghrib region of north west Africa, Ethiopian highlands Johannesburg industrial region of South Africa.
- (iv) Rwanda Mauritius, Burundi, Ethiopia, Swaziland Lesotho
- (v) Sahara Desert, Kalahari Desert, Somali land (horn of Africa), Sahel region (Mali, Niger, Chad, Sudan, south west Africa)

## 2 Favourable climate

- |                      |   |                                       |
|----------------------|---|---------------------------------------|
| ▲ Fertile soils      | ▲ Presences of minerals,                | transport routes                      |
| ▲ Flat topography    | ▲ Trade and commerce industrial centres | ▲ Nature of livelihood                |
| ▲ Drainage           | ▲ Well-developed                        |                                       |
| ▲ Vegetation         | ▲ Political factors                     |                                       |
| ▲ Natural calamities | ▲ Government policy                     | ▲ Accessibility to transport networks |

## 3 Favourable climate

- |                                |                                   |
|--------------------------------|-----------------------------------|
| ▲ Favourable relief            | ▲ Controls on migration and trade |
| ▲ Energy and mineral resources |                                   |
| ▲ Cultural factors             |                                   |

You have learnt that in Africa 90% of the population is concentrated in less than 21% of the land surface.

The distribution of population and settlements across a country and their interconnectivity and accessibility from urban areas are important for delivering healthcare, distributing resources and economic development.

## Urbanisation in Africa (Learner's Book Pages 43-53)

Africa is the fastest urbanising region in the world with an average annual urbanisation rate of 3.2%. Currently, 472 million people live in African cities and this number is expected to grow to 810 million people by 2035. Rapid urbanisation has important implications on how residents live their day to day life, as well as how businesses operate. Urbanisation occurs when people move from rural areas and settle in towns. This process is known as **rural urban migration**.

### Rural-Urban Migration (Learner's Book Page 43)

You might have shifted from one area to another or you might have seen your neighbour shift from one area to another. You can share with your friend why people move from one area to another. After doing tasks in activity 28.9, you will understand the factors responsible for rural-urban migration.

#### Activity 28.9

Understanding the factors responsible for rural-urban migration

In groups:

1. Discuss factors that have led to rural-urban migration?
2. Present your work to the rest of the class through discussion.
3. Present your work to the teacher for further guidance.

Resources to use: writing materials

Skills: interpersonal skills, critical thinking, communication, forming own opinions.  
Methods: Class discussion

#### Instructions to the teacher

- (a) Provide learners with the learner's book and tell them the page on which the tasks are.
- (b) Observe learners as they discuss in their groups and assist them as they do the task.
- (c) Make sure everyone is actively involved.
- (d) Converse with learners as they do the activity.
- (e) Instruct learners to present their work.
- (f) Encourage the learners to explain and defend their views.
- (g) Assess the learners' work and give them feedback.

#### Suggested responses

##### 1 Pull Factors

- ^ Availability of social amenities in towns which make people to migrate from villages to towns
- ^ Employment opportunities which towns offer attract and employ from rural areas
- ^ Security also attracts people in towns because they are relatively peaceful and have different security services

- ▲ People have also moved from rural areas to urban centre to take advantage of the existing trade and commercial opportunities
- ▲ Family ties have also influenced people to move from villages to towns to live with relatives

## 2 Push Factors

- ▲ Low productivity of land due to over cultivation
- ▲ Limited social services like medical centres, education services piped water
- ▲ Cultural practices which scare away people in the villages
- ▲ Limited employment opportunities in villages
- ▲ Land disputes in rural areas force people to move to towns
- ▲ Natural hazards like landslides, drought, el-nino floods which displace people from villages and force them to go live in towns.

You have realised that Africa's urban population has been rapidly increasing due to rural-urban migration. Rural-urban migration is caused by a number of factors. The factors that force people to leave their areas of origin are called **push factors**. Those that attract people to areas of their destination are called **pull factors**. Urbanisation involves a number of processes. After doing tasks in activity 28.10, you will understand the characteristics of urban centres in Africa.

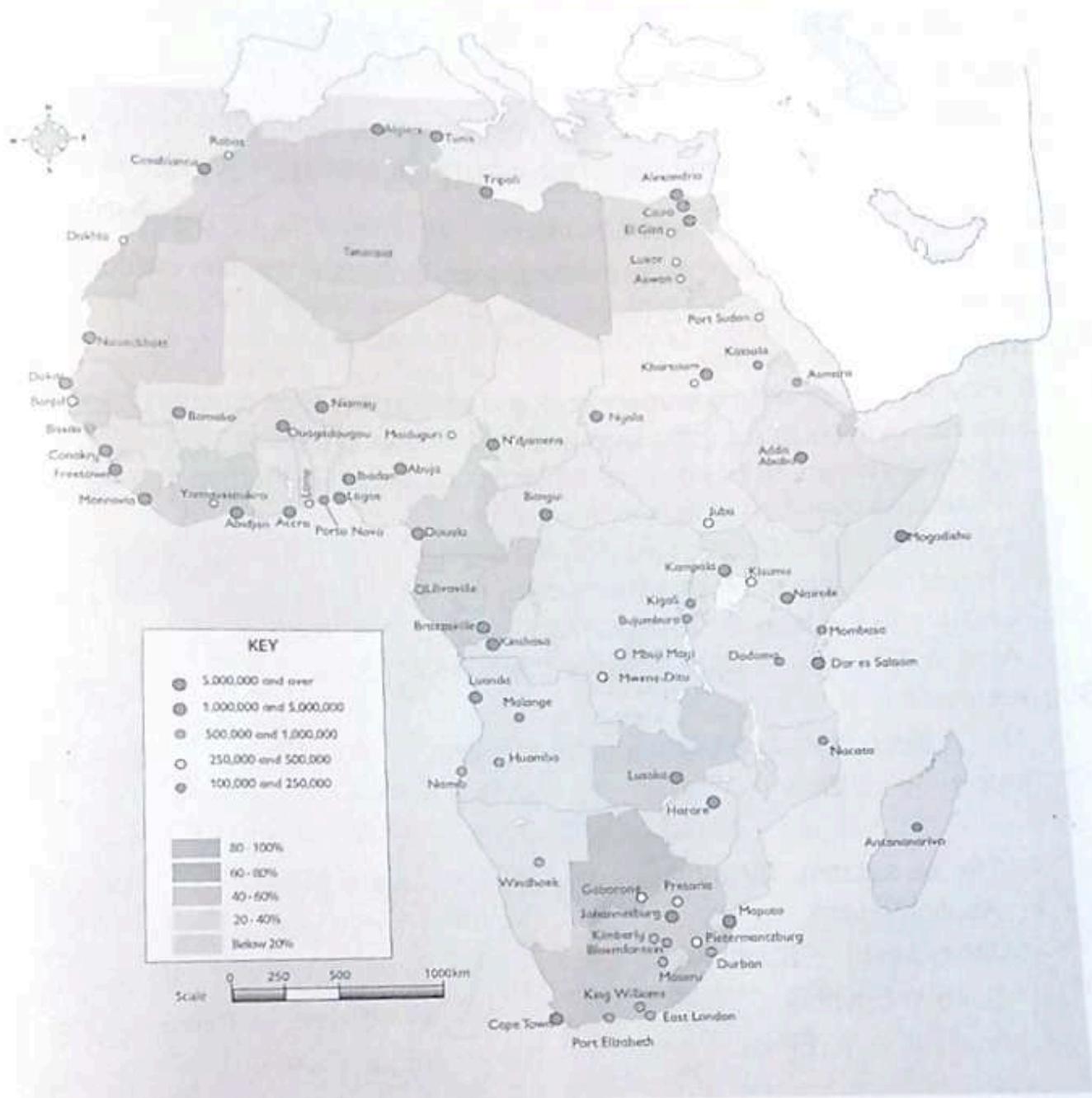


Figure 28.3: Map of Africa showing major urban centres

#### Activity 28.10 Understanding the characteristics of urban centres

Study map in figure 28.3 showing the major urban centres in Africa and do the following tasks.

1. What is meant by the term urbanisation?
2. Copy the map in figure 28.3 showing the major urban centres in Africa into your note book and show the capital cities of the countries indicated.
3. Write down the top ten cities of Africa.

4. What is the rank position of your country's capital city?
5. Explain the characteristics of urban centres in Africa?
6. Describe the relationship between a rapidly growing population and urbanisation.
7. Share your work with the rest of the class through discussion

**Resources to use:** writing materials, map

**Skills:** interpersonal skills, critical thinking, communication, forming own opinions

**Methods:** Brainstorming and class discussion

#### Instructions to the teacher

- (a) Provide learners with the learner's book and tell them the page on which the tasks are.
- (b) Instruct learners to study the map and do the tasks that follow
- (c) Observe learners as they discuss in their groups and assist them as they do the task.
- (d) Make sure everyone is actively involved.
- (e) Converse with learners as they do the activity.
- (f) Instruct learners to present their work.
- (g) Encourage the learners to explain and defend their views.
- (h) Assess the learners' work and give them feedback.

#### Suggested responses

- 1 This is the growth and development of towns.
- 2 Map in figure 28.3
- 3
 

▲ Dar es salaam, Tanzania	▲ Lagos, Nigeria
▲ Abuja, Nigeria	▲ Nairobi, Kenya
▲ Johannesburg South Africa	▲ Abidjan, ivory coast
▲ Cairo in Egypt	▲ Windhoek, Namibia
▲ Addis Ababa, Ethiopia	▲ Kigali Rwanda
- 4 23<sup>rd</sup>
- 5 Commercial mainly in towns that offer commerce and trade
  - ▲ Agricultural these grow as a result of farming
  - ▲ Administrative these develop due to administration functions
  - ▲ Industrial function where manufacturing is the common function
  - ▲ Cultural towns that have religious sites, museums, historical sites
  - ▲ Residential mainly these have housing estates
  - ▲ Mining these develop as a result of mining activities
- 6 In areas where urban centres have developed due to the various functions these will always attract more population to settle in those areas so as to enjoy the services provided by the urban centres so urbanisation and population increase are very related one leads to the other.

You have learnt that urbanisation in Africa is not uniform. Some cities are more urbanised than others. **Urbanisation** is the process through which cities grow, and higher percentages of the population shift from rural areas to urban centres. Urban areas in Africa are poorly planned. This has resulted in the development of slums or informal settlements in the areas surrounding urban centres.

## Functions of Urban Centres (Learner's Book Pages (45-46))

In Senior Two, you learnt that urban centres have a number of functions to the development of East African countries. You can remember a number of functions you learnt about. After doing tasks in activity 28.11, you will understand the functions of urban centres in Africa.

### Activity 28.11 Understanding functions of urban areas

In groups; study photographs A-D in figure 28.4 and do the tasks that follow.



*Figure 28.4: Urban infrastructure for different purposes.*

- 1 Identify the functions of urban centres shown in each photograph in figure 28.4
- 2 Suggest other functions of urban centres.
- 3 Suggest ways through which urbanisation lead to development of an area?
- 4 Present your findings to the rest of the class through discussion.

**Resources to use:** writing materials, photographic interpretation,  
**Skills:** Photographic interpretation, interpersonal skills, critical thinking, communication, forming own opinions  
**Methods:** Brainstorming and class discussion

#### Instructions to the teacher

- (a) Provide learners with the learner's book and tell them the page on which the tasks are.
- (b) Instruct learners to study the photographs and do the tasks that follow
- (c) Observe learners as they discuss in their groups and assist them as they do the task.
- (d) Make sure everyone is actively involved.
- (e) Converse with learners as they do the activity.
- (f) Instruct learners to present their work.
- (g) Encourage the learners to explain and defend their views.
- (h) Assess the learners' work and give them feedback.

#### Suggested responses

- 1 Photograph A- Recreational centre  
 Photograph B- Medical centre  
 Photograph C- Educational centre  
 Photograph D- Residential centre
- 2 Commercial centres
  - ↳ Administrative centres
  - ↳ Transport and communication centres
  - ↳ Industrial centres
- 3 Urbanisation leads to development of an area because with urbanisation also comes the development of social services to make the people comfortable. This alone will always lead to development because urbanisation will increase in population will call for increased demand of social services in that said area hence development.

You have learnt that, urban centres are used as commercial centres, administrative centres, educational and residential centres. Cities play an important role in economic development. They provide economies of scale, accumulation, and localisation; they provide efficient infrastructure and services through density and concentration in transportation, communications, power, human interactions, water and sanitation services. Urban areas are very developed, meaning there is a density of human structures such as houses, commercial buildings, roads, bridges, and railways.

### ● Factors responsible for rapid Urban Growth (Learner's Book Pages 46)

Africa has experienced very high urban growth in the last 20 years. Growth rates have been about 3.5% per year. There are many factors that are responsible for this rapid urban growth. After doing tasks in activity 28.12, you will understand the factors responsible for rapid urban growth.

**Activity 28.12****Understanding factors responsible for rapid urban growth**

In groups;

- 1 Describe the factors responsible for rapid urban growth in Africa.
- 2 Present your work to the rest of the class through discussion.
- 3 Present your work to the teacher for further guidance.

**Resources to use:** writing materials

**Skills:** interpersonal skills, critical thinking, communication, forming own opinions.

**Methods:** Group and class discussion

**Instructions to the teacher**

- (a) Provide learners with the learner's book and tell them the page on which the tasks are.
- (b) Observe learners as they discuss in their groups and assist them as they do the task.
- (c) Make sure everyone is actively involved.
- (d) Converse with learners as they do the activity.
- (e) Instruct learners to present their work.
- (f) Encourage the learners to explain and defend their views.
- (g) Assess the learners' work and give them feedback.

**Suggested responses**

1.

- Rich hinterland
- Favourable climate
- Availability of minerals
- Strategic location
- Improvement in transport
- Industrial development
- Government policy
- Administrative reasons
- Increase in commercial activities
- Historical events

You have realised that urbanisation occurs mainly because people move from rural areas to urban areas which results into growth in the size of the urban population and the extent of urban areas.

**• Problems facing Urban Areas in Africa** Learner's Book Pages (46-48)  
 You might have realised that when an area develops, more people come to stay there. This is associated with problems such as poor waste disposal and pollution. After doing tasks in activity 28.13, you will understand better the problems facing urban areas in Africa.

**Activity 28.13** Identifying problems facing urban areas in Africa

In groups; study photographs A-D in figure 28.5 showing and do the following tasks.

A



B



C



D



*Figure 28.5: Problems facing urban areas*

- 1 Describe the problems facing urban areas in each of the photographs in figure 28.5?
- 2 Present your findings to other groups through discussion.

**Resources to use:** writing materials, photographic interpretation,

**Skills:** Photographic interpretation, interpersonal skills, critical thinking, communication, forming own opinions

**Methods:** Group and class discussion

**Instructions to the teacher**

- (a) Provide learners with the learner's book and tell them the page on which the tasks are.
- (b) Instruct learners to study the photographs and do the tasks that follow
- (c) Observe learners as they discuss in their groups and assist them as they do the task.
- (d) Make sure everyone is actively involved.
- (e) Converse with learners as they do the activity.
- (f) Instruct learners to present their work.
- (g) Encourage the learners to explain and defend their views.
- (h) Assess the learners' work and give them feedback.

**Suggested responses**

1 Photograph A- Pollution

Photograph B- traffic congestion

Photograph C- poor waste management

Photograph D- slums development

2 Poor planning

▲ Inadequate social amenities

▲ High rate of crime

▲ Unemployment

▲ Inadequate housing facilities

3 Silting of the water bodies causes flooding, easy spread of diseases and requires expensive dredging

▲ Pollution of air land and water bodies by industrial wastes causes chronic diseases, water borne diseases

▲ High crime rate results into insurgencies

▲ Traffic congestion causes delays and accidents

You have found out that Urban areas are faced by problems such as unemployment, poor planning and high crime rates.

 **Solutions to the problems facing Urban Areas (Leamer's Book Pages 48-49)**

**Activity 28.14** Discussing solutions to the problems facing urban areas in Africa

In groups; study photographs A and B in figure 28.6 structures which ease problems of urbanisation and do the following tasks.



*Figure 28.6: Structures which ease problems of urbanisation*

- 1 Identify the solutions to the problems facing urban areas shown in figure 28.6.
- 2 Carry out a textbook research on other solutions to the problems facing urban areas not shown in figure 28.6.
- 3 Present your findings with other groups through discussion.

**Resources to use:** writing materials, photographic interpretation,

**Skills:** Photographic interpretation, interpersonal skills, critical thinking, communication, forming own opinions

**Methods:** Brainstorming and class discussions

#### Instructions to the teacher

- Provide learners with the learner's book and tell them the page on which the tasks are.
- Instruct learners to study the photographs and do the tasks that follow
- Observe learners as they discuss in their groups and assist them as they do the task.
- Make sure everyone is actively involved.
- Converse with learners as they do the activity.
- Instruct learners to present their work.
- Encourage the learners to explain and defend their views.
- Assess the learners' work and give them feedback.

#### Suggested responses

- Photograph A- Constructing by-passes, subways, tunnels, fly over or under passes.  
Photograph B- proper waste management that is to say setting up landfills.
- Provision of social services
  - proper planning by the government
  - Establish income generating activities in rural areas
  - Establish low housing projects
  - sensitise and encourage birth control
  - Improve the slummy areas
  - Relocate activities to areas outside the city
  - Enforce laws that govern the development of modern cities
  - Enforce law and order to reduce on crime rate

You have learnt that problems facing urban areas can be solved by involving local communities. Local communities can plant trees which can help in reducing air pollution. Air pollution can also be reduced by providing alternative transport system. Government of African countries should establish re-cycling industries or plants as a form of waste management.

#### CASE STUDIES OF URBANISED CITIES IN AFRICA (Leamer's Book Pages 49-53)

##### CAIRO (Leamer's Book Pages 49-50)

Cairo is the capital city of Egypt. It is among the top ten cities of Africa. Cairo is also the 19th largest city in the world, and among the world's most densely populated cities. Cairo has the oldest and largest film and music industries in the Arab world, as well as the world's second-oldest institution of higher learning, al-Azhar University. Many international media, businesses, and organisations have regional headquarters in the city; the Arab League has had its headquarters in Cairo for most of its existence.



Figure 28.7: Map showing the location of Cairo

Study table 28.2 showing Characteristics, Functions, Factors influencing growth, Problems and Solutions to the problems facing Cairo city

Table 28.2: Characteristics, Functions, Factors influencing growth, Problems and Solutions to the problems facing Cairo city

Characteristics of Cairo	Functions of Cairo	Factors influencing growth of Cairo	Problems facing Cairo	Solutions to the problems
▲ It is the capital and largest city of Egypt	▲ Administrative centre. ▲ Trade centre. ▲ Tourist centre	▲ Availability of educational facilities ▲ Natural increase in population	▲ High levels of pollution ▲ Unemployment ▲ Traffic congestion	▲ Initiating developments in the rural areas
▲ It is located near river Nile and the pyramids of Giza in the northern part of Egypt	▲ Education centre. ▲ Residential centre ▲ Commercial centre ▲ Industrial centre	▲ Investment opportunities. ▲ Presence of water used in industrialisation provided by River Nile ▲ Presence of power	▲ High rate of crime including terrorism. ▲ Growth of slums ▲ Poor garbage disposal ▲ High costs of living	▲ Setting up industries far from residential areas ▲ Expanding existing road network to improve traffic flow

<ul style="list-style-type: none"> <li>↗ It is one of the largest cities in Africa.</li> <li>↗ It has an area of 528 square kilo metres.</li> </ul>	<ul style="list-style-type: none"> <li>↗ Financial centre with banking institutions</li> <li>↗ Cultural centre</li> <li>↗ Recreation centre</li> </ul>			<ul style="list-style-type: none"> <li>↗ Increasing the number of police officers on patrol.</li> </ul>
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### Johannesburg (Leamer's Book Pages 50-51)

Johannesburg is the biggest city in South Africa's and capital of Gauteng province. Its growth began as a 19th century with the gold-mining settlement. Johannesburg is the site of a large-scale gold and diamond trade due to its location on the mineral-rich Witwatersrand range of hills. The city was established in 1886 following the discovery of gold on what had been a farm. Due to the extremely large gold deposit found along the Witwatersrand, within ten years, the population had grown to 100,000 people. Johannesburg is the seat of the Constitutional Court, the highest court in South Africa. The photograph in figure 28.8 shows part of Johannesburg.

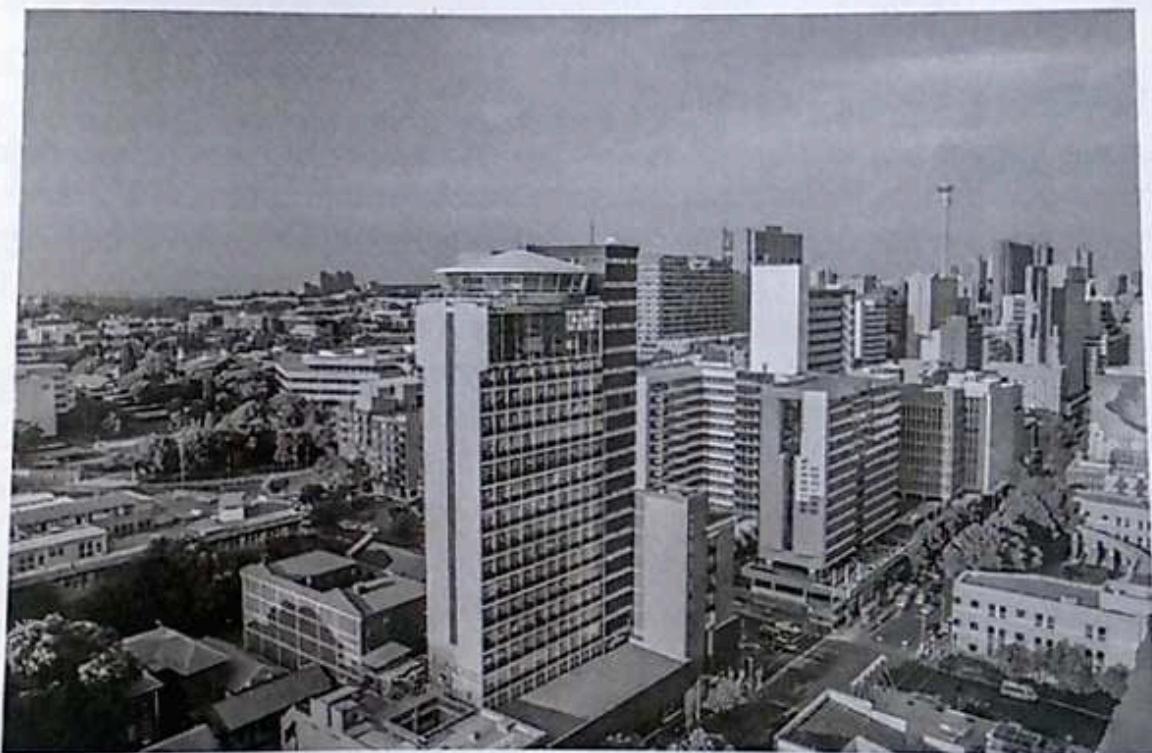


Figure 28.8: Part of Johannesburg

Table 28.3: Characteristics, Functions, Factors influencing growth, Problems and Solutions to the problems facing Johannesburg city

Characteristics of Johannesburg	Functions of Johannesburg	Factors influencing growth of Johannesburg	Problems facing Johannesburg	Solutions to the problems
---------------------------------	---------------------------	--	------------------------------	---------------------------

<ul style="list-style-type: none"> <li>▲ It is the capital and largest city of South Africa</li> <li>▲ It is found in the wealthiest province of South Africa Gauteng</li> <li>▲ It covers an area of 1,645 km<sup>2</sup></li> <li>▲ It has an estimated population of 5.635 million people</li> </ul>	<ul style="list-style-type: none"> <li>▲ Administrative centre.</li> <li>▲ Trade centre.</li> <li>▲ Tourist centre</li> <li>▲ Education centre.</li> <li>▲ Residential centre</li> <li>▲ Commercial centre</li> <li>▲ Industrial centre</li> <li>▲ Financial centre with banking institutions</li> <li>▲ Cultural centre</li> <li>▲ Recreation centre</li> </ul>	<ul style="list-style-type: none"> <li>▲ Presence of energy such as coal</li> <li>▲ Natural increase in population</li> <li>▲ Discovery of gold</li> <li>▲ Presence of power</li> </ul>	<ul style="list-style-type: none"> <li>▲ High levels of pollution</li> <li>▲ Unemployment</li> <li>▲ Traffic congestion</li> <li>▲ High rate of crime including terrorism.</li> <li>▲ Growth of slums</li> <li>▲ Poor garbage disposal</li> <li>▲ High costs of living</li> </ul>	<ul style="list-style-type: none"> <li>▲ Initiating developments in the rural areas</li> <li>▲ Setting up industries far from residential areas</li> <li>▲ Expanding existing road network to improve traffic flow</li> <li>▲ Increasing the number of police officers on patrol.</li> </ul>
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### Lagos (Learner's Book Pages 51-53)

Lagos is the largest city in Nigeria. It was the capital city of Nigeria until before the government decided to move their capital to Abuja in the centre of the country in December 1991. It is the second city with the highest population in Africa. Lagos has the tallest skyline in Nigeria. Lagos is also among the top ten of the world's fastest-growing cities and urban areas. The photograph in figure 28.9 shows part of Lagos

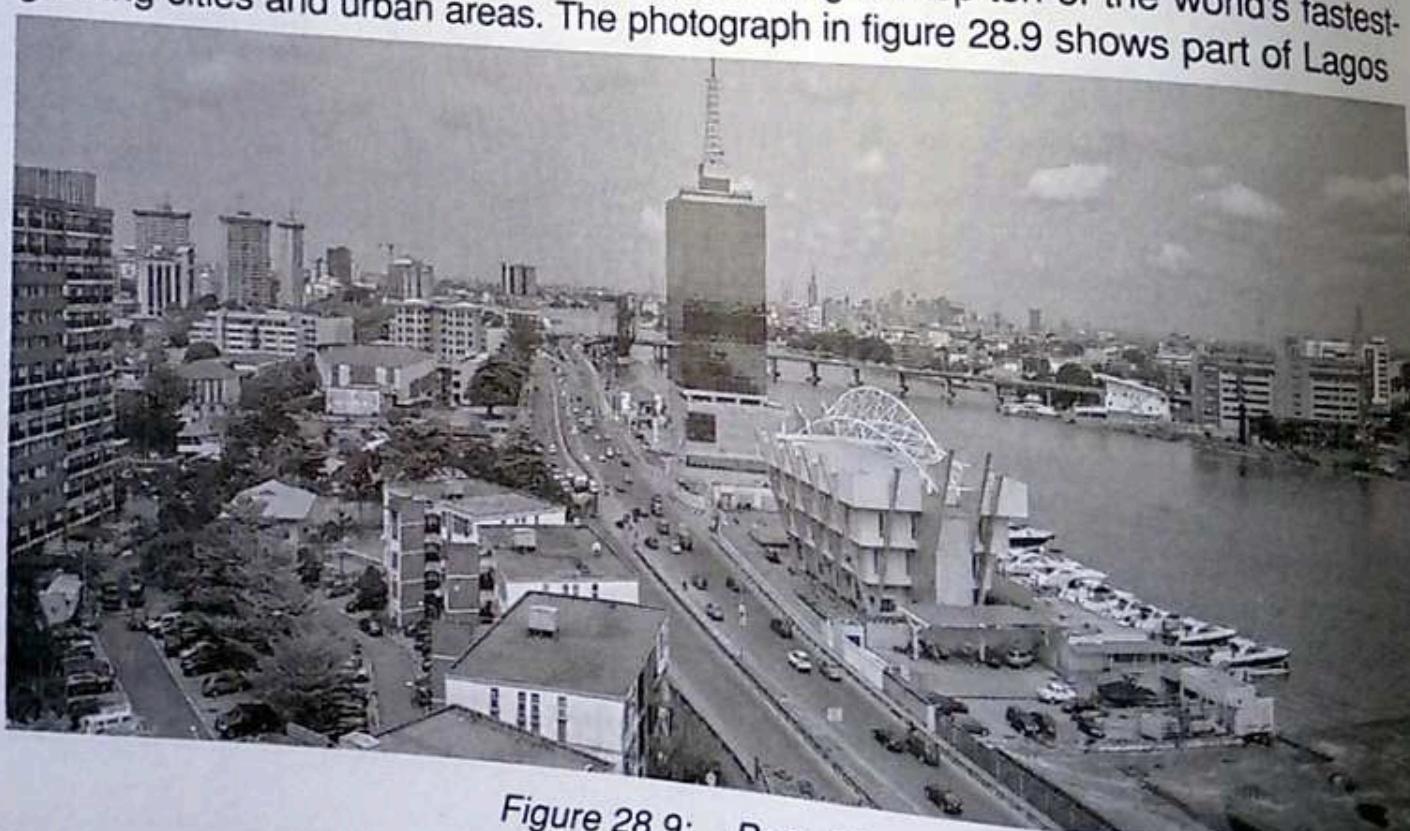


Figure 28.9: Part of Lagos

**Activity 28.15**

Exploring Characteristics, functions, factors influencing growth, problems and solutions to the problems facing different cities in Africa

Carry out a text book or internet research on Lagos and do the following tasks.

**Find out;**

- 1 Characteristics of Lagos
- 2 Functions of Lagos.
- 3 Factors influencing the growth of Lagos.
- 4 Problems facing Lagos.
- 5 Efforts being made to solve problems facing Lagos.
- 6 Draw a sketch map showing the location of Lagos.
- 7 Present your findings to other groups through discussion.

**Resources to use:** writing materials, internet, computers

**Skills:** interpersonal skills, critical thinking, ICT communication, forming own opinions

**Methods:** Research and class discussion

**Instructions to the teacher**

- (a) Organise learners into manageable groups.
- (b) Provide learners with the learner's book and tell them the page on which the tasks are.
- (c) Instruct learners to carry out a textbook or library research and do the tasks that follow.
- (d) Make sure everyone is actively involved.
- (e) Converse with learners as they do the activity.
- (f) Emphasise that each group comes up with a write-up.
- (g) Instruct learners to present their work.
- (h) Encourage the learners to explain and defend their views.
- (i) Assess the learners' work and give them feedback.

**Activity 28.15**

Exploring Characteristics, functions, factors influencing growth, problems and solutions to the problems facing different cities in Africa

Carry out a text book or internet research on Lagos and do the following tasks.

**Find out;**

- 1 Characteristics of Lagos
- 2 Functions of Lagos.
- 3 Factors influencing the growth of Lagos.
- 4 Problems facing Lagos.
- 5 Efforts being made to solve problems facing Lagos.
- 6 Draw a sketch map showing the location of Lagos.
- 7 Present your findings to other groups through discussion.

**Resources to use:** writing materials, internet, computers

**Skills:** interpersonal skills, critical thinking, ICT communication, forming own opinions

**Methods:** Research and class discussion

**Instructions to the teacher**

- (a) Organise learners into manageable groups.
- (b) Provide learners with the learner's book and tell them the page on which the tasks are.
- (c) Instruct learners to carry out a textbook or library research and do the tasks that follow.
- (d) Make sure everyone is actively involved.
- (e) Converse with learners as they do the activity.
- (f) Emphasise that each group comes up with a write-up.
- (g) Instruct learners to present their work.
- (h) Encourage the learners to explain and defend their views.
- (i) Assess the learners' work and give them feedback.

**Suggested responses**

Characteristics, Functions, Factors influencing growth, Problems and Solutions to the problems facing Lagos city

Characteristics of Lagos	Functions of Lagos	Factors influencing growth of Lagos	Problems facing Lagos	Solutions to the problems
▲ It is the largest city in Nigeria	▲ Administrative centre.	▲ Availability of educational facilities	▲ High levels of pollution	▲ Initiating developments in the rural areas
▲ Lagos is dominated by its system of islands, sandbars, and lagoons.	▲ Trade centre. ▲ Tourist centre ▲ Education centre. ▲ Entertainment centre ▲ Residential centre ▲ Commercial centre ▲ Industrial centre ▲ Financial centre with banking institutions ▲ Cultural centre ▲ Recreation centre	▲ Natural increase in population ▲ Investment opportunities. ▲ Presence of power	▲ Unemployment ▲ Traffic congestion ▲ High rate of crime including terrorism. ▲ Development of slums ▲ Poor standards of living	▲ Setting up industries far from residential areas ▲ Expanding existing road network to improve traffic flow ▲ Increasing the number of police officers on patrol.
▲ It is one of the largest cities in Africa.				
▲ It has an area of 1,171 square kilo metres.				
▲ It has an estimated population of 21,320,000 people				

You have realised that most of the cities in Africa have common functions such as being used as educational centres, tourism and recreational centres, Factors influencing their growth such as, Availability of educational facilities, Investment opportunities, problems such as Rural-urban migration and high levels of pollution.

**Sample Activity of Integration (Leamer's Book Pages 53)**

Each year, on July 11, African joins the rest of the world to celebrate the World Population Day. The event was established by the Governing Council of the United Nations Development Programme in 1989. This annual event is observed to focus on the importance of population and development issues. Imagine you were invited to represent Uganda for this year's celebrations at the headquarters of African Union in Addis Ababa, Ethiopia under the theme "**Population and urban development in Africa and Other parts of the world**".



**Task:**  
Write a speech of about 800 words that you would have to present at the ceremony.

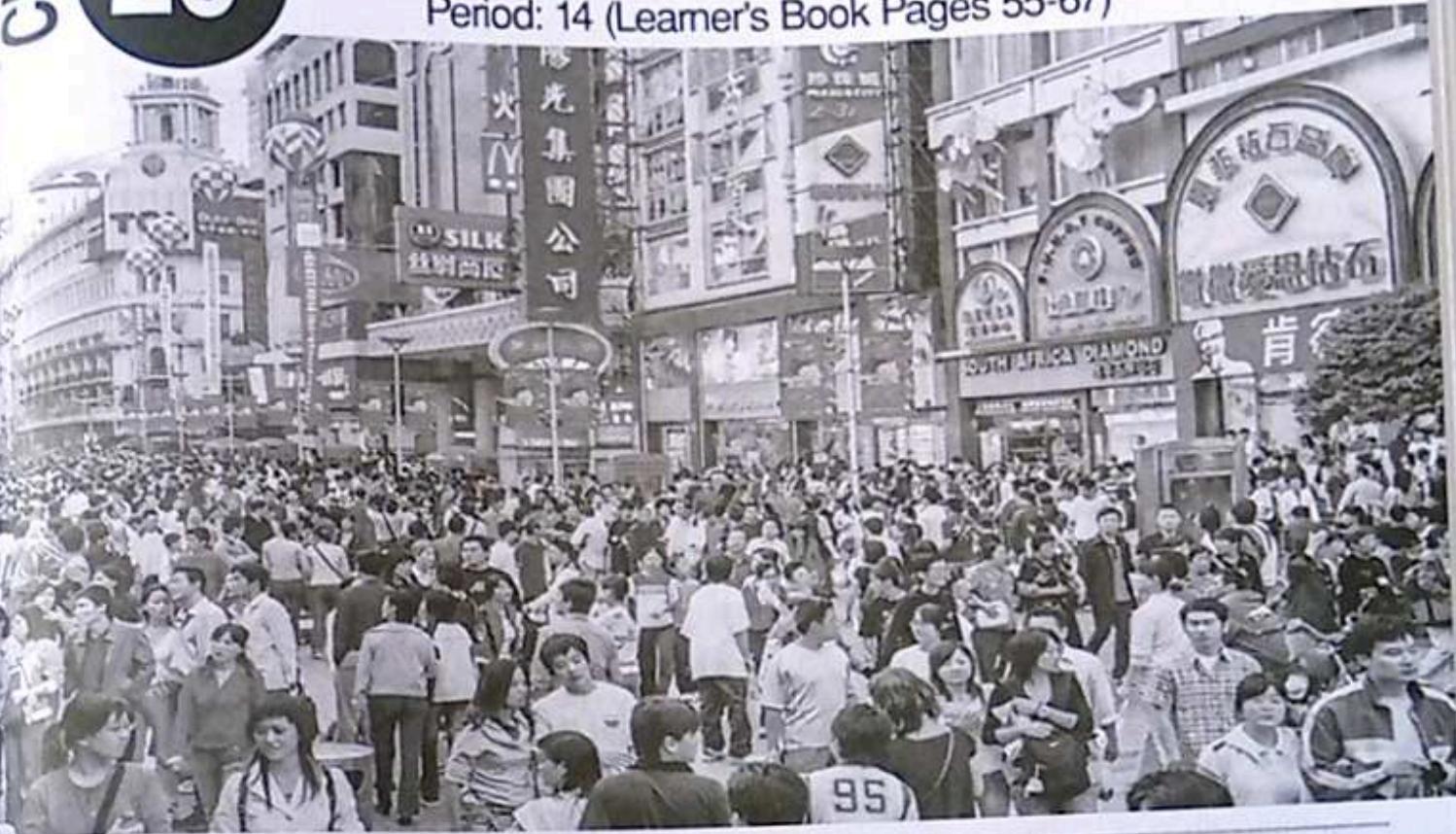
### Sample Assessment grid

Expected output	Basis of evaluation	Relevance	Accuracy	Coherence	Excellence
A speech of about 800 words	reasons for population growth rates and distribution	The learner earns: 3 points if the learner gives 8-7 reasons for population growth rates and distribution 2 points if the learner gives 6-3 reasons for population growth rates and distribution 1 point if the learner gives 3 reasons for population growth rates and distribution	The learner earns: 3 points if 8-7 reasons for population growth rates and distribution are correctly identified 2 points if 6-3 reasons for population growth rates and distribution are correctly identified 1 point if the learner gives 3 reasons for population growth rates and distribution are correctly identified	The learner earns: 3 points if 8-7 reasons for population growth rates and distribution are logically well-linked 2 points if if 6-3 reasons for population growth rates and distribution are logically well-linked 1 point if the learner gives 3 reasons for population growth rates and distribution are logically well-linked	The learner earns: 1 score if the learner gives outstanding responses

	reasons for rapid urbanisation and effects	The learner earns: 3 points if the learner gives 7-5 reasons for rapid urbanisation and effects 2 points if the learner gives 4-3 reasons for rapid urbanisation and effects 1 point if the learner gives 2 reasons for rapid urbanisation and effects	The learner earns: 3 points if 7-5 reasons for rapid urbanisation and effects are logically well-linked 2 points if 4-3 reasons for rapid urbanisation and effects are logically well-linked 1 point if 2 reasons for rapid urbanisation and effects are logically well-linked	The learner earns: 3 points if 7-5 reasons for rapid urbanisation and effects are logically well-linked 2 points if 4-3-5 reasons for rapid urbanisation and effects are logically well-linked 1 point if 2-5 reasons for rapid urbanisation and effects are logically well-linked	
Total scores/19		/6	/6	/6	/1

## Population and urbanisation in China

Period: 14 (Leamer's Book Pages 55-67)



### Key words

- ▲ Birth rates
- ▲ Death rates
- ▲ One-child policy
- ▲ Population
- ▲ Population density
- ▲ Population distribution
- ▲ Rural-urban drift
- ▲ Urbanisation

After studying this chapter, the learner should be able to;

- ▲ know the total population of China and the changes in her population growth rate.
- ▲ know the number and size of some urban areas in China
- ▲ Understand the size and rapid growth of China's population and reasons for this.
- ▲ understand the reasons for the adoption of the one child policy in China
- ▲ understand the consequences of the one child policy and changes in it
- ▲ understand the reasons that lead to rural-urban drift and growth of urban areas in China
- ▲ understand the growth of Shanghai as a major city
- ▲ understand government control over the growth of urban areas
- ▲ use maps, statistics, graphs and diagrams to analyse population
- ▲ draw a map to show the major urban areas of China
- ▲ Understand the methods which can be used to control the rate of population growth.
- ▲ appreciate the advantages and disadvantages of the one child policy
- ▲ appreciate the advantages and problems of having a large or rapidly increasing population in a country.
- ▲ appreciate the need for, and use of Population control methods.

**Introduction (Learner's Book Pages 56)****Guide learners to read the introduction**

Did you know that China is the world's most populous country? Its population is equivalent to 18.47 percent of the total world population. However, the population growth decreased to around 0.29 percent in recent years and total population figures are beginning to drop in the 2030s.

In this chapter you will be able to understand the size of China's population, the history of its growth rate, the one-child population policy and its impacts on the country's population growth and development.

It is important that you use a number of interactive methods to enable learners acquire and develop the different skills reflected in the different activities throughout the chapter. It is necessary to ensure that all learners participate in pairs, groups and class discussions. The use of ICT is one of the learning components, so it is advisable that you make use of it as may be required.

## **Population size and population growth in China (Learner's Book Pages 56-57)**

You learnt about population in Africa. Can you remember what is meant by the term population? You learnt that population in Africa is unevenly distributed throughout the continent. China's population is also unevenly distributed. This is because some areas are densely populated others are sparsely populated. After doing tasks in activity 29.1 you will be able to describe the population of China.

### **Activity 29.1 Describing the population of China**

Individually, carry out a textbook or internet research and do the tasks that follow.

- 1 Find out
  - (a) the total population of China.
  - (b) the size of China
- 2 Swap your work with your neighbour for comments
- 3 Present your work to the rest of the class through discussion.

**Resources to use:** Library, Computers, pens, notebooks and pencils

**Skills:** Recording information, critical thinking, ICT, reporting, problem solving and communication.

**Methods:** Research, guided discussion

### **Instructions to the teacher**

- (a) Provide learners with the learner's book and tell them the page on which the tasks are.
- (b) Instruct learners to go the library computer laboratory and carry-out research and do the tasks that follow.

- (c) Observe learners as they do work and assist them as they do the task.
- (d) Make sure everyone is actively involved.
- (e) Converse with learners as they do the activity.
- (f) Instruct learners to present their work.
- (g) Encourage the learners to explain and defend their views.
- (h) Assess learner's work and give them feedback.

**Suggested response**

1. 1,397,897,720 people    2. 9,596,960 sq km

You have learnt that China has an estimated population of 1,449,447,918 and it covers an area of 9,388,211 Km<sup>2</sup>. After doing tasks in activity 29.2 you will be able to describe China's population growth rate.

**Activity 29.2** Describing China's population growth rate

In groups, study table 29.1 and 29.2 and do the tasks that follow:

Year	Population	Growth Rate %
1950	554,419,273	0.00
1960	660,405,056	1.57
1970	827,601,394	2.68
1980	1,000,089,235	1.42
1990	1,176,883,674	1.60
2000	1,290,550,765	0.71
2010	1,368,810,615	0.56
2020	1,439,323,776	0.39

- 1 Draw a line or bar graph to represent China's population from 1950 to 2020.
- 2 Describe the population growth rates from 1950 to 2020
- 3 In which years did China have the:
  - (a) lowest population growth rate?
  - (b) highest population growth rate?
- 4 Suggest reasons why China experienced lowest and highest population growth rates in the years identified (2) above.
- 5 Present your work to the rest of the class through discussion

**Resources to use:** Table provided in the learner's book, calculators, pens, notebooks and pencils

**Skills:** Recording information, critical thinking, mathematical computations, reporting, problem solving and communication.

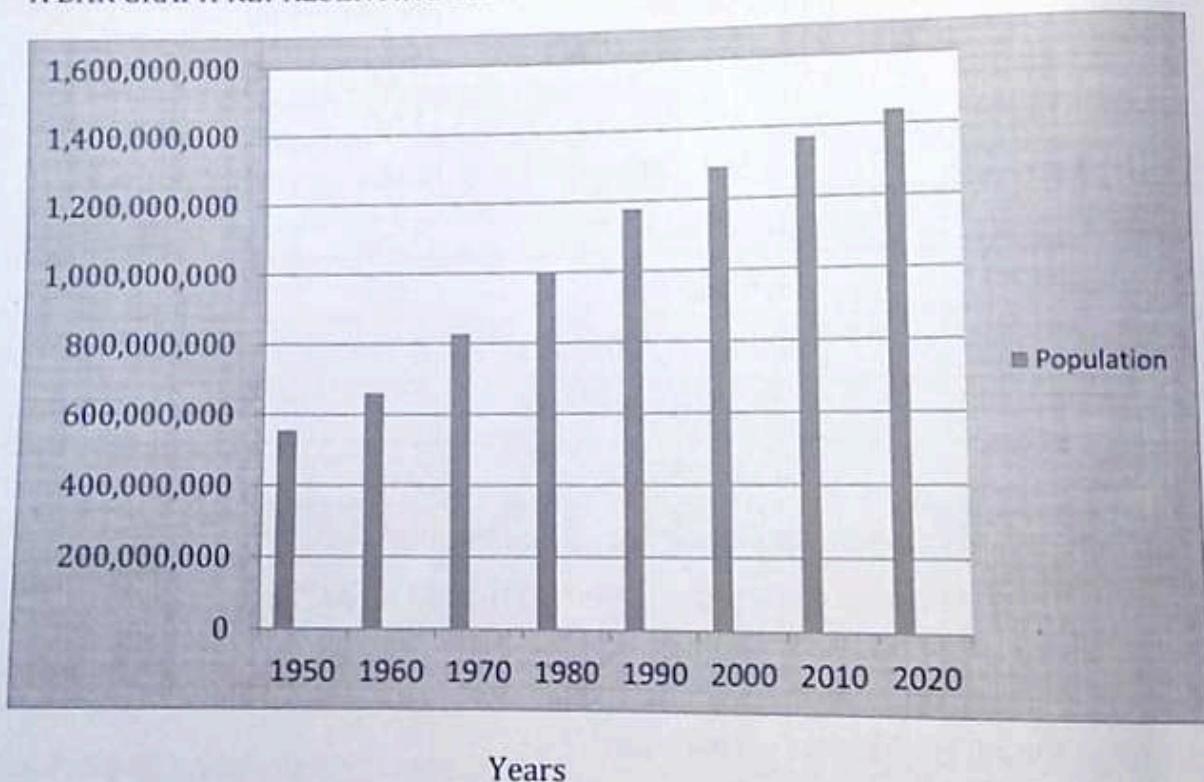
**Methods** Group discussions and brainstorming**Instructions to the teacher**

- Organise the learners in groups
- Provide learners with the learner's book and tell them the page on which the tasks are.
- Instruct learners to study table 29.1 and do the tasks that follow.
- Observe learners as they discuss in their groups and assist them as they do the task.
- Make sure everyone is actively involved.
- Converse with learners as they do the activity.
- Instruct learners to present their work.
- Encourage the learners to explain and defend their views.
- Assess learner's work and give them feedback.

**Suggested responses**

1

A BAR GRAPH REPRESENTING CHINA'S POPULATION FROM 1950 TO 2020

**Scale**

1cm represents 200,000,000

- In 1950 China had no population growth rate and the growth rate percentage was at 0.00%, in 1960 it increased to 1.57%, there was an increase to 2.69% in 1970, from 1980 to 2020 the growth rate has been reducing slightly.

- 3 (a) 1990  
 4 Birth control methods such as the one child policy.

## Factors leading rapid population growth in China (Learner's Book Page 57)

You might have realised that China has the highest population growth rates in the whole world. In Senior Two you learnt about the factors that lead to rapid population growth in East. Can you remember any factor? After doing tasks in activity 29.3 you will understand the factors responsible for the rapid population growth in China.

### Activity 29.3

Understanding the factors leading rapid population growth in China

In groups,

- 1 Explain the factors leading to a rapid population growth in China?
- 2 Share your work with the rest of the class through a discussion.
- 3 Present your work to the teacher for further guidance

**Resources to use:** pens, notebooks and pencils

**Skills:** Recording information, critical thinking, reporting, problem solving and communication.

**Methods** Group discussions, brainstorming

#### Instructions to the teacher

- (a) Organise learners into manageable groups.
- (b) Provide learners with the learner's book and tell them the page on which the tasks are.
- (c) Instruct learners to read the article and do the tasks that follow.
- (d) Observe learners as they discuss in their groups and assist them as they do the task.
- (e) Make sure everyone is actively involved.
- (f) Converse with learners as they do the activity.
- (g) Emphasise that each group comes up with a write-up.
- (h) Instruct learners to present their work.
- (i) Encourage the learners to explain and defend their views.
- (j) Assess learner's work and give them feedback

#### Suggested response

- |                              |                                      |
|------------------------------|--------------------------------------|
| (i) High fertility rate      | (ii) Improved health care facilities |
| (iii) Decreasing death rates | (iv) Immigration                     |
| (v) Emigration               |                                      |

You have found out that China has a rapid population growth due to increased emigration from other countries, improved health facilities, high fertility rates and decreased death rates.

## Comparison of China's population to the rest of the world

(Learner's Book Pages 57-58)

China is one of the world's largest country. In chapter twenty, you learnt about the continents of the world. You can find out the continent in which China is found. It has the biggest population in the world totaling to 1.4 billion people followed by India (1.329 billion). The next five most populous nations include the United States, Indonesia, Brazil, Pakistan and Nigeria. After doing tasks in activity 29.4 you will discover the comparison of China's population to the rest of the world.

### Activity 29.4

#### Comparing China's population to the rest of the world

Study table 29.2 showing the World's top seven countries with the highest population by May 2020 and do the tasks that follow.

Table 29.2: World's top seven populous countries

Country	Population
Indonesia	270,625,568
United States	329,064,917
India	1,366,417,754
Pakistan	216,565,318
Brazil	211,049,527
China	1,433,783,686
Nigeria	200,963,599

Source: [https://en.wikipedia.org/wiki/List\\_of\\_countries\\_by\\_population\\_\(United\\_Nations\)](https://en.wikipedia.org/wiki/List_of_countries_by_population_(United_Nations))

- Identify
  - the country with the highest population
  - the country with the least population
  - Find the range
- Compare the population size of China with other countries shown in the table above.
- Draw a pie chart showing the world's top seven countries with the highest population shown in table 29.2
- Prepare a class presentation for your findings.

**Resources to use:** Table provided in the learner's book, calculators, pens, notebooks and pencils

**Skills:** Recording information, critical thinking, mathematical computations, reporting, problem solving and communication.

**Methods:** Guided discovery and discussion

**Instructions to the teacher**

- Provide learners with the learner's book and tell them the page on which the tasks are.
- Instruct learners to study table 29.2 and do the tasks that follow.
- Observe learners as they discuss in their groups and assist them as they do the task.
- Assist them where they get challenges
- Ensure that all learners are participating in the activity
- Instruct learners to share their work with the class through a discussion
- Assess learner's work and give them feedback.

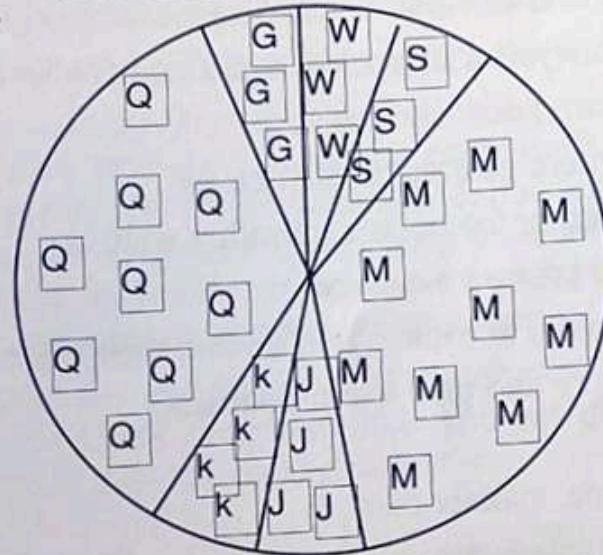
**Suggested responses**

- (a) China      (b) Nigeria      (c)  $1,433,783,686 - 200,963,599 = 1,232,820,087$
- China has the highest population
- 

A PIE CHART SHOWING WORLD'S TOP SEVEN MOST POPULATED COUNTRIES

J Pakistan    Q China    k Brazil    S United States

G Nigeria    W Indonesia    M India



China is the country with the highest population nearly 1.4 billion residents. Since India's population is less than 290 million behind China; there could be a time when India will surpass its neighbour country in terms of population. The estimated population of the world is 7.8 billion as of 2020. The government of China has been introducing a number of policies to control the high population growth.

## **Policies introduced to control population growth in China (Leamer's Book Pages 58-61)**

In Senior Two you learnt about a number of ways East African countries control population growth. Can you write down any three you remember. Similarly, the government of China has introduced a number of policies to control her population growth. After doing tasks in activity 29.5 you will be able to understand the policies of population growth in China

### Activity 29.5

Finding out the policies used in controlling population growth in China

In groups, carry out a textbook or internet research on the policies used in controlling population growth in China and do the following tasks

- 1 Describe the methods which have been applied to control population growth in China
- 2 What steps has your country taken to control population growth?
- 3 Present your work to the rest of the class through discussion.

**Resources to use:** Library, Computers, pens, notebooks and pencils

**Skills:** Recording information, critical thinking, ICT, reporting, problem solving and communication.

**Methods:** Research, discussion

#### Instructions to the teacher

- (a) Organise learners into manageable groups.
- (b) Provide learners with the learner's book and tell them the page on which the tasks are.
- (c) Instruct learners to carryout a textbook or library research and do the tasks that follow.
- (d) Make sure everyone is actively involved.
- (e) Converse with learners as they do the activity.
- (f) Emphasise that each group comes up with a write-up.
- (g) Instruct learners to present their work.
- (h) Encourage the learners to explain and defend their views.
- (i) Assess learner's work and give them feedback.

#### Suggested responses

- 1 Vasectomy, condoms, injector plan
- 2 Condemning early marriages, sex education to teenagers and encouraging family planning

You have found out that China introduced policies to control her population growth such as vasectomy, condoms, injector plan condemning early marriages, sex education to teenagers and encouraging family planning. You also found out China introduced the **one child policy**. The one child policy is where a couple was restricted to produce only child as shown in the photograph in figure 29.1.



*Figure 29.1: A Chinese couple with one child*

The one-child policy was a program introduced in China and it was implemented nationwide to Chinese families to have one child each. The policy's main aim was to address the growth rate of the country's population which was increasing rapidly. The policy was implemented by applying different methods ranging from offering financial bonuses for families in agreement and providing contraceptives to implementing forced sterilizations and forced abortions.

In late 2012 the government announced that the one-child limit per family would end in 2016. After doing tasks in activity 29.6, you will discover the advantages and the disadvantages of the one-child policy.

### Activity 29.6 Understanding the advantages and disadvantages of the one child policy

Read the extract below about the advantages and disadvantages of the one child policy and do the tasks that follow.

China's family planning policies began to be shaped by fears of overpopulation in the 1970s, and officials raised the age of marriage and called for fewer and more broadly spaced births.

After a full decade of concerted efforts, a near universal one-child limit was imposed in 1980. The policy was modified beginning in the mid-1980s to allow rural parents a second child if the first was a daughter. It also allowed exceptions for some other groups, including ethnic minorities.

In 2015, the government removed all remaining one-child limits, establishing a two-child limit. In May 2021, this was loosened to a three-child limit, in July 2021 all limits as well as penalties for exceeding them were removed.

The one child policy was of benefit because; More jobs became available in China because of this policy. Because the one child policy in China prevented up to 400 million births, there are now more employment opportunities available for everyone in the country. Each person has less competition to fight through when trying to land a great job.

The one child policy offered numerous exemptions that families could use. Although the public perception was that the one child policy applied to all families, that was not the case.

There were financial benefits to consider for families under the one child policy.

Even if you set aside the 5-yuan financial benefit for families that only had a single child in their household, this structure helped to create more economic stability at the local level.

Parents could afford more educational and vocational opportunities because there was only one child to support. Schedules were easier to manage, care needs became simple to schedule, and there would still be friends to make in each community.

The one child policy helped to transform the role that women play in Chinese society. Because families were authorized to have only one child as part of their family composition, the role of girls and women began to grow in China. Before the policy, men received a preponderance of the educational chances and career ventures from their family.

The one child policy was hated because; It created mandatory contraception and sterilization policies. As part of the one child policy in China, women were required to have a contraceptive intrauterine device installed surgically after having their first child. This product offers a 99% success rate at preventing a pregnancy, so it was effective at controlling the population levels of the country.

If a woman were to have a second child, then the government forced her to have a tubal ligation procedure. Over 320 million Chinese women were fitted with intrauterine devices under this policy between 1980-2014. Another 108 women were forced to undergo sterilization with a tubal ligation. The men were much luckier, often being told to pay a fine for their activities instead.

This policy created a disparity in the gender ratio at birth in China. The gender ratio of newborn infants in mainland China reached 117 to 100 for boys vs. girls born, which was about 10% higher than the global baseline. It rose from 108:100 in 1981, which was the boundary of the natural baseline. That means there are 30 million more men than women in this generation of Chinese citizens, which could create significant socioeconomic issues for their country.

The reason for this disparity was a desire to have boys so that the family line could continue on. This option was not available for women at the time of this policy, and it is still incredibly rare for girls to have the same family rights as men with regards to inheritance.

There may be social issues because of the unusual gender ratio. China has already admitted that having between 32 million to 36 million more men than expected in their society could result in several social problems developing in the country over the years. There are tens of millions of young men who may be unable to find a future bride. The government is concerned that this may lead to higher levels of social unrest, sex trafficking, kidnapping, and other forms of criminal conduct so that intimacy can be an experience for them in some way.

It caused many parents to give up their children for adoption or abandon them. When parents had an unauthorized second birth or wanted a son, but had a daughter, then giving up the child for adoption became a financial strategy for them under the one child policy. Adoptions of daughters accounted for more than 50% of the missing girls that were not on census documents in the country. Starting in 1991, the Chinese government raised the penalties for additional children and levied them on those who even chose to adopt.

This action caused over 120,000 children who were abandoned to find hope in adoption with over 120,000 international parents.

This policy caused couples to seek fertility counselling when none was needed.

Adopted from: <https://futureofworking.com/9-advantages-and-disadvantages-of-the-one-child-policy>

#### Tasks

- 1 Explain the advantages of one- child policy in China?
- 2 Explain the disadvantages of one- child policy in China?
- 3 Present your work to the rest of the class through discussion.

**Resources to use:** Text provided in the learner's book, pens, notebooks and pencils

**Skills:** Recording information, critical thinking, reporting, problem solving and communication.

#### Methods: Discussion

#### Instructions to the teacher

(a) Organise learners into manageable groups.

(b) Provide learners with the learner's book and tell them the page on which the tasks are.

(c) Instruct learners to read the article and do the tasks that follow.

(d) Observe learners as they discuss in their groups and assist them as they do the task.

(e) Make sure everyone is actively involved.

(f) Converse with learners as they do the activity.

(g) Emphasise that each group comes up with a write-up.

- (h) Instruct learners to present their work.
- (i) Encourage the learners to explain and defend their views.
- (j) Assess learner's work and give them feedback.

### Suggested responses

- 1 More jobs became available in China because of this policy.
  - ▲ There were financial benefits to consider for families under the one child policy.
  - ▲ The one child policy helped to transform the role that women play in Chinese society.
  - ▲ Parents in China were not forced to give one of their children up for adoption if they had twins.
- 2 It created mandatory contraception and sterilization policies.
  - ▲ This policy created a disparity in the gender ratio at birth in China.
  - ▲ It caused many parents to give up their children for adoption or abandon them.
  - ▲ This policy caused couples to seek fertility counselling when none was needed.
  - ▲ One of the unique aspects of the one child policy was that it was more of a one pregnancy policy with its implementation.

### Advantages of having large population in a country (Learner's Book Page 62)

When you learnt about population in East Africa and Africa you noted that having a large population is associated with a number of benefits. Similarly, China benefits from its large and rapidly increasing population. After doing tasks in activity 29.7, you will be able to understand the advantages of having a large and rapidly growing population in a country.

#### Activity 29.7 Finding out the advantages of having large population in a country

In groups,

- 1 Discuss the advantages of having a large population in China?
- 2 Present your work to the rest of the class through discussion.
- 3 Present your work to the teacher for further guidance

Resources to use: photographs provided in the learner's book, computers, library, pens, notebooks and pencils

Skills: Recording information, critical thinking, photographic interpretation, reporting, problem solving and communication.

**Methods:** group discussions

#### Instructions to the teacher

- (a) Organise learners into manageable groups.

- (b) Provide learners with the learner's book and tell them the page on which the tasks are.
- (c) Observe learners as they discuss in their groups and assist them as they do the task.
- (d) Make sure everyone is actively involved.
- (e) Converse with learners as they do the activity.
- (f) Emphasise that each group comes up with a write-up.
- (g) Instruct learners to present their work.
- (h) Encourage the learners to explain and defend their views.
- (i) Assess learner's work and give them feedback.

### Suggested responses

1 It provides labour

It leads to urbanisation

If the population is above the optimum size, the country will be able to make better use of its resources.

The size of markets will increase. This should enable firms to take greater advantage of economies of scale.

There may be an increase in factor mobility if the rise has resulted from an increase in the birth rate or immigration. Expanding industries can recruit new workers to the labour force. These people are likely to be familiar with new ideas and methods. If this is the case, firms training costs will be reduced.

Extra demand will be generated. This is likely to stimulate investment and this may lead to introduction of new technology.

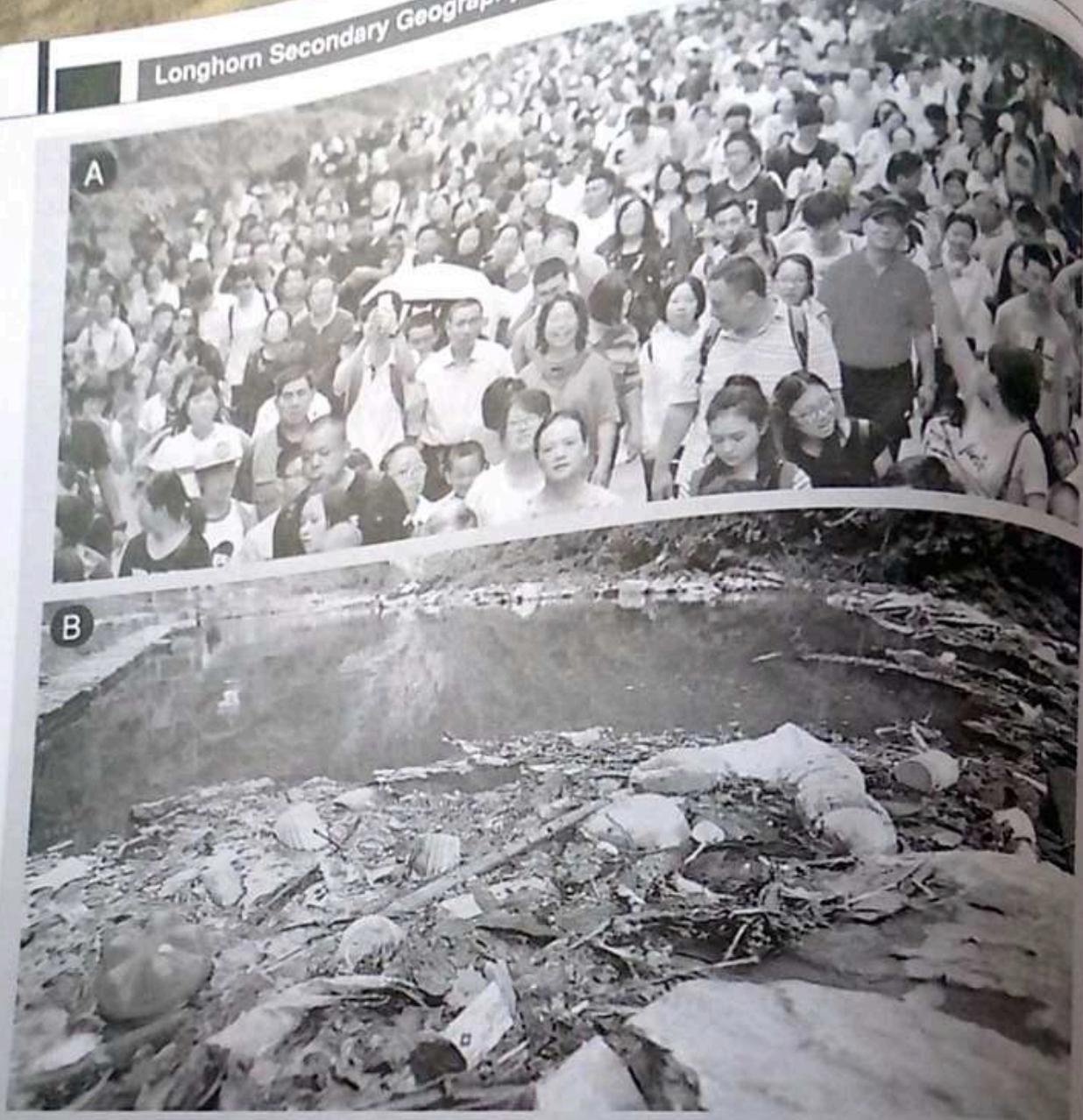
## ● Problems associated with having large and rapidly growing population in a country (Leamer's Book Pages 62-63)

In activity 29.7 you noted the advantages of a large population such as urbanisation, provision of labour and market. However, a large population comes with a number of challenges. After doing tasks in activity 29.8 you will understand the problems associated with large a population in a country.

### Activity 29.8

Discovering the problems associated with large and rapidly growing population in a country.

In groups, study photographs in figure 29.2 A and B showing problems of large populations and do the tasks that follow.



*Figure 29.2: Problems of a large population*

- 1 Identify the problems associated with rapid population growth shown in each photograph in figure 29.2
- 2 What other problems are associated with a rapidly increasing population?
- 3 Present your findings to the rest of the class through discussion.

**Resources to use:** photographs provided in the learner's book, computers, library, pens, notebooks and pencils

**Skills:** Recording information, critical thinking, photographic interpretation, reporting, problem solving and communication.

**Methods:** group discussions

#### **Instructions to the teacher**

- (a) Organise learners into manageable groups.
- (b) Provide learners with the learner's book and tell them the page on which the tasks are.

- (c) Instruct learners to study the photographs and do the tasks that follow.
- (d) Observe learners as they discuss in their groups and assist them as they do the task.
- (e) Make sure everyone is actively involved.
- (f) Converse with learners as they do the activity.
- (g) Emphasise that each group comes up with a write-up.
- (h) Instruct learners to present their work.
- (i) Encourage the learners to explain and defend their views.
- (j) Assess learner's work and give them feedback.

### Suggested responses

- 1 (a) Over crowding  
(b) Water pollution
- 2 Concerns about famine.
  - ↪ Restrictions on improvements in living standards.
  - ↪ Pressure on employment opportunities

### Urbanisation in China (Learner's Book Pages 63-65)

When you studied population and urbanisation in Africa, you noted that an area with concentrated people, buildings and services is called an urban center. Can you name the urban center in Africa? Similarly, China has over 160 cities.

According to the administrative divisions of China, there are three levels of cities, namely direct-administered municipalities, prefecture-level cities, and county-level cities. Figure 29.3 shows one of China's urban cities. After doing tasks in activity 29.9, you will find out more about urbanisation in China

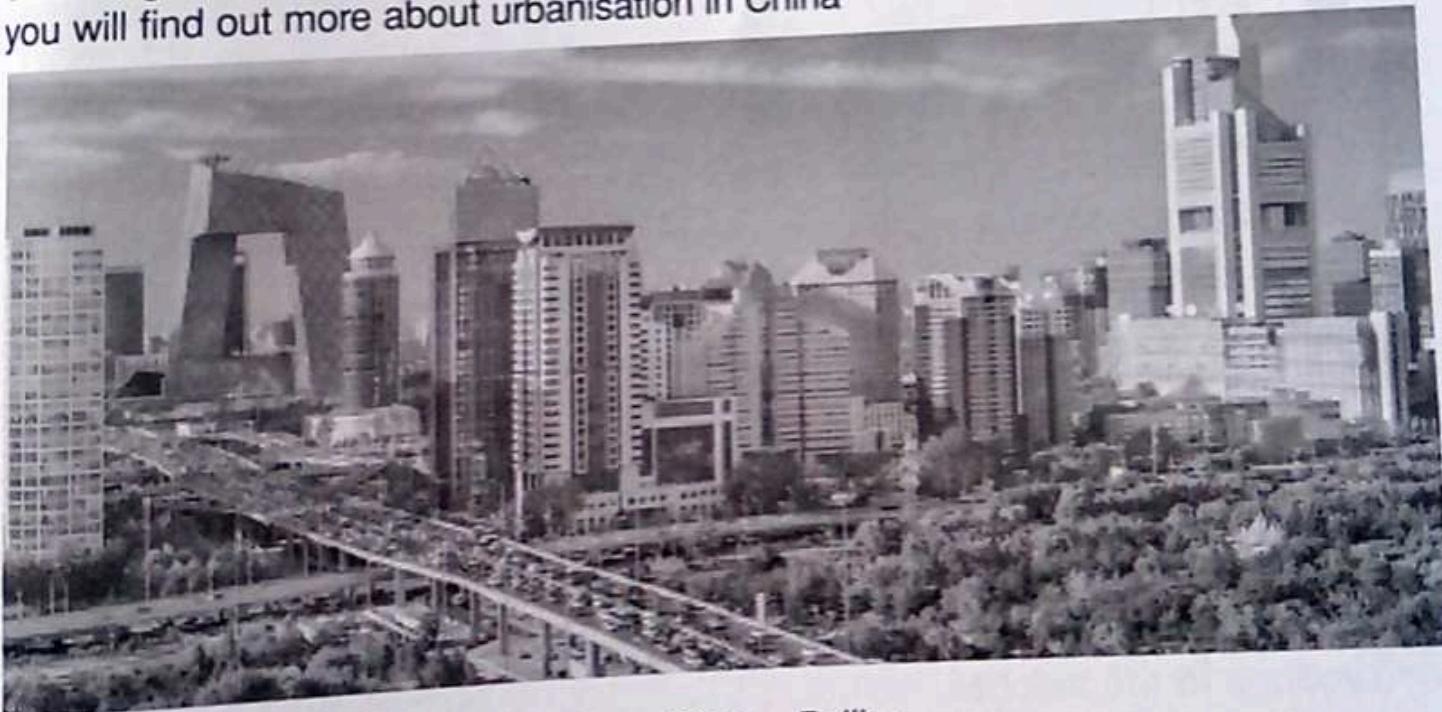


Figure 29.3: Beijing

**Activity 29.9**

**Exploring urbanisation in China**  
 In pairs, study the map in Figure 29.3 showing urban Centres in China and do the tasks that follow.

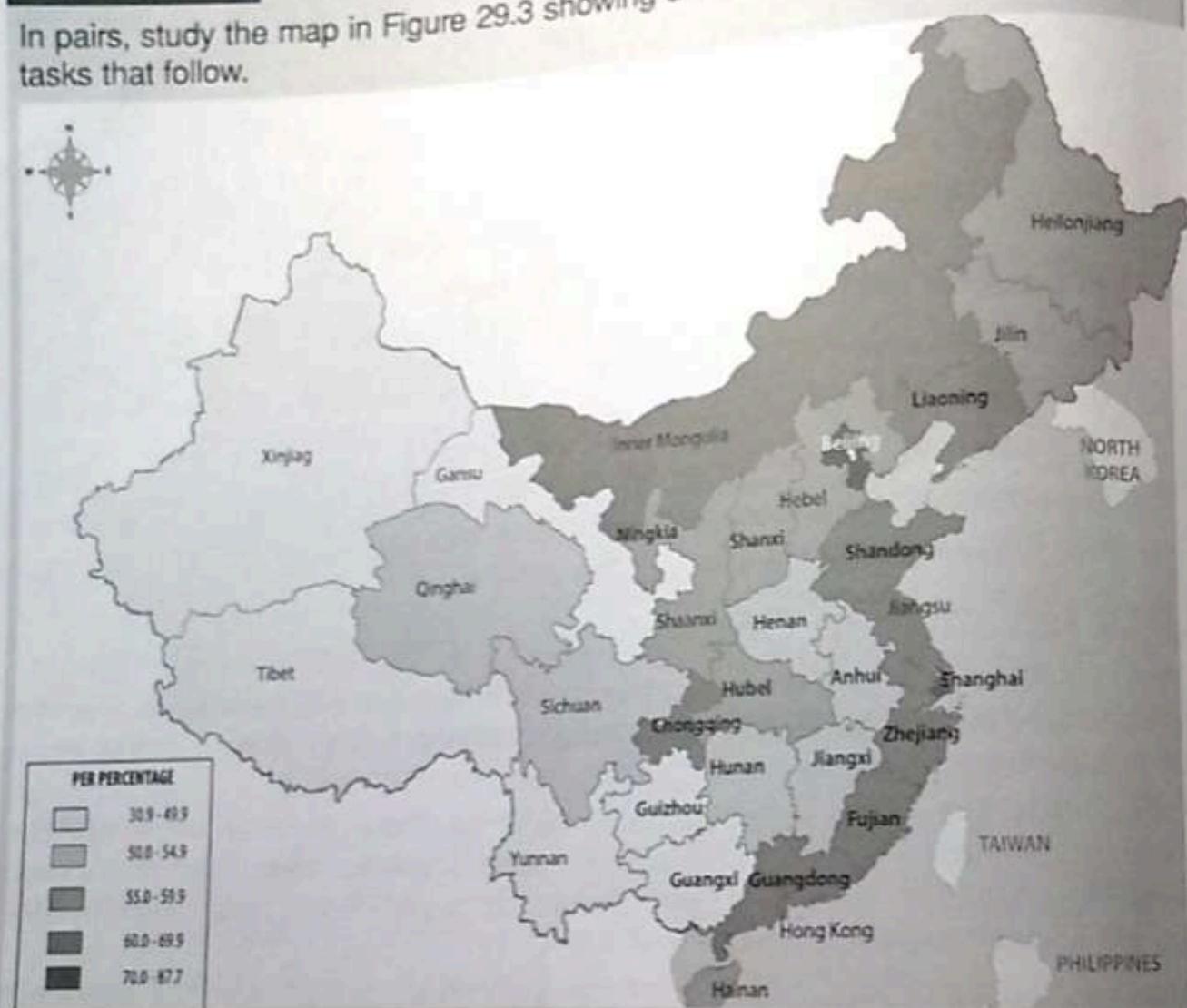


Figure 29.4: A map showing urban centres in China

1. Copy the map of China showing the major urban centers in China.
2. Discuss reasons for the growth of urban centers in China?
3. Share your work with the rest of the class through discussion
4. Present your work to the teacher for further guidance

Resources to use: Computers, library, pens, notebooks and pencils

Skills: Recording information, critical thinking, reporting, ICT, problem solving and communication.

**Methods:** Discussions, brainstorming

**Instructions to the teacher**

- (a) Organise learners into manageable groups.

- (b) Provide learners with the learner's book and tell them the page on which the tasks are.
- (c) Instruct learners to study the map and do the tasks that follow.
- (d) Observe learners as they discuss in their groups and assist them as they do the task.
- (e) Make sure everyone is actively involved.
- (f) Converse with learners as they do the activity.
- (g) Emphasise that each group comes up with a write-up.
- (h) Instruct learners to present their work.
- (i) Encourage the learners to explain and defend their views.
- (j) Assess learner's work and give them feedback.

### Suggested response

#### 1. Map in figure 29.4

2.

- Energy supply.
- Investment in infrastructure
- Economic diversification.
- Strong leadership.
- Free market economics.

You have found out that urbanisation in China is not uniform. Some cities are more urbanised than others. Most urbanised cities in China include Tianjin, Guangzhou, Beijing, Chongqing, Shenzhen and Shanghai. It is important to note that China's urban cities are of different sizes. After doing tasks in activity 29.9 you will be able to describe the sizes of urban centers in China.

#### Activity 29.10 Describing the size of urban centers in China

Study the table 29.3 showing the major urban areas of China and do the tasks that follow.

Table 29.3: China's urban cities with its estimated population

Urban cities	Estimated population
Tianjin	13,794,000
Guangzhou	13,632,000
Beijing	20,879,000
Chongqing	16,382,000
Shanghai	27,796,000
Shenzhen	12,292,000

1 Identify the urban area with the:

- (a) Highest number of people.

- (b) Least number of people.
- 2 Draw a bar graph to represent the information in table 29.3.
  - 3 Share your work with the rest of the class through discussion

**Resources to use:** Table provided in the learner's book, pens, notebooks and pencils

**Skills:** Recording information, critical thinking, reporting, mathematical computations, problem solving and communication.

**Methods:** Brain storming and class discussion

#### Instructions to the teacher

- (a) Provide learners with the learner's book and tell them the page on which the tasks are.
- (b) Instruct learners to study table 29.3 and do the tasks that follow.
- (c) Observe learners as they discuss in their groups and assist them as they do the task.
- (d) Make sure everyone is actively involved.
- (e) Converse with learners as they do the activity.
- (f) Instruct learners to present their work.
- (g) Encourage the learners to explain and defend their views.
- (h) Assess learner's work and give them feedback
- (i) Instruct learners to share their work with the class through a discussion

#### Suggested responses

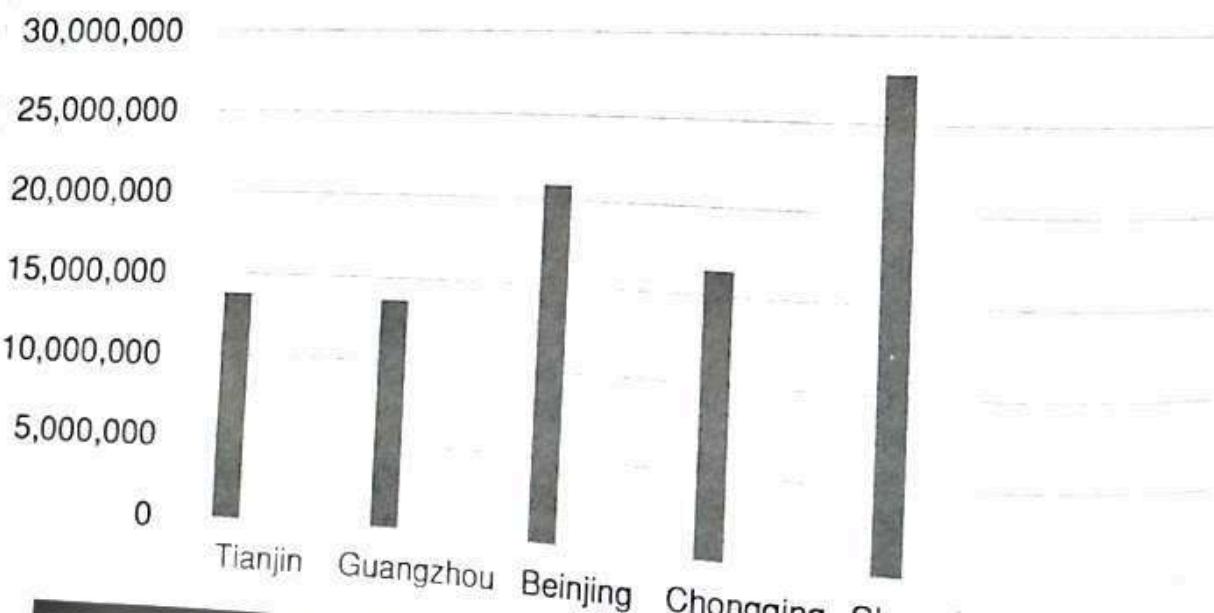
1

(a) Beijing

(b) Shenzhen

2.

A graph showing China's urban cities and their estimated population size



You have found out that China has over 100 cities with over a million people. The most populated urban areas in China are Shanghai, Beijing, Chongqing, Tianjin, Guangzhou **Shanghai**

Did you know that Shanghai is the most populous and wealthiest city in China? Shanghai has the largest and busiest port in terms of containers and cargo tonnage, a grand business district, two large airports that is Pudong and Hongqiao the world's fastest train known as the Maglev and a network of elevated highways. After doing tasks in activity 29.10 you will find out more about Shanghai.



*Figure 29.5: Part of Shanghai*

### Activity 29.11 Exploring Shanghai as the major city in China

In groups, carry out a textbook or internet research on Shanghai and do the following tasks.

- 1 Draw a map of China showing the location of Shanghai city.
- 2 What are reasons that led to the growth of Shanghai as a major city.
- 3 Present your work to the rest of the class through discussion.

**Resources to use:** Computers, library, pens, notebooks and pencils

**Skills:** Recording information, critical thinking, reporting, ICT, problem solving and communication.

**Methods:** Research, guided discovery and class discussion

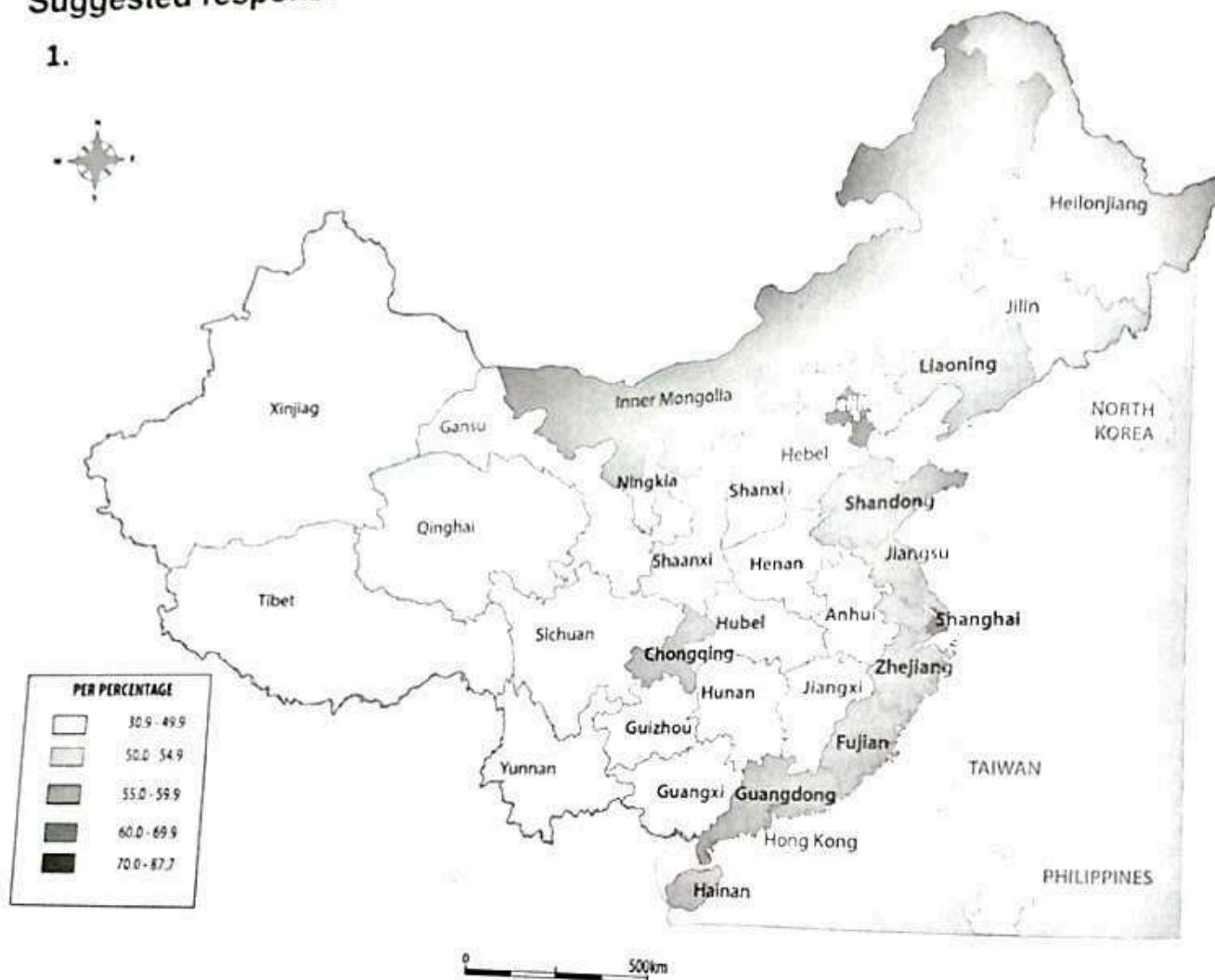
#### Instructions to the teacher

- (a) Organise learners into groups
- (b) Provide learners with the learner's book and tell them the page on which the tasks are.

- (c) Instruct learners to go to the library computer laboratory and carry-out research the tasks that follow.
- (d) Observe learners as they do work and assist them as they do the task.
- (e) Make sure everyone is actively involved.
- (f) Converse with learners as they do the activity.
- (g) Instruct learners to present their work.
- (h) Encourage the learners to explain and defend their views.
- (i) Assess learner's work and give them feedback.

### Suggested response

1.



### 2 And 3

- ▲ Energy supply
- ▲ Investment in infrastructure.
- ▲ Economic diversification
- ▲ Economic diversification.
- ▲ Strong leadership.

- Free market economics.

You have found out the reason that led to the growth of Shanghai city. You have learnt that factors such as strong leadership, free market economic, market and labour and presence of power supply play an important role in urbanisation.

## Rural -Urban drift in China (Leamer's Book Pages 66-67)

In Senior Two, you learnt about rural-urban drift in East Africa where you noted that people move from villages to towns. Similarly, China has experienced a rapid process of urbanisation, created by the largest flow of rural urban migration in the world.

Rural urban migration made dominant contributions to Chinese urban population growth. Towns and cities are expanding covering a greater area of land. After doing tasks in activity 29.12 you will find out more about rural-urban drift in China.

### Activity 29.12 Describing Rural- Urban migration in China

In groups, debate on rural-urban migration and do the following tasks.

- 1 Explain the reasons that lead to rural-urban drift in China?
- 2 Discuss the policies that can be used to control rural-urban drift and population migration in China.
- 3 Which problems can be avoided in case the policies discussed in (2) above are used?
- 4 Discuss whether the policies identified would be good in Africa.
- 5 Comment on each other's work and present it to the rest of the class through discussion.

**Resources to use:** pens, notebooks and pencils

**Skills:** Recording information, critical thinking, reporting, problem solving and communication

**Methods:** Debate and guided discussions

#### Instructions to the teacher

- (a) Organise learners into two groups
- (b) Provide learners with the learner's book and tell them the page on which the tasks are.
- (c) Instruct learners to debate on rural urban migration and do the tasks that follow.
- (d) Observe learners as they discuss in their groups and assist them as they do the task.
- (e) Make sure everyone is actively involved.
- (f) Converse with learners as they do the activity.
- (g) Instruct learners to present their work.
- (h) Encourage the learners to explain and defend their views.

- (i) Assess learner's work and give them feedback.

### Suggested response

- 1 Employment opportunities
  - ▲ Better services in cities such as health and education services
  - ▲ Increase in crime rates
  - ▲ Population pressure in rural areas
  - ▲ Insecurity in rural areas
- 2 Improvements of services in rural areas
  - ▲ Setting up industries in rural areas
  - ▲ Improving on security
  - ▲ Enforcing laws on migrations
- 3 Increased growth of slums
  - ▲ Pollution of air and water
  - ▲ High spread of diseases
  - ▲ Increased crime rates
  - ▲ Underemployment
- 4 It will depend on the learners

You have probably found out that over the last 20 years, the percentage of people who live in cities has increased from 20 per cent to nearly 290 per cent. In 2009, there were 1429 million rural-urban migrants in China, accounting for about 11 percent of the total population.

### Sample Activity of Integration (Leamer's Book Pages 67)

You have been selected to represent your school in a conference aimed at how the rapid population increase in China can be reduced. You are required to make a presentation on how to reduce the rapidly increasing population growth in China.



**Task:**

Write a presentation of about 600 words on what you will present in the conference

## Sample Assessment grid

Expected output	Basis of Evaluation	Relevance	Accuracy	Coherence	Excellency
Essay	Ways of controlling population growth	The learner earns 3 scores if the learner gives 8-6 ways of controlling population growth 2 scores if the learner gives 5-3 ways of controlling population growth 1 score if the learner gives 2-1 ways of controlling population growth	The learner earns 3 scores if 8-6 ways of controlling population growth are correctly stated; 2 scores if 5-3 ways of controlling population growth are correctly stated; 1 scores if 2-1 ways of controlling population growth are correctly stated.	The learner earns 3 scores if 8-6 ways of controlling population growth are logically linked 2 scores if 5-3 ways of controlling population growth are logically linked 1 scores if 2-1 ways of controlling population growth are logically linked	1 score For outstanding responses
Total scores / 10	/3	/3	/3	/3	/1

# Development of Transport, Communication and trade in Africa

Period:10 (Learner's Book Pages 69-82)


**Key words**

- ▲ transport
  - ▲ communication
  - ▲ trade
  - ▲ ports
  - ▲ airports
  - ▲ routes
  - ▲ water ways
  - ▲ imports
  - ▲ exports
  - ▲ patterns
- After studying this chapter, the learner should be able to:**
- ▲ use maps to show the major transport routes.
  - ▲ understand the role of the different types of transport in development.
  - ▲ use photographs to identify the different types/modes of transport.
  - ▲ appreciate the importance of transport in national and regional development.
  - ▲ understand the difference between internal transport, inter-African transport and international transport.
  - ▲ understand how the main forms of transport used for international journeys are different from those used in inter-African and internal transport.
  - ▲ know the characteristics of the main forms of inter-African transport.
  - ▲ appreciate the advantages, disadvantages and uses of the main forms of inter-African transport.
  - ▲ understand the development of water transport in Africa.
  - ▲ understand why inter-African transport is less developed than transport between Africa and the rest of the world.
  - ▲ know the main forms of international transport.
  - ▲ understand the main forms of trade in Africa: Internal, inter-African and international.
  - ▲ understand the trade patterns of the selected countries and the factors influencing them.
  - ▲ understand the contributions of trade to the development of the selected countries.
  - ▲ use flow charts, statistics and map to show trade patterns.
  - ▲ understand the main forms of international communications.
  - ▲ understand how the internet has transformed international communication.
  - ▲ use statistics flow charts, maps and graphs to analyze trade in Africa countries.
  - ▲ appreciate the importance of promoting inter African transport and communication to promote African unity and trade.

**Introduction (Learner's Book Pages 70)****Guide learners to read the introduction**

Transport and communication facilities are important in modern economy. As engines of economic integration, transport and communication infrastructure facilitates trade, that is the movement of goods and persons. In this chapter you are going to learn the main forms of transport and communication and trade in Africa, and the advantages and disadvantages of each.

It is important that you use a number of diverse interactive methods to enable learners acquire and develop the different skills reflected in the different activities throughout the chapter. It is necessary to ensure that all learners participate in pair, group and class discussions. The use of ICT is one of the learning components, so it is advisable that you make use of it as may be required.

**Transport in Africa (Learner's Book Pages 70-71)**

In Senior One, you learnt that transport involves marriage of goods and people from place to place. Also you learnt about the different types of transport used in East Africa for example water, road, air, railway, animal and human transport. Similarly, Africa consists of a wide range of transport networks. After doing tasks in activity 30.1 you will be able to know the types of transport used in Africa.

**Activity 30.1 Describing the types of transport used in Africa .**

In groups, study the photographs in figure 30.1 showing the different modes of transport and do the tasks that follow







H

Figure 30.1: Modes of transport

- 1 Identify the type of transport shown in each of the photographs A-H in figure 30.1.
- 2 Describe each type of transport identified in (1).
- 3 Explain the role of transport types described in (1) in development.
- 4 Discuss the importance of transport in both national and regional development.
- 5 Share your work to the rest of the class through discussion.

**Resources to use:** Photographs provided in the learner's book, writing materials, library, internet

**Skills:** Photographic interpretation, interpersonal skills, critical thinking, communication, forming own opinions.

**Methods:** group discussions, guided discovery

#### Instructions to the teacher

- (a) Organise learners into manageable groups.
- (b) Provide learners with the learner's book and tell them the page on which the tasks are.
- (c) Instruct learners to study the photographs and do the tasks that follow.
- (d) Observe learners as they discuss in their groups and assist them as they do the tasks.
- (e) Make sure everyone is actively involved.
- (f) Converse with learners as they do the activity.
- (g) Emphasise that each group comes up with a write-up.
- (h) Instruct learners to present their work.

- (i) Encourage the learners to explain and defend their views.
- (j) Assess learner's work and give them feedback.

### Suggested responses

1.

- |                      |                        |
|----------------------|------------------------|
| (a) Animal transport | (b) Human portage      |
| (c) Canoes           | (d) Air transport      |
| (e) Railway          | (f) water transport    |
| (g) road portage     | (h) Pipeline transport |

2 **Water transport.** Water transport is the use of ships. Water transport is the use of ships, boats, steamers, canoes and rafts to transport goods and people on the water bodies. There are two forms of water transport, that is, inland water transport and sea transport. Water transport is divided into Inland Water Transport and Sea Transport

**Railway transport.** Railway transport is the transportation of goods and people using trains. Trains move on railway lines. Some of the railway lines connect Kenya, Tanzania and Uganda. Burundi, South Sudan and Rwanda do not have railway lines. Plans are under way to construct a modern railway network to link Kenya, Uganda, South Sudan and Rwanda. It is known as the standard gauge railway.

**Animal transport.** Animals such as oxen, camels, donkeys and horses are used to carry heavier loads on their backs or on carts.

**Road transport** Road transport is the movement of goods and passengers on the road. We use means such as walking, cars, lorries, buses, taxis and motorcycles. Some roads are tarmacked while others are not.

**Air transport.** Air transport is the use of aircraft to transport goods and people. Aircraft land and take off from airports and airstrips or airfields. Airports are large and have better facilities to enable landing and taking off of large planes. Airstrips and airfields are smaller than airports.

**Human portage.** In Human portage people carry goods on their heads or backs from one place to another.

**Pipeline transport** Pipeline transport is the use of special pipes to transport gas or liquids from one place to another. Pipelines are mainly used to transport water, natural gas and petroleum products.

### 3 and 4

- ▲ Promoting trade
- ▲ Improving international relationships
- ▲ Facilitating growth of industries
- ▲ Contributing to development of urban centres

You have noted that with advanced science and technology, new means of transport have been developed. Transport plays an important part in economic growth and connecting different parts of the world. A planned and organised system of transport is an indicator of a country's development.

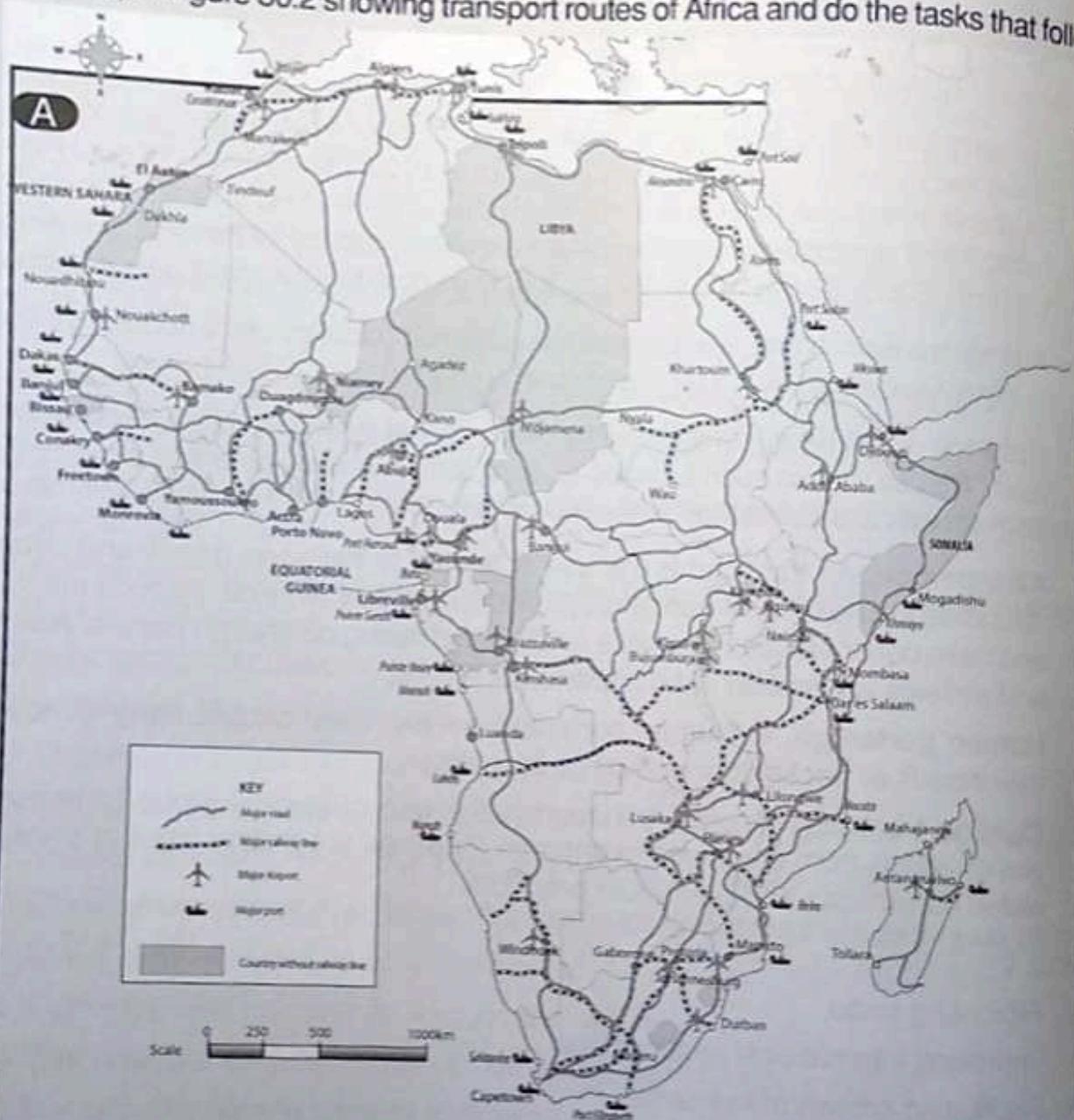
**Major transport routes in Africa** (Leamer's Book Pages 72-74)  
In activity 30.1 you have found out that Africa has an extensive network of paved  
unpaved roads, international airports, ports and railways.

**Major transport routes in Africa** (Leamer's Book Pages 72-74)  
In activity 30.1 you have found out that Africa has an extensive network of paved and unpaved roads, international highways, Railways, waterways and Airports. After doing tasks in activity 30.2 you will know the major transport routes in Africa.

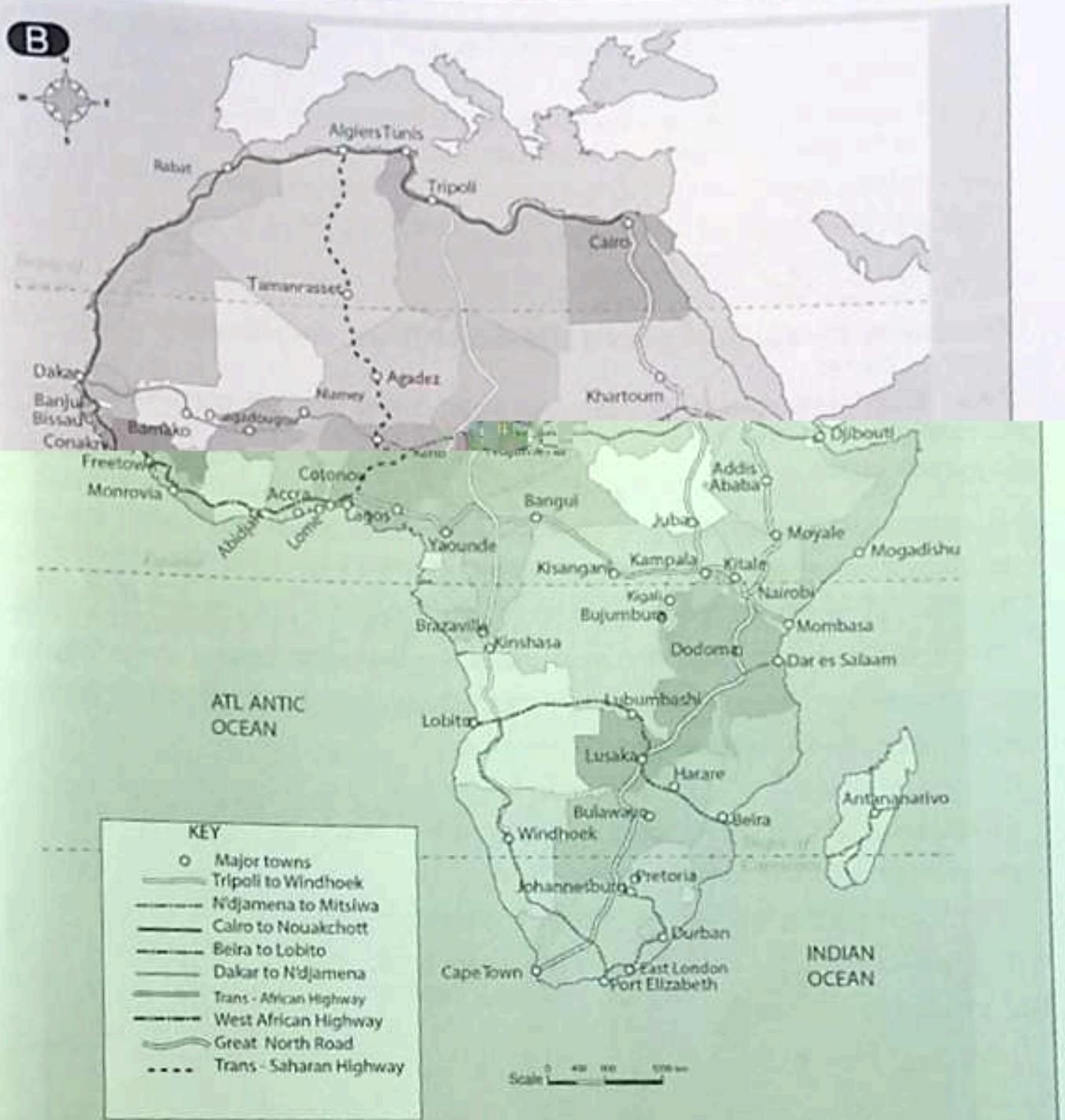
## Activity 30.2

### Discovering the major transport routes in Africa

Discovering the major transport routes in Africa  
Study map in figure 30.2 showing transport routes of Africa and do the tasks that follow.



**B**



*Figure 30.2: Transport routes of Africa*

**Table 30.1: Type of transport, major transport route, major transport route, places it links and countries linked**

Type of transport	Major transport route	Places it links	Countries linked
1			
2			
3			

- 1 Copy maps A and B in figure 30.2 showing transport routes in Africa into your notebook
- 2 Copy table 30.1 in your notebook and fill in the type of transport, major transport route, places it links and countries it links.
- 3 Suggest reasons for the existence of such a transport pattern in Africa.
- 4 Identify different transport networks mainly developed within each country's borders.
- 5 Present your work to the rest of the class through discussion.

**Resources to use:** Photographs provided in the learner's book, writing materials, library, internet

**Skills:** Map interpretation, interpersonal skills, critical thinking, communication, forming own opinions.

**Methods:** Brainstorming and discussions

#### Instructions to the teacher

- (a) Organise learners into manageable groups.
- (b) Provide learners with the learner's book and tell them the page on which the tasks are.
- (c) Instruct learners to study the map and do the tasks that follow.
- (d) Observe learners as they discuss in their groups and assist them as they do the task.
- (e) Make sure everyone is actively involved.
- (f) Converse with learners as they do the activity.
- (g) Emphasise that each group comes up with a write-up.
- (h) Instruct learners to present their work.
- (i) Encourage the learners to explain and defend their views.
- (j) Assess learner's work and give them feedback.

#### Suggested responses

1. Maps in Figure 30.2

2.

Type of transport	Major transport route	Places it links	Countries linked
1 Road	Highways	South Africa	Botswana, Zimbabwe, Lesotho and Eswatini
2 Railway	Major railway line	Central Africa	Congo, Gabon and Central African Republic

3. Promoting trade

- ▲ Improving international relationships
- ▲ Facilitating growth of industries
- ▲ Contributing to development of urban centres

#### 4. Railways and high ways

You have found out that road transport is the most dominant mode of motorized transport in Africa. It accounts for 80 percent of the goods traffic and 90 percent of passenger traffic on the continent.

African countries together have about 2.06 million km of roads in 2001, resulting in a road density of 30.84 km per 100 sq.km. Whereas the average road-to-population ratio for the whole continent is 26 km per 10,000 inhabitants, there is a large subregional variation.

### Development of water transport in Africa (Learner's Book Pages 74-75)

Water transport has been used to transport goods, people and animals for a long period as you can see in figure 30.3. This is done where there are big rivers, lakes, seas and oceans. Rivers and lakes are called **inland water ways** while seas and oceans are called **sea ways**. Around Twenty-nine African countries have navigable bodies of water, though only a small number have been well developed for transport services. Sea ports are important outlets of international trade for both coastal and landlocked countries in Africa. After doing tasks in activity 30.3, you will understand the development of water in Africa



Figure 30.3: People and goods being transported on water.

#### Activity 30.3 Understanding the development of water transport in Africa

carry out a textbook or internet research on the development of water transport and do the following tasks.

- 1 Identify the main forms of water transport in Africa.
- 2 Explain the factors that lead to the development of water transport in Africa.

- 3 What are the advantages of developing inland water transport?
- 4 Present your work to the rest of the class through discussion.
- 5 Present your work to the teacher for further guidance.

**Resources to use:** Library, Computers, pens, notebooks and pencils

**Skills:** Recording information, critical thinking, ICT, reporting, problem solving and communication.

**Methods:** Research and class discussion

#### Instructions to the teacher

- (a) Organise learners into groups
- (b) Provide learners with the learner's book and tell them the page on which the tasks are.
- (c) Instruct learners to go the library computer laboratory and carry-out research the tasks that follow.
- (d) Observe learners as they do work and assist them as they do the task.
- (e) Make sure everyone is actively involved.
- (f) Converse with learners as they do the activity.
- (g) Instruct learners to present their work.
- (h) Encourage the learners to explain and defend their views.
- (i) Assess learner's work and give them feedback.

#### Suggested response

1 **Inland Water Transport.** Inland water transport is the movement of goods or people on the interior water bodies like lakes and rivers.

**Sea Transport.** Sea transport is the movement of people and goods on Oceans and seas. These are characterised with ports which are used for sea transport.

2 Presence of lakes, rivers, seas and oceans

Availability of capital for constructing ports and buying vessels

3 It is a cheap means of transport when moving heavy goods over long distances. Goods are protected from loss and damage from the weather as they are transported in sealed containers.

Inland water transport is cheap to maintain. It is only the vessels that require maintenance.

Inland water transport has no congestion on the waters.

It is the best means of transporting fragile goods like glass.

You have learnt that water transport in Africa has played a significant role in the country's economy. It is better than surface transport for dry and liquid bulk cargo or containerised cargo over long distances.

Water transport is the most dominant mode of transport for moving freight from international continents to Africa. It accounts for over 92 percent of Africa's external trade. With a total coastline of 30,725 km, Africa has 90 major ports and a number of other ports providing services for fishing and tourism. African ports handle only 6 percent of global traffic. About 6 ports, three in Egypt and others in South Africa, handle about 50 percent of Africa's container traffic.

## Inter-African, International and internal transport

(Learner's Book Pages 74-75)

In your community or family, you might have heard of or have seen people travelling from one African country to another for example from Uganda to South Africa. This type of movement is called Inter -African journey and the means of transport used is known **Inter-African transport**.

You or your family members might have probably moved from one village to another for example from Masaka to Mbale. This type of movement is called Internal journey and the type of transport you used is known as **Internal transport**.

Similarly, you might have travelled from Africa to another continent for example from Africa to Asia, America or Europe. This is called International journey and the type of transport you used is known as **international transport**. After doing tasks in activity 30.4, you will understand the main forms of inter- African and international transport

### Activity 30.4

Understanding the main forms of inter-African and international transport

In groups,

- 1 Identify the main forms of inter- African and international transport.
- 2 What are the characteristics of the main forms of inter- African transport?
- 3 What are the advantages and disadvantages of the main forms of inter- African transport?
- 4 With reasons, discuss why inter- African transport is less developed than transport between Africa and the rest of the world.
- 5 Discuss the difference between internal, inter- African and international transport.
- 6 Present your work with the rest of the class through discussion.

**Resources to use:** Library, Computers, pens, notebooks and pencils

**Skills:** Recording information, critical thinking, reporting, problem solving and communication.

**Methods:** group discussion

**Instructions to the teacher**

- (a) Organise learners into two groups

- (b) Provide learners with the learner's book and tell them open page on which the tasks are.
- (c) Instruct learners to discuss on trade between African countries and do the tasks that follow.
- (d) Observe learners as they discuss in their groups and assist them as they do the task.
- (e) Make sure everyone is actively involved.
- (f) Converse with learners as they do the activity.
- (g) Instruct learners to present their work.
- (h) Encourage the learners to explain and defend their views.
- (i) Assess learner's work and give them feedback.

#### **Suggested response**

- 1 (a) Main forms of inter- African transport include water, air, railway, and road.
- (b) Main forms of international transport include water and air
2. Water. The three main characteristics of water transport are that it is slow, that it can carry large loads, and that it is relatively cheap

#### **Air.**

- ▲ Unbroken Journey
- ▲ Expensive:
- ▲ Special Preparations
- ▲ High Speed
- ▲ Comfortable and Quick Services

#### **Railway.**

- ▲ It is cheap
- ▲ There are fewer cases of train accidents
- ▲ The railway transport is not affected by traffic congestion
- ▲ Railway lines require little maintenance costs.

#### **Road**

- ▲ Road transport offers complete freedom to road user to transfer the vehicle from one lane to other.
- ▲ It gives quick and easy transportation of men, machineries, materials etc.
- ▲ Road transport serves the agricultural area by transporting of goods.
- ▲ Roads are used by various categories of vehicles

#### **Water transport**

##### **Advantages of Water Transport**

- ▲ It is a cheap means of transport when moving heavy goods over long distances.

- ▲ Goods are protected from loss and damage from the weather as they are transported in sealed containers.
- ▲ Water transport is cheap to maintain. It is only the vessels that require maintenance.
- ▲ Water transport has no congestion on the waters.
- ▲ It is the best means of transporting fragile goods like glass.

### **Disadvantages of Water Transport**

- ▲ It is the slowest means of transport.
- ▲ Large vessels move on a strict timetable.
- ▲ Water vessels are expensive to buy and maintain.
- ▲ In case of accidents, ships sink with all the goods and passengers can drown.
- ▲ Water transport is limited to areas having water bodies.
- ▲ Water transport is regularly attacked by thieves known as pirates. They rob the ships of the goods or divert the ships to different destinations. This is a problem on the Indian Ocean.
- ▲ The presence of water hyacinth on Lake Victoria hinders movement by small boats.
- ▲ Water transport is largely affected by bad weather.

### **Air transport**

#### **Advantages of Air Transport**

- ▲ It is the fastest means of transport.
- ▲ Air transport is the best in transporting perishable goods.
- ▲ The aeroplanes do not suffer from traffic congestion as they follow strict timetables.
- ▲ Helicopters can be used to transport goods and passengers in remote areas where there are no airports or roads.
- ▲ Many planes can land or take off from the same airport at the same time.
- ▲ Air transport is comfortable when travelling for long distances.
- ▲ Air transport cannot be hindered by features like dense forests and mountains.

#### **Disadvantages of Air Transport**

- ▲ The aeroplanes are expensive to purchase and maintain. Building airports and airstrips is also expensive. Airports can only be constructed in low lying areas and not in hilly or mountainous areas.
- ▲ In case of an accident, all or very many people perish with a lot of property being destroyed.
- ▲ It is the most expensive means of transport.
- ▲ Air transport is highly affected by weather.
- ▲ Airports require a lot of land for construction.

### **Railway transport**

### Advantages of Railway Transport

- ▲ It is cheap when used to transport heavy goods over long distances.
- ▲ There are fewer cases of train accidents on our railway lines as compared to road transport. The railway transport is not affected by traffic congestion. This enables goods to reach their destinations in time.
- ▲ Railway lines require little maintenance costs as they are not affected by weather.
- ▲ Trains carry bulky goods by loading containers on the railway wagons. Many wagons can be pulled at a go.

### Disadvantages of Railway Transport

- ▲ The railway transport is slow. It takes a train long hour to reach its destination.
- ▲ It relies heavily on road transport to feed it with goods and passengers.
- ▲ Trains only stop at railway stations. They therefore, do not reach the final destination of the people or goods.
- ▲ It requires highly trained people to run and maintain trains.
- ▲ Railway lines are usually laid in flat areas. They are difficult to lay in hilly terrain.
- ▲ It is expensive to build railway lines.

### Road transport

#### Advantages of Road Transport

- ▲ Most flexible: Roads can be constructed to reach many parts of a country. This makes it easy to transport goods from one place to another.
- ▲ Cheap to construct: Different types of roads can be built at lower costs than other forms of transport for example, railways.
- ▲ Cheap to use: Road transport can be afforded by many people. It is the cheapest means of transport when travelling over short distances.
- ▲ Convenience: Most vehicles do not have a fixed schedule of departure and arrival time. Opening up the region: The road transport can be used to open up remote areas and expose the available resources in these areas.
- ▲ A link to other means of transport: Roads connect to railway stations, airports and ocean harbours.

#### Disadvantages of Road Transport

- ▲ Accidents: There are more accidents on our roads than any other form of transport. Accidents cause death, injuries and loss of goods.
- ▲ Expensive to maintain: Roads need to be maintained regularly making it expensive in the long run. Roads are mostly damaged during the rainy season.
- ▲ Congestion: There is too much delay on busy roads due to traffic jam.
- ▲ Difficult to construct: It is difficult to build roads in swampy or mountainous areas.
- ▲ Small amount of goods: Vehicles on roads can only carry a limited number of passengers or amount of goods.

- Some African have different political ideologies and conflicts which hinders transport development
- Internal transport is the movement of people from one village to another within the same country.

**Inter- African transport** is the movement of people from one country to another country on the same continent.

International transport is the movement of people from one continent to another.

- You have noted that transport is of various forms depending on the networking system, that is how the routes are constructed for instance certain transport networks are connected within one country, other routes can be constructed to connect with different African countries and there also transport networks which can connect with the rest of the world.

## • **The role of China in developing Africa's transport** (Leamer's Book Pages 76)

China has developed Africa through improving its transport networks. Infrastructure helps China to easily trade on the African continent. The Tanzam railway was, for instance, intended to provide transport to African nations that created the need to enter imperialist Apartheid south-Africa. China is presently involved in infrastructure project in 35 African countries. A concentration of projects is to be found in Angola, Nigeria and the Sudan. After doing tasks in activity 30.5 you will discover the role of china in developing African transport.

### **Activity 30.5 Discovering the role of China in developing African transport**

In groups, debate on the role of China in developing Africa's transport and do the following tasks.

- Why is China investing in railways in Africa?
- Suggest the advantages and disadvantages of Chinese investment in railways in Africa.
- Present your work with the rest of the class through discussion.

**Resources to use:** Library, Computers, pens, notebooks and pencils

**Skills:** Recording information, critical thinking, reporting, problem solving and communication.

**Methods:** Debate, group discussion

**Instructions to the teacher**

- Organise learners into two groups

- (b) Provide learners with the learner's book and tell them the page on which the tasks are
- (c) Instruct learners to debate and do the tasks that follow.
- (d) Observe learners as they discuss in their groups and assist them as they do the task.
- (e) Make sure everyone is actively involved.
- (f) Converse with learners as they do the activity.
- (g) Instruct learners to present their work.
- (h) Encourage the learners to explain and defend their views.
- (i) Assess learner's work and give them feedback.

### Suggested response

- 1 Africa provides market to the Chinese manufactured goods.  
Africa has enough land to accommodate the Chinese nationals that is why they are constructing railways in Africa.  
Sometimes China construct infrastructures to access oil
- 2 Advantages
  - ▲ It provides employment opportunities to people who help in the construction of railways.
  - ▲ It leads to the development of infrastructures.
  - ▲ It leads to urbanisation of African countries.

### Disadvantages

- ▲ It puts African countries in debts.
- ▲ Over exploitation of resources by the investor.
- ▲ Poor working conditions of the African citizen.
- ▲ Profit repatriation

You have found out that many Chinese companies have invested in a lot of money in African roads and railways maintenance. Construction and infrastructure are the sectors that have made China find market for her products in Africa. The infrastructure projects include coastal railway in Nigeria, Addis-Ababa-Djibouti Railway, mega port and economic zone at Bagamoyo are all being developed through Chinese partnerships.

### ● Problems that affect transport in Africa (Learner's Book Pages 76-77)

You learnt the problems that affect transport in East Africa. You can remember them. Similarly, Transport in Africa is affected by a number of barriers. After doing tasks in

activity 30.6, you will understand more about the problems that affect transport in Africa

**Activity 30.6** Understanding the problems that affect transport in Africa

In groups, study photographs A-C in figure 30.4 and do the tasks that follow.



*Figure 30.4: Some of the challenges that affect transport in Africa*

- 1 Identify the problems that affect transport in Africa shown in each photograph in figure 30.4.
- 2 What are other problems that affect transport in Africa?
- 3 Suggest ways of overcoming the problems which you have identified in 1 and 2 above.
- 4 Share your findings with other groups for further discussions.

Resources to use: Library, Computers, pens, notebooks and pencils

Skills: Recording information, critical thinking, reporting, problem solving and communication.

**Methods:** group discussions

### Instructions to the teacher

- Organise learners into manageable groups.
- Provide learners with the learner's book and tell them the page on which the tasks are.
- Instruct learners to study the photographs and do the tasks that follow.
- Observe learners as they discuss in their groups and assist them as they do the task.
- Make sure everyone is actively involved.
- Converse with learners as they do the activity.
- Emphasise that each group comes up with a write-up.
- Instruct learners to present their work.
- Encourage the learners to explain and defend their views.
- Assess learner's work and give them feedback.

### Suggested response

- (a) Plane crushes      (b) Mist      (c) Floods
- The presence of water hyacinth on Lake Victoria hinders movement by small boats.
  - Water transport is regularly attacked by thieves known as pirates. They rob the ships of the goods or divert the ships to different destinations. This is a problem on the Indian Ocean.
  - Water transport is largely affected by bad weather.
  - The presence of waterfalls and rapids along rivers limits water transport in a way that they limit navigation.
  - Accidents: There are more accidents on our roads than any other form of transport. Accidents cause death, injuries and loss of goods.
  - Expensive to maintain: Roads need to be maintained regularly making it expensive in the long run. Roads are mostly damaged during the rainy season.
  - Congestion: There is too much delay on busy roads due to traffic jam. Difficult to construct: It is difficult to build roads in swampy or mountainous areas.
  - Small amount of goods: Vehicles on roads can only carry a limited number of passengers or amount of goods.

### Trade in Africa (Learner's Book Pages 78-79)

In senior three, you learnt about trade within East Africa and the rest of Africa. You can remember the types of trade carried out in East Africa. Similarly, Africa is involved

in trade. After doing tasks in activity 30.7, you will find out the main forms of internal, inter-African, and international trade in Africa.

### Activity 30.7

Understanding the main forms of internal, inter-African and international trade in Africa.

In groups, using the knowledge you gained on trade:

- 1 Explain the main forms of internal, inter-African and international trade in Africa.
- 2 Describe the trade patterns of African countries.
- 3 What are the factors influencing the trade patterns of African countries described in (2).
- 4 What are the contributions of trade to the development of African countries?
- 5 Which type of transport can be used for;
  - (a) Inter-African trade.
  - (b) International trade outside Africa.
- 6 Share your findings with other groups through discussion.

**Resources to use:** pens, notebooks and pencils

**Skills:** Recording information, critical thinking, reporting, problem solving and communication.

**Methods:** group discussions and brainstorming

#### Instructions to the teacher

- (a) Organise learners into two groups
- (b) Provide learners with the learner's book and tell them the page on which the tasks are.
- (c) Instruct learners to discuss on trade between African countries and do the tasks that follow.
- (d) Observe learners as they discuss in their groups and assist them as they do the task.
- (e) Make sure everyone is actively involved.
- (f) Converse with learners as they do the activity.
- (g) Instruct learners to present their work.
- (h) Encourage the learners to explain and defend their views.
- (i) Assess learner's work and give them feedback.

#### Suggested response

- 1 Main forms of internal trade include wholesale and retail trade.
  - ▲ Main forms of inter-African trade include import and export trade.
  - ▲ Main forms of international trade include import and export trade.
- 2 symmetrical, descending and ascending
- 3 and 4 Creation of employment
  - ▲ Acquisition of foreign currency
  - ▲ Generating revenue for the government

- ▲ Promoting development of transport and communication systems.
- ▲ Promoting agricultural development
- ▲ Promoting growth of industries

5 (a) Road, railway, water and air (b) water and air

You have learnt that trade is of various forms depending on how it is carried out that is to say, it can be with in one country, within African countries and trade with the rest of the world.

Africa's trading partners are China, European Union and United States. After doing tasks in activity 30.8, you will analyse trade in Africa using statistics

### Activity 30.8 Analysing trade in Africa using statistics

Study the information in the tables 30.2 showing Sub-Saharan service exports by country 2015 and 30.3 showing Sub-Saharan service imports by country 2015 do the following tasks.

Table 30.2 Sub-Saharan service exports by country 2015.

Country	Exports (%)
South-Africa	27.0
Ghana	10.5
Kenya	6.8
Tanzania	6.7
Ethiopia	5.2
All other	43.7

Table 30.3 Sub-Saharan service imports by country 2015.

Country	Imports (%)
Nigeria	22.8
Angola	22.7
South Africa	18.3
Ghana	6.0
Ethiopia	5.6
All other	24.6

Source: WTO, Statistics data base, Time series on international Trade. (accessed September 14, 2016)

- 1 Draw a pie-chart to represent;
  - (a) Service exports by country 2015. (b) Service imports by country 2015.
- 2 Select two countries from the pie chart you have drawn and compare their trade.
- 3 What are the problems facing trade among African countries?
- 4 Discuss the advantages and disadvantages of among African countries.
- 5 Why is international trade more developed in African countries than inter-African trade?
- 6 Present your work to the class through discussion.

**Resources to use;** tables provided in the learners book, pens, notebooks and pencils

**Skills:** Recording information, critical thinking, mathematical calculations, reporting, problem solving and communication.

**Methods:** Discussion and brainstorming

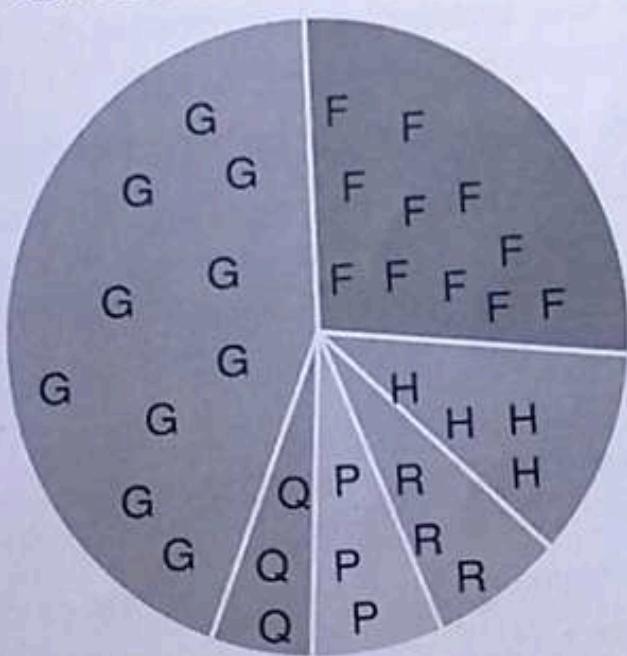
#### Instructions to the teacher

- Provide learners with the learner's book and tell them the page on which the tasks are.
- Instruct learners to study tables and do the tasks that follow.
- Observe learners as they discuss in their groups and assist them as they do the task.
- Make sure everyone is actively involved.
- Converse with learners as they do the activity.
- Instruct learners to present their work.
- Encourage the learners to explain and defend their views.
- Assess learner's work and give them feedback
- Instruct learners to share their work with the class through a discussion

#### Suggested response

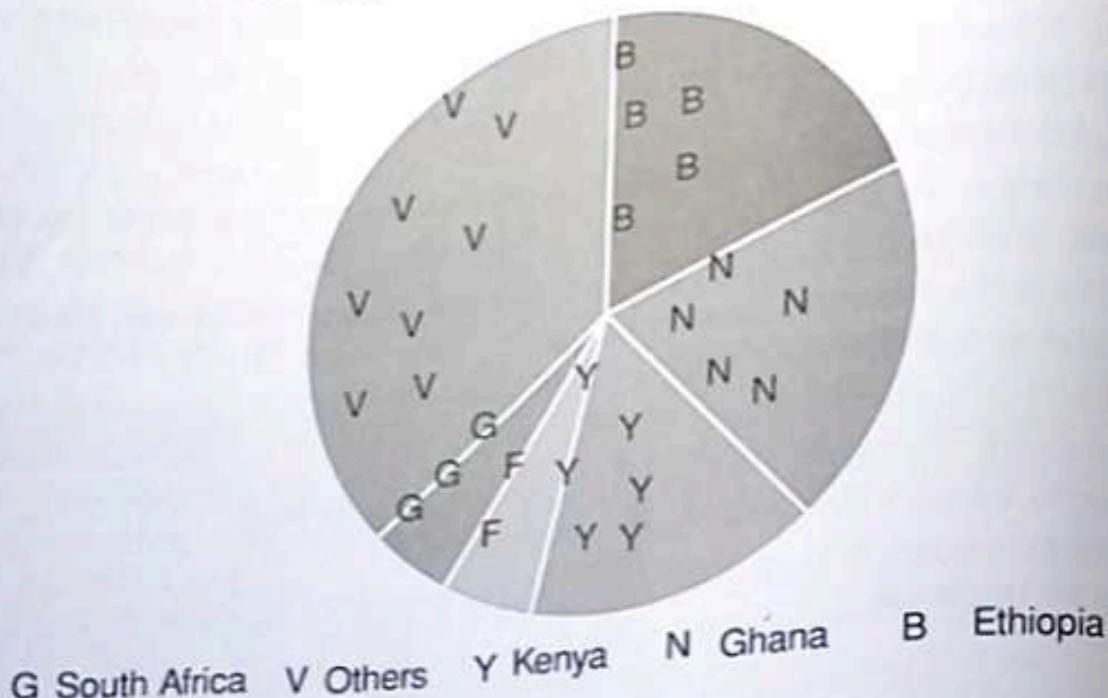
1

#### Sub - saharan service export by 2015



Q South Africa F Ethiopia R Kenya P Tanzania H Ghana

## Sub - saharan service import by 2015

**2 Differences in currencies**

- ▲ Differences in resource endowments
- ▲ Different political ideologies
- ▲ Insecurity.
- ▲ Weak institutional framework.

**3 Advantages**

- ▲ Fostering specialisation and boosting industrialisation
- ▲ Increasing employment and investment opportunities, as well as technological development.
- ▲ Allowing African-owned enterprises to enter new markets, expand their customer base and create new products and services, making investing in innovation viable
- ▲ Reducing the manufacturing gap, creating more well-paid jobs, especially for young people

**4 Disadvantages**

- ▲ Cultural Differences What makes this one of the major disadvantages of international trade is that cultural differences, many times, are never documented. They are the unwritten rules of commerce in the country that are hard to uncover and can be even more difficult to solve.

- ▲ Returning Products. Since not all customers will be satisfied with a company's products, a process must be in place to return them and process a refund.
- ▲ Language Barriers. Despite the availability of online translators, language is still one of the major disadvantages of inter-African trade
- ▲ Efficient Allocation and Better Utilization of Resources: Consumption at Cheaper Cost: International trade enables a country to consume things which either cannot be produced within its borders or production may cost very high. Therefore, it becomes cost cheaper to import from other countries through foreign trade.
- ▲ Reduces Trade Fluctuations: By making the size of the market large with large supplies and extensive demand international trade reduces trade fluctuations. The prices of goods tend to remain more stable.
- ▲ Utilisation of Surplus Produce International trade enables different countries to sell their surplus products to other countries and earn foreign exchange

In activity 30.8 you have learnt that the main imported commodities in Africa are machinery and equipment, chemicals, petroleum products, scientific instruments and food stuffs. The main exported commodities are palm oil, gold, diamonds, oil, cocoa, timber and precious metals.

Due to long distances between different countries, it's a bit difficult to establish quick and close trade contacts between traders for the case of intra and overseas trade. Buyers and sellers rarely meet one another therefore personal contact is rarely possible.

## ● Communication in Africa (Leamer's Book Pages 79-81)

In senior two, you learnt about communication where you noted the ways through which messages are passed from one person to another. You can remember these ways. You usually talk to people near you and those that are far from you. How do you do it? After doing tasks in activity 30.9, you will discover more about forms of communication used in Africa.

### Activity 30.9 Understanding modes of communication

In groups, study photographs A-G in figure 30.5 showing ways of communication and do the tasks that follow.



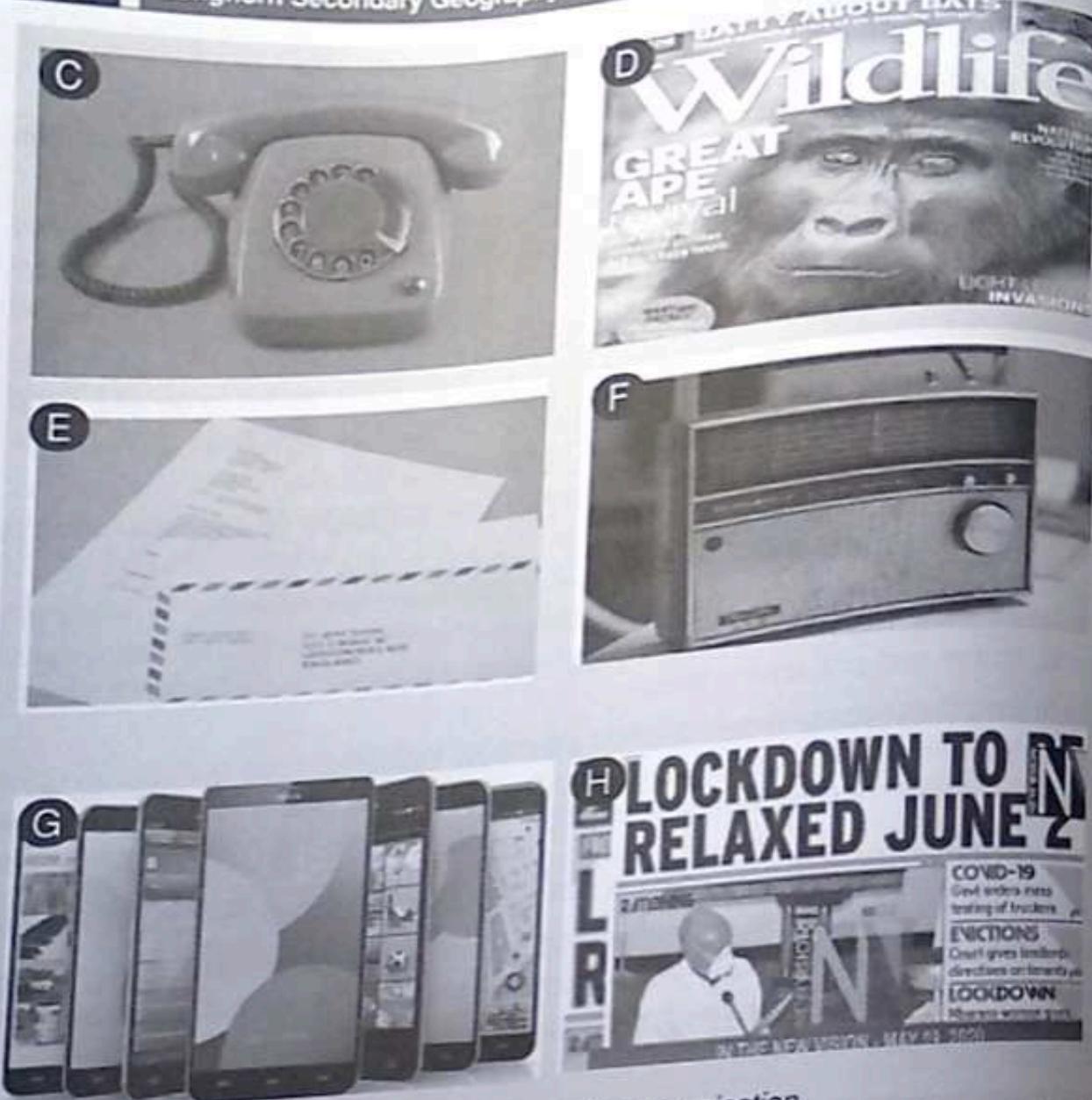


Figure 30.5: Ways of communication

- 2 a) Identify the main forms of communications used in the past and today shown in figure 30.5. Draw a table with 2 columns and classify them.
- (b) Identify the main forms of international communications
- 2 Explain the advantages and disadvantages of using each type of communication that you have identified in 1 and comment on each other's group work.
- 3 Swap your work with other groups
- 4 Present it to the rest of the class through discussion.

**Resources to use:** Photographs provided in the learner's book, writing materials, library, internet  
**Skills:** Photographic interpretation, interpersonal skills, critical thinking, communication, forming own opinions.

**Methods:** group discussion and brainstorming

**Instructions to the teacher**

- Organise learners into manageable groups.
- Provide learners with the learner's book and tell them the page on which the tasks are.
- Instruct learners to study the photographs and do the tasks that follow.
- Observe learners as they discuss in their groups and assist them as they do the task.
- Make sure everyone is actively involved.
- Converse with learners as they do the activity.
- Emphasise that each group comes up with a write-up.
- Instruct learners to present their work.
- Encourage the learners to explain and defend their views.
- Assess learner's work and give them feedback.

**Suggested response**

- (a) Forms of communication used in the past are; fixed line telephone, drums and horns.  
Forms of communication used today are; magazines, Newspapers, radios, letters, smart phones.
- (b) magazines, Newspapers, letters and smart phones.

- (a) and (b)

You have found out that communication involves transmission of words and messages from one person to another . There are three main modes of communication; verbal, written and audio-visual communication. Communication has improved tremendously in most of African countries.

New technologies have led to the development of landline and mobile telephones, and radios. Satellite communication has also been introduced. These developments have led to wide spread of ideas and information. These have a positive influence in trade and economic development in Africa.

Africa recognizes ICT as a key instrument for economic growth. The ICT sector has witnessed tremendous growth in terms of subscriptions, investment and network coverage. After doing tasks in activity you will be able to understand the importance of internet and communication between African countries.

**Activity 30.10**

Understanding the importance of internet and communication between African countries

In groups,

- Discuss how internet and social media has changed communication.
- Explain the importance of promoting inter-African communication between African countries.
- Share your findings with other groups through discussion.

**Resources to use:** pens, notebooks and pencils

**Skills:** Recording information, critical thinking, reporting, problem solving and communication.

**Methods:** group discussions, guided discovery, brainstorming

### Instructions to the teacher

- Organise learners into two groups
- Provide learners with the learner's book and tell them the page on which the tasks are.
- Instruct learners to discuss on trade between African countries and do the tasks that follow.
- Observe learners as they discuss in their groups and assist them as they do the task.
- Make sure everyone is actively involved.
- Converse with learners as they do the activity.
- Instruct learners to present their work.
- Encourage the learners to explain and defend their views.
- Assess learner's work and give them feedback.

### Suggested response

- The internet has made communication easier and faster; it's allowed us to stay in contact with people regardless of time and location. It's accelerated the pace of business and widened the possibilities within the enterprise space. It's allowed people to find their voice and express themselves through social media, YouTube and memes. The internet has connected like nothing before.
- Communication has led to the development of areas of trade in Africa. People can now trade from any part of Africa and the world without necessarily seeing each other face to face. This can be done through fax, Internet and cell phones.
  - With telecommunication services, business transactions are carried out faster and more efficiently. People can now buy and sell their goods and services without having to physically travel to meet with their clients.
  - The use of communication facilities has enabled people to transfer or send money from one part of the world to another with ease and very fast. Money transactions today are done using communication devices such as over the Internet and cell phones.
  - Modern communication systems allow instantaneous communication worldwide whereby mobility and labour are made available. This has shortened the distance between countries.
  - Through communication, people from different parts of Africa are in close contact enabling them learn about each other's way of life very fast. This has promoted friendship between nations.

**Sample Activity of Integration (Learners book page 82)**

Your friend who is a farmer would like to transport his/her farm products to other African countries and other continents but he/she does not know which means of transportation she/he can use and how to communicate to the potential customers.



**Task:** Write an essay of about 600 words advising your friend on how to reach

### Evaluation Grid

Expected output	Basis of Evaluation	Relevance	Accuracy	Coherence	Excellency
Essay	The different modes of transport and the different forms of communication	3 scores if the learner gives the 8-6 modes of transport and the different forms of communication correctly stated; 2 scores if the learner gives 5-3 modes of transport and the different forms of communication correctly stated;	3 scores if 8-6 modes of transport and the different forms of communication are correctly stated;	3 scores if 8-6 modes of transport and the different forms of communication are logically linked 2 scores if 5-3 modes of transport and the different forms of communication are logically linked	1 score For any uniqueness
				1 scores if 2-1 modes of transport and the different forms of communication are correctly stated.	/1
				/3	/3
	Total scores/10				

## Trade between Europe and Africa, Asia and Africa

Period : 8 (Leamer's Book Pages 83-87)



### Key words

- ▲ domestic trade
- ▲ foreign trade
- ▲ barter trade
- ▲ visible trade
- ▲ invisible trade
- ▲ imports
- ▲ exports

After studying this chapter, the learner should be able to;

- ▲ know the trade which exists between Europe and Africa
- ▲ know the trade between Asia and Africa
- ▲ understand the benefits of trade to both sides
- ▲ appreciate the role of trade in development
- ▲ use flow charts statistics and maps to show trade patterns
- ▲ form opinions about these two types of trade with Europe and Asia
- ▲ analyze the trade statistics between the European union and African countries and Asia and Africa
- ▲ appreciate the difficulties of negotiating trade agreements
- ▲ appreciate the increasing importance of china in Africa and African development
- ▲ appreciate the need for an economic system which helps to distribute the resource in an equitable way

**Introduction (Learner's Book Pages 84)****Guide learners to read the introduction**

In Senior Three, you learnt about trade within and outside East Africa. You might have learnt that countries trade with each other in East Africa, Africa, Europe and Asia. In this chapter, you are going to learn the main forms of trade between Europe and Africa and the advantages and disadvantages for both; the trade between China and Africa and the reasons for its increasing importance.

It is important that you use a number of interactive methods to enable learners acquire and develop the different skills reflected in the different activities throughout the chapter. It is necessary to ensure that all learners participate in pairs, groups and class discussions. The use of ICT is one of the learning components, so it is advisable that you make use of it as may be required.

**Trade between the European Union and Africa (Learner's Book Page 84-85)**

Figure 30.1: A map showing European countries that trade with Africa

Countries in Africa formed trade unions amongst themselves and European countries also formed the European Union. African countries signed an agreement mainly to achieve prosperity, competitiveness, security, stability and political unification in Africa. After doing tasks in activity 31.1, you will understand more about trade between the European Union and Africa.

**Activity 31.1****Understanding trade between the European Union and Africa**

In groups carry out a textbook or internet research on trade between the European Union and Africa and do the tasks that follow.

1. What kind of trade exists between;
  - (a) Europe and Africa.
2. What are the difficulties encountered in negotiating trade agreements?
3. Why do you think countries trade with one another?
4. Discuss the benefits trade brings to the European Union and to African countries.
5. Present your work to the rest of the class through discussion.

**Resources to use:** internet, textbook, note book, pens, and pencils

**Skills:** critical thinking, creative thinking, collaboration, communication.

**Methods:** Research, discussion and brainstorming

**Instructions to the teacher**

- (a) Organise learners into manageable groups.
- (b) Provide learners with the learner's book and tell them the page on which the tasks are.
- (c) Instruct learners to go the library computer laboratory and carry-out research the tasks that follow.
- (d) Observe learners as they discuss in their groups and assist them as they do the task.
- (e) Make sure everyone is actively involved.
- (f) Converse with learners as they do the activity.
- (g) Instruct learners to present their work.
- 8 Encourage the learners to explain and defend their views.
- (i) Assess learner's work and give them feedback.

**Suggested responses**

- 1 a) horizontal integration  
Horizontal integration is a business strategy in which one company/ country acquires or merges with another that operates at the same level in an industry. Horizontal integrations help companies grow in size and revenue, expand into new markets, diversify product offerings, and reduce competition.
- 2 Differences in currencies
  - Differences in political ideology
  - Differences in resource endowment
- 3 Countries trade with each other because they do not have all the resources. Capacity to satisfy their own needs and wants.
  - To develop and exploit their domestic scarce resources
  - Countries can produce a surplus therefore need to trade with each other.
- 4 Increased revenues.

- ▲ Longer product lifespan.
- ▲ Easier cash-flow management.
- ▲ Better risk management.
- ▲ Benefiting from currency exchange.
- ▲ Disposal of surplus goods

You have learnt that trade is meant to be between two parties that is the seller and the buyer. In this case countries have to depend on others for goods and items that they do not have. This helps to widen the market as well.

### ② Trade between Africa and Asia (Learner's Book Pages 85-86)



*Figure 30.2: A map showing Asian countries trade with Africa*

You might have realised that the trade relationships between Africa and Asia, especially China, increase the prosperity of African countries. This is because they have been able to increase the value added to their exports and also export more to the rest of the world. Did you know that about one-third of Africa's total trade is already with markets in developing and developed countries? China is now Africa's second-largest single trading partner. After doing tasks in 31.2, you will understand trade between Africa and Asia.

**Activity 31.2****Understanding trade between Africa and Asia**

In groups;

- 1 Identify countries which make-up Asia.
- 2 What kind of trade exists between Asia and Africa?
- 3 Find out goods and commodities you buy and use that are made in Asiatic countries.
- 4 Discuss the benefits of trade to the development of Asian and African countries.
- 5 Use knowledge acquired in chapter 27 to explain why many Asian goods are very cheap compared to those from western industrialised countries.
- 6 Present your work to the rest of the class through discussion.

**Resources to use:** Internet, textbook, note book, pens, and pencils

**Skills:** Critical thinking, creative thinking, collaboration, communication.

**Methods:** Group discussion and brainstorming

**Instructions to the teacher**

- (a) Organise learners into manageable groups.
- (b) Provide learners with the learner's book and tell them the page on which the tasks are.
- (c) Instruct learners to go discuss and do the tasks that follow.
- (d) Observe learners as they discuss in their groups and assist them as they do the task.
- (e) Make sure everyone is actively involved.
- (f) Converse with learners as they do the activity.
- (g) Instruct learners to present their work.
- (h) Encourage the learners to explain and defend their views.
- (i) Assess learner's work and give them feedback.

**Suggested responses**

- 1 Afghanistan, Armenia, Azerbaijan, Bahrain, Bangladesh, Bhutan, Brunei, Burma, Cambodia, China, East Timor, Georgia, Hong Kong, India, Indonesia, Iran, Iraq, Israel, Japan, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Laos, Lebanon, Malaysia, Mongolia, Nepal, North Korea, Oman, Pakistan, Papua New Guinea, Philippines, Qatar, Russia, Saudi Arabia, Singapore, South Korea, Sri Lanka, Syria, Taiwan, Tajikistan, Thailand, Turkey, Turkmenistan, United Arab Emirates, Uzbekistan, Vietnam, Yemen.
- 2 International trade
- 3 Shoes, watches, clothes and phones
- 4 Abundance of cheap Chinese labor that brings down the production costs
  - to compete with the world market
  - lower compliance to laws and guide lines.

You have learned that, the main exports from Africa are mainly agricultural commodities such as coffee, tea, cocoa, meat and horticultural products. Asia exports machinery and manufactured goods to the African Continent.

## Role of China in Africa's development (Learner's Book Pages 86-87)

Most of the commodities used in your home are labelled made in China. You can name some of them. Over the last 15 years, China has become a major economic partner of African countries.

China is both a long-established diplomatic partner and a new investor in Africa. Chinese concentration on the continent involves not only natural resources but also issues of trade, security and diplomacy. After doing tasks in activity 31.4, you will understand the role of China in Africa's development.

### Activity 31.3 Understanding the role of China in Africa's development

Carry out a textbook or internet research on the role of China in Africa's development and do the following tasks.

1. Discuss the role of China in Africa's development.
2. What effects will the increasing wages in China have on trade?
3. Present your work to the teacher for further guidance.

**Resources to use:** Internet, text book, note book, pens, and pencils

**Skills:** Critical thinking, creative thinking, collaboration, communication.

**Methods:** Research and discussion

#### Instructions to the teacher

- (a) Organise learners into manageable groups.
- (b) Provide learners with the learner's book and tell them the page on which the tasks are.
- (c) Instruct learners to go to the library computer laboratory and carry-out research the tasks that follow.
- (d) Observe learners as they discuss in their groups and assist them as they do the task.
- (e) Make sure everyone is actively involved.
- (f) Converse with learners as they do the activity.
- (g) Instruct learners to present their work.
- (h) Encourage the learners to explain and defend their views.
- (i) Assess learner's work and give them feedback.

#### Suggested responses

- 1 China is a significant source of foreign direct investment in Africa.
  - ▲ It offers development loans to resource-rich nations, like Angola.
  - ▲ It invests in agriculture.
  - ▲ It develops special trade and economic cooperation zones in several states, including Ethiopia, Nigeria, and Zambia
- 2 Even if trade does not reduce the number of jobs, it could affect wages. Because trade raises the amount that an economy can produce by letting firms and workers play to their comparative advantage, trade will also cause the average level of wages in an economy to rise.

You have learnt that over the last 15 years, China has become a major economic partner of sub-Saharan African countries. Total merchandise trade between China and Africa increased. At the same time, Africa's growth performance has improved significantly following two decades of negative growth rates in the 1980s and 1990s.

### Activity 31.4 Analysing trade patterns using statistics

In groups study table 31.1 and do the tasks that follow.

Table 31.1: European Union exports of goods from Africa by main partners 2017

Country	Exports (%)
South Africa	16
Morocco	15
Egypt	13
Algeria	13
Tunisia	8
Nigeria	7
Other	28

Source: Eurostat (online data codes: Ds-018995)

- 1 Draw a pie to represent the information in table 31.1.
- 2 Identify goods that African countries export to the European Union.
- 3 State the country that exports the highest percentage of goods to European countries.
- 4 Present your findings to the rest of the class through a discussion.

**Resources to use:** statistics provided in learners book, note book, pens, and pencils

**Skills:** critical thinking, creative thinking, collaboration, communication.

**Methods:** Group discussion and brainstorming

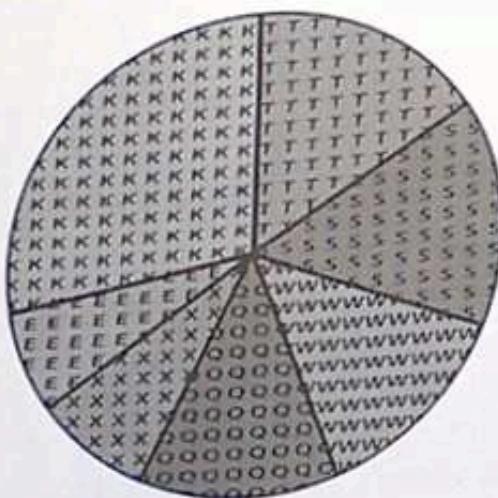
#### Instructions to the teacher

- (a) Organise learners into manageable groups.
- (b) Provide learners with the learner's book and tell them the page on which the tasks are.
- (c) Instruct learners to study the table the tasks that follow.
- (d) Observe learners as they discuss in their groups and assist them as they do the task.
- (e) Make sure everyone is actively involved.
- (f) Converse with learners as they do the activity.
- (g) Instruct learners to present their work.
- (h) Encourage the learners to explain and defend their views.
- (i) Assess learner's work and give them feedback.

**Suggested responses**

- 1 South Africa  $16/100 \times 360 = 57.6^\circ$
- Morocco  $15/100 \times 360 = 54^\circ$
- Egypt  $13/100 \times 360 = 46.8^\circ$
- Algeria  $13/100 \times 360 = 46.8^\circ$
- Tunisia  $8/100 \times 360 = 28.8^\circ$
- Nigeria  $7/100 \times 360 = 25.2^\circ$
- Other  $28/100 \times 360 = 100.8^\circ$

Pie chart showing European Union exports of goods from Africa



- T South Africa**
- S Morocco**
- W Egypt**
- Q Algeria**
- X Tunisia**
- E Nigeria**
- K Others**

2.

Agricultural raw- materials

- Minerals like coal, gold
- Flowers
- Hides

3. South Africa

You have learnt that, as trade developed, merchants established regular trade routes. By the 1500s, a complex trade network linked Europe, Africa, and Asia. Much of this trade passed through the Arabian Peninsula in the Middle East. Ships from China and India brought their cargoes of spices, silks, and gems to ports on the Red Sea.

**Sample Activity of Integration (Learner's Book Pages 87)**

Due to the rising fuel prices in early January 2022 going as high up as Ugandan Shillings 10, 000 for a litre. Leader of Opposition Mathias Mpuuga wrote to the Speaker of Parliament calling for a special parliamentary sitting to discuss the fuel crisis. "This is based on the fact that the crisis is rapidly rising and requires urgent attention before it results into a huge economic and security crisis," Mpuuga said in his letter. Imagine you are the elected member of parliament in your home district and you are to attend the parliamentary sitting;

**Task**

Write a manifesto of about 500 words you will present to the speaker of parliament.

**Evaluation Grid**

Expected output	Basis of evaluation	Relevance	Accuracy	Coherence	Excellence
A manifesto of about 500 words.	Ways of improving trade	The learner earns: 3 points if the learner gives 7-6 ways of improving trade	The learner earns: 3 points if s 7-6 ways of improving trade are correctly identified	The learner earns: 3 points if s 7-6 ways of improving trade are logically well-linked	The learner earns: 1 score for an outstanding learner

	2 points if the learner gives 5-4 ways of improving trade 1 point if the learner gives 3-2 ways of improving trade	2 points if 5-4 ways of improving trade are correctly identified 1 point if 3-2 ways of improving trade are correctly identified	2 points if 5-4 ways of improving trade are logically well-linked 1 point if 3-2 ways of improving trade are logically well-linked	The learner earns: 3 points if 7-6 importances of integrations and partnerships are logically well-linked 2 points if 5-4 importances of integrations and partnerships ideas are logically well-linked 1 point if 3-2 importances of integrations and partnerships are logically well-linked
Importances of integrations and partnerships	3 points if the learner gives 7-6 importances of integrations and partnerships 2 points if the learner gives 5-4 importances of integrations and partnerships ideas 1 point if the learner gives 3-2 importances of integrations and partnerships	The learner earns: 3 points if 7-6 importances of integrations and partnerships are logically well-linked 2 points if 5-4 importances of integrations and partnerships ideas are logically well-linked 1 point if 3-2 importances of integrations and partnerships are logically well-linked	The learner earns: 3 points if 7-6 importances of integrations and partnerships are logically well-linked 2 points if 5-4 importances of integrations and partnerships ideas are logically well-linked 1 point if 3-2 importances of integrations and partnerships are logically well-linked	
Total scores/19	/6	/6	/6	/1

## Glossary

**Abstinence:** the decision not to have sexual intercourse.

**Air transport:** movement of passengers and cargo by aircraft such as airplanes and helicopters

**Airport:** an area where planes can land or take off from

**Barter trade:** a system of exchange in which participants in a transaction directly exchange goods or services for other goods or services without using a medium of exchange, such as money.

**Birth rate:** the number of individuals born in a population in a given amount of time.

**Capital-intensive:** business processes or industries that require large amounts of investment to produce a good or service

**Census:** the procedure of systematically calculating, acquiring and recording information about the members of a given population

**Communication:** the sending and receiving of messages from one person to another

**Consumer goods:** products bought for consumption by the average consumer

**Death rate:** number of people per thousand who die in a particular area during a particular period of time.

**Demographic transition:** phenomenon and theory which refers to the historical shift from high birth rates and high infant death rates in societies with minimal

technology, education

Derrick: equipment used in the extraction of oil.

Domestic trade: the exchange of goods or services within a country or territory.

Economic diversification: the process of shifting an economy away from a single income source toward multiple sources from a growing range of sectors and markets.

Exports: goods and services produced in one country and purchased by residents of another country.

Foreign trade: the exchange of capital, goods, and services across international borders or territories.

Heavy industry: an industry that involves one or more characteristics such as large and heavy products; large and heavy equipment and facilities or complex or numerous processes.

Industrial goods: materials used in the production of other goods

Inland ports: ports found on lakes or rivers

Invisible trade: involves the export and import of physically intangible items such as services

Light industries: industries that usually are less capital-intensive than heavy industry and are more consumer-oriented than business-oriented, as they typically produce smaller consumer goods

Manufacturing industries: industries that engage in the transformation of goods, materials or substances into new products

Migration: involves the movement of people from one place to another with intentions of settling, permanently or temporarily, at a new location

Minerals: naturally occurring inorganic element or compound having an orderly internal structure and characteristic chemical composition, crystal form, and physical properties.

Minimum wage: lowest remuneration that employers can legally pay their employees

Mining: the extraction of valuable minerals or other materials from the Earth, usually from an ore body, lode, vein, seam, reef, or placer deposit

One-child policy: official program initiated in the late 1970s and early '80s by the central government of China, the purpose of which was to limit the great majority of family units in the country to one child each.

Open cast mining: surface mining technique of extracting rock or minerals from the earth by their removal from an open-air pit.

Pollution: the introduction of harmful materials into the environment

Population density: the number of people per unit of area, usually quoted per square kilometer or square mile

Population: the number of people in a single area, whether it be a city or town, region, country, or the world.

Producer goods: goods manufactured for use in further manufacturing, processing, or resale

Products: the item offered for sale or the items produced by a factory or industry.

- Raw materials: materials or substances used in the manufacturing of goods
- Rural - urban migration: movement of humans from villages to towns.
- Sea port: ports found on oceans/seas
- Transport: the movement of people or goods from one place to another
- Urbanisation: the population shift from rural to urban areas, the corresponding decrease in the proportion of people living in rural areas, and the ways in which societies adapt to this change
- Visible trade: Exchange of physically tangible goods between countries, involving the export, import, and re-export of goods at various stages of production
- Water transport: movement of people or goods from one place to another on water using canoes, boats, ferries and ships.

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