

PSYCHOLOGY

Combination: History-Literature in English-Psychology
(HLP)

Senior

4

Teacher's Guide

For Experimental version

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FOREWORD

Dear Teacher,

Rwanda Basic Education Board (REB) is pleased to present Psychology Teacher's Guide for Senior 4, History-Literature in English-Psychology Combination. It was designed based on the Senior Four Student Book to serve as a guide to teaching and learning of Psychology subject in general education.

The Rwandan education philosophy is to ensure that young people at every level of education achieve their full potential in terms of relevant knowledge, skills and appropriate attitudes that prepare them to be well integrated in society and exploit employment opportunities. In line with efforts to improve the quality of education, the government of Rwanda emphasizes the importance of aligning teaching and learning materials with the curriculum to facilitate the learning process.

Many factors influence what students learn, how well they learn and the competences they acquire. Those factors include the relevance of the specific content, the quality of teacher's pedagogical approaches, the assessment strategies, and the instructional materials available. Special attention was paid to the activities that facilitate the learning process in which students can develop ideas and make new discoveries during concrete activities carried out individually or with peers.

This contrasts with traditional learning theories which view learning mainly as a process of acquiring knowledge from the more knowledgeable who is mostly the teacher. In competence-based approach, learning is considered as a process of active building and developing of knowledge and understanding, skills, values and attitudes by the learner, where concepts are mainly introduced by an activity, situation or scenario that helps the learner to construct knowledge, develop skills and acquire positive attitudes and values.

With your facilitation, students learning psychology subject in senior four will gain basic knowledge, skills, attitudes and values that they need to understand human behaviour and mental processes of people; to sensitize parents and the community on impact of home environment on child growth and development; to act as a role model in inculcating positive attitudes, challenge negatives motives among individuals of different ages and in different social contexts.

As a facilitator, your role is to:

- Plan your lessons and prepare appropriate teaching materials.
- Organize group discussions for learners considering the importance of social constructivism suggesting that learning occurs more effectively when the learner works collaboratively with more knowledgeable and experienced people.

- Engage learners through active learning methods such as inquiry methods, group discussions, research, investigative activities and group and individual work activities.
- Provide supervised opportunities for learners to develop different competences by giving tasks which enhance critical thinking, problem solving, research, creativity and innovation, communication and cooperation.
- Support and facilitate the learning process by valuing learners' contributions in the class activities.
- Guide learners towards the harmonization of their findings.
- Explain different concepts for clear understanding of the content.
- Encourage individual, peer and group evaluation of the work done in the classroom and use appropriate competence-based assessment approaches and methods.
- Create more learning and assessment activities in supplement of those provided in the student book.

To facilitate you in your teaching activities, the content of this teacher's guide is self-explanatory so that you can easily use it. It is divided into 3 parts :

- The part 1 : Explains the structure of this book and gives you methodological guidance;
- The part 2: Gives a sample lesson plan as reference for your lesson planning process;
- The part 3: Provides guidance on teaching for each lesson. Even though this guide contains answers for all activities given in the student's book, you are requested to work through each question and activity before judging student's findings.

I wish to sincerely appreciate all people who contributed towards the development of this teacher's guide, particularly REB staff who organized the whole process from its inception.

Special gratitude goes to the lecturers and TTC tutors who diligently worked for the successful completion of this guide. Any comment or contribution would be welcome for the improvement of this teacher's guide for the next edition.

Dr. MBARUSHIMANA Nelson

Director General, REB

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MURUNGI Joan,

Head of CTRLRD, REB

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PART I. GENERAL INTRODUCTION

1.0. About the Teacher’s guide

This book is a teacher’s guide for Psychology, Senior Four in general education”. It is designed to accompany Senior Four student’s book and intends to help teachers in the implementation of the curriculum. As the name says, it is a guide that teachers can refer to, when preparing their lessons. Teachers may prefer to adopt the guidance provided but they are also expected to be more creative and consider their specific classes’ contexts and prepare accordingly.

1.1 The structure of the guide

This section presents the overall structure, the unit and lesson structure to help teachers to understand the different sections of this guide and what they will find in each section.

Overall structure

The teacher’s guide of Psychology is composed of three parts:

Part I: General Introduction

This part provides general guidance on how to develop the generic competences, how to integrate cross cutting issues, how to cater for learners with special educational needs, active methods and techniques of teaching Foundations of Education and guidance on assessment.

Part II: Sample lesson plan

This part provides a sample lesson plan, developed and designed to help the teacher develop their own lesson plans.

Part III: Unit development

This is the core part of the guide. Each unit is developed following the structure below. The guide ends with references.

Structure of a unit

Each unit is made of the following sections:

- **Unit title**
- **Key unit competence**
- **Prerequisites**

This section indicates knowledge, skills and attitudes required for the success of the unit. The competence-based approach calls for connections between units/topics within a subject and interconnections between different subjects. The teacher will find an indication of those prerequisites and guidance on how to establish connections.

- **Cross-cutting issues to be addressed**

This section suggests cross cutting issues that can be integrated depending on the unit content. It provides guidance on how to come up with the integration of the issue. Note that the issue indicated is a suggestion; teachers are free to take another cross-cutting issue taking into consideration the learning environment.

- **Guidance on the introductory activity**

Each unit starts with an introductory activity in the learner's book. This section of the tutor's guide provides guidance on how to conduct this activity and related answers. Note that learners may not be able to find the right solution, but they are invited to predict possible solutions or answers. Solutions are provided by learners gradually through discovery activities organized at the beginning of lessons or during the lesson.

- **List of lessons**

This section presents in a table suggestion on the list of lessons, lesson objectives and duration for each lesson. Each lesson is then developed.

- **End of each unit**

At the end of each unit, the teacher's guide provides the following sections:

- **Additional information** which provides additional content compared to the student's book for the tutor to have a deeper understanding of the topic;
- **End unit assessment** which provides the answers to questions of end unit assessment in the textbook.
- **Additional activities:** remedial, consolidation and extended activities). The purpose of these activities is to accommodate each learner (slow, average and gifted) based on end unit assessment results.

Structure of a lesson

After the lesson title, each lesson is made of the following sections:

- a) Learning objective**
- b) Teaching resources**

This section suggests the teaching aids or other resources needed in line with the activities to achieve the learning objectives. Teachers are encouraged to replace the suggested teaching aids by the available ones in their respective schools and based on learning environment.

c) Prerequisites/Revision/Introduction

This section gives a clear guidance to the tutor on how to start the lesson.

d) Learning activities: this section provides a short description of the methodology and any important aspect to consider. It provides also answers to learning activities with cross reference to text book.

e) Application activities: this provides questions and answers for application activities

1.2 Methodological guidance

1.2.1 Developing competences

Since 2015 Rwanda shifted from a knowledge based to a competence-based curriculum for pre-primary, primary, secondary education. This called for changing the way of learning by shifting from teacher centred to a learner centred approach. Teachers are not only responsible for knowledge transfer but also for fostering students' learning achievement and creating safe and supportive learning environment. It implies also that students have to demonstrate how they are able to transfer the acquired knowledge, skills, values and attitudes to new situations.

The competence-based curriculum uses an approach of teaching and learning based on discrete skills rather than dwelling on only knowledge or the cognitive domain of learning. It focuses on what learner can do rather than what learner knows. Students develop competences through subject unit with specific learning objectives broken down into knowledge, skills and attitudes/ values through learning activities.

In addition to the competences related to Psychology, students also develop generic competences which should promote the development of the higher order thinking skills. Generic competences are developed throughout all units as follows:

Generic competences	Ways of developing generic competences
Critical thinking	All activities that require students to interpret, analyse, compare and contrast, evaluate ideas, beliefs and attitudes; etc. have a common factor of developing critical thinking into students
Creativity and innovation	All activities that require students to design a poster, create a scenario that illustrates or helps to explain psychological concepts; write a poem describing an child, an adolescent or adult; etc. have a common character of developing creativity and innovation into students.
Research and problem solving	All activities that require students to make a research and apply their knowledge to solve real-life problems have a character of developing research and problem solving into students.
Communication	All activities that require students to discuss either in groups or in the whole class, write and present findings, debate ...develop communication skills into students.
Co-operation, interpersonal relations and life skills	All activities that require students to work in pairs or in groups have character of developing cooperation and life skills among students.
Lifelong learning	All activities that are connected with research have a common character of developing into students a curiosity of applying the knowledge learnt in a range of situations. The purpose of such kind of activities is for enabling students to become life-long learners who can adapt to the fast-changing world and the uncertain future by taking initiative to update knowledge and skills with minimum external support.

1.2.2 Addressing cross cutting issues

Among the changes brought by the competence-based curriculum there is the integration of cross cutting issues as an integral part of the teaching learning process-as they relate to and must be considered within all subjects to be appropriately addressed. The eight cross cutting issues identified in the national curriculum framework are: *Comprehensive Sexuality Education, Environment and Sustainability, Financial Education, Genocide studies, Gender education, Inclusive Education, Peace and Values Education, and Standardization Culture.*

Some cross-cutting issues may seem specific to particular learning units/subjects but the teacher need to address all of them whenever an opportunity arises. In addition, students should always be given an opportunity to address these cross-cutting issues during the learning process both within and out of the classroom.

Below are examples of how crosscutting issues can be addressed:

Cross-Cutting Issue	Ways of addressing cross-cutting issues
<p>Comprehensive Sexuality Education: The primary goal of introducing Comprehensive Sexuality Education program in schools is to equip children, adolescents, and young people with knowledge, skills and values in an age appropriate and culturally gender sensitive manner so as to enable them to make responsible choices about their sexual and social relationships, explain and clarify feelings, values and attitudes, and promote and sustain risk reducing behaviour.</p>	<p>Using different scenarios, illustrations related to early parenting, alcohol and drug abuse, unwanted pregnancies, and Sexually Transmitted Diseases (STDs), Psychology teachers should lead students to discuss the risky behaviours during adolescence for them to take informed decisions.</p>
<p>Environment and Sustainability: Integration of Environment, Climate Change and Sustainability in the curriculum focuses on and advocates for the need to balance economic growth, society well-being and ecological systems. Students need basic knowledge from the natural sciences, social sciences, and humanities to understand to interpret principles of sustainability.</p>	<p>Based on the impact of physical environment on human development and wellbeing, psychology teachers will help students to discuss topics related to that interaction for them to adopt attitudes that protect environment starting by homes.</p>
<p>Gender education: At school, gender will be understood as family complementarities, gender roles and responsibilities, the need for gender equality and equity, gender stereotypes, gender sensitivity, etc.</p>	<p>Psychology teachers should address gender education by helping students understand the key role that the family and school can play to have a society free of gender stereotypes through distribution of tasks/responsibilities at home and school and through practices that address gender inequalities in different context.</p>

<p>Inclusive Education: Inclusion is based on the right of all students to a quality and equitable education that meets their basic learning needs and understands the diversity of backgrounds and abilities as a learning opportunity.</p>	<p>The topics related to human development in and developmental milestones during early years will empower students in early detection of delays in development. Moreover, Psychology teachers will identify/recognize students with special educational needs and accommodate them through adapted teaching and learning resources and techniques during the teaching-learning process and assessment tasks.</p>
<p>Peace and Values Education: Peace and Values Education (PVE) is defined as education that promotes social cohesion, positive values, including pluralism and personal responsibility, empathy, critical thinking and action in order to build a more peaceful society.</p>	<p>Through a given lesson, a teacher should:</p> <p>Set a learning objective which is addressing positive attitudes and values,</p> <p>Encourage students to develop the culture of tolerance during discussion and to be able to instil it in colleagues and cohabitants;</p> <p>Encourage students to respect ideas from others.</p>
<p>Standardization Culture:</p> <p>Standardization Culture in Rwanda will be promoted through formal education and plays a vital role in terms of health improvement, economic growth, industrialization, trade and general welfare of the people through the effective implementation of Standardization, Quality Assurance, Metrology and Testing.</p>	<p>The knowledge and skills gained from the topic of human development and developmental milestones, will develop in students the value of respecting people's abilities in every decision towards them. such as for example choosing or purchasing age appropriate toys, tables, chairs, books, etc.</p>

1.2.3 Guidance on how to help students with special education needs in classroom

In the classroom, students learn in different way depending to their learning pace, needs or any other special problem they might have. However, the teacher has the responsibility to know how to adopt his/her methodologies and approaches in order to meet the learning needs of each student in the classroom. Also teachers need to understand that student with special needs, need to be taught differently or need some accommodations to enhance the learning environment. This will be done depending to the subject and the nature of the lesson.

In order to create a well-rounded learning atmosphere, teachers need to:

- Remember that students learn in different ways so they have to offer a variety of activities (e.g. role-play, music and singing, word games and quizzes, and outdoor activities);
- Maintain an organized classroom and limits distraction. This will help students with special needs to stay on track during lesson and follow instruction easily;
- Vary the pace of teaching to meet the needs of each student. Some students process information and learn more slowly than others;
- Break down instructions into smaller, manageable tasks. Students with special needs often have difficulty understanding long-winded or several instructions at once. It is better to use simple, concrete sentences in order to facilitate them understand what you are asking.
- Use clear consistent language to explain the meaning (and demonstrate or show pictures) if you introduce new words or concepts;
- Make full use of facial expressions, gestures and body language;
- Pair a student who has a disability with a friend. Let them do things together and learn from each other. Make sure the friend is not over protective and does not do everything for the one with disability. Both students will benefit from this strategy;
- Use multi-sensory strategies. As all students learn in different ways, it is important to make every lesson as multi-sensory as possible. Students with learning disabilities might have difficulty in one area, while they might excel in another. For example, use both visual and auditory cues.
- Below are general strategies related to each main category of disabilities and how to deal with every situation that may arise in the classroom. However, the list is not exhaustive because each student is unique with different needs and that should be handled differently.

Strategy to help students with developmental impairment

- Use simple words and sentences when giving instructions;
- Use real objects that students can feel and handle. Rather than just working abstractly with pen and paper;
- Break a task down into small steps or learning objectives. The student should start with an activity that she/he can do already before moving on to something that is more difficult;
- Gradually give the student less help;
- Let the student with disability work in the same group with those without disability.

Strategy to help students with visual impairment

- Help students to use their other senses (hearing, touch, smell and taste) and carry out activities that will promote their learning and development;
- Use simple, clear and consistent language;
- Use tactile objects to help explain a concept;
- If the student has some sight, ask him/her what he/she can see;
- Make sure the student has a group of friends who are helpful and who allow him/her to be as independent as possible;
- Plan activities so that students work in pairs or groups whenever possible;

Strategy to help students with hearing disabilities or communication difficulties

- Always get the student's attention before you begin to speak;
- Encourage the student to look at your face;
- Use gestures, body language and facial expressions;
- Use pictures and objects as much as possible.
- Keep background noise to a minimum.

Strategies to help students with physical disabilities or mobility difficulties

- Adapt activities so that students who use wheelchairs or other mobility aids, can participate.
- Ask parents/caregivers to assist with adapting furniture e.g. the height of a table may need to be changed to make it easier for a student to reach it or fit their legs or wheelchair under;
- Encourage peer support when needed;
- Get advice from parents or a health professional about assistive devices if the student has one.

Adaptation of assessment strategies

At the end of each unit, the teacher is advised to provide additional activities to help students achieve the key unit competence. These assessment activities are for remedial, consolidation and extension designed to cater for the needs of all categories of students; slow, average and gifted students respectively. Therefore, the teacher is expected to do assessment that fits individual students.

Remedial activities	After evaluation, slow students are provided with lower order thinking activities related to the concepts learnt to facilitate them in their learning. These activities can also be given to assist deepening knowledge acquired through the learning activities for slow students.
Consolidation activities	After introduction of any concept, a range number of activities can be provided to all students to enhance/ reinforce learning.
Extended activities	After evaluation, gifted and talented students can be provided with high order thinking activities related to the concepts learnt to make them think deeply and critically. These activities can be assigned to gifted and talented students to keep them working while other students are getting up to required level of knowledge through the learning activity.

1.2.4. Guidance on assessment

Assessment is an integral part of teaching and learning process. The main purpose of assessment is for improvement of learning outcomes. Assessment for learning/ Continuous/ formative assessment intends to improve students' learning and teacher's teaching whereas assessment of learning/summative assessment intends to improve the entire school's performance and education system in general.

Continuous/ formative assessment

It is an on-going process that arises during the teaching and learning process. It includes lesson evaluation and end of sub unit assessment. This formative assessment should play a big role in teaching and learning process. The teacher should encourage individual, pair and group evaluation of the work done in the classroom and uses appropriate competence-based assessment approaches and methods.

Formative assessment is used to:

- Determine the extent to which learning objectives are being achieved and competences are being acquired and to identify which students need remedial interventions, reinforcement as well as extended activities. The application activities are developed in the student
- book and they are designed to be given as remedial, reinforcement, end lesson assessment, homework or assignment
- Motivate students to learn and succeed by encouraging students to read, or learn more, revise, etc.

- Check effectiveness of teaching methods in terms of variety, appropriateness, relevance, or need for new approaches and strategies. Psychology teachers need to consider various aspects of the instructional process including appropriate language levels, meaningful examples, suitable methods and teaching aids/ materials, etc.
- Help students to take control of their own learning.

In teaching Psychology, formative or continuous assessment should compare performance against instructional objectives. Formative assessment should measure the student's ability with respect to a criterion or standard. For this reason, it is used to determine what students can do, rather than how much they know.

Summative assessment

The assessment can serve as summative and informative depending to its purpose. The end unit assessment will be considered summative when it is done at end of unit and want to start a new one.

It will be formative assessment, when it is done in order to give information on the progress of students and from there decide what adjustments need to be done.

The assessment done at the end of the term, end of year, is considered as summative assessment so that the teacher, school and parents are informed of the achievement of educational objective and think of improvement strategies. There is also end of level/ cycle assessment in form of national examinations.

When carrying out assessment?

Assessment should be clearly visible in lesson, unit, term and yearly plans.

- Before learning (diagnostic): At the beginning of a new unit or a section of work; assessment can be organized to find out what students already know / can do, and to check whether the students are at the same level.
- During learning (formative/continuous): When students appear to be having difficulty with some of the work, by using on-going assessment (continuous). The assessment aims at giving students support and feedback.
- After learning (summative): At the end of a section of work or a learning unit, the Psychology Teacher has to assess after the learning. This is also known as Assessment of Learning to establish and record overall progress of students towards full achievement. Summative assessment in Rwandan schools mainly takes the form of written tests at the end of a learning unit or end of the month, and examinations at the end of a term, school year or cycle.

Instruments used in assessment.

- **Observation:** This is where the Psychology teacher gathers information by watching students interacting, conversing, working, playing, etc. A teacher can use observations to collect data on behaviours that are difficult to assess by other methods such as attitudes, values, and generic competences and intellectual skills. It is very important because it is used before the lesson begins and throughout the lesson since the teacher has to continue observing each and every activity.
- **Questioning**
 - a) Oral questioning: a process which requires a student to respond verbally to questions
 - b) Class activities/ exercise: tasks that are given during the learning/ teaching process
 - c) Short and informal questions usually asked during a lesson
 - d) Homework and assignments: tasks assigned to students by their teachers to be completed outside of class.

1.2.5. Teaching methods and techniques that promote active learning

The different student learning styles mentioned above can be catered for, if the teacher uses active learning whereby learners are really engaged in the learning process.

What is Active learning?

Active learning is a pedagogical approach that engages students in doing things and thinking about the things they are doing. In active learning, learners are encouraged to bring their own experience and knowledge into the learning process.

The role of the teacher in active learning

- The teacher engages learners through active learning methods such as inquiry methods, group discussions, research, investigative activities and group and individual work activities.
- He/she encourages individual, peer and group evaluation of the work done in the classroom and uses appropriate competence-based assessment approaches and methods.
- He provides supervised opportunities for learners to develop different competences by giving tasks which enhance critical thinking, problem solving, research, creativity and innovation, communication and cooperation.

- Teacher supports and facilitates the learning process by valuing learners' contributions in the class activities.

The role of learners in active learning

Learners are key in the active learning process. They are not empty vessels to fill but people with ideas, capacity and skills to build on for effective learning. A learner engaged in active learning:

- Communicates and shares relevant information with other learners through presentations, discussions, group work and other learner-centred activities (role play, case studies, project work, research and investigation)
- Actively participates and takes responsibility for their own learning
- Develops knowledge and skills in active ways
- Carries out research/investigation by consulting print/online documents and resourceful people, and presents their findings
- Ensures the effective contribution of each group member in assigned tasks through clear explanation and arguments, critical thinking, responsibility and confidence in public speaking
- Draws conclusions based on the findings from the learning activities.

Main steps for a lesson in active learning approach

All the principles and characteristics of the active learning process highlighted above are reflected in steps of a lesson as displayed below. Generally the lesson is divided into three main parts whereby each one is divided into smaller steps to make sure that learners are involved in the learning process. Below are those main part and their small steps:

1) Introduction

Introduction is a part where the teacher makes connection between the current and previous lesson through appropriate technique. The teacher opens short discussions to encourage learners to think about the previous learning experience and connect it with the current instructional objective. The teacher reviews the prior knowledge, skills and attitudes which have a link with the new concepts to create good foundation and logical sequencings.

2) Development of the new lesson

The development of a lesson that introduces a new concept will go through the following small steps: discovery activities, presentation of learners' findings, exploitation, synthesis/summary and exercises/application activities, explained below:

▪ **Discovery activity**

Step 1

- The teacher discusses convincingly with students to take responsibility of their learning
- He/she distributes the task/activity and gives instructions related to the tasks (working in groups, pairs, or individual to instigate collaborative learning, to discover knowledge to be learned)

Step 2

- The teacher let the students work collaboratively on the task.
- During this period the teacher refrains to intervene directly on the knowledge
- He/she then monitors how the students are progressing towards the knowledge to be learned and boost those who are still behind (but without communicating to them the knowledge).

▪ **Presentation of learners' productions**

- In this episode, the teacher invites representatives of groups to presents the students' productions/findings.
- After three/four or an acceptable number of presentations, the teacher decides to engage the class into exploitation of the students' productions.

▪ **Exploitation of learner's productions**

- The teacher asks the students to **evaluate the productions**: which ones are correct, incomplete or false
- The teacher **judges the logic of the students' products, corrects** those which are false, **completes** those which are incomplete, and confirms the correct ones.

▪ **Summary/conclusion/ and examples)**

- The **teacher summarises the learned knowledge** and gives examples which illustrate the learned content.

3) Assessment

In this step the teacher asks some questions/application activities to assess achievement of instructional objective. During assessment activity, learners work individually on the task/activity. The teacher avoids intervening directly. In fact, results from this assessment inform the teacher on next steps for the whole class and individuals. The teacher ensures that learners make connections between what they have learnt and the real life where applicable. In some cases, the teacher can end with a homework assignment.

PART II : SAMPLE LESSON PLAN

Term	Date	Subject	Class	Unit No	Lesson No	Duration	Class size
II	.../.../...	Psychology	Senior 4	6	1	40 min	46
Type of special educational needs to be catered for in this lesson and number of learners in each category				One student with partial hearing loss This student will sit in front and the teacher will speak loudly facing him.			
Unit title		Developmental milestones					
Key unit competence		Apply skills gained during human developmental milestones based on observation of physical, cognitive, language and socio-emotional skills.					
Title of the lesson		Key concepts related to developmental milestones					
Instructional objective		Given questions on manila paper, students will be able to answer questions on key concepts related to developmental milestone correctly within 10 minutes reserved for assessment.					
Plan for this class		In the classroom					
Learning materials		Flash cards with key concepts, flash cards with meaning of key concepts, chalk, chalkboard, manila paper, papers, marker					
References		REB (2022). Psychology student book, Senior 4. Kigali REB (2022). Psychology teacher's guide, Senior 4. Kigali. REB (2022) Psychology syllabus, S4-6. Kigali					
Steps and timing for each step	Description of teaching and learning activity					Generic competences and crosscutting issues to be addressed +short explanation	
	In small groups that mix boys and girls with different abilities, students will match flash cards with key terminologies related to developmental milestones with flash cards with their meaning. They will then make gallery walk to compare their work with other's work. The teacher will be facilitating and checking whether everyone is participating, and compliment them and finally together with students will make conclusion to have common understanding on key terminologies related to developmental milestones.						
	Teacher's activities		Student's activities				
1. Introduction 5 min	<ul style="list-style-type: none"> - Greet students - Check attendance - Check the proper sitting arrangement, more specially the student with partial hearing loss impairment 		<ul style="list-style-type: none"> - Greet the teacher - Inform the teacher how many students are absent and why. - Sitting properly and the student with hearing loss sit in front where it will be easy to hear teacher's and his/her classmates. 			<p>Communication: will be developed through answering questions orally.</p> <p>Critical thinking: this will be developed while thinking and sharing about their views</p>	

	<ul style="list-style-type: none"> - Invite students to work on the following task. Give them required guidance to : <p><i>Based on what you learnt in unit of introduction to human development, observations and experience, use concept mapping to demonstrate your understanding on the following terminologies related to developmental milestones: Milestones, Developmental domains, Prenatal, Conception, Zygote, Labor, Delivery</i></p>	<ul style="list-style-type: none"> - Students think individually on the task about human development; share ideas in pairs and write them on a piece of paper using concept mapping. - Two pairs make a square and share their views - Make presentation in plenary 	
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Lesson Development (25 min)			
<p>a) Discovery activity</p>	<ul style="list-style-type: none"> - Communicate and write the title of the lesson. - Assist students in group formation and ensure groups are mixed in terms of gender and abilities. - Distribute the materials needed for the group work: flash cards, manila paper scotch and markers. - Invite the student to read, discuss and match flash cards of key concepts with others with their meaning. 	<ul style="list-style-type: none"> - Read the title of the lesson. - Form groups under the teacher's guidance and quickly appoint a group leader and a secretary. - Ensure that they have the required materials for the group work. - In small groups, for each concept, students read the key concept on the flash card, discuss to find out the corresponding flash card with its meaning. 	<p>Communication: will be developed through listening and sharing in groups.</p> <p>Inclusive education: This will be addressed when teacher caters for the student with partial hearing loss.</p> <p>Gender education: will be addressed when teacher engages both boys and girls in classroom activities.</p>

	<ul style="list-style-type: none"> - Move around and ensure that there is active participation of all students. 	<ul style="list-style-type: none"> - Students collaborate in groups in order to come up with correct matching. - Students may ask for support when needed. 	
b) Presentation of learner's productions	<ul style="list-style-type: none"> - Invite group representatives to hang on the wall the manila paper with their work - Invite each group members to proceed to gallery walk and provide guidance for the task. - Encourage students to ask questions, make comments while comparing their work with others in order to foster their understanding. 	<ul style="list-style-type: none"> - Group representatives hang group's work on the wall - In their small groups, students proceed to the gallery walk by moving from one station to another to compare their work with other 'work. - Make comments, complement, ask questions while comparing their work with other's work. 	<p>Cooperation, interpersonal management and life skills: this will be developed through working in group while sharing ideas.</p> <p>Peace and value education: this will be addressed while encouraging students to work collaboratively in peaceful manner and respect.</p>
c) Exploitation	<ul style="list-style-type: none"> - Give time to students to ask questions where they are confused - Ask individual students questions to check student's understanding - For any misunderstanding provide support - Invite students to correct each other. 	<ul style="list-style-type: none"> - Ask questions where they do not understand to enrich their understanding. - Actively engaged in activity given individually about the new lesson. - Ask for support where there are some difficulties. - Correct each other with the support of the teacher. 	<p>Critical thinking and problem solving: students will be engaged in thinking critically in order to do the activities given neatly.</p>

d) Conclusion	Help students to summarize the lesson	<p>Answer to questions asked to summarize the lesson:</p> <p>Milestones: Are behaviours or physical skills seen in infants and children as they grow and develop, the milestones are different for each age range; there is a normal range in which a child may reach each milestone. Developmental domains: are growth areas, each with specific skills and abilities that develop over time.</p> <p>Prenatal: This is a period prior to birth. Conception: This marks the first step toward pregnancy, the sperm and egg have joined together, and creating what is known as a zygote</p> <p>Zygote: Is a fertilized egg cell that results from the union of a female gamete with a male gamete.</p>	<p>Critical thinking and problem solving: students will be engaged in thinking critically while answering to questions</p> <p>Communication: this will be developed while asking questions</p>
3. Assessment 10 minutes	<p>Ask questions to check the achievement of the objective</p> <ol style="list-style-type: none"> 1. How is conception different from zygote? 2. Explain stages of labor? 	<p>Answers to assessment questions:</p> <ol style="list-style-type: none"> 1. Conception: Conception is the joining of a sperm and egg, also known as fertilization. In most cases, conception occurs in a woman's fallopian tube in the hours or days following sexual intercourse. 2. Stages of labor are: <ul style="list-style-type: none"> - Dilation stage - Expulsion stage - After birth stage 	<p>Critical thinking and problem solving: students will be engaged in thinking critically while answering to questions</p> <p>Communication: this will be developed while asking questions</p>
Teacher self-evaluation	Students enjoyed the gallery walk but the time was not enough for them to discuss their classmates' answers and ask questions, etc.		

PART III: UNIT DEVELOPMENT

UNIT 1

NATURE AND SCOPE OF PSYCHOLOGY

1.1.Key unit competence

Analyze the Nature and Scope of Psychology.

1.2.Prerequisite

Psychology is being introduced for the first time in secondary school as one of the principal subjects in the combination of History-Literature in English-Psychology (HLP). However, as a science of human knowledge and mental processes at large, it requires students to have studied the subjects of physiology or human biology in the previous studies (O Level).

Having studied the brain and nervous system functions will help the students understand how human behaviour is influenced by the brain state among other factors. The knowledge about human growth and organic structure will allow students comprehend all topics about human development and changes that occur at every developmental period.

1.3.Cross-cutting issues to be addressed

Gender education: The teacher should bear in mind that all students (girls and boys) have equal opportunities and rights to study. When forming group activities, assigning tasks and responsibilities, asking questions, and giving feedback teacher should include both girls and boys.

Financial education: The teacher and students should know that resources and materials used in teaching and learning activities must not be mismanaged. This issue will also be addressed when studying techniques of managing different resources especially financial resources in secondary school. Students will learn to make budgets for resources and materials and manage them well. They will put in mind that misusing materials is wasting money.

Inclusive education: To make teaching and learning process inclusive, the teacher must understand individual differences and consider them when organizing and setting teaching and learning activities. Teacher will use teaching

approaches, methods and techniques that cater for students' diversities and encourage them to maximize their full potential in classroom.

Peace and value education: Through teaching and learning, the culture of peace and values should be promoted. In group, students learn to share resources and ideas with respect. They also learn to solve their problems in peaceful manner.

Environmental sustainability: This issue will be addressed in all psychology topics because environment is one key factor, along with genetic and heredity, that impact on people's behaviour and personality at large. They will know that while constructing a school the environment should be preserved and both teachers and students must contribute to the sustainability of the environment.

1.4.Guidance on introductory activity

- Students form group of four.
- Invite students to read the scenario from student book and share ideas about the indicated conversation and inquiries raised.
- Guide the conversation.
- Invite one student to lead loudly the scenario.
- Invite students to share the understanding about the conversation.
- Raise the students' curiosity about the subject of psychology and inquiries to be addressed during the whole period of the course, in different topics.

1.5.List of lessons

#	Lesson title	Learning objectives	Number of periods
1	Concepts of psychology : Psychology, mental processes, mind, behavior, personality and emotion	Explain the key concepts of psychology	2
2	Concepts of psychology: Intelligence, motivation, perception, sensation, memory and learning	Explain the key concepts of psychology	2
	Assesment		1
3	Background and Origin of Psychology	Explain the background and origin of psychology	2
4	Key Figures in Psychology	Illustrate the prominent psychologosists and their contribution to the discipline	3
5	Psychology as a Science	Explain how psychology has become a scientific discipline	2

	Assessment		1
6	Importance of Psychology	Explain the goals and uses of psychology	3
	Assessment		1
7	Psychology and Natural Sciences	Explain the relationship between psychology and natural sciences	2
8	Psychology, social sciences and humanities	Explain the relationship between psychology, social sciences and humanities	2
	End unit assessment		2
Total number of periods			23

Lesson 1: Concepts of psychology : Psychology, mental processes, mind, behavior, personality and emotion (2 periods)

Learning objective

Explain the key concepts of psychology.

Teaching resources

Flip chart, markers, flash cards, psychologist profiles, handouts describing concepts of psychology, internet.

Prerequisites/Revision/Introduction

Students have learnt physiology and already know the concepts of human anatomy.

Learning activities

Activity 1.1

- Invite student to read individually the question in the student book and work in pairs to share with the classmates.
- Have some pairs make presentations.
- Provide constructive feedback in terms of supplements.

Answers to activity 1.1

- The Subject of Psychology will be taught in 7 periods per week. Guidance for the second question: Some learners might say yes, others might say no. The teacher will hear from learners' answers and provide his input.
 - I am expecting to learn about people's behaviors and emotions; the differences between individuals and all issues in relation to mental processes, etc.

Activity 1.1.1

After introducing the subtitle of the lesson, invite students to read the question in pairs and thereafter provide their understandings.

Answers to activity 1.1.1

Learning key terms facilitates the understanding of the lesson and increases the interest in the content under study.

Application activities

Answers to application 1.1.1

- **Psychology** is the study of the behavior, performance, and mental operations of people (and other animals). It also refers to the application of knowledge, which can be used to understand events, treat mental health problems, and improve education, employment, and relationships.
- **Mental processes** include all the things that the human mind can normally do. Common mental processes include memory, emotion, perception, thoughts, thinking, and reasoning. Since the human mind is constantly active, mental processes continue to matter and affect or take on daily life events.
- **Mind** is broadly all the intellectual and psychological phenomena of a creature, including systems of motivation, affection, behavior, perception on and cognition; that is, the planned total of the mental and intellectual processes of an organism and the structural elements and cognitive functions that depend on it.

Lesson 2: Concepts of psychology: Intelligence, motivation, perception, sensation, memory and learning (2 periods)

Learning objective

Explain the key concepts of psychology.

Teaching resources

Flip chart, markers, flash cards, psychologist profiles, handouts describing concepts of psychology, internet.

Prerequisites/Revision/Introduction

Students have learnt physiology, know the concepts of human anatomy and already have knowledge about the following psychological concepts: psychology, mental processes, mind, behavior, personality and emotion.

Learning activities

Activity 1.1.2

- Invite student to read individually the question in the student book and work in pairs to share with the classmates.
- Have some pairs make presentations.
- Provide constructive feedback in terms of supplements.

Answers to activity 1.1.2

Matching concepts and explanation:

1. D
2. C
3. A
4. B

Application activities

Answers to application 1.1.2

- **Intelligence** is the mental capacity necessary to adapt to any contextual environment, as well as to solve problems, create and choose.
- **Motivation** is the process involving the biological, emotional, social, and cognitive forces that activate behavior and sustain us in everything we are expected to be doing.
- **Perception** Perception is the closely related process by which the brain selects, organises and interprets these sensations. It is the process whereby the brain interprets sensations, giving information order and meaning.
- **Behavior** refers to «the activity of an organism in its interaction with its environment». The term refers to all activities in general or to specific activities. It also refers to «a set of flexible responses that the body with the nervous system makes in response to environmental stimuli that can also be considered

- **Personality** encompasses all the thoughts, behavior patterns and social attitudes that affect how we see ourselves and what we believe about others and the world around us.
- **Emotion** is a complex experience of consciousness, bodily sensation, and behavior that reflects the personal significance of a thing, an event, or a state of affairs.

Lesson 3: Background and origin of psychology (2 periods)

Learning objective

Explain the background and origin of psychology.

Teaching resources

Flip chart, markers, flash cards, psychologist profiles, handouts describing concepts of psychology, internet.

Prerequisites/Revision/Introduction

Students have learnt key concepts of psychology and can now comprehend the terminologies used in the lesson.

Learning activities

Activity 1.2.1

- Invite student to read individually the question in the student book and work in groups of three to share with the classmates.
- Have some group leaders make presentations.
- Provide constructive feedback in terms of supplements.

Answers to activity 1.2.1

- Origin is the start or beginning of something. The origin of psychology is where and when the first thoughts leading to psychology evolved. The history of psychology refers to the story about past of psychology and psychologists.
- By understating the history of psychology, you can gain light on how the topics under that subject are studied and what we have learned thus far. It will help understanding the relationship of psychology with other sciences and how it became a scientific discipline about mental processes and significance of its existence.

Application activities

Answers to Application Activity 1.2.1

470 – 399 B.C. : Socrates, Plato, Aristotle

460 – 377 B.C.: Hippocrates

1821 – 1894 : Hermann von Helmholtz

August 16, 1832 – August 31, 1920: Wilhelm Maximilian Wundt

January 11, 1842 – August 26, 1910: William James

1875: Ivan Pavlov

1900: Sigmund Freud

Lesson 4: Key Figures in Psychology (3 periods)

Learning objective

Illustrate the prominent psychologists and their contribution to the discipline

Teaching resources

Flip chart, markers, flash cards, psychologist profiles, handouts describing concepts of psychology, internet

Prerequisites/Revision/Introduction

Students have learnt the background and origin of psychology and already know some of the philosophers and early psychologists.

Learning activities

Activity 1.2.2

- Invite student to read individually the question in the student book and work in pairs to share with the classmates.
- Have some pairs make presentations.
- Provide constructive feedback in terms of supplements.

Answers to Activity 1.2.2.

1. Socrates, Plato, Aristotle, Hippocrates, Hermann von Helmholtz, Wilhelm Maximilian Wundt, William James, Charles Sanders Peirce, Ivan Pavlov, Sigmund Freud
2. Wundt developed the first psychological laboratory and thereby called himself psychologist for the first time.

Application activities

Answers to application Activity 1.2.2.

- a) Philosophers who developed psychology as a scientific discipline:

470 – 399 B.C. : Socrates, plato, Aristotle

460 – 377 B.C.: Hippocrates

1821 – 1894 : Hermann von Helmholtz

August 16, 1832 – August 31, 1920: Wilhelm Maximilian Wundt

January 11, 1842 – August 26, 1910: William James and, Charles Sanders Peirce

1875 : Ivan Pavlov

1900: Sigmund Freud

- b) Key figures in psychology and their contributions:

Wilhelm Wundt (first psychological laboratory), Albert Bandura (Social Learning theory), William James and B.F. Skinner (Behaviorism), Aaron Beck and Jean Piaget (Cognitive Psychology), Kurt Lewin (Social Psychology), Carl Rogers and Abraham Maslow (Humanistic Psychology)

Lesson 5: Psychology as a Science (2 periods)

Learning objective

Explain how psychology has become a scientific discipline

Teaching resources

Flip chart, markers, flash cards, psychologist profiles, handouts of psychology, internet

Prerequisites/Revision/Introduction

Students have learnt the scientific contributions of the prominent psychologists which will help them understand why psychology is a science.

Learning activities

Activity 1.2.3

- Invite student to observe the illustration and read individually the question in the student book.
- Students are called to provide their views.
- Provide constructive feedback in terms of supplements.

Answers to activity 1.2.3.

This illustration displays various tools used in natural, arts and social sciences in connection with the human brain. This means that psychology is practically linked with other sciences in its duty to understand and explain human behavior and his/her interaction with the environment.

Application activities

Application activity 1.2.3

- a) Any four among the following: Socrates, Plato, Aristotle, Hippocrates, Wilhelm Wundt, William James.
- b) Any four among the following: Sigmund Freud (Psychoanalysis); Albert Bandura (Social Learning theory), William James and B.F. Skinner (Behaviorism), Aaron Beck and Jean Piaget (Cognitive Psychology), Kurt Lewin (Social Psychology), Carl Rogers (Humanistic Psychology).
- c) c) The status of psychology as a science is based on the use of the scientific method. Psychologists base their professional practice on knowledge obtained through verifiable evidence of human behavior and mental processes. Psychological studies are designed like studies in other scientific fields. It is through these studies that psychologists contribute to the body of research in their field.

Lesson 6: Importance of Psychology (3 periods)

Learning objective

Explain the goals and uses of psychology.

Teaching resources

Flip chart, markers, flash cards, psychologist profiles, handouts of psychology, internet.

Prerequisites/Revision/Introduction

Students have knowledge about the origin of psychology and for which purpose it has been a scientific discipline.

Learning activities

Activity 1.3.

- Invite student to read individually the question in the student book and discuss in pairs
- Students are called to present their views
- Provide constructive feedback in terms of supplements

Answers to activity 1.3.

Psychology is the study of mind and behavior and by this it can be defined as the study of how people behave and how their minds work. It uses scientific methods to create new knowledge about the causes of behavior, while practitioner psychologists, such as clinical, counseling, industrial-organizational, and school psychologists, use existing research to improve everyday life of others. The science of psychology is important to researchers and practitioners.

Application activities

Answers to application activity 1.3.

- a) Psychology has four main goals: to describe, explain, predict, and modify behavior and mental processes.
- b) Psychology is used mainly to building relationships, improve communication, build self-confidence and enrich careers.

Lesson 7 Psychology and Natural Sciences (2 periods)

Learning objective

Explain the relationship between psychology and natural sciences.

Teaching resources

Flip chart, markers, flash cards, psychologist profiles, handouts of psychology, internet.

Prerequisites/Revision/Introduction

Students have knowledge about the origin of psychology and for which purpose it has been a scientific discipline.

Learning activities

Activity 1.4.1.

- Invite student to read individually the question in the student book and discuss in pairs.
- Students are called to present their views.
- Provide constructive feedback in terms of supplements.

Answers to activity 1.4.1..

Psychology is the study of mind and behavior and by this it can be defined as the study of how people behave and how their minds work. It uses scientific methods to create new knowledge about the causes of behavior, while practitioner psychologists, such as clinical, counseling, industrial-organizational, and school psychologists, use existing research to improve everyday life of others. The science of psychology is important to researchers and practitioners.

Application activities

Application activity 1.4.1.

Psychology is also commonly called as the science of behavior and often consists of observing the physical behaviour and mental cognitive processes. It is due to this characteristic that is more concerned with the nature of the brain and its functions. Psychological researchers study genetics in order to better understand the biological basis that contributes to certain behaviors. While all humans share certain biological mechanisms, we are each unique.

Lesson 8: Psychology and social sciences (2 periods)

Learning objective

Explain the relationship between psychology social sciences.

Teaching resources

Flip chart, markers, flash cards, psychologist profiles, handouts of psychology, internet.

Prerequisites/Revision/Introduction

Students have knowledge about the relationship between psychology and natural sciences such as biology and physiology.

Learning activities

Activity 1.4.2.

- Invite student to read individually the question in the student book and discuss in pairs.
- Students are called to present their views.
- Provide constructive feedback in terms of supplements.

Answers to activity 1.4.2.

- a) All sciences which are concerned with human interactions: Sociology, Economics, History, Law, Politics, Administration, Psycholog. ...
- b) Psychology is itself a social science and it links with other social sciences to understand and explain interpersonal thinking and interaction.

Application activities

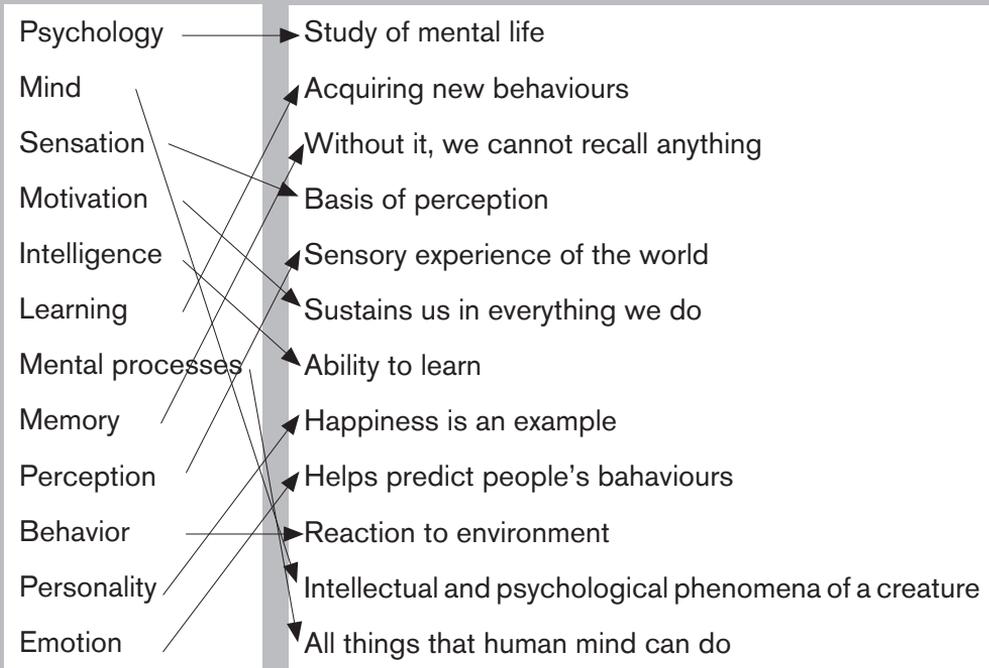
Answers to application activity 1.4.2.

Psychology is also a social science, which studies people within society and looks at how a particular society influences how people think and behave. It recognizes that behaviours are influenced by a person's motives and their reactions to other people and situations. That is the reason why psychology needs other social sciences like sociology to better understand and interpret peoples' behaviors within social settings and philosophy to understand people understanding and reasoning. Psychology and other social sciences look to the principles of philosophy to try to understand human behavior, molarity's impact on decision making, and the development of social institutions.

1.6. End unit assessment

Answers to end Unit 1 assessment

3. Link the psychological concepts with their meaning using arrows (→)



4. Sigmund Freud introduced the Psychoanalytic approach; Albert Bandura established the Social Learning theory, William James and B.F. Skinner developed Behaviorism approach, Aaron Beck and Jean Piaget were involved in the development of Cognitive Psychology theories, Carl Rogers developed Humanistic Psychology
5. Goals of psychology: describe, explain, predict and control human behavior
6. Psychology is at the core of a person's experience and actions. Sociology, on the other hand, focuses on the role of human beings in society. Thus, psychology and sociology are related because to study human's behaviors, psychology needs to assess how individual react, interact and are influenced by the world around them.

1.7. Additional activities

1.7.1. Remedial activities

Questions

1. Who is considered as the father of psychology?
2. Explain why psychology is considered as a science.

Answers

1. Wilhelm Wundt who found the first Psychological Laboratory is considered as the father of psychology.
2. Psychology is a science because it takes the scientific approach to understanding human behavior and it links with other sciences in complementary manner.

1.7.2. Consolidation activities

Questions

1. What is the common definition of psychology? (choose either a, b or c)
 - a) The study of behavior
 - b) The scientific study of human emotion
 - c) The scientific study of behavior and cognitive process
2. Before psychology became a recognized academic discipline, matters of the mind were undertaken by those in _____.
 - a) Biology
 - b) Chemistry
 - c) Philosophy
3. Who is most well-known for proposing his hierarchy of needs?
 - a) Carl Rogers
 - b) Abraham Maslow
 - c) Sigmund Freud

Answers:

1. (c)
2. (c)
3. (b)

1.7.3. Extended activities

Questions

1. Identify other key psychologists not studied in class lessons
2. Search for various areas where psychology may be of need

Answers

- 1) Bowlby, John - Attachment Theory, Bruner, Jerome - cognitive development of children, Kohlberg, Lawrence - moral development, Kolb, David - experiential learning styles theory.
- 2) a) Psychology is critical to the workplace. It helps managers at all levels of organizations select, support, motivate and train employees. It also helps businesses design products, build better workspaces and foster healthy behavior.
b) Psychology is needed in sports to address optimal performance and well-being of athletes, developmental and social aspects of sports participation, and systemic issues associated with sports settings and organizations.
c) Psychology can and should contribute to sustainable agriculture by way of research, development, and practices that effect the attraction, retention, and engagement of workers in agricultural occupations.
d) It is necessary to analyse tourism not only from the economic-geographical point of view, but also analyse behaviour of tourists when exposed to emotional factors to protect their health and well-being.
e) A historian must have to show some psychological insights while making an analysis of the motive and actions of men and societies.

UNIT 2

SCHOOLS OF PSYCHOLOGY

2.1. Key unit competence

Justify thoughts imbedded in schools of psychology.

2.2. Prerequisites

Psychology is being introduced for the first time in secondary school as one of the principal subjects in the combination of History-Literature in English-Psychology (HLP). However, as a science of human knowledge and mental processes at large, it requires students to have studied the subjects of physiology or human biology in the previous studies (O Level). Having studied the brain and nervous system functions will help the students understand how human behaviour is influenced by the brain state among other factors.

The knowledge about human growth and organic structure will allow students comprehend all topics about human development and changes that occur at every developmental period. The skills acquired in the first unit will serve as a benchmark for this second unit. They have learnt the history of psychology where specifically they were equipped with knowledge about some prominent philosophers and psychologists and their contributions to the development of psychology as a separate science with clear target but complementarily working with other sciences.

2.3. Cross-cutting issues to be addressed

Gender education: The teacher should bear in mind that all students (girls and boys) have equal opportunities and rights to study. When forming group activities, assigning tasks and responsibilities, asking questions, and giving feedback teacher should include both girls and boys.

Financial education: Teacher and students should know that resources and materials used in teaching and learning activities must not be mismanaged. This issue will also be addressed when studying techniques of managing different resources especially financial resources in secondary school. Students will learn to make budgets for resources and materials and manage them well. They will put in mind that misusing materials is wasting money.

Inclusive education: To make teaching and learning process inclusive, the teacher must understand individual differences and consider them when organizing and setting teaching and learning activities. Teacher will use teaching approaches, methods and techniques that cater for students' diversities and encourage them to maximize their full potential in classroom.

Peace and value education: Through teaching and learning, the culture of peace and values should be promoted. In group, students learn to share resources and ideas with respect. They also learn to solve their problems in peaceful manner.

Environmental sustainability: This issue will be addressed in all psychology topics because environment is one key factor, along with genetic and heredity, that impact on people's behaviour and personality at large. They will know that while constructing a school the environment should be preserved and both teachers and students must contribute to the sustainability of the environment.

Compresensive sexuality: This issue will be addressed when dealing with psychoanalytic theory of Sigmund Freud. Students will learnr about sexual urges and impulses and the way of controlling them. Sex has a specific purpose for a human being and has to be respected. Learners will be advised on good use of sex. They will be taught about the danger of unplanned, unauthorised and uncotroled sexual intercourse relationships. They will learner that both sexes (girls and boys) have to respect each other and that the exist limits in what regard sex.

2.4.Guidance on introductory activity

- Students form group of four.
- Invite students to discuss about the psychologists presented.
- Guide the conversation.
- Invite students to share the understanding about the conversation.
- Raise the students' curiosity about the schools of psychology and the importance of studying various viewpoints and philosophies of famous academicians.

2.5. List of lessons

#	Lesson title	Learning objectives	Number of periods
1	Structuralism	Explain thoughts imbedded in structuralism school.	4
2	Functionalism	Compare and contrast structuralism and functionalism schools of thoughts.	4
3	Behaviourism	Explain the use and impact of thoughts imbedded in behaviourism.	4
4	Gestalt psychology	Illustrate the principles and impact of gestalt school of thought.	4
5	Psychoanalytic school	Explain how psychoanalytic school interpret human personality components and their implications.	4
6	Humanism	Describe the use and impact of humanistic school of thoughts.	4
7	Cognitive psychology	Illustrate the impact of cognitive school of thought in daily life.	4
	End unit assessment		2
Total number of periods			30

Lesson 1: Structuralism (4 Periods)

Learning objective

Explain thoughts imbedded in structuralism school.

Teaching resources

Handouts and videos about different schools of Psychology, fact sheets about different schools of psychologists, internet, flash cards, flip charts, wall charts with graphics to represent different thoughts imbedded in schools of Psychology.

Prerequisites/Revision/Introduction

Students have learnt physiology and already know the concepts of psychology, its origin and prominent psychologists and their contributions.

Learning activities

Activity 2.1

- Invite student to read individually the question in the student book and work in pairs to share with the classmates.
- Have some pairs make presentations.
- Provide constructive feedback in terms of supplements.

Answers to activity 2.1.

Wundt was named the father of psychology because he founded the first psychology laboratory in 1879 at the University of Leipzig, Germany.

Application activities

Answers to application activity 2.1.

Wundt used the term voluntarism to describe the school of psychology he was founding, the term structuralism (which is now wrongly associated with him) was actually coined by his student, Titchener. Wundt also used the terms First Psychology to describe the experimental study of immediate conscious experience. Third, Psychology was what he called the study of higher mental processes. Second Psychology could not be confined to laboratory studies, he believed. It would also require naturalistic observation and cultural studies.

For Wundt, attention was controlled by the individual. A person controlled attention, voluntarily (hence the term voluntarism). For Titchener, attention was simply the clarity with which something was perceived and this was not necessarily voluntarily controlled. We might see something clearly because it is bright, large, or threatening. Structuralism faded after Titchener because it is unwieldy, complicated and seemingly useless. Without Titchener's influence, others simply drop it for more practical pursuits.

Lesson 2: Functionalism (4 periods)

Learning objective

Compare and contrast structuralism and functionalism schools of thought.

Teaching resources

Handouts and videos about different schools of Psychology, fact sheets about different schools of psychologists, internet, flash cards, flip charts, wall charts with graphics to represent different thoughts imbedded in schools of Psychology.

Prerequisites/Revision/Introduction

Students have already learnt the structuralism school of thought in psychology and have assimilated the ideas imbedded in Wundt's voluntarism and Titchener's structuralism.

Learning activities

Activity 2.2

- Invite student to read individually the question in the student book and work in pairs to share with the classmates.
- Have some pairs make presentations.
- Provide constructive feedback in terms of supplements.

Answers to activity 2.2.

William James was an American philosopher and psychologist who wrote the first textbook in psychology “Principles of Psychology”.

Application activities

Answers to application activity 2.2.

Structuralism and functionalism are two earliest theories introduced in psychology to fundamentally explain the scientific basis of various behavioral patterns and mindset observed in human beings. As the first formal schools of psychology, both have made a considerable impact in the development of the subject. However, the main difference between structuralism and functionalism lays in the fact that the first focuses on different brain elements and their capacities whereas the latter focuses on the adaptation of human mind to different environments.

Lesson 3: Behaviorism (4 periods)

Learning objective

Explain the use and impact of thoughts imbedded in behaviourism.

Teaching resources

Handouts and videos about different schools of Psychology, fact sheets about different schools of psychologists, internet, flash cards, flip charts, wall charts with graphics to represent different thoughts imbedded in schools of Psychology.

Prerequisites/Revision/Introduction

Students have already learnt the structuralism school of thought in psychology and have assimilated the ideas imbedded in Wundt's voluntarism and Titchener's structuralism, as well as functionalism school of thought and its difference to structuralism. In the previous Unit, they have already learnt views of some behavioural psychologists.

Learning activities

Activity 2.3

- Invite student to read individually the question in the student book and work in pairs to share with the classmates.
- Have some pairs make presentations.
- Provide constructive feedback in terms of supplements.

Answers to activity 2.3.

- Watson defined psychology as a science of behavior.
- Pavlov developed the theory of learning.
- Skinner was also involved in behavioral psychology as Watson.

Application activities

Answers to application activity 2.3.

- Behaviorists consider human nature to be the product of one's environment. An example is when teachers reward their class or some students with a party or special treat at the end of the week for good behavior throughout the. The same concept is used with punishments.
- You can also use behaviorism to increase learning and decrease distracting student behavior by developing a system for tracking student progress, and intervene if problem arise.
- Behaviorism allows the student to focus on one goal. It provides clear predictions about the behavior of students under certain conditions like reinforcement or punishment. It states the specific and objective outcomes for learning. One of the greatest impact of behavioral psychology is the ability to clearly observe and measure behaviors as it is based on observable behaviors.

Lesson 4: Gestalt psychology (4 periods)

Learning objective

Illustrate the principles and impact of gestalt school of thought.

Teaching resources

Handouts and videos about different schools of Psychology, fact sheets about different schools of psychologists, internet, flash cards, flip charts, wall charts with graphics to represent different thoughts imbedded in schools of Psychology.

Prerequisites/Revision/Introduction

Students have already learnt the structuralism school of thought in psychology and have assimilated the ideas imbedded in Wundt's voluntarism and Titchener's structuralism, as well as functionalism school of thought and its difference to structuralism. In the previous Unit, they have already learnt views of some prominent psychologists.

Learning activities

Activity 2.4

- Invite student to read individually the question in the student book and work in pairs to share with the classmates.
- Have some pairs make presentations.
- Provide constructive feedback in terms of supplements.

Answers to activity 2.4.

Structuralism derived from the psychological voluntarism of Wundt, where it was suggested the power of the will organizes the contents of the mind through processes of higher levels. Wundt also introduced the technique of introspection as a practice of self-examination. Structuralism was also inspired by Eduard Titchener who attempted to classify the mind into structures via introspection. He however discovered three elements of the mind: sensations, images and affection.

Application activities

Answers to application activity 2.4.

Wertheimer's observations of the phi phenomenon are widely credited as the beginning of Gestalt psychology and he went on to publicize the core principles of the field. Other psychologists also had an influence on this school of psychology.

Wolfgang Köhler: Köhler connected Gestalt psychology to the natural sciences, arguing that organic phenomena are examples of holism at work. He also studied hearing and looked at problem-solving abilities in chimpanzees

Kurt Koffka: Together with Wertheimer and Köhler, Koffka is considered a founder of the field. He applied the concept of Gestalt to child psychology, arguing that infants first understand things holistically before learning to differentiate things into parts. Koffka played a key role in bringing Gestalt principles to the United States.

- There are six key principles commonly associated with gestaltism : similarity, continuation, closure, proximity, figure/ground, and summety & order (also called prägnaz. There are also some additional, newer principles such as common fate.

Lesson 5: Psychoanalytic school (4 periods)

Learning objective

Explain how psychoanalytic school interpret human personality components and their implications.

Teaching resources

Handouts and videos about different schools of Psychology, fact sheets about different schools of psychologists, internet, flash cards, flip charts, wall charts with graphics to represent different thoughts imbedded in schools of Psychology.

Prerequisites/Revision/Introduction

Students have already learnt the structuralism school of thought in psychology and have assimilated the ideas imbedded in Wundt's voluntarism and Titchener's structuralism, as well as functionalism school of thought and its difference to structuralism. They also know about gestaltism and its principles. In the previous Unit, they have already learnt views of some prominent psychologists.

Learning activities

Activity 2.5

- Invite student to read individually the question in the student book and work in pairs to share with the classmates.
- Have some pairs make presentations.
- Provide constructive feedback in terms of supplements.

Answers to activity 2.5.

Sigmund Freud is among early psychologists and the father of psychodynamic theory which emphasizes on the mind structure (id, ego and superego) and the levels of awareness (conscious, subconscious and unconscious). His first publication was “Intepretation of Dreams” in 1900.

Application activities

Answers to application activity 2.5.

- a) Freud proposed that the mind is divided into three components: id, ego, and superego, and that the interactions and conflicts among the components create personality. According to Freudian theory, the id is the component of personality that forms the basis of our most primitive impulses. The id is entirely unconscious, and it drives our most important motivations, including the sexual drive (libido) and the aggressive or destructive drive (Thanatos). According to Freud, the id is driven by the pleasure principle — the desire for immediate gratification of our sexual and aggressive urges. The id is why we smoke cigarettes, drink alcohol, view pornography, tell mean jokes about people, and engage in other fun or harmful behaviors, often at the cost of doing more productive activities. In contrast to the id, which is about the pleasure principle, the function of the ego is based on the reality principle — the idea that we must delay gratification of our basic motivations until the appropriate time with the appropriate outlet. The ego is the largely conscious controller or decision-maker of personality. The ego serves as the intermediary between the desires of the id and the constraints of society contained in the superego. We may wish to scream, yell, or hit, and yet our ego normally tells us to wait, reflect, and choose a more appropriate response. Freud believed that psychological disorders, and particularly the experience of anxiety, occur when there is conflict or imbalance among the motivations of the id, ego, and superego. When the ego finds that the id is pressing too hard for immediate pleasure, it attempts to correct for this problem, often through the use of defence mechanisms — unconscious psychological strategies used to cope with anxiety and maintain a positive self-image. The superego is the ethical component of the personality and provides the moral standards by which the ego operates. The superego’s criticisms, prohibitions, and inhibitions form a person’s conscience, and its positive aspirations and ideals represent one’s idealized self-image or ego ideal.

b) Psychoanalytic theories offer the most comprehensive understanding of the mind among all other psychological theories. The ideas and concepts have undergone over a century of revisions and modifications aimed at helping to understand the human condition. As complex and multi-faceted creatures we are endowed with an incessant curiosity and remarkable resilience. We not only invented science, but also the humanities. Art, music, literature, and dance are methods humans have created to express the enormity of our shared lives and the drive to understand the essential meaning of our existence. Psychoanalytic theories also examine our relationship to these humanities as they may hold personal significance for the individual. Psychoanalysis evolved from Freud's devotion to understanding himself and others as members of a dominant world species.

Lesson 6: Humanism (4 periods)

Learning objective

Describe the use and impact of humanistic school of thoughts.

Teaching resources

Handouts and videos about different schools of Psychology, fact sheets about different schools of psychologists, internet, flash cards, flip charts, wall charts with graphics to represent different thoughts imbedded in schools of Psychology.

Prerequisites/Revision/Introduction

Students have already learnt the structuralism school of thought in psychology and have assimilated the ideas embedded in Wundt's voluntarism and Titchener's structuralism, as well as functionalism school of thought and its difference to structuralism. They also know about gestaltism and its principles, and thoughts embedded in psychoanalytic school. In the previous Unit, they have already learnt views of some prominent psychologists.

Learning activities

Activity 2.6

- Invite student to read individually the question in the student book and work in pairs to share with the classmates.
- Have some pairs make presentations.
- Provide constructive feedback in terms of supplements.

Answers to activity 2.6.

Rogers was one of the pioneers of the humanistic psychology movement and believed, like Abraham Maslow, that people strive toward self-actualization. Maslow established the Hierarchy of Needs. They both believed in human potential.

Application activities

Answers to application activity 2.6.

- a) Humanistic psychology is a perspective that emphasizes looking at the whole person, and the uniqueness of each individual. Humanistic psychology begins with the existential assumptions that people have free will and are motivated to achieve their potential and self-actualize. The fundamental belief of humanistic psychology is that people are innately good and that mental and social problems result from deviations from this natural tendency. Humanism also suggests that people possess personal agency and that they are motivated to use this free will to pursue things that will help them achieve their full potential as human beings.
- b) The goals of humanism remain as relevant today as they were in the 1940s and 1950s and humanistic psychology continues to empower individuals, enhance well-being, push people toward fulfilling their potential, and improve communities all over the world. Humanists stand for the building of a more humane, just, compassionate, and democratic society using a pragmatic ethics based on human reason, experience, and reliable knowledge - an ethics that judges the consequences of human actions by the well-being of all life on Earth.

Lesson 7: Humanism (4 periods)

Learning objective

Describe the use and impact of humanistic school of thoughts.

Teaching resources

Handouts and videos about different schools of Psychology, fact sheets about different schools of psychologists, internet, flash cards, flip charts, wall charts with graphics to represent different thoughts imbedded in schools of Psychology.

Prerequisites/Revision/Introduction

Students have already learnt the structuralism school of thought in psychology and have assimilated the ideas embedded in Wundt's voluntarism and Titchener's structuralism, as well as functionalism school of thought and its difference to

structuralism. They also know about gestaltism and its principles, and thoughts embedded in psychoanalytic school. In the previous Unit, they have already learnt views of some prominent psychologists.

Learning activities

Activity 2.7

- Invite student to read individually the question in the student book and work in pairs to share with the classmates.
- Have some pairs make presentations.
- Provide constructive feedback in terms of supplements.

Answers to activity 2.7.

It is one of psychological theories developed by Jean Piaget who believed that a child cognitive development is an active process from childhood to adulthood.

Application activities

Answers to application activity 2.7.

- a) To Piaget, cognitive development was a progressive reorganization of mental processes as a result of biological maturation and environmental experience. Children construct an understanding of the world around them, then experience discrepancies between what they already know and what they discover in their environment.
- b) Cognitive psychology is the school of psychology that studies mental processes including how people think, perceive, remember and learn. Cognitive psychologists try to build up cognitive models of the information processing that goes on inside people's minds, including perception, attention, language, memory, thinking, and consciousness. The emphasis of psychology shifted away from the study of conditioned behaviour and psychoanalytical notions about the study of the mind, towards the understanding of human information processing, using strict and rigorous laboratory investigation.

2.6. End unit assessment

Answers to end unit assessment

1. Structuralism suggests that the goal of psychology is to study the structure of the mind and consciousness, while functionalism puts forth that understanding the purpose of the mind and consciousness is the aim of psychology. Functionalism was developed as a response to structuralism. The main difference between the two is that structuralism focuses on different brain elements and their capacities whereas functionalism focuses on the adaptation of human mind to different environments
2. Psychoanalytic theory explains human behavior by looking at the unconscious mind. Freud suggested that the instinct to pursue pleasure, which he described as sexual in nature, lies at the root of human development. To Freud, even the development of children hinged on key stages in discovering this pleasure, through acts such as feeding at the mother's breast and defecating. On the other hand, Gestalt psychologists believe that the human mind works by interpreting data through various laws, rules or organizing principles, turning partial information into a whole. For example, your mind might interpret a series of lines as a square even though it has no complete lines; your mind fills in the gaps. Gestalt psychotherapists apply this logic to help patients solve a wide array of problems from issues at work to relationship troubles while psychoanalysts treat abnormal behavior in adults by addressing psychosexual drives.
3. There are numerous practical applications for cognitive theory such as providing knowledge on how to cope with memory disorders, increasing decision-making accuracy, finding ways to help people recover from brain injury, treating learning disorders, and structuring educational curricula to enhance learning. Cognitive psychologists can better pinpoint ways to measure human intellectual abilities, develop new strategies to combat memory problems, and decode the workings of the human brain—all of which ultimately have a powerful impact on how we treat cognitive disorders.
4. Behaviorists believe that observing behavior, rather than attempting to analyze the inner workings of the mind itself, provides the key to psychology. This makes psychology open to experimental methods with results that can be replicated the same as any other scientific experiment.

2.7. Additional activities

Guidance

- Read more about psychodynamic theories and explain why they are commonly called psychoanalytic/psychosexual theories .
- Learn about what Sigmund Freud refers to when he talks about sexuality (eros), aggression (tanathos).
- Learn about other possible schools of psychology not mentioned in the students textbooks.

2.7.1. Remedial activities

Questions

- a) What does introspection mean in structuralism?
- b) What is the origin of behaviorism?
- c) What is the belief of psychoanalytic school of thought about the origin of abnormal behaviour?

Answers

- a) Introspection is the process by which a person looks inward at his/her own mental processes to gain insight into how he/she works. It is the self-observation of one's consciousness
- b) Behaviorism being regarded as a school of thought in the 1950s and was mainly based upon the ideas of John B. Watson, Ivan Pavlov and B. F. Skinner, according to which, all behaviors can be explained by environmental causes rather than by internal forces. Behaviorism is focused on observable behavior; hence behavior is acquired and not innate.
- c) Sigmund Freud and other psychoanalysts believe that abnormal behavior originated from unconsciousness and childhood unresolved conflicts.

2.7.2. Consolidation activities

Questions

Ask students to work into groups and identify how is every school of thought in psychology applied in everyday life.

Answers

Every school of psychology is used to better understand and help people with psychological disorders, treat mental health problems and improve the education system, workplace behavior, and relationships. Psychology can be applied in all areas of life.

2.7.3. Extended activities

Questions

Identify and explain other schools of thought not mentioned in the Student's Book.

Answers

- | | |
|--|--|
| <ul style="list-style-type: none">- Activity-oriented approach- Anomalistic psychology- Associationism- Biological psychology- Biopsychosocial model- Cultural-historical psychology- Depth psychology- Descriptive psychology- Developmental psychology- Ecopsychology- Ecological psychology- Ecological systems theory- Ego psychology- Environmental psychology- Evolutionary psychology | <ul style="list-style-type: none">- Existential psychology- Individual psychology- Industrial psychology- Liberation psychology- Organismic psychology- Organizational psychology- Phenomenological psychology- Process psychology- Psychohistory- Psychology of self- Social psychology (sociocultural psychology)- Strength-based practice- Systems psychology- Transactional analysis- Transpersonal psychology |
|--|--|

UNIT 3

BRANCHES OF PSYCHOLOGY

3.1. Key unit competence

Relate branches of Psychology to different working and living fields.

3.2 Prerequisites

Students will learn better and understand this unit because they have understood some units that they have learnt and which have relationship with this one, those units are the following:

Unit 1: Nature and scope of psychology: within this unit they have studied key concepts of psychology, history of psychology, key figures of psychology and relationship between psychology and other disciplines.

Unit 2: Schools of psychology like behaviorism, gestalt, psychoanalysis, humanism and cognitive. The above units will enable them to learn and understand branches of psychology.

3.3 Cross-cutting issues to be addressed

Gender education: The teacher should bear in mind that all students (girls and boys) have equal opportunities and rights to study. When forming group activities, assigning tasks and responsibilities, asking questions, and giving feedback teacher should make sure that both girls and boys are involved.

Financial education: Teacher and students should know that resources and materials used in teaching and learning activities must not be mismanaged, they should be kept for future use or for improvisation of the teacher. They will put in mind that misusing materials is wasting money because many of them are bought.

Inclusive education: To make teaching and learning process inclusive, the teacher must understand individual differences and consider them when organizing and setting teaching and learning activities and when making seating arrangement. Teacher will use teaching approaches, methods and techniques that cater for students' diversities and needs and encourage them to maximize their full potential in classroom. Especially student's special educational needs should be catered for.

Peace and value education: Through teaching and learning, the culture of peace and values should be promoted. When students are collaborating in groups, they learn to share resources and ideas in respectful manner. They also learn to solve their problems in peaceful manner.

3.4. Guidance on introductory activity

This introductory activity is intended to arouse students' attention and interest to have idea about branches of psychology. They will use internet and other books form the library to find branches of psychology. It can be done using think pair share to encourage team work and collaboration in the classroom as students share about research done as they used different books.

Possible answer for introductory activity:

Developmental psychology, personality psychology, social psychology, industrial organizational psychology, clinical psychology, counseling psychology, experimental psychology, physiological psychology, educational psychology...

3.5. List of lessons

#	Lesson title/sub heading	Learning objectives	Number of periods
1	Developmental psychology	Explain developmental psychology	1
2	Educational psychology	Explain educational psychology	2
3	Cognitive psychology	Explain cognitive psychology	2
4	Social psychology	Explain social psychology	1
5	Health psychology	Explain health psychology	1
6	Forensic psychology	Explain forensic psychology	1
7	Family psychology	Explain family psychology	1
8	Child psychology	Explain child psychology	1
9	Clinical psychology	Explain clinical psychology	2
10	Contribution of branches of Psychology to the understanding of human behavior.	Appreciate the contribution of branches of Psychology to the understanding of human behavior.	1
	End unit assessment		2
	Total number of periods		15

Lesson 1: Developmental psychology (1 period)

Learning objective:

Explain developmental psychology.

Teaching resources:

Flashcards, flip chart, markers, books and internet connectivity if available.

Prerequisites/Revision/Introduction

Students have studied nature and scope of psychology, they know what psychology is and they have defined other terminologies related to it, they have studied history of psychology, key figures of psychology, relationship between psychology and other sciences and schools of psychology like behaviorism, gestalt, psychoanalysis, humanism and cognitive.

Learning activities

Activity 3.1

- Take the students in the room with internet availability if possible;
- Distribute books for making research or allow time to students to find them;
- Invite them to search what developmental psychology is;
- They can work in pairs;
- Each pair should have books to use in research;
- Each pair is given a marker and flash card to write findings;
- Allow them to present their findings and hang them on a flip chart.

Possible answer for introductory activity 3.1.

Developmental psychology looks at how thinking, feeling and behaviour change through a person's life span from conception to death.

Application activity 3.1

- Provide time to the students to do the activity.
- Time should be enough to students to do the activity neatly.
- This application activity will be done individually.

Possible answer on application activity 3.1

1. Three goals of developmental psychology are to describe, explain and optimize development.
2. Areas of development treated by developmental psychologists are: Cognitive development, Learning disabilities, Intellectual disabilities, Developmental delays, Emotional development, Motor skill development, Speech and language delays, Developmental challenges, Auditory processing (hearing) disorders, Autism spectrum.
3. - The study of developmental psychology is essential to understanding how humans learn, mature and adapt throughout their lives as they go through various stages of development.
- Developmental psychology helps to know how people grow, develop and adapt at different life stages.

Lesson 2: Educational psychology (2 periods)

Learning objective

Explain educational psychology.

Teaching resources

Flashcards, flip chart, markers, books and internet connectivity if available.

Prerequisites/Revision/Introduction

Students have studied nature and scope of psychology, they know what psychology is and they have defined other terminologies related to it, they have also studied history of psychology, key figures of psychology, relationship between psychology and other sciences and schools of psychology like behaviourism, gestalt, psychoanalysis, humanism and cognitive, they have also learn one branch of psychology in the previous lesson.

Learning activities

Activity 3.2

- Take the students in the room with internet availability if possible;
- Distribute books for making research or allow time to students to find them;
- Invite them to search what educational psychology is;
- They can work in pairs;
- Each pair should have books to use in research;
- Each pair is given a marker and flash card to write findings;
- Allow them to present their findings and hang them on a flip chart.

Possible answer on activity 3.2

Educational psychology concerns with application of scientific method to the study of the behaviour of people in instructional settings.

Application activity 3.2

- Provide time to the students to do the activity
- Time should be enough to students to do the activity neatly
- To be able to assess each student's achievement of the objective this application activity will be done individually.

Possible answer to application activity 3.2

1. The major leader in the field of educational psychology is Edward Lee Thorndike.
2. Studying growth and development of children, finding ways of facilitating teaching and learning, classifying children according to their behaviour, and treating people suffering with emotional disorders.
3. Answer:
 - Educational psychology helps the teacher to know how learning takes place.
 - Educational psychology enables the teacher to know how learning process should be initiated, how to motivate and how to learn.
 - Educational psychology helps the teacher to guide the students in right direction in order to canalize the student's abilities in right direction.
 - Educational psychology enables the teacher to know about the nature of the learners and his potentialities.

Lesson 3: Cognitive Psychology (2 periods)

Learning objective

Explain cognitive psychology.

Teaching resources

Flashcards, flip chart, markers, books and internet connectivity if available.

Prerequisites/Revision/Introduction

This lesson is not separated from the previous one. It builds a foundation from it. The more important and core knowledge that is much relevant to this lesson is that they learn some branches of psychology which are educational and

developmental. In addition, in 1 and 2 they have studied nature and scope of psychology and schools of psychology. This will help them to have a starting point that make them to learn this lesson with high motivation and easily understand it.

Learning activities

Activity 3.3.

- Take the students in the room with internet availability if possible;
- Distribute books for making research or allow time to students to find them;
- Invite them to search what cognitive psychology is;
- They can work in pairs;
- Each pair should have books to use in research and flash card to write their findings;
- Allow them to present their findings and hang them of flipchart.

Answer to Activity 3.3

Cognitive psychology branch involves the study of mind and how people think. It also involves the study of internal mental processes such as attention, language use, memory, perception, problem solving, creativity and reasoning.

Application activity 3.3

- Provide time to the students to do the activity individually in order to assess the achievement of the objective.
- Time should be enough to students to do the activity neatly.

Possible answers for application activity 3.3

1. Cognitive psychology is a branch of psychology that involves the study of mind and how people think. It also involves the study of internal mental processes such as attention, language use, memory, perception, problem solving, creativity and reasoning.
2. Attention is the cognitive process of selectively concentrating on one aspect of environment while ignoring other things. Attention is the process or act of concentrating on one or more environmental factors that your five senses experience (Barkley, 1997). For example, listening carefully to what someone is saying while ignoring other conversations.

Memory is an organism's ability to store, retain, and recall information and experiences. It is our ability to encode, store, retain and subsequently recall information and past experiences in the human brain.

Perception is the process whereby the brain interprets sensations, giving information order and meaning.

It is the process by which sensations or impressions from sense organs are made meaningful. As soon as one becomes aware of the object or organism, then sensation process changes to perception. It takes into account experiences stored in our memory, the context in which the sensation occurs and our internal state (our emotions and motivations). It is the process of forming hypotheses about what the senses tell us.

Reasoning is the process of thinking in which conclusions are drawn from a set of facts.

It is also thinking directed towards a given goal or objective. To reason is the ability to think critically, logically and analytically.

3. You can consult a cognitive psychologist when you have brain trauma, memory loss, perceptual or sensory issues, and when you need interventions for learning disabilities, therapy for a speech or language disorder and cognitive therapy for a psychological illness.

Lesson 4: Social psychology (1 period)

Learning objective

Explain social psychology.

Teaching resources

Flashcards, flip chart, markers, books and internet connectivity if available.

Prerequisites/Revision/Introduction

This lesson is not separated from previous one. It builds a foundation from it. The more important and core knowledge that is much relevant to this lesson is about branches of psychology studied which are educational, developmental and cognitive in addition to the content of unit 1 and 2 about nature and scope of psychology and schools of psychology, this will help them to have a starting point that make them to learn this lesson with high motivation and easily understand it.

Learning activities

Activity 3.4.

- Take the students in the room with internet availability if possible.
- Distribute books for making research or allow time to students to find them.
- Invite them to search what social psychology is.
- They can work in pairs.
- Each pair should have books to use in research and flash card to write their findings.
- Allow them to present their findings and hang them of flipchart.

Possible answer on activity 3.4

Social psychology is the field of psychology that studies the nature and cause of people thoughts, feelings and behaviors in social situation. In other words, social psychology studies the behaviors of the individual as a member of a crowd, group or society.

Application activity 3.4

- Provide time to the students to do the activity individually.
- Time should be enough to students to do the activity neatly.
- This activity will help the teacher to assess the achievement of the objective.

Possible answer on application activity 3.4

1. Social psychologists are employed, or used as consultants in:
 - setting up the social organization of businesses and psychiatric communities.
 - some work to reduce conflict between ethnic groups.
 - designing mass communications (e.g., advertising).
 - advising on child rearing.
 - helping in the treatment of mental patients and in the rehabilitation of convicts.
2. Learning more about social psychology can enrich your understanding of yourself and the world around you. By learning more about how people view others, how they behave in groups, and how attitudes are formed, you can gain a greater appreciation for how social relationships influence individual functioning. It helps to understand how human behaviors is influenced by others.

Lesson 5: health psychology

Learning objective

Explain health psychology.

Teaching resources

Flashcards, flip chart, markers, books and internet connectivity if available.

Prerequisites/Revision/Introduction

Important and core knowledge that is much relevant to this lesson is about branches of psychology studied which are educational, developmental, cognitive and social in addition to the content of unit 1 and 2 about nature and scope of psychology and schools of psychology. The content said above will help them to have a starting point that makes them to learn this lesson with high motivation and easily understand it.

Learning activities

Activity 3.5.

- Take the students in the room with internet availability if possible;
- Distribute books for making research or allow time to students to find them;
- Invite them to search what health psychology is;
- They can work in pairs;
- Each pair should have books to use in research and flash card to write their research findings;
- Allow them to make a gallery work to compare their work and other's work.

Possible answer on activity 3.5

Health psychology is the application of psychological knowledge to the promotion and maintenance of health, the avoidance, diagnosis and treatment of illness and the improvement of health care provision.

Application activity 3.5

- Request student to form group and discuss.
- Help them to understand the question.
- Whenever it is possible and materials are available, you can allow them make a further research in library or on internet.
- Each group presents its findings and helps the whole class to make conclusion.

Possible answers on application activity 3.5

1. Stress reduction, Weight management, Smoking cessation, Improving daily nutrition, Reducing risky sexual behaviors, Hospice care and grief counseling, Preventing illness, Understanding the effects of illness, Improving recovery, Teaching coping skills
2. The field of health psychology is focused on promoting health as well as the prevention and treatment of disease and illness.
3. Health psychology is important in the following ways:
 - It has an important role to play in the education of healthcare professionals by promoting patient-centered care that facilitates increased self-management, allowing individuals to have control over their health and helping them make better choices.
 - Health psychologists work with individuals, groups, and communities to decrease risk factors, improve overall health, and reduce illness.

Lesson 6: Forensic psychology (1 period)

Learning objective:

Explain forensic psychology.

Teaching resources:

Flashcards, flip chart, markers, books and internet connectivity if available.

Prerequisites/Revision/Introduction

Important and core knowledge that is much relevant to this lesson is about branches of psychology studied which are educational, developmental, cognitive, social and health which have been studied in this unit. In addition, students learnt about nature and scope of psychology and schools of psychology in unit 1 and 2. This content will help them to have a starting point that makes them to learn this lesson with high motivation and easily understand it.

Learning activities

Activity 3.6.

- Take the students in the room with internet availability if possible;
- Distribute books for making research or allow time to students to find them;
- Invite them to search information on forensic psychology is;
- They can work in pairs;
- Each pair should have books to use in research and flash card to write their

research findings;

- Allow them to make a gallery work to compare their works and other's work.

Possible answer for activity 3.6

Forensic psychology: this branch of psychology explores the connection between human behaviours and the justice system it is interested in understanding why certain behaviours occur and using psychological analysis to minimize negative behaviours in the future.

Application activity 3.6

- Request student to form group and discuss.
- Help them to understand the question.
- Whenever it is possible and materials are available, you can allow them make a further research in library or on internet.
- Each group presents its finding and teacher helps the whole class to make conclusion.

Possible answers on application activity 3.6

1. Apply psychological theory to criminal investigation to help understand psychological problems associated with criminal behaviour, and treatment of those who have committed offences. Professionals working in forensic psychology are tasked with improving the relationships between individuals and the legal system by assessing, evaluating, and treating offenders and victims.

2. Duties:

Observing and Interviewing: These professionals observe and interview people in the legal system. They assess behavioural, emotional, and psychological problems and disorders.

Writing Reports and Articles: Forensic psychologists write reports discussing criminal profiles, criminal responsibility, and mental status.

Providing Expert Testimony: These professionals serve as expert witnesses providing testimony in courtroom trials. Drawing from their psychological training and knowledge, they testify about sentencing and treatment recommendations, competency, and future risk of criminal behaviour.

Counseling and Treatment: Forensic psychologists provide counseling to victims of crime. They design and provide therapy services to sex offenders and other people convicted of crimes.

Supervising: Forensic psychologists often supervise interns and must complete supervised practice to receive their credentials.

Lesson 7: Family psychology (1 period)

Learning objective

Explain family psychology.

Teaching resources

Flash cards, flip chart, markers, books and internet connectivity if available.

Prerequisites/Revision/Introduction

This lesson should build its foundation from other six lessons of this unit which deals with branches of psychology (developmental, educational, social, cognitive, health and forensic). Students also learnt about nature and scope of psychology in unit 1 and schools of psychology in unit 2. Revision and recall on those previous lessons will directly help them to the understanding of this lesson.

Learning activities

Activity 3.7.

- Take the students in the room with internet availability if possible;
- Distribute books for making research or allow time to students to find them;
- Invite them to search what family psychology is;
- They can work in pairs;
- Each pair should have books to use in research;
- Each group is given flash card and marker to write their research findings;
- Allow them to present their findings and hang them on a flipchart.

Possible answers on activity 3.7

Family psychology is a broad specialty in professional psychology based upon the principles of systems theory with a strong focus on the interpersonal system of the family.

Application activity 3.7

- Students return back in their respective groups they used during the activity 3.7.
- Give them time to work and focus on the activity in a collaborative way.
- Let each group present its final work.
- Others group may comment supplement and ask questions.
- Help them to reach a clear conclusion.

Possible answer on application activity 3.7

- Yes it is important to have family psychologist in school. Students will give out ideas about the reason of having family psychology in their school. The teacher will comment on each answer.
- Answer:
 - They provide resources that can help an individual cope with stress, engage in healthier behaviours, and enhance self-esteem, leading to higher well-being.
 - By working with a family psychologist couples and families can find ways to take the maladaptive behaviour patterns and turn them into more positive ones.
 - Working with family psychologists can mean families stay together.

Lesson 8: Child psychology (1 period)

Learning objective

Explain child psychology.

Teaching resources

Flash cards, flip chart, markers, books and internet connectivity if available.

Prerequisites/Revision/Introduction

This lesson should build its foundation from other seven lessons of this unit which deals with branches of psychology (developmental, educational, social, cognitive, health, forensic and family). Students also learnt about nature and scope of psychology in unit 1 and schools of psychology in unit 2. Revision and recall on those previous lessons will directly help them to the understanding of this lesson.

Learning activities

Activity 3.8.

- Take the students in the room with internet availability if possible;
- Distribute books for making research or allow time to students to find them;
- Invite them to search what child psychology is;
- They can work in pairs;
- Each pair should have books to use in research;
- Each group is given flash card and marker to write their research findings;
- Allow them to present their findings and hang them on a flipchart.

Possible answer on activity 3.8

Child psychology is concerned specifically with the development of children and adolescents; it is the study of sub conscious and conscious child development.

Application activities 3.8

- Guide students to make pairs.
- Give them time to work and focus on the activity in a collaborative way.
- Let each group present its final work.
- Others group may comment supplement and ask questions.
- Help them to reach a clear conclusion.

Possible answers on application activity 3.8

1. The aim of child psychology is to assemble an objective knowledge base that can provide insight into both the nature of childhood generally as well as the distinctive characteristics of individual children.
2. Yes I agree with the statement. Early development affects later development because of the following reasons:
 - Children spend their earliest years in nurturing surroundings that promote optimal brain development and provide young children with a solid foundation on which their later skills and abilities will be built.
 - Early child development sets the foundation for lifelong learning, behaviour, and health. The experiences children have in early childhood shape the brain and the child's capacity to learn, to get along with others, and to respond to daily stresses and challenges.

- Children’s early experiences – the bonds they form with their parents and their first learning experiences – deeply affect their future physical, cognitive, emotional and social development. Optimizing the early years of children’s lives is the best investment we can make as a society in ensuring their future success.

Lesson 9: Clinical psychology (2 periods)

Learning objective

Explain clinical psychology.

Teaching resources

Flashcards, flip chart, markers, books and internet connectivity if available.

Prerequisites/Revision/Introduction

This lesson should build its foundation from other eight lessons of this unit which deals with branches of psychology (developmental, educational, social, cognitive, health, forensic, family and child). Students also learnt about nature and scope of psychology in unit 1 and schools of psychology in unit 2. Revision and recall on those previous lessons will directly help them to the understanding of this lesson.

Learning activities

Activity 3.9.

- Take the students in the room with internet availability if possible;
- Distribute books for making research or allow time to students to find them;
- Invite them to search what child psychology is;
- They can work in pairs;
- Each pair should have books to use in research;
- Each group is given flash card and marker to write their research findings;
- Allow them to present their findings and hang them on a flipchart.

Possible answer on activity 3.9

Clinical psychology is a branch of psychology that deals with understanding and treating people with mental illness and other psychological disorders.

Application activities

- Guide students to make pairs.
- Give them time to work and focus on the activity in a collaborative way.
- Let each pair present its final work.
- Others group may comment supplement and ask questions.
- Guide them to reach a clear conclusion.

Possible answers on application activity 3.9

Aims of clinical psychology:

- Understand, predict, and treat or alleviate disorders, disabilities, or any kind of maladjustment.
- Address behavioural and mental health issues faced by individuals across the lifespan including: Intellectual, emotional, psychological, social and behavioural maladjustment. Disability and discomfort. Minor adjustment issues as well as severe psychopathology.
- Provide continuing and comprehensive mental and behavioural health care for individuals and families.
- Assess a wide range of psychological problems at different levels of a system.

Lesson 10: Contribution of branches of Psychology to the understanding of human behaviour (1 period)

Learning objective:

Appreciate the contribution of branches of Psychology to the understanding of human behavior.

Teaching resources:

Flashcards, flip chart, markers, books and internet connectivity if available and hand out on branches of psychology.

Prerequisites/Revision/Introduction

This lesson should build its foundation from other nine lessons of this unit which deals with branches of psychology (developmental, educational, social, cognitive, health, forensic, family, child and clinical). Students also learnt about nature and scope of psychology in unit 1 and schools of psychology in unit 2. Revision and recall on those previous lessons will directly help them to the understanding of this lesson.

Learning activities

Activity 3.10.

- Take the students in the room with internet availability if possible;
- Distribute books for making research or allow time to students to find them;
- Give them hand out on branches of psychology or they use their notebooks.
- They can work in pairs to find contribution of branches of psychology to the understanding of human behaviour.
- Each pair should have books and hand out to use in research.
- Each group is given flash card and marker to write their research findings.
- Allow them to present their findings and hang them on a flipchart.

Possible answer on activity 3.10

- Psychologists study mental processes and human behaviour by observing, interpreting, and recording how people and other animals relate to one another and the environment.
- Psychologists are actively involved in studying and understanding mental processes, brain functions, and behaviour.
- Psychology helps people in large part because it can explain why people act the way they do.
- It is used to better understand and help people with psychological disorders, treat mental health problems and improve the education system, workplace behaviour, and relationships.
- Psychology can control individual behaviours and predict their occurrence.
- It can study the different types of human and animal behavior.
- It can study the laws that affect psychological phenomena, interpret them, predict them, and try to modify them if they need modification.
- It can assist students in investing their time in the right way of studying and gaining knowledge.
- It can help individuals organize their different lifestyles.
- It can help build relationships based on mutual respect between different individuals and groups.
- It helps in enriching careers.
- Psychology allows people to understand more about how the body and mind work together.
- It improves communication.

Application activity 3.10

- Guide students to make pairs.
- Give them time to work and focus on the activity in a collaborative way.
- Let each pair present its final work.
- Others group may comment supplement and ask questions.
- Guide them to reach a clear conclusion.

Possible answer on application activity 3.10

Essentially, psychology helps people in large part because it can explain why people act the way they do. With this kind of professional insight, a psychologist can help people improve their decision making, stress management and behavior based on understanding past behavior to better predict future behavior.

3.6. Additional information for teachers

Other branches of psychology.

Behavioural psychology

Behavioural psychology, or behaviourism, is a theory suggesting that environment shapes human behavior. In a most basic sense, behavioral psychology is the study and analysis of observable behavior. This field of psychology influenced thought heavily throughout the middle of the 20th century. It is the study of the connection between our minds and our behavior. Sometimes you will hear behavioural psychology referred to as behaviorism.

The researchers and scientists who study behavioural psychology are trying to understand why we behave the way we do and they are concerned with discovering patterns in our actions and behaviours. The hope is that if we can use behavioural psychology to help us predict how humans will behave, we can build better habits as individuals, create better products as companies, and develop better living spaces as communities.

Abnormal psychology

Abnormal psychology is a branch of psychology that deals with psychopathology and abnormal behavior, often in a clinical context. The term covers a broad range of disorders, from depression to obsessive-compulsive disorder to personality disorders.

There are many ways psychologists define “abnormal psychology.” But, at its root, the term refers to the study of behaviour and mental illnesses that are unusual and atypical — out of the societal norm. In addition, abnormal psychology deals primarily with major mental and behavioural disorders, or conditions and illnesses that detract from an individual’s mental, emotional, and behavioral health, negatively affecting or limiting their life experience. These disorders may also be defined by or include the way an individual’s mental or behavioural conditions might negatively affect those in their immediate social environment or society at large.

Occupational psychology

Occupational psychology is concerned with the performance of people at work and with how individuals and organizations behave and function. Its aim is to increase the effectiveness of the organization and improve the job satisfaction of individuals. Occupational psychologists aim to increase the effectiveness of the organization and improve the job satisfaction of individuals.

The specialty is broader in scope and less formalized than many areas of psychology and it touches on diverse fields, including ergonomics, personnel management and time management. Work can be in advisory, teaching and research roles, and to a lesser extent, in technical and administrative roles.

Gestalt psychology

Gestalt psychology is a school of thought that looks at the human mind and behavior as a whole. When trying to make sense of the world around us, Gestalt psychology suggests that we do not simply focus on every small component. Instead, our minds tend to perceive objects as elements of more complex systems.

Medical psychology

It refers to the application of psychological principles to the practice of medicine, and is clearly comprehensive rather than primary drug oriented, for both physical and mental disorders.

Community psychology: attempts to examine how the social environment institutions and physical structures can better serve individual human needs.

Guidance and counseling psychology: deals with helping people with mind non-medical problems of social and emotional adjustment such as in schooling, marriage, working in social group, choosing and sustaining school career, handling personal problems, etc.

Neuropsychology: is a branch of psychology. It is concerned with how a person's cognition and behavior are related to the brain and the rest of the nervous system. Professionals in this branch of psychology often focus on how injuries or illnesses of the brain affect cognitive and behavioural functions.

3.7. End unit assessment (2 periods)

Answers to end Unit 3 assessment

1. Complete with an appropriate branch of psychology:
 - a) **Cognitive psychology** investigates internal mental processes such as problem solving, memory, learning and language.
 - b) **Forensic psychology** involves applying psychology to criminal investigation and the law.
 - c) **Social psychology** uses scientific methods to understand how social influences impact human behavior.
 - d) **Developmental psychology** is a branch of psychology that focuses on how people change and grow throughout life.
 - e) **Educational psychology** is a branch of psychology concerned with schools, educational issues and student concerns
2.
 - a) lawyer: forensic psychology
 - b) parents: child, developmental and family psychology
 - c) teachers: educational psychology
 - d) medical doctors: clinical and health psychology
 - e) community leaders: social psychology
3. Answer:
 - It explains why people act the way they do.
 - It helps people improve their decision making, stress management and behavior based on understanding past behavior to better predict future behavior.
 - Psychology allows people to understand more about how the body and mind work together. --It can help with time management, setting and achieving goals, and living effectively.
 - It is used to better understand and help people with psychological disorders, treat mental health problems.
 - It improves the education system, workplace behaviour, and relationships.

- It helps in building of relationships.
 - Psychology makes it easier to live with others by understanding them more and working with their behavior.
 - It improves communication.
 - It helps in building self-confidence by understanding more about yourself and your personality.
 - It can help in gaining more self-confidence. You will learn more about your weaknesses and can build on them.
 - It helps in enriching careers: with psychology people will be able to understand their co-workers more and building a better friendship so that they will help each other to enrich their careers.
 - With psychology:
 - You'll learn more about yourself and others.
 - You'll gain valuable research and analytical skills.
 - You'll become a better communicator.
 - You'll learn how to resolve conflict.
 - You'll be well prepared for countless careers.
 - You could even gain a better social life.
4. The advice should turn around the ideas like observation, being child's best friend, spend time with him/her, listen and talk with him/her, give full attention while talking and give respect.

3.8. Additional activities

3.8.1 Remedial activities

Questions:

1. List studied branches of psychology.
2. Differentiate health from clinical psychology.

Answers

1. Developmental, educational, cognitive, social, health, forensic, family, child and clinical psychology.
2. Clinical psychology is a branch of psychology that deals with understanding and treating people with mental illness and other psychological disorders. Health psychology is the application of psychological knowledge to the promotion and maintenance of health, the avoidance, diagnosis and treatment of illness and the improvement of health care provision.

3.8.2. Consolidation activities

Question:

Select and explain 3 branches of psychology that parents need to adequately play their role. Explain why.

Answers

- **Child psychology:** to ensure holistic development of their children and adolescent and to be able to help them in their daily life challenges.
- **Family psychology:** to ensure wellbeing of their family members and focus on the emotions, thoughts and behaviours of individuals, couples and families in relationships and in the broader environment in which they function
- **Developmental psychology:** to understand how humans learn, mature and adapt. Throughout their lives as they go through various stages of development, understanding how humans learn, mature and adapt. Throughout their lives, humans go through various stages of development. Developmental psychologists study how people grow, develop and adapt at different life stages. This will help parents to understand how people grow, develop and adapt at different life stages and how to help on each stage of human development.

3.8.3. Extended activities

Teacher guides students to conduct a debate on this motion: “**All people should learn psychology**”.

UNIT 4

INTRODUCTION TO HUMAN DEVELOPMENT

4.1. Key unit competence

Demonstrate an understanding of introduction to human development.

4.2 Prerequisites

Students will learn better and understand this unit because they have understood some units that they have learnt and which have relationship with this one, some of those units have been studied in biology like nervous system and reproduction system in O-Level. They also studied unit 3 (branches of psychology) where some branches are related to this unit especially developmental psychology and child psychology. The teacher need to use the active methods and techniques to stimulate students in order to build strong foundation for better understanding this unit.

4.3 Cross-cutting issues to be addressed

Gender education: Remind students that both males and females should be treated equally and have the same rights and obligations as they all pass through the same sequence of human development irrespective of their sex. Therefore, need to be treated fairly and equally studying. People's opinion of gender roles should not deny or hinder one's right or responsibilities to meet his or her learning during this unit.

Comprehensive sexuality education: The teacher needs to equip learners with all necessary information about sexuality that are linked to this unit as it extents the understanding about how both sex (male and female) need to go through all stages of development.

Environment and sustainability: During the study of this unit, students appreciate the environmental factors and how these influence brain. They need to understand that development of human being happen in environment and it should be safe for a better seek to human development.

Inclusive education: This will be much focused on as teacher understands the individual difference that may arise as result of their difference in development. Teacher will use different materials that cater for individual difference and encourage them to fulfill their potential throughout the entire unit.

Peace and values education: This is a broad cross cutting issue which will make students to appreciate the culture and values of Rwanda. Students need to know that though we have modern stages of human development, we have them also in Rwandan culture. This crosscutting issue will also be addressed when encouraging students to work respectful and peacefully when working into groups.

4.4. Guidance on introductory activity

- Students are not expected to give correct answers regarding age, which corresponds to each age category according to Rwandan culture. This activity aims to stimulate their curiosity about human development in general and the developmental stages of Rwandan culture in particular.
- Have students perform this task in small groups as homework before class so that they have time to research the internet, read books from the school library, or talk to older people in the community.
- Start the lesson by welcoming group representatives for presentation of their findings.
- Ask them to keep their works until the last lesson of this unit because they will have time to redo the same task.

4.5. List of lessons

	Lesson title/sub heading	Learning objectives	Number of periods
1	Key concepts of human development	Define key concepts of human development.	2
2	Principles of human development	Explain the principles of human development.	2
3	Human developmental domains	Explain physical, cognitive and socio-emotional domains and highlight the interrelationship between them.	2
	Periods of human development		

4	Prenatal period of human development: From conception to birth	Describe prenatal period of human development.	2
	Lesson title/sub heading	Learning objectives	Number of periods
5	Infancy and toddlerhood periods of human development: From birth to 3 years	Illustrate the infancy and toddlerhood of human development.	2
6	Early and middle childhood periods of human development	Portray the early and middle childhood periods of human development.	2
7	Adolescence and early adulthood periods of human development	Explain the adolescence and early adulthood period of human development.	2
8	Middle and late adulthood periods of human development	Describe middle and late adulthood periods of human development.	2
	Brain development		
9	Brain basics	Explain the basis of brain function.	3
10	Brain development	Explain brain development.	2
11	Key messages for parents and caregivers about their role in children's brain development	Advise people in helping children's brain to develop.	2
	End unit assessment		2
	Total number of periods		25

Lesson 1: Key concepts of human development (2 periods)

Learning objective

Define key concepts of human development.

Teaching resources

Flip chart, marker, flash cards, hand out with information about key terms of developmental psychology, internet connectivity if available.

Prerequisites/Revision/Introduction

Students have grown in different villages but have in mind the different development stages as they are sequenced in our culture. They need to think deeply and discover different stages of development in Rwandan culture and the teacher guide them to understand and arrange them. Students will need to make research either in library or internet and try to explain different terms related to human development. Students should also try to compare periods of development according with Rwandan stages of development. They will also use the knowledge from what they studied in biology to understand human development ; the knowledge gained in developmental psychology also will build a strong foundation and motivation to understand this content.

Learning activities

Activity 4.1.

- Form groups of boys and girls with mixed abilities.
- Give them instruction about activity.
- Let them discuss in groups and select terminologies associated with human development.
- Move in the classroom to facilitate the activity.
- Give them time to present and supplement to have common understanding.

Application activities 4.1

Answers to Activity 4.1

Terms related to human development: changes, maturation, growth, development processes, stages of development, child development.

Students are given time to do this activity independently and then after there should be correction on the chalkboard.

Answers to Application Activity 4.1

1) Difference between growth and development

- **Growth**
 - is an aspect of development.
 - is not continuous.
 - is measurable (size, weight, height, length,).
 - change in structure only.

- **Development**

- is wider than growth.
- is a continuous and lifelong process that covers the whole life span of an individual.
- In development, assessment focuses on qualitative changes instead of measuring physical aspects.
- changes as a whole (different aspects are affected by changes in various parts of the body and behavior).

2) Examples of Rwandan proverbs that emphasise on heredity and environment:

- **Proverbs emphasizing the role of heredity:**

- Inyana ni iya mweru.
- Mwene Samusure avukana isunzu.
- Nta yima nyina akabara.
- Etc.

- **Proverbs emphasizing the role of environment:**

- Uwiba ahetsa aba abwiriza uwo mu mugongo.
- Ihene mbi ntawe uyizirikaho inziza.
- Isuku igira isoko.
- Ingwe ntiyari izi gufata ku gakanu yarabwirijwe.
- Ugiye iburyasazi azimira nzima.
- Etc.

Lesson 2: Principles of human development (2 periods)

Learning objective

Explain the principles of human development.

Teaching resources

Flip chart, marker, flash cards, hand out with information about key terms of developmental psychology, internet connectivity if available.

Prerequisites/Revision/Introduction

This lesson is interrelated with other lessons learnt previously. Students need to revise and use content learnt in previous lessons to better understand this lesson. They can focus on key concepts related to human development seen in unit one, In addition to that, they have also seen branches of psychology where

developmental psychology is included. This content will help them to effectively go with the teacher with much attention and full participation which will help them in this lesson.

Learning activities

Activity 4.2.

- Form groups of boys and girls with mixed abilities;
- Give them instruction about activity;
- Let them discuss in groups and answer activities asked on given pictures;
- Move in the classroom to facilitate the activity;
- Give them time to hang their findings on a wall;
- Let groups make gallery work to compare their findings to other's work.

Answers to activity 4.2

1. Age estimation based on given pictures:

- Picture 1: 1-3 months: The baby can roll both ways (tummy to back and back to tummy).
- Picture 2: 10-11 months: The baby can walk with much support.
- Picture 3: 6-7 months: The baby is able to sit down without support of his/her hands.
- Picture 4: 2-3 years: The baby is able to run.
- Picture 5: 8-10 months: The baby is able to crawl. Picture 6: 12-14 months: The baby is toddling (starting to walk without support).

2. Ordering pictures from the youngest to oldest child:

Picture 1	Picture 3	Picture 5	Picture 2	Picture 6	Picture 4
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3. No. Because individuals differ in the rate of growth and development. Guidance: Learners may explain their ideas in different ways. Some may say that all children do not achieve the illustrated skills at the same age due to the uniqueness of each child. This discovery activity helps to introduce the new lesson on principle of development. It is okay if learners are not able to give the correct answer.

4. No, the sequence is the same for all children (This question refers to the principle that states that “the development is sequential and follows a pattern or general sequence which is the same for all individuals”).

Guidance: Let learners express their ideas. There might be some who think that the development sequencing is not the same if we consider children living in different conditions. Let them explain why and help them by starting the new lesson on principles of development.

Application activities 4.2

- Give students papers with questions.
- Give them time to do the activity.
- This activity is done individually.

Answers to Application activity 4.2

Refer to the content summary in the Student’s Book.

Lesson 3: Human developmental domains (2 periods)

Learning objective:

Explain physical, cognitive and socio-emotional domains and highlight the interrelationship between them.

Teaching resources:

Flip chart, marker, flash cards, hand out with information about key terms of developmental psychology, internet connectivity if available.

Prerequisites/Revision/Introduction

This lesson is interrelated with other lessons learnt previously. Students need to revise and use content learnt in previous lessons to better understand this lesson. They can focus on key concepts related to human development and principles of human development seen in this unit. In addition to that they have also seen branches of psychology where developmental psychology which is well related to this unit is included. This content will help them to effectively go with the teacher with much attention and full participation which will help them in this lesson.

Learning activities

Activity 4.3.

- Form groups of boys and girls with mixed abilities.
- Give them instruction about activity.
- Let them discuss and provide sentences on a given diagram.
- Move in the classroom to facilitate the activity.
- Group representatives present their findings.
- Teacher compliment to help students have common understanding.
- Other classmate may ask questions where they do not understand.

Possible Answers to activity 4.3

The development of the whole child takes into consideration different aspects which are:

- Physical aspect (Gross and fine motor)
- Social and emotional aspects (Interaction, cooperation, self-confidence, sense of community)
- Sensory aspects (sight, touch, smell, hearing, taste, vestibular, proprioception)
- Cognitive aspect (Problem solving, abstract thinking, learning)
- Communication (Expressive, receptive, pragmatic language)

Application activities 4.3

- Give students papers with questions.
- Give them time to do the activity neatly.

Answers to Application activity 4.3

1. **Holistic development** refers to the comprehensive approach of human development that caters for a child's intellectual, spiritual, physical, emotional, social and communication skills/abilities so that he or she is capable to cope with the demands and challenges of everyday life.
2. Grouping of abilities according to the development domain:

<p>Physical development</p> <p>Fine motor skills Hand –eye coordination Toddling Rolling over Sensory abilities</p>	<p>Cognitive development</p> <p>Problem solving Conceptual understanding Thinking</p>
<p>Social development</p> <p>Working with others Social relationships</p>	<p>Communication</p> <p>Babbling Making a complete sentence to express the needs</p>

Lesson 4: Prenatal period of human development: From conception to birth (2 periods)

Learning objective

Describe prenatal period of human development.

Teaching resources

Flip chart, marker, flash cards, hand out with information about key terms of developmental psychology, internet connectivity if available.

Prerequisites/Revision/Introduction

This lesson is interrelated with other lessons learnt previously. Students need to revise and use content learnt in previous lessons to better understand this lesson. They can focus on key concepts related to human development, principles of human development and domains of human development seen in this unit, they can also focus on content related to branches of psychology especially developmental psychology. This content will help them to effectively go with the teacher with much attention and full participation which will help them in this lesson.

Learning activities

Activity 4.4.1

- Students are put into groups.
- Teacher use flash cards and write each Rwandan belief on flash card.
- Each group is given a flash card with a Rwandan belief to discuss about.
- Give students time to discuss.
- Students discuss and present in plenary what they discussed about.

- Teacher complements their findings and students may ask questions where they do not understand.

Answers to activity 4.4.1

Comments on some traditional Rwandan practices and beliefs during the prenatal period:

#	Traditional belief or practice during prenatal period	Comment
1	It was forbidden for pregnant women to make fun of disabled people or animals with some deformities for fear of giving birth to a child who looked like them.	This belief has no scientific basis. While environmental causes can have adverse effects on the unborn child, making fun of disabled people cannot be a reason for having a disabled child.
2	It was forbidden for pregnant women to attend funeral ceremonies.	This belief has a scientific basis. Attending a funeral service can expose the pregnant woman to emotional states that can be harmful to the unborn child and lead to miscarriage.
3	It was forbidden for a pregnant woman to assist another woman who was about to give birth.	This belief has a scientific basis. Supporting a mother who is in labor and about to give birth can expose the pregnant woman to emotional states that can be harmful to the unborn child and lead to miscarriage.
4	It was good practice to consult a witch to ensure that the pregnancy and childbirth process are under control.	This practice had a scientific basis: Based on spiritual beliefs in the traditional pre-Christian era, consulting a witch and ensuring the process of pregnancy and childbirth is under control had a calming effect on the pregnant women.
5	A pregnant woman was required to perform daily abdominal massage with ointment derived from cow's milk.	A gentle and personal abdominal massage has advantages during pregnancy. It supports the daily changes of the body and the growing baby. It allows for deeper connections and forging a mother's initial relationship with the unborn child, especially when the mother speaks or sings to the baby during the massage.
6	A pregnant woman was advised to take water with "inkuri" made of clay mixed with various medicinal herbs to treat various diseases that a pregnant woman could be infected with.	In traditional Rwanda, before modern medicine, there were no hospitals, no pharmacies like we have today. The Rwandans were then treated with medicinal plants. It was therefore logical to think of a mixture of plants capable of preventing various diseases.

Application activities

- Give time to students to do application activity.
- Students do the activity individually.

Answers to Application activity 4.4.1

Immediately after birth, newborns react in a specific way to their mother's voice and are able to thumb or breast sucking. This is a proof that these early behaviors had developed some times ago during the prenatal periods. The unborn child's hearing sense is developed before birth, the same for the sucking reflex.

Guidance: More explanations on these early behaviors and other neonatal reflexes will be provided in Unit 6.

Lesson 5. Infancy and toddlerhood periods of human development: From birth to 3 years (2 periods)

Learning objective

Illustrate the infancy and toddlerhood of human development.

Teaching resources

Flip chart, marker, flash cards, hand out with information about key terms of developmental psychology, internet connectivity if available.

Prerequisites/Revision/Introduction

Students learnt many lessons in this unit which are in relation with this one. Those lessons are key terminologies related to human development, principles of human development, domains of human development and prenatal period of human development. Those lessons built a strong foundation for students to learn and understand this lesson. In addition to this, students have also learnt developmental psychology as one of branches of psychology in unit 3. They need to revise this content to better understand this lesson.

Learning activities

Activity 4.4.2.

- Students are put into groups.
- Each group may be given one aspect to discuss about.
- Students discuss and present in plenary what they discussed on abilities of young children before they attend pre-schools in terms of physical, cognitive, social and emotional development.

- Teacher complements their findings and students may ask questions where they do not understand.

Possible answers to activity 4.4.2

Guidance: Students may give different examples. Let them give and explain their own examples.

Examples of behaviors, games, skills of 1-year-olds	Examples of behaviors, games, skills of 3-year-olds
They use one word to express an entire idea. Non-verbal communication helps them complete what they try to say to people.	They are able to express themselves telling what they want.
They do what they are asked to do.	They are very negativist: they frequently use: “I don’t want that”; “I don’t want do this...”
They enjoy playing with toys that stimulate senses especially the sight and hearing senses.	They play with symbolic toys like car or plane toys, dolls.
They are building their first relationship with their parents/ caregivers; siblings.	They look for other children of the same age or younger to play with, but often fight with their peers about toys and other things. They don’t share.
They are able to walk but with support: Babies are making their first steps.	They are able to walk independently and even to run.

Application activities

- Give time to students to do application activity.
- Students do the activity individually.

Answers to Application activity 4.4.2

- 1) The age name of toddlerhood refers to the physical domain. This is the age when babies walk with unsteady steps. The equivalent name of toddler in Kinyarwanda is “*Igitambambuga*”.
- 2) At least 1 skill that babies attain during infancy and a toddlerhood (Students may give different but correct answers).

Developmental domain	Infancy	Toddlerhood
Physical	<p>-The baby is able to roll out and later to crawl.</p> <p>- Babies are developing skills such as crawling, sitting down, walking, , and waving “bye-bye”.</p>	The young child is able to walk independently.
Cognitive	Babies learn to focus their vision, explore, and learn about the things that are around them.	<p>-The ability to use symbols and solve problems develop when they complete the second year.</p> <p>- They explore and differentiate objects from their surroundings.</p>
Communication	- They produce the first syllables that end in words mostly the names of people, familiar foods or objects.	<p>They can form simple phrases and sentences.</p> <p>They are to understand and follow simple instructions.</p>
Social and Emotional	<p>- Babies are smiling for the first time (around 3-6 months). They smile to everyone without distinguishing familiar people and visitors.</p> <p>- Babies also are developing bonds of love and trust with their parents and others.</p>	Toddlers show greater independence; begin to show defiant behavior; and imitate the behavior of others, especially adults and older children.

Lesson 6: Early and middle childhood periods of human development (2 periods)

Learning objective

Illustrate the infancy and toddlerhood of human development.

Teaching resources

Flip chart, marker, flash cards, hand out with information about key terms of developmental psychology, internet connectivity if available.

Prerequisites/Revision/Introduction

Students learnt many lessons in this unit which are in relation with this lesson, those lessons are key terminologies related to human development, principles of human development, domains of human development, prenatal, infancy and toddler periods of human development. Those lessons built a strong foundation for students to learn and understand this lesson. In addition to this, students have also learnt developmental psychology as one of branches of psychology in unit 3. They need to revise this content to better understand this lesson.

Learning activities

Activity 4.4.3.

Guidance on activity 4.4.3

There is no single answer to these questions as they refer to the one's own experience.

Possible answers to activity 4.4.3

- 1) Examples of practices in our community aimed at promoting the holistic development of young children aged 3 to 6:
 - The health center works to prevent and cure diseases; educate parents about balanced and age-appropriate nutrition for young children; to work on vaccinations etc.
 - There are churches that organize meetings for parents to care for their children at home.
 - There are pre-primary schools.
 - There are ECD centers organized by local NGOs.
 - Some neighboring families organize themselves and use a selected family to host their children daily for a few hours a day.

Contribution to the holistic development: Even though these practices are in different settings, they contribute in one way or another to the physical, health, cognitive, communication, social and emotional development.

- 2) The pre-primary/primary schools I went through contributed to the development of my full potentials: they worked in collaboration with my family to promote holistic development:
 - **Physical development:** through games and sportive activities organized at school.
 - **Cognitive and communication development:** learning activities in different subjects developed the creativity, problem solving, communication, innovation, critical thinking skills.
 - **Social and emotional development:** in various school and out of class activities, I learnt to work with classmates; to demonstrate empathy towards them; to regulate emotions; to manage conflicts, etc.

Application activities

- Give time to students to do application activity.
- Students do the activity individually.

Possible answers to application activity 4.4.3

- 1) Equivalent name of children in early and middle childhood according to the traditional Rwandan culture:

Childhood stage	Equivalent name according to the traditional Rwandan culture	Is the name relevant?
Early childhood 3-6 years	<i>“Inshuke”</i>	Yes, the name is relevant as it refers to the time when most children stop breastfeeding due to the birth of a younger child.
Middle childhood 6-12 years	<i>“Umwana ukurikira abandi”</i> <i>Umwana utashya</i>	Yes, these two names are relevant and focus on age appropriate activities that children aged 6-12 were initiated to do for their family.

2)

Developmental domain	Early childhood	Middle childhood
Physical	<p>Growth is steady;</p> <p>Appearance becomes slimmer and proportions more adultlike.</p> <p>Gross motor skills and strength improve: Handedness appears.</p> <p>Children are able to use safety scissors and other objects.</p>	<p>Growth in general slows but strength and athletic skills improve</p> <p>Health is generally better than at any other time in the life span.</p>
Cognitive	<p>Thinking is egocentric</p> <p>Cognitive immaturity results in some illogical ideas about the world.</p> <p>Memory skills improve compared to the previous period.</p>	<p>Egocentrism diminishes and children begin to see the point of view of others more objectively.</p> <p>Children think logically but concretely and have an increased attention span.</p> <p>Memory skills increase.</p> <p>Some children show special educational needs and strengths.</p>
Communication	<p>Language skills improve.</p>	<p>Language skills increase.</p>
Social and Emotional	<p>Self-concept and understanding of emotions become more complex;</p> <p>Self-esteem is global (they have a global, overall knowledge of their goodness as a person).</p> <p>Independence, initiative and self-control increase.</p> <p>Family is still the focus of social life but other children become more important. Young children begin to focus more on things, people (adults and children) outside of the family.</p>	<p>Self-concept becomes more complex and affects the self-esteem.</p> <p>Friendships become more important and peer pressure can become strong during this time.</p>

Lesson 7: Adolescence and early adulthood periods of human development (2 periods)

Learning objective

Explain the adolescence and early adulthood periods of human development.

Teaching resources

Flip chart, marker, flash cards, hand out with information about key terms of developmental psychology, internet connectivity if available.

Prerequisites/Revision/Introduction

Students learnt many lessons in this unit which are in relation with this lesson, those lessons are key terminologies related to human development, principles of human development, domains of human development, prenatal, infancy, toddler and early childhood periods of human development. Those lessons built a strong foundation for students to learn and understand this lesson. In addition to this, students have also learnt developmental psychology as one of branches of psychology in unit 3. They need to revise this content to better understand this lesson.

Learning activities

Activity 4.4.4.

Guidance on activity 4.4.4

- Organise learners into small groups;
- Ask each group to observe the picture;
- Ask learners to describe the place shown on the picture;
- Ask them to explain what they think should come out from their behaviours.

Answers to activity 4.4.4

There are young people of both sexes in equal numbers : 3 males and 3 females. They might be between 20 and 25 years old. They are in a bar where some are smoking and others are drinking. If they consume alcoholic beverages, they could develop risky behaviors. Students are free to provide answers.

Application activities

- Give time to students to do application activity. Students do the activity individually.

Answers to Application activity 4.4.4

- 1) 4 characteristics of adolescents:
 - Physical development: rapid and profound physical and physiological changes.
 - Reproductive maturity occurs.
 - Cognitive development: Ability to think abstractly.
 - Social development: Peer group may exercise a positive or negative influence.
- 2) 2 characteristics that distinguish adolescents and young adults:
 - The full physical and intellectual maturity has been attained.
 - Intimate relationships and personal lifestyles are established.
- 3) Rwandan Proverbs:
 - Ubuto buroshya ntibuherekeza.
 - Ukize ubusore arabubagira.
 - Umusore umuhana avayo ntumuhana ajoyo.
 - Amaraso y'ubuto asindisha kuruta inturire.
 - Etc.

Lesson 8: Middle and late adulthood periods of human development (2 periods)

Learning objective

Describe middle and late adulthood periods of human development.

Teaching resources

Flip chart, marker, flash cards, hand out with information about key terms of developmental psychology, internet connectivity if available.

Prerequisites/Revision/Introduction

To better understand this lesson students need to revise other lessons in this unit which are related to this one, Those lessons are like key terminologies related to human development, principles of human development, domains of human development, prenatal, infancy, toddler, early childhood, adolescence and young adult hood .In addition to this, students may also revise content of unit 3 on branches of psychology especially developmental psychology .

Learning activities

Activity 4.4.5.

Guidance on activity 4.4.5

- Ask learners to individually observe the picture.
- Ask them to tell what they see on the picture.

Answers to activity 4.4.5

There are 2 old people. It can be a couple at home or someone who has a visitor. Based on their physical appearance, they could be over 60 years old.

Application activities

- Give time to students to do application activity
- Students do the activity individually

Answers to Application activity 4.4.5

- 1) Example of characteristics of people in middle adulthood:
 - Slow deterioration of sensory abilities begins.
 - Women experience menopause.
 - Mental abilities peak, expertise and practical problem solving skills are high.
- 2) Examples of characteristics of people in middle adulthood:
 - Health and physical strength decline
 - Retirement from workforce may occur
 - Slowing of reaction time affects some aspects of functioning.
- 3) Rwandan proverbs:

Uticaranye na Se ntamenya icyo Sekuru yasize avuze.
Iyamukuru riratinda ariko ntirihera.
Uriye umusaza aruka imvi.
Igihugu kitagira mukuru kibura gihana.
Etc.

Lesson 9: Brain basics and functions

Learning objective

Explain the basis of brain function.

Teaching resources

Flip chart, marker, flash cards, hand out with information about key terms of developmental psychology, internet connectivity if available.

Prerequisites/Revision/Introduction

Help students to use effectively knowledge they have on the concepts related of biology that they have studied in O-Level Senior 3 such as brain, nerve, neuron etc., and apply them to understand this lesson.

Learning activities

Activity 4.5.1.

Guidance on activity 4.5.1

- Guide students to make pairs.
- Give them time to work and focus on the activity in a collaborative way.
- Let each group present its final work.
- Others group may comment supplement and ask questions.
- Help them to reach a clear conclusion.

Answers to activity 4.5.1

Refer to the Student book.

Application activities

- Give time to students to do application activity.
- Students do the activity individually.

Answer to Application activity 4.5.1

Statement	True/False
1) All left-handers are more talented in language than in Mathematics.	False
2) A person suffering from the effects of a stroke is unable to move the right arm and leg. That means the right brain was seriously damaged.	False
3) Right-handers have their left brain dominant.	True
4) The cerebellum is divided into 2 cerebral hemispheres which are connected by the corpus callosum.	False
5) Each cerebral hemisphere has 4 different lobes.	True

Lesson 10: Brain development (2 periods)

Learning objective

Explain brain development

Teaching resources

Flip chart, marker, flash cards, hand out with information about key terms of developmental psychology, internet connectivity if available.

Prerequisites/Revision/Introduction

Students need to use effectively knowledge they have on the concepts related of biology that they have studied in O-Level Senior 3 such as brain, nerve, neuron, they will also revise on the previous lesson learnt in this unit which is brain basics those lessons will build a strong foundation for students to understand this lesson.

Learning activities

Activity 4.5.2.

Guidance on activity 4.5.2

- Guide students to make pairs.
- Give them time to work and focus on the activity in a collaborative way.
- Let each group present its final work.
- Others group may comment supplement and ask questions.
- Help them to reach a clear conclusion.

Answers to activity 4.5.2

- a) The graph displayed in the student's book shows how neuro connections for different functions develop sequentially with focus on development of sensory, cognitive and language skills from the pre-natal period up to 19 years of age.
- b) Conclusions drawn from the graph:
 - Sensory pathways develop first, language skills next, followed by higher order thinking skills.
 - Only higher order thinking skills continue to develop into the teenage years.
 - The peak of neural connections happens in the first year of a child's life. In general, it is during the first 5 years of life, that the most neural connections are made in the brain.
 - This means that parents, caregivers and educators must intervene early through care, age appropriate stimulating environment, bearing in mind that the brain is formed at 90% by age 5.

Application activities

- Give time to students to do application activity.
- Students do the activity individually.

Answer to application activity 4.5.2

From birth to age 5, a child's brain develops more than at any other time in life. From birth, children develop brain connections through their everyday experiences. Positive, nurturing interactions with parents, day-to-day experiences are key to build strong brains. Parents should know that early years matter because the quality of a child's experiences in the early years, whether positive or negative, affects the development of their brain. It is much more difficult to form these essential brain connections later in life.

4.6. End unit assessment

Answers to End Unit Assessment activities

I. TRUE/FALSE

#	Statement	True/ False
1	Early childhood covers birth to 3 years.	False
2	Children go through the growth process at their own pace.	True
3	Development is affected by both genetics and environment.	True
4	The development of the head happens after child legs and arms.	False
5	Growth refers to an increase in the physical aspects such as size, weight and height.	True
6	Most brain development occurs within the first 5 years of a person's life.	True

II. ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. b)	5. b)
2. b)	6. c)
3. c)	7. c)
4. d)	8. b)

III. ANSWERS TO OPEN ENDED QUESTIONS

1. Students, in small groups will be given enough time to prepare their posters. There will be group presentations.

There is no single answer for this question. Students may have different ways of designing the poster. Evaluation will consider the following:

- The key messages will focus on proper nutrition, caring, responsive relationships, early stimulation, reading picture books.
- Creativity: pictures to illustrate the message.
- Attractiveness of the poster.

2)

- Elevated maternal distress during pregnancy increases the future child's risk for mental health disorders.
- Exposure to high levels of prenatal anxiety doubled the risk of having a mental health disorder at age 13.
- Adverse prenatal influences on child's health were also confirmed by studies: these are for example: maternal smoking and drinking, medical conditions during pregnancy, socioeconomic status, and the mother's mood postpartum.

UNIT 5

THEORIES OF HUMAN DEVELOPMENT

5.1. Key unit competence

Apply the principles and theories of human development in real-life.

5.2. Prerequisites

Psychology is being introduced for the first time in secondary school as one of the principal subjects in the combination of History-Literature in English-Psychology (HLP). However, as a science of human knowledge and mental processes at large, it requires students to have studied the subjects of physiology or human biology in the previous studies (O Level). Having studied the brain and nervous system functions will help the students understand how human behaviour is influenced by the brain state among other factors. The knowledge about human growth and organic structure will allow students comprehend all topics about human development, related theories and changes that occur at every developmental period.

5.3. Cross-cutting issues to be addressed

Gender education: The teacher should bear in mind that all students (girls and boys) have equal opportunities and rights to study. When forming group activities, assigning tasks and responsibilities, asking questions, and giving feedback, the teacher should include both girls and boys.

Inclusive education: To make teaching and learning process inclusive, the teacher must understand individual differences and consider them when organizing and setting teaching and learning activities. Teacher will use teaching approaches, methods and techniques that cater for students' diversities and encourage them to maximize their full potential in classroom.

Peace and value education: Through teaching and learning, the culture of peace and values should be promoted. In groups, students learn to share resources and ideas with respect. They also learn to solve their problems in peaceful manner.

Environmental sustainability: This issue will be addressed in all psychology topics because environment is one of the key factors, along with genetic and heredity, that impact on people's behaviour and personality at large. Therefore, they will learn to preserve the environment based on its value to the wellbeing of people.

Comprehensive sexuality education: The issues will be emphasized while explaining, for example, sexual behaviour of adolescents and consequences attached to them. The students in senior four are the best target considering their age. The teacher should take the opportunity and address this issue to prevent those consequences.

Genocide studies: this will be addressed by respect of human rights right from conception. Abortion of a zygote is killing a complete human being. Students should know that this arm can be used to exterminate a certain human race. The human being should be valued and protected from conception up to old age. This is because old people in late adulthood should also valued and not considered as useless to the society.

5.4. Guidance on introductory activity

- Students form groups of three.
- Invite students to read the questions from student book and share ideas in group.
- Guide the conversation.
- Invite one student to read loudly the questions.
- Invite students to share their understanding about the questions group by group.
- Raise the students' curiosity about the subject of psychology and inquiries to be addressed during the whole period of the course, in different topics.

5.5. List of lessons

#	Lesson title	Learning objectives	Number of periods
1	Key concepts of human development theories	Explain the key concepts related to human development theories.	4
2	Psychosexual development theory	Explain psychosexual theory of human development.	4
3	Psychosocial development theory	Illustrate the stages established in the psychosocial theory of human development.	4
	Assessment		2
4	Cognitive development theory	Describe the stages of development using cognitive development theory.	4

5	Attachment theory	Compare and contrast the Bowlby and Ainsworth's theories of attachment.	4
	Assessment		2
6	Moral development theory	Illustrate levels and stages established in moral development theory.	4
7	Language development theory	Demonstrate an understanding of Behaviourist theory, Nativist theory and Social Interactionist Theory and how they interact together to influence language acquisition and learning.	4
	Assessment		2
8	Psychomotor development theory	Explain the implications of dynamic systems theory on human psychomotor development.	4
	End of Unit Assessment		2
Total number of periods			40

Lesson 1: Key Concepts of human development theories (4)

Learning objective

Explain the key concepts related to human development theories.

Teaching resources

Flip charts, markers, flash cards, handouts and videos about each theory/theorist, internet.

Prerequisites/Revision/Introduction

Students have already learnt various concepts of psychology in earlier lessons.

Learning activities

Activity 5.1.

- Invite students to read individually the question in the student book and work in pairs to share with the classmates.
- Have some pairs make presentations.
- Provide constructive feedback in terms of supplements.

Answers to activity 5.1.

1. A theory is a carefully thought-out explanation for observations of the natural world that has been constructed using the scientific method, and which brings together many facts and hypotheses.
2. Like other sciences, psychology must have theories that guide and facilitate the explanation of human behavior, mental processes and human development at large.
3. Learning key terms facilitates the understanding of the lesson and increases the interest in the content under study.
4. Human development is a branch of psychology with the goal of understanding how people grow, develop, and change throughout their lives.

Application activities

Answers to ApplicationActivity 5.1.

Attachment: long-standing connection or bond with others. Attachment is defined as a deep and enduring emotional bond between two individuals in which each seeks closeness and feels more secure when in the presence of the attachment figure. Attachment behavior in adults towards the child includes responding sensitively and appropriately to the child's needs.

Object permanence: The object permanence involves understanding that objects and people still exist, even when you cannot see or hear them. This concept was discovered by child psychologist Jean Piaget and represents an important milestone in the development of a child's brain.

Psychomotor development: domain of lifespan development that examines growth and changes in the body and brain, the senses, motor skills, and health and wellness.

Preoperational stage: second stage in Piaget's theory of cognitive development; from ages 2 to 7, children learn to use symbols and language but do not understand mental operations and often think illogically.

Psychosexual development: process proposed by Freud in which pleasure-seeking urges focus on different erogenous zones of the body as humans move through five stages of life.

Psychosocial development: process proposed by Erikson in which social tasks are mastered as humans move through eight stages of life from infancy to adulthood.

Reversibility: principle that objects can be changed, but then returned back to their original form or condition.

Unconsciousness: In Sigmund Freud's psychoanalytic theory of personality, the unconscious mind is defined as a reservoir of feelings, thoughts, urges, and memories that are outside of conscious awareness. Within this understanding, most of the contents of the unconscious are considered unacceptable or unpleasant, such as feelings of pain, anxiety, or conflict. Freud believed that the unconscious continues to influence behavior even though people are unaware of these underlying influences.

Lesson 2: Psychosexual Development Theory (4 periods)

Learning objective

Explain psychosexual theory of human development.

Teaching resources

Flip charts, markers, flash cards, handouts and videos about each theory/theorist, internet.

Prerequisites/Revision/Introduction

Students have already learnt various concepts of psychology in earlier lessons and psychoanalytic schools of thought.

Learning activities

Activity 5.2.

- Invite students to read individually the question in the student book and work in pairs to share with the classmates.
- Have some pairs make presentations.
- Provide constructive feedback in terms of supplements.

Answers to activity 5.2.

- 1. Sexuality** is about sexual feelings, thoughts, attractions and behaviours towards other people. You can find other people physically, sexually or emotionally attractive, and all those things are part of your sexuality. It is a diverse and personal, it is an important part of who you are. It is the capacity to derive pleasure from various forms of sexual activity and behavior, particularly from sexual intercourse. It is also all aspects of sexual behavior, including gender identity, orientation, attitudes, and activity.
- 2. Psychosexual development** is a process proposed by Freud in which pleasure-seeking urges focus on different erogenous zones of the body as humans move through five stages of life.

Application activities

Answers to Application Activity 5.2.

1. Psychosexual stages and associated erogenous zones: **oral**-mouth; **anal**-bowel and bladder control; **phallic**-genitals; **latent**-sexual feeling inactive; **genital**-maturing sexual interests.
2. A fixation is a persistent focus on an earlier psychosexual stage. Until this conflict is resolved, the individual will remain “stuck” in this stage. A person who is fixated at the anal stage, for example, may be characterized by lack of order and cleanliness.

Lesson 3: Psychosocial Development Theory (4 periods)

Learning objective

Illustrate the stages established in the psychosocial theory of human development.

Teaching resources

Flip charts, markers, flash cards, handouts and videos about each theory/theorist, internet.

Prerequisites/Revision/Introduction

Students have already learnt various concepts of psychology in earlier lessons and psychosexual theory of human development.

Learning activities

Activity 5.3.

- Invite students to read individually the question in the student book and work in pairs to share with the classmates.
- Have some pairs make presentations.
- Provide constructive feedback in terms of supplements.

Answers to activity 5.3.

Psychosocial development refers to a process proposed by Erikson in which social tasks are mastered as humans move through eight stages of life from infancy to adulthood.

Application activities

Answers to Application activity 5.3

- 1) Psychosocial stages according to Erikson
 - Stage 1: Trust vs. Mistrust (0-1year)
 - Stage 2: Autonomy vs. Shame and doubt (1-2years)
 - Stage 3: Initiative vs. Guilt (3-6years)
 - Stage 4: Industry vs. Inferiority (7-11years)
 - Stage 5: Identity vs. Confusion (12-19years)
 - Stage 6: Intimacy vs. Isolation (20-25years)
 - Stage 7: Generativity vs. Stagnation (26-64years)
 - Stage 8: Integrity vs. Despair (65 and above)
- 2) Freud believed that personality developed through a series of childhood stages in which the pleasure-seeking drives of the id emphasize on certain erogenous areas characterized by sensitive body areas. During the five psychosexual stages of development, which are the oral, anal, phallic, latent, and genital stages, the erogenous zone associated with each stage serves as a source of pleasure. Each stage of development is characterized by conflicts that can instill changes, depending upon how they are resolved. The healthy personality is the outcome of the successful psychosexual stage.

- 3) The first stage begins at birth and lasts through around one year of age and develops a sense of trust when interactions provide reliability, care, and affection. This is followed by a sense of personal control over physical skills and sense of independence that are established from the ages of 18 months to approximately age two to three years. Success leads to feelings of autonomy, failure results in feelings of shame and doubt. Between the ages of three and five, the child begins to assert control and power over their environment by planning activities, accomplishing tasks and facing challenges. It is called initiative stage and its failure leads to a sense of guilt and discourages a child from establish expectations in the following stage between the ages of five and twelve. It is at this stage that the child's peer group will gain greater significance and will become a major source of the child's self-esteem. The child is coping with new learning and social demands. Success leads to a sense of competence, while failure results in feelings of Inferiority. This stage prepares significantly a child to shift to adolescence where the identity will be formed between 12-18 years. Teenagers explore who they are as individuals, and seek to establish a sense of self, and may experiment with different roles, activities, and behaviors. Mature personalities are then progressively established during young adulthood between the ages of approximately 19 and 40, where major conflict centers on forming intimate, loving relationships with other people. Success leads to strong relationships, while failure results in loneliness and isolation. Between the ages of approximately 40 and 65 people experience a need to create or nurture things that will outlast them, often having mentees or creating positive changes that will benefit other people. This stage prepares the final one which from age 65 and until death involves reflecting on one's life and either moving into feeling satisfied and happy with one's life or feeling a deep sense of regret. Success at this stages leads to feelings of wisdom, while failure results in regret, bitterness, and despair.

Lesson 4: Cognitive development theory (4 periods)

Learning objective

Describe the stages of development using cognitive development theory.

Teaching resources

Flip charts, markers, flash cards, handouts and videos about each theory/theorist, internet.

Prerequisites/Revision/Introduction

Students have already learnt various concepts of psychology in earlier lessons, psychosexual theory of human development and Erikson's stages theory.

Learning activities

Activity 5.4.

- Invite students to read individually the question in the student book and work in pairs to share with the classmates.
- Have some pairs make presentations.
- Provide constructive feedback in terms of supplements.

Answers to activity 5.4.

1. Cognitive development is a domain of lifespan development that examines learning, attention, memory, language, thinking, reasoning, and creativity.
2. Yes, Jean Piaget and Aaron Beck

Application activities

Answers to Activity 5.4.

At one year, infants recognize the existence of their mother even when they are not around. This is called "objects permanence". However, at seven years old, individuals can learn through manipulation of "concrete" objects, while at fourteen, individuals are able to reason "abstractly" and think "hypothetically".

Lesson 5: Attachment Theory (4 periods)

Learning objective

Compare and contrast the Bowlby and Ainsworth's theories of attachment.

Teaching resources

Flip charts, markers, flash cards, handouts and videos about each theory/theorist, internet.

Prerequisites/Revision/Introduction

Students have already learnt various concepts of psychology in earlier lessons, psychosexual theory of human development, Erikson's stages theory and cognitive development theory.

Learning activities

Activity 5.5.

- Invite students to read individually the question in the student book and work in pairs to share with the classmates.
- Have some pairs make presentations.
- Provide constructive feedback in terms of supplements.

Answers to activity 5.5.

1. John Bowlby and Mary Ainsworth
2. Attachment is defined as a deep and enduring emotional bond between two individuals in which each seeks closeness and feels more secure when in the presence of the attachment figure. Attachment behavior in adults towards the child includes responding sensitively and appropriately to the child's needs.

Application activities

Answers to application activity 5.5.

- 1) Bowlby established the following stages of attachments: preattachment, attachment-in-the-making, clear-cut attachment, and formation of reciprocal relationships; while Ainsworth listed 4 types of attachments: secure, anxious-insecure, avoidant-insecure and disorganized-insecure attachments.
- 2) Human development is a lifelong process of physical, behavioral, cognitive, and emotional growth and change. In the early stages of life—from babyhood to childhood, childhood to adolescence, and adolescence to adulthood—enormous changes take place. Jean Piaget's theory of cognitive development suggests that children move through four different stages of mental development. His theory focuses not only on understanding how children acquire knowledge, but also on understanding the nature of intelligence. Piaget believed that children take an active role in the learning process, acting much like little scientists as they perform experiments, make observations, and learn about the world. As kids interact with the world around them, they continually add new knowledge, build upon existing knowledge, and adapt previously held ideas to accommodate new information. Encourage adolescents to share ideas and thoughts with adults. Encourage adolescents to think independently and develop their own ideas. Help adolescents in setting their own goals. Encourage adolescents to think about possibilities of the future.

- 3) Bowlby and Ainsworth Attachment theories assume that attachment patterns can endure across the lifespan. Our attachment history can affect our emotional well-being which in turn can influence our friendships, our choice of significant others and the quality of our romantic relationships. Securely attached children become autonomous adults, who are comfortable in warm, loving, and emotionally close relationships. Avoidantly attached children become dismissive adults, who are distant and rejecting in their intimate relationships. Anxiously attached children develop into preoccupied adults, chronically insecure, needy, and worried about abandonment. Children with disorganized attachment, a result of severe maltreatment, turn into unresolved adults, who display PTSD symptoms, cannot tolerate emotional closeness, and have serious psychosocial problems. Achieving secure attachment in our adult relationship—having a partner who fulfills our intrinsic emotional needs and serves as a secure base—is vital to emotional and physical health. Securely attached adults are more calm and confident, have less depression and anxiety, have a more positive outlook, sustain a deeper sense of meaning and purpose, are able to maintain intimate and reciprocal relationships, and are better able to cope with life's challenges and hardships, as compared to those lacking secure connections.

Lesson 6: Moral development theory (2 periods)

Learning objective

Illustrate levels and stages established in moral development theory.

Teaching resources

Flip charts, markers, flash cards, handouts and videos about each theory/theorist, internet.

Prerequisites/Revision/Introduction

Students have already learnt various concepts of psychology in earlier lessons, psychosexual theory of human development, Erikson's stages theory, cognitive development theory and attachment theory.

Learning activities

Activity 5.6.

- Invite students to read individually the question in the student book and work in pairs to share with the classmates.
- Have some pairs make presentations.
- Provide constructive feedback in terms of supplements.

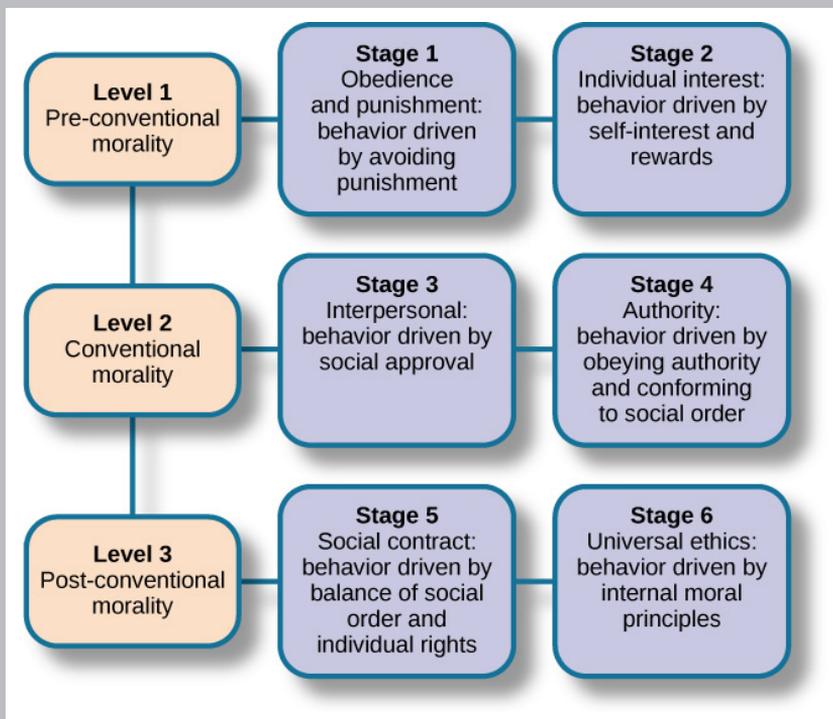
Answers to activity 5.6.

1. **Moral development** is a theory developed by an American psychologist Laurence Kohlberg that focuses on how children develop morality and moral reasoning. Kohlberg' theory suggests that moral developmnt occurs in a series of six stages. The theory also suggests that moral logic primarily focuses on seeking and maintaining justice.
2. **Morality** refers to the set of standards enabling people to live cooperatively in groups. It's what societies determine to be "right" and "acceptable." Sometimes, acting in a moral manner means individuals must sacrifice their own short-term interests to benefit society.

Application activities

Answers to Activity 5.6.

1)



- 2) Moral development theory helps raise understanding of principles of fairness, justice, and social responsibilities and thereby children learn to find a balance between their own needs and wants and the interests of the greater social environment. By placing limits on their desires, children benefit from a greater sense of love, security, and shared identity.

Lesson 7: Language development theory (4 periods)

Learning objective

Demonstrate an understanding of Theories of language acquisition and learning and key principles.

Teaching resources

Flip charts, markers, flash cards, handouts and videos about each theory/theorist, internet.

Prerequisites/Revision/Introduction

Students have already learnt various concepts of psychology in earlier lessons, psychosexual theory of human development, Erikson's stages theory, cognitive development theory, attachment theory and moral development theory.

Learning activities

Activity 5.7.

- Invite students to read individually the question in the student book and work in pairs to share with the classmates.
- Have some pairs make presentations.
- Provide constructive feedback in terms of supplements.

Answers to activity 5.7.

1. Language is a system of communication used by a specific community or a nation. It is a method of human communication consisting of conventional structured way using speech, writing, signs or gestures.
2. Language is one of the most important parts of any culture. In this way, people communicate with each other, build relationships and create a sense of community. Understanding the language of your community makes people feel part of the group, enhancing the sense of loyalty of a member.

Application activities

Answers to application activity 5.7

Question 1:

0-50 weeks: A child produces meaningful sounds.

1 – 2-years old: The child uses longer phrases and straightforward sentences.

2 – 3 yrs old: The child begins to communicate in complete sentences.

3 – 4 years old: The child uses language as a tool to expand their knowledge of the world.

4 – 5 years old: The child has a basic mastery of the language.

Question 2. Language development is an important part of child development. It supports your child's ability to communicate. It also supports your child's ability to express and understand feelings. As language is connected other mental processes like cognition, sensation and perception, language development in childhood helps appreciate the development of other abilities.

Lesson 8: Psychomotor development theory (4 periods)

Learning objective

Explain the implications of dynamic systems theory on human psychomotor development.

Teaching resources

Flip charts, markers, flash cards, handouts and videos about each theory/theorist, internet.

Prerequisites/Revision/Introduction

Students have already learnt various concepts of psychology in earlier lessons and developmental psychology notions.

Learning activities

Activity 5.8.

- Invite students to read individually the question in the student book.
- Invite some students to stand up and share their thoughts.
- Provide constructive feedback in terms of supplements.

Answers to activity 5.8.

Physical development is the growth and development of both the brain and body in infancy and early childhood. It is the growth and development of both brain and body and involves developing control of muscles and physical coordination.

Physical development refers to the advancements and refinements of motor skills, or, in other words, children's abilities to use and control their bodies. Physical development is one of the many domains of infant and toddler development. It relates to the growth and skill development of the body, including the brain, muscles, and senses.

Physical development contributes to cognitive development. As children move and explore the world they learn about the properties of objects and their own capabilities. In the early years children are establishing patterns of activity which will affect their whole future.

Application activities

Answers to Activity 5.8.

Puberty and adolescence is the period of tremendous changes in the boys and girls as a result of maturation and experiences.

The physical changes: The bones lengthen and become denser; Muscle growth is more visible in men; Body fats increase; Heart and lung capacity increase.

Hormonal changes: The concentration of certain hormones increases during adolescence: testosterone (boys), estrogen (girls); **B o t h** testosterone and estrogen are present in the hormonal content of both boys and girls; Testosterone is predominant in boys and is associated with: development of genitals, increase in height, voice change; Estrogen is predominant in girls and is associated with: development of breasts, uterus, skeletal system.

Psychological changes (mutual influence between hormonal system and behavior changes of adolescents): Anger and depression due to hormonal influence and social factors; Stress, eating habits, exercise, sexual activity, tension and depression can also influence hormonal system; Adolescence is

the period of sexual exploration and experimentation; Incorporation of sexuality into one's own identity; Risky behaviors and associated consequences, for example: unprotected sex which leads to unwanted pregnancies and sexually transmitted diseases.

Sexual maturation: Modification of primary sexual characteristics: ovaries, uterus and vagina (girls); scrotum, testicles and penis (boys); Changes in secondary sexual characteristics: breast growth and pelvic enlargement (female); facial hair and broadening of shoulders (male); body hair, voice and skin changes in both sexes. In puberty, growth and stretching of breasts, appearance of pubic hair, menarche (onset of menstruation) for females. Growth of testicles and scrotum, appearance of pubic hair, penis grows in size, first ejaculation of fluid with semen for males.

Health issues: Eating disorder-anorexia and bulimia-obesity; Physical activity to reduce risk of obesity, cancer, heart diseases, depression and anxiety.

5.6. Additional information for teachers

Discussion on theories of language development and learning

Behaviourist Theory

This theory explains language development exclusively in terms of environmental factors. Behaviorists use two processes to explain language acquisition; imitation and reinforcement. They suggest that children learn to speak by imitating what they hear and repeating it in appropriate situations. A good example of children's imitation of adults' language is seen when parents say "good-bye" to their children.

With time, many young children by the age of two years are able to wave and say 'bye and bye' or good bye'. They learn this by simply observing and imitating parents and others. When children imitate, adults give praise and attention. This increases the likelihood that they will imitate again. Through continuous observation and imitation, the child's language expands and that way he or she develops a language.

Social Interaction Theory

This theory states that language development occurs in the context of social interaction, that is, as children interact with adults and other children. This means that language development is interactive, that is adults mediate language through interactions designed to elaborate and extend meaning (Newman & Roskos, 1993)

An example of such interactions is seen when an infant makes his or her first sounds. The result is that the parent is delighted and responds with gentle words that encourage the child to repeat the sounds. As the children grow older, they are able to formulate consonant and vowel sounds then they try them out. By six months, it is common to hear children vocalize sounds such as ba, ba, ba or ma, ma, ma.

The theory recognizes the valuable support from the caregiver whereby the introduction of Language Acquisition Support System (LASS) describing the support from caregivers/ parents/ teachers in a child's early language development such as:

- Adjusting language to suit the child. This is sometimes referred to as 'motherese', 'caregiver speech', 'baby talk', or 'Child-Directed Speech (CDS)'.
- Collaborative learning such as joint reading. This can involve an adult looking at picture books with a child and pointing out key vocabulary, for example, by saying 'this is a banana' as they point to a picture of a banana.
- Encouraging the child and providing feedback through interactions. For example, the adult may smile when the child talks and say 'yes, good, that's a banana!'
- Providing examples for the child to imitate. This includes using certain vocabulary in certain social situations, for example, by encouraging the child to 'say hi!' or 'say thank you!'
- Games such as "sakwe-sakwe" in Kinyarwanda that practice the turn-taking that is necessary for interactions.

Nativist Theory

This theory was proposed by Noam Chomsky (1968). According to the Nativist or innate theory, language development does not depend on what is in the environment. Rather, it depends on what is in the child. According to this theory, the child is endowed with an innate ability to acquire language. Human beings are born with brain that is programmed to acquire language. This programming is called a Language Acquisition Device (LAD).

According to the nativist theorists, children are capable of acquiring language without reinforcement, modeling and interactions with adults. They argue that language depends on maturation, as they mature their language grows (Morrow, 1997). Language learning is therefore seen as a natural ability.

Conclusion

None of the three theories can stand alone to explain the process of language acquisition and learning. They all interact to influence how children acquire and develop language. For example, if behaviourists stick to theirs, then they would not justify the language structures that the child comes up with as a result of maturation. In the same way, the social interactionists could not ignore the innate ability of acquiring language the child is endowed with at birth.

5.7. End unit assessment

Answers to end unit assessment

- 1. Psychosexual development stages :** oral, anal, phallic, latent and genital stages
- 2.** John Bowlby's contributions to the theory of attachment formation are heavily influenced by ethology (the scientific study of human and animal behavior), including an emphasis on the evolutionary origins and biological purposes of behavior. According to Bowlby, children are biologically predisposed to develop attachments to caregivers as the result of genetics. In 1969 Bowlby studied mother-infant interactions and concluded that infant smiling, babbling, crying, and cooing are built-in mechanisms to encourage parents to attach to, and thereby care for, the infant. Keeping the parent in close proximity ensures the infant will avoid danger. Bowlby introduced the idea of the caregiver as a "secure base" for the child, and that this secure base was either successfully created during childhood or was not. Mary Ainsworth built on and expanded Bowlby's ideas, coming up with a more nuanced view of multiple types of insecure attachment. Ainsworth's primary contribution to attachment theory comes in the form of a study known as the Strange Situation. In this study, Ainsworth placed children between the ages of 1 and 2 in unfamiliar situations to assess the type and level of their attachment to their caregivers. Her research showed that children generally use the parent as a secure base from which to explore an unfamiliar room, and they become upset or uncomfortable when the parent leaves and a new individual (not known to the child) enters the room.

3. Psychomotor development which is a theory that focuses on child growth and development emphasise on fine and gross motor skills performance. As a child performs those skills he/she can walk and interact with other through play and thereby the language skills are engaged. It is also linked to cognitive development because physical abilities helps children express they already know and hence learn new skills. Through cooperative play, the level of knowledge and communication increase and attachment with other and the world at large are facilitated.

5.8. Additional activities

Answers to activity 5.7.

In groups, students read and find out the implications of every theory in real life-long.

5.8.1. Remedial activities

Questions

1. In Erikson's stages theory, what may be the culmination in old age of industry/inferiority conflict?
2. What are the characteristics of sensori motor stage?
3. What may be the implication of anxious-insecure attachment?

Answers

1. Humility, acceptance of the course of one's life but unresolved experiences may lead to unfulfilled hopes.
2. The infant knows the world through their movements and sensations. Children learn about the world through basic actions such as sucking, grasping, looking, and listening. Infants learn that things continue to exist even though they cannot be seen (object permanence). They are separate beings from the people and objects around them. They realize that their actions can cause things to happen in the world around them.
3. Children with this form of attachment are unable to use the caregiver as a secure base, and they seek out the caregiver prior to separation. They are both distressed by the caregiver's departure and angry when the caregiver returns. They are not easily calmed by the caregiver or the stranger, and they feel anxiety with the caregiver due to inconsistent attachment patterns.

5.8.2. Consolidation activities

Questions

1. What maybe the consequences of fixation in phallic stage?
2. What the link between theories of human development?

Answers:

1. Freud suggested that fixations in phallic stage could lead to adult personalities that are overly vain, exhibitionistic, and sexually aggressive. However, other sexual deviances may occur in case unresolved phallic stage conflicts.
2. *Theories of human development do happen concurrently, one specializing in its own orientation. For example: Cognitive development refers to thinking and learning. Social development is related to how students learn to interact well with others. Psychomotor development refers to growth in the brain and the body.*
- 3.

5.8.3. Extended activities

Questions

Learn about other theories of human development not mentioned in students textbook.

Answers

1. Steiner's theory
2. Montessori's planes of development
3. Vygotsky's theories
4. Mahler's separation-individuation theory
5. Marcis's identity theory
6. Maslwo hiearcy of needs
7. Grave's emergent cyclical levels of exisitence
8. Loevinger's stages of ego development
9. Bandura's social learning theory
10. Beck and Cowan's spiral dynamics
11. Harris' modular theory of social development
12. Commons' model of hierarchical complexity
13. Fowler's stages of faith development
14. Kegan's subject-object constructive development theory
15. Wilber's integral theory

UNIT 6

DEVELOPMENTAL MILESTONE

6.1. Key unit competence

Apply Skills gained during human developmental milestones based on observation of physical, cognitive, language and socio-emotional skills.

6.2 Prerequisites

This unit does not stand alone; rather it is interconnected with other units learnt previously. Students need to apply knowledge from those units learnt in this one, especially those learnt in unit 4 where they have studied key concepts of human development, principles of human development, periods of human development and domains of human development. This will need also a quick revision and reflection on unit 5 about theories of human development. All these prerequisites will enhance student's prior knowledge and skills to follow with much interest and understanding of this unit. Teacher needs to guide them effectively with probing questions that direct them to the new lesson.

6.3 Cross-cutting issues to be addressed

Gender education: The teacher should bear in mind that all students (girls and boys) have equal opportunities and rights to study. When forming group activities, assigning tasks and responsibilities, asking questions, and giving feedback, the teacher should make sure that both girls and boys are involved, this crosscutting issue will also be addressed because developmental milestones might not be the same for boys and girls of the same age especially during adolescence period.

Inclusive education: To make teaching and learning process inclusive, the teacher must understand individual differences and consider them when organizing and setting teaching and learning activities and when arranging seating arrangement. Teacher will use teaching approaches, methods and techniques that cater for students' diversities and needs and encourage them to maximize their full potential in classroom. Especially student's special educational needs should be catered for to help them to succeed like other as disability is not inability. In addition, students will learn how to support in early detection of disability based on developmental milestones.

Peace and value education: To address this crosscutting issue teachers should be role models in teaching and learning by using positive language when communicating. The culture of peace and values should also be promoted when students are collaborating in groups; they learn to share resources and ideas in respectful manner. They also learn to solve their problems in peaceful manner and also helping each other.

Comprehensive sexuality education: This crosscutting issue will be mainly addressed as boys and girls can differ in their development in some periods of human development, and also during adolescence we will look at different second characteristics of boys and girls within early and late maturation. With this crosscutting issue Students will be able to judge tips necessary to help adolescents to become successful in life.

Genocide studies: This will be addressed by respect of human rights right from conception. Abortion of a zygote is killing a complete human being. Students should know that this arm can be used to exterminate a certain human race. The human being should be valued and protected from conception up to old age. This is because old people in late adulthood should also valued and not considered as useless to the society.

6.4. Guidance on introductory activity

This activity will help students to get acquainted with this unit and have general overview of the whole unit.

- Students observe the images that show different stages of human development.
- Students use T-chart and describe what can be achieved by a child at each stage on every aspect of human development.
- Students also describe what cannot be achieved before that stage in every aspect.
- Students can take notes on piece of paper individually or in pairs or in groups.
- The teacher asks students to suggest activities which can help in the development of each domain within different stages.
- Teacher guide students to use internet dictionary or other books and find the meaning of the concept developmental milestones.

Possible answer on introductory activity

Developmental milestones: It is a checklist which represents what an average child can do around a particular age, behaviour or physical skills seen in children as they grow and develop the milestones are different for each age range, and there is a normal range in which a child may reach each milestone. Generally, milestones are things most children can do by a certain age.

Examples: Rolling over, crawling, walking, taking a first step, smiling for the first time.

6.5. List of lessons

	Lesson title/subheading	Learning objectives	Number of periods
1	Key concepts related to developmental milestones	Differentiate key concepts related to developmental milestones.	4
Pre-natal period			
2	Prenatal developmental milestones	Describe what learning happens before birth in each stage of prenatal development.	4
3	Labour and childbirth	Identify signs indicating the beginning of labour and differentiate stages of labour.	4
4	Risk factors for women and infants during pregnancy and delivery	Advise the community about the risk factors for women and infants during pregnancy and delivery.	4
5	Key message and recommended practices during 1000 Days	Suggest strategies to help community take care of pregnant mothers and babies during 1000 days.	3
Assessment on prenatal period			1
Developmental milestones during infancy and toddlerhood			
6	Some milestones that babies reach during 0-6 months	Describe developmental milestones that babies reach during 0-6 months.	4

7	Some milestones that babies reach during 7-12 months	Describe developmental milestones that babies reach during 7-12 months.	4
8	Some milestones that babies reach between 13-36 months	Describe developmental milestones that babies reach during 13-36 months.	4
9	Key message and recommendation practices during infancy and toddlerhood period	Identify activities and games to promote a holistic development of an infant aged 0-3 years.	4
	Assessment on infancy and toddlerhood		1
Developmental milestones during Early childhood (3-5 years)			
10	Physical and cognitive developmental milestones during early childhood	Describe physical and cognitive developmental milestones of a child aged 3-5 years.	4
11	Social and language developmental milestones during early childhood	Describe social and language developmental milestones of a child aged 3-5 years.	4
12	Messages and recommendations practices during early childhood	Identify activities and games to promote a holistic development of a child aged 2-5 years.	4
	Assessment on early childhood		1
13	Developmental milestones during Middle & Late childhood (6-12 years)	Describe developmental milestones of a child aged 6-12 years on all aspects of human development.	4
14	Key messages and recommendations for middle and late childhood	Identify activities and games to promote a holistic development of a child aged 6-12 years.	2
	Assessment on middle and late childhood		1

Developmental milestones during Adolescence (13-20/21 years)			
15	Early adolescence	Describe physical characteristics and body changes of early teens.	4
16	Middle adolescence	Describe developmental milestones of an adolescent aged 14-17 years.	4
17	Late adolescence	Describe developmental milestones of an adolescent aged 18-21 years.	4
18	Adolescent egocentrism and social problems	Explain adolescent egocentrism and social problems during adolescence.	4
19	Key messages and recommendation practices during adolescence	Advising parents, teachers and community in general on how to help children effectively navigate their adolescence for smooth transition from childhood to adulthood.	3
Assessment on adolescence			1
20	Developmental milestones during Adulthood (21-50/60 years)	Describe developmental milestones of an adult person on all aspects of human development.	4
21	Developmental milestones during advanced age (60+)	Describe developmental milestones of a person during advanced age on all aspects of human development.	4
End unit assessment			2
Total number of periods			87

Lesson 1: Key concepts related to developmental milestone (4 periods)

Learning objective

Differentiate key concepts related to developmental milestone.

Teaching resources

Flashcards, flip chart, markers, books and internet connectivity if available, audio visual materials, hand out pictures, developmental chart.

Prerequisites/Revision/Introduction

This lesson has interconnection with other lessons learnt in previous units. Students need to apply knowledge from other units learnt, especially unit 4 which is introduction to human development where they have studied key concepts related to human development, principles of human development, periods of human development and domains of human development and unit 5 in which they have studied theories of human development. This content will help them to effectively go with the teacher with much attention and full participation which will help them to achieve their objective within this lesson.

Learning activities

Activity 6.1.

- Students will be in the room with internet availability if possible.
- Relevant textbooks can be used to help in research.
- Invite them to search information about key terminologies related to developmental milestone.
- Teacher draws a concept mapping diagrams on the chalkboard with key terminology in the center.
- Students are given time to go and write their findings on each key terminology.
- Teacher guides students to a clear conclusion about each given key terminology.
- If time allows let students do more research for better understanding of the given key concepts.

Possible answers on activity 6.1.

Milestones: Are behaviours or physical skills seen in infants and children as they grow and develop, the milestones are different for each age range; there is a normal range in which a child may reach each milestone. Generally, milestones are things most children can do by a certain age.

Examples: Rolling over, crawling, walking, taking a first step, smiling for the first time.

Developmental domains are growth areas, each with specific skills and abilities that develop over time.

Prenatal: This is a period prior to birth. I.e. conception to birth. It is a period of tremendous growth usually from a single cell to an organism. This occurs approximately between 8-9 months though some exceptional cases may occur (Odera, Nizeyimana, and Kareba, 2004).

Conception: This marks the first step toward pregnancy, the sperm and egg have joined together, and creating what is known as a zygote. In the coming days, the single-cell zygote transforms into a multi-celled embryo. But in order to facilitate pregnancy, the embryo must successfully move from the fallopian tubes and implant in the uterus, where it will continue to develop into a fetus and eventually an infant.

Zygote: Is a fertilized egg cell that results from the union of a female gamete (egg, or ovum) with a male gamete (sperm).

Labor: Is a series of continuous, progressive contractions of the uterus that help the cervix dilate (open) and efface (thin). This allows the fetus to move through the birth canal. Labor usually starts two weeks before or after the estimated date of delivery.

Application activity 6.1

- Provide time to the students to do the activity.
- you may ask them to do this activity individually.
- Time should be enough to students to do the activity neatly.

Possible answers on application activity 6.1

1. **Conception:** Conception is the joining of a sperm and egg, also known as fertilization. In most cases, conception occurs in a woman's fallopian tube in the hours or days following sexual intercourse. However, in cases of assisted reproduction, particularly in vitro fertilization, conception can occur in a lab and zygote is the cell that formed by the union of an egg cell and a sperm cell.
2. Stages of labor are:
 - a) **Dilation stage:** In order for the baby to pass from the uterus to the vagina, the cervix must first stretch and expand. This is referred to as dilation. At first, the cervix is approximately inch in diameter. The contractions push the baby's head against the cervix, causing it to widen. At the end of this stage of labour, the cervix is approximately 4 inches in diameter.
 - b) **Expulsion stage:** This stage begins when the baby's head is in the birth canal and ends when the baby is born. This stage does not last long, usually 5-10 minutes. During this stage, contractions become more frequent and longer.
 - c) **After birth stage:** The contractions of the uterus continue, causing the placenta to separate from the wall of the uterus and be expelled. The afterbirth, which is expelled, consists of placenta, umbilical cord, amniotic sac, and lochia.
3. While telling the mother that she has started labour reference will be made on symptoms of labor like increased pressure in the uterus, a change of energy levels, a bloody mucus discharge...

Lesson 2: Prenatal developmental milestones (4 periods)

Learning objective

Describe what learning happens before birth in each stage of prenatal development.

Teaching resources

Flashcards, flip chart, markers, books and internet connectivity if available, audio visual materials, handouts, pictures, developmental chart.

Prerequisites/Revision/Introduction

This lesson is interrelated with other lessons learnt previously. Students need to revise and use content learnt in previous lessons to better understand this lesson. They can focus on key concepts related to human development, principles of human development, periods of human development and domains of human development learnt in unit 4 and theories of human development studied in unit 5. In addition to

that they have also seen key concepts related to developmental milestone. This content will help them to effectively go with the teacher with much attention and full participation which will help them in this lesson.

Learning activities

Activity 6.2.1.

- Students observe the pictures on prenatal period of human development.
- In pairs they discuss about events that happen before birth.
- After discussing they write their findings on a piece of paper.
- Each pair is given time for presentation.
- Other pairs comment, ask questions or provide additional information to other's presentations.
- Teacher guides students to have common understanding on prenatal period of human development.
- If times allows students should be given enough time for further research.
- Students' questions are welcome for further clarification.

Possible answers for activity 6.2.1

The image shows the development of a human being during pre-natal period. This period is marked by 3 stages: the pre-embryonic stage (Germinal stage), the embryonic period, or period of organogenesis, and foetal period.

The germinal stage begins at conception when the sperm and egg cell unite in one of the two fallopian tubes. The fertilized egg is called a zygote. Just a few hours after conception, the single-celled zygote begins making a journey down the fallopian tube to the uterus.

The embryonic stage: At this point, the mass of cells is now known as an embryo. The beginning of the third week after conception marks the start of the embryonic period, a time when the mass of cells becomes distinct as a human. The embryonic stage plays an important role in the development of the brain.

The embryonic stage of pregnancy is a stage that spans from implantation through organogenesis. Three major events occur during the embryonic stage: implantation, the division of germ layers, and organogenesis.

The foetal stage: Once cell differentiation is mostly complete, the embryo enters the next stage and becomes a fetus. The fetal period of prenatal development marks more important changes in the brain. This period of development begins during the ninth week and lasts until birth. This stage is marked by amazing change and growth.

Application activities

- Provide time to the students to do the activity.
- This activity is done individually.
- Time should be enough to students to do the activity neatly.

Possible answers on application activity 6.2.1

1.

Age	Accomplishment
3 weeks	Nervous system begin to form.
4 weeks	Heart begin to beat.
5 weeks	Head continues rapid growth.
8 weeks	Almost all body parts are differentiated.
12 weeks	Possible to visually determine baby's sex.
14 weeks	Begins to coordinate limb movements and slow eye movements occur.
16 weeks	Ultrasound shows clearly defined bone structure.
20 weeks	Possible to hear heart beat with fetoscope.
21 weeks	Rapid eye movements commence substantial weight gain.
24 weeks	Finger nails can be seen.
28 weeks	Eye open and close, lungs capable of breathing.
32 weeks	Skin pink and smooth, chubby appearance.
38 weeks	Nervous system can carry out some interactive functions reacts to light, usually assumes upside-down position as birth approaches.

2. Complete using the appropriate term:

- A. The fertilized egg passes through the fallopian tube on its way to the uterus.
- B. The attachment of the zygote to the uterine wall is called implantation.
- C. The embryonic period extends from the 3rd week to the 8th week of development.
- D. The three distinct layers during the embryonic period are the endoderm, mesoderm and ectoderm.
- E. The period beginning with the third month of pregnancy and extending to birth is known as the fetal period.
- F. The implantation which is the attachment of the zygote to the uterine wall occurs ten days after conception.

Lesson 3: Labour and childbirth (4 periods)

Learning objective

Identify signs indicating the beginning of labour and differentiate stages of labour.

Teaching resources

Flashcards, flip chart, markers, books and internet connectivity if available, audio visual materials, hand out pictures, developmental chart.

Prerequisites/Revision/Introduction

Students has learnt introduction to human development in unity 4 and theories of human development in unit 5 which both has lessons related to this one. In addition, most of the previous lessons of this unit introduce clearly this lesson. Students have to use knowledge and skills they got from those lessons efficiently with teacher's facilitation.

Learning activities

Activity 6.2.2.

- Students work in pairs with guidance from teacher.
- Two Pairs may join to make pair square and share ideas.
- Teacher passes around by asking groups (pair square) their findings.
- Teacher may provide additional information that guides students to understand the new lesson.

Possible answers for the activity 6.2.2

Third trimester of pregnancy is the final part of your pregnancy. You may be tempted to start the countdown till your due date and hope that it would come early, but each week of this final stage of development helps the fetus prepare for birth.

Birth, also called childbirth or parturition, process of bringing forth a child from the uterus, or womb. Childbirth is an intense event that involves extreme physical stress and is of emotional, cognitive, social, and cultural significance. It is a very common and predictable event that enables us to study the interaction between pre-birth, birth and after birth.

Application activities

- On this activity help students to form groups accordingly with the mixture of both sexes where the class has both sexes.
- Encourage both boys and girls to share leadership functions equally.

- Invite group to present and share with their colleagues.
- Here you may help the students to go in smart classroom (if you have) and make a research (if the internet connectivity is available).
- Other groups may comment, ask questions or provide additional information.

Possible answer on application activity 6.2.2



Source: <https://ocwmg.com/ob-gyn-services/obstetrical-care/prenatal-care-timeline/>

Studies show that when babies are born, they've already acquired knowledge about language, food preferences, and emotions. A baby's hearing develops around 24 weeks in the womb, which allows them to learn the sound of their mother's voice and be able to recognize her native language.

Babies recognize familiar voices and music they heard in the womb, and are soothed by them after birth. They're also soothed by rocking and noises like car engines, which may remind them of the movement and sounds of your body.

The teacher welcomes all learners ideas.

Refer to the summary table shown in the table and developmental milestone during pre natal development to enrich learners understanding.

Lesson 4. Risk factors for women and infants during pregnancy and delivery (4 periods)

Learning objective

Advise the community about the risk factors for women and infants during pregnancy and delivery.

Teaching resources

Flashcards, flip chart, markers, books and internet connectivity if available, audio visual materials, hand out pictures, developmental chart.

Prerequisites/Revision/Introduction

The previous lessons of this unit 'developmental milestone' were a good prerequisite of this lesson. Together with other lessons studied in unit 4 which is introduction to human development and unit 5 on theories of human development will help the students to go through this lesson without any kind of difficult. Guide them to use this prerequisite effectively and arouse their interests and attention for maximum understanding of this lesson.

Learning activities

Activity 6.2.3.

- Invite students to think about the answers individually and then share with his/her colleague in pair.
- Pairs may also share their views.
- Link their answer with the new lesson.

Possible answer to activity 6.2.3

Yes, Mary's life will impact on baby's life. Because the baby is totally dependent on her mother during pregnancy.

Other student opinions are welcome, aligned with the suggested answers.

Application activities

- Provide time to the students to do the activity.
- This activity is done individually.
- Time should be enough to students to do the activity neatly.
- If time allows make correction.

Possible answers on application activity 6.2.3

1. Students say those risks or influences that are common for their environment.

Growth and development are continuous process. You refer to this principle to explain how pregnancy is the foundation for postnatal life.

Examples:

- Regular prenatal care throughout your pregnancy helps to catch potential concerns early and reduces the risk for pregnancy and birth complications.
- Help mothers -to-be — and their babies — stay healthy.

Lesson 5. Key message and recommended practices during 1000 Days (3 periods)

Learning objective

Suggest strategies to help community take care of pregnant mothers and babies during 1000 days.

Teaching resources

Flashcards, flip chart, markers, books and internet connectivity if available, audio visual materials, hand out pictures, developmental chart.

Prerequisites/Revision/Introduction

The previous lessons of this unit ‘developmental milestone’ were a good prerequisite of this lesson. Together with other lessons studied in unit 4 which is introduction to human development and unit 5 on theories of human development will help the students to go through this lesson without any kind of difficult. Guide them to use this prerequisite effectively and arouse their interests and attention for maximum understanding of this lesson.

Learning activities

Activity 6.2.4.

- This activity needs to be done in groups.
- Help students to form groups effectively.
- Guide them and make them focus on the activity.
- Help them to access other sources of information (they may visit the smart room and use internet connectivity for further information if it is available).
- Have groups present while other group’s members comment and ask questions.
- Facilitate them and help them to take a sound conclusion.

Possible answers on activity 6.2.4

1. Talk to your doctor about any over-the-counter and prescription medicines you are using.
2. Doctor may suggest taking prenatal vitamins with iron and folic acid to help protect you against anemia.
3. Keep blood sugar level up by eating whole, healthy foods and plenty of proteins.
4. Wash fruits and vegetables before eating. Don't eat uncooked or undercooked meats or fish.
5. Taking plenty of fluids, especially water to keep one hydrated. Plain water is great.
6. Get plenty of rest. Take a nap before dinner. Take a nap around lunch time.
7. Get early and regular prenatal care physical examinations.
8. Avoid very hot baths. The high heat raises your risk of miscarriage and birth defects.
9. Get plenty of sleep and find ways to control stress.
10. Read books, watch videos, go to a childbirth lessons they can help you prepare for the birth of your baby.
11. Stay away from chemicals like solvents (like some cleaners or paint thinners), lead, and mercury and paint (including paint fumes).
12. Do physical exercises and avoid drugs like cocaine, heroin, marijuana, tobacco and alcohol to avoid birth defects.
13. Cocaine, heroin, marijuana and other drugs increase risk of miscarriage, premature birth.

Application activity 6.2.4

- Provide time to the students to do the activity.
- This activity is done individually.
- Time should be enough to students to do the activity neatly.
- If time allows make correction.

Possible answers on application activity 6.2.4

1. All the reasons will be turning around the importance of prenatal development as basis for future life (post natal period).

Examples:

- Prevent complications and inform women about important steps they can take to protect their infant and ensure a healthy pregnancy.
 - Reduces complications during pregnancy and prevents problems during delivery.
 - Students will suggest other recommended practices.
 - Pre natal development affects the life of the baby after birth.
2. Students suggest other recommendation practices for both mother and husband.

Possible answers of assessment on pre-natal period

Question 1

- Keza is aged between 0-6 months.
- Amina is aged between 13-24.
- Keza is the one who was behind in the development.

Question 2

Physical development	Cognitive development	Psychosocial development
<ul style="list-style-type: none">-All senses and body systems operate at birth to varying degrees.-The brain grows in complexity and is highly sensitive to environmental influence.-Physical growth and development of motor skills are rapid.	<ul style="list-style-type: none">-Abilities to learn and remember are present even in early weeks.-Use of symbols and ability to solve problems develop by end of second year.-Comprehension and use of language develop rapidly.	<ul style="list-style-type: none">-Attachment to parents and other people start.-Self-awareness develops.-Shift from dependence towards autonomy occurs.-Interest in other children increases.

Lesson 6: Some milestones that babies reach during 0-6 months (4 periods)

Learning objective

Describe developmental milestones that babies reach during 0-6 months.

Teaching resources

Flashcards, flip chart, markers, books and internet connectivity if available, audio visual materials, handout, pictures, developmental chart.

Prerequisites/Revision/Introduction

The previous lessons of this unit 'developmental milestone' were a good prerequisite of this lesson. Together with other lessons studied in unit 4 which is "introduction to human development" and unit 5 on "theories of human development" will help the students to go through this lesson without any kind of difficulty. Guide them to use this prerequisite effectively and arouse their interests and attention for maximum understanding of this lesson. Students will also refer to their observation in real life.

Learning activities

Activity 6.3.1.

- This activity needs to be done in groups.
- Help students to form groups effectively.
- Guide them and make them focus on the activity.
- Help them to access other sources of information (they may visit the smart room and use internet connectivity for further information if it is available).
- Have groups present while other group's members comment and ask questions.
- Facilitate them and help them to take a sound conclusion.

Possible answer on activity 6.3.1

Skills a child can be able to manifest	What a child cannot be able to manifest
Raise head and chest. Coo and smile. Enjoy playing with people. Follow moving object. Transfer object from hand to hand. Grasp and shakes toys. Bring hand to mouth.	Look at correct picture when the image is named. Explore and examines an object using both hands and mouth. Show more control while rolling and sitting. Start to look and reach for objects such as food that is nearby.

Application activities

- Provide time to the students to do the activity.
- This activity is done individually.
- Time should be enough to students to do the activity neatly.
- If time allows make corrections.

Possible answers on application activity 6.3.1

See the student book, section 6.3.1 for developmental milestones for a child aged 0-6 months and how parents and caregivers should cater for holistic development.

Lesson 7: Some milestones that babies reach during 7-12 months (4 periods)

Learning objective

Describe developmental milestones that babies reach during 7-12 months.

Teaching resources

Flashcards, flip chart, markers, books and internet connectivity if available, audio visual materials, hand out pictures, developmental chart.

Prerequisites/Revision/Introduction

The students are having knowledge about developmental milestone during 0-6 months, the teacher has to start from this and facilitate the students to understand developmental milestone during 7-12 years. Guide them to use this prerequisite effectively and arouse their interests and attention for maximum understanding of this lesson. Students will also refer to their observation in real life.

Learning activities

Activity 6.3.2.

- This activity needs to be done in pairs.
- Help students to form groups effectively.
- Guide them and make them focus on the activity.
- Help them to access other sources of information (they may visit the smart room and use internet connectivity for further information if it is available).
- Have groups present while other group's members comment and ask question.
- Facilitate them and help them to take a sound conclusion.

Possible answer on activity 6.3.2

See student book, section 6.3.2

Application activities

- Provide time to the students to do the activity.
- This activity is done individually.
- Time should be enough to students to do the activity neatly.
- If time allows make correction.

Possible answer on application activity 6.3.2.

See student book, section 6.3.2 on content of developmental milestones for a child of 7-12 months.

Lesson 8: Some milestones babies reach during 13-36 months (4 periods)

Learning objective

Describe developmental milestones that babies reach during 13-36 months.

Teaching resources

Flashcards, flip chart, markers, books and internet connectivity if available, audio visual materials, handout, pictures, developmental chart.

Prerequisites/Revision/Introduction

The students are having knowledge about developmental milestones during 0-6 months and 7-12 months, the teacher has to start from this and facilitate the students to understand developmental milestones during 13-36 months. Guide them to use this prerequisites effectively and arouse their interests and attention for maximum understanding of this lesson. Students will also refer to their observation in real life.

Learning activities

Activity 6.3.3.

- This activity needs to be done in pairs.
- Help students to form groups effectively.
- Guide them and make them focus on the activity.
- Help them to access other sources of information (they may visit the smart room and use internet connectivity for further information if it is available).
- Have groups present while other group's members comment and ask questions.
- Facilitate them and help them to take a sound conclusion.

Possible answer on activity 6.3.3

See student book, section 6.3.3

Application activity 6.3.3

- Provide time to the students to do the activity.
- This activity is done individually or in pairs.
- Time should be enough to students to do the activity neatly.
- If time allows make correction.

Possible answers on application activity 6.3.3

1. Physical development contributes to cognitive development – as children move and explore the world they learn about the properties of objects and their own capabilities. In the early years children are establishing patterns of activity which will affect their whole future. Motor development is important throughout a child's early life, because physical development is tied to other development areas.

For example, if a child is able to crawl or walk (gross motor skills), he/she can more easily explore their physical environment, which affects cognitive development.

2. You may confirm that a child has particular problem when:
 - Learning and developing more slowly than other children of the same age.
 - Rolling over, sitting up, crawling, or walking much later than developmentally appropriate.
 - Difficulty communicating or socializing with others.
 - Lower than average scores on IQ tests.
 - Delayed rolling over, sitting, or walking.
 - Poor head and neck control.
 - Muscle stiffness or floppiness.
 - Speech delay.
 - Swallowing difficulty.
 - Body posture that is limp or awkward.
 - Clumsiness.
 - Muscle spasms

Lesson 9: Key messages and recommendation practices during infancy and toddlerhood (4 periods)

Learning objective

Identify activities and games to promote holistic development of a child aged 0-3 years.

Teaching resources

Flashcards, flip chart, markers, books and internet connectivity if available, audio visual materials, handout, pictures, developmental chart.

Prerequisites/Revision/Introduction

The students are having knowledge about developmental milestones during infancy; the teacher will start from this and facilitate the students to understand key messages and recommendation practice during infancy period of human development. Guide them to use this prerequisites effectively and arouse their interests and attention for maximum understanding of this lesson. Students will also refer to their observations in real life.

Learning activities

Activity 6.3.4.

- This activity needs to be done in pairs.
- Help students to form groups effectively.
- Guide them and make them focus on the activity.
- Help them to access other sources of information (they may visit the smart room and use internet connectivity for further information if it is available).
- Have groups present while other group's members comment and ask questions.
- Facilitate them and help them to take a sound conclusion.

Possible answer on activity 6.3.4

See student book, section 6.3.4

Application activities

- Individually students will do this activity for the teacher to check objective achievement.
- Time should be enough for students to do the activity neatly.
- If time allows make corrections.

Possible answers on application activity 6.3.4

1. Breastfeeding is good for child's health and development. Breast milk is the perfect food for baby to get immunities, nutrition and to line the brain cells for a smart start. Breastfeeding is a great time to form attachment, touch and hold the baby close. Singing and humming soothes baby while Breastfeeding. Talking with your child as she is sucking will encourage her to suck well and be healthy. Therefore, a proper and enough breastfeeding enable the child to have a good foundation for further development in life.
2. Play builds imagination and creativity, during play kids stretch their imaginations, play fosters cognitive development, play brings emotional and behavioral benefits, play improves Literacy, play encourages greater independence, play promotes physical fitness.

Possible answers of assessment on infancy and toddlerhood

1.
 - Speak to child in a clear, correct, and simple manner. Avoid using baby talk.
 - Make conversation a two-way street. Take time each day to listen to and talk with child.
 - Model good listening behavior when child speaks (i.e. pause an activity and make eye contact).
 - Encourage child to use language (and not just gestures or actions) to express ideas, observations, and feelings.
 - Ask questions that require child to make and express a choice.
 - Try to enrich and expand child's vocabulary.
 - Engage child in activities and games that require listening and following directions.
 - Read and sing nursery rhymes.
 - Read and tell stories that have interesting characters and easy-to follow plots.
 - Discuss the stories together.

2.

Physical development	Cognitive development	Social development
<ul style="list-style-type: none">-Growth is steady, appearance becomes more slender and proportions more adult like.-Appetite diminishes and sleep problems are common-Handedness appear fine and gross motor skills and strength improve.	<ul style="list-style-type: none">-Thinking is somewhat egocentric but understanding of other people's perspectives grows.-Cognitive immaturity results in some illogical ideas about the world.-Memory and language improve.-Intelligence becomes more predictable.	<ul style="list-style-type: none">-Independence, initiative, and self-control increase.-Gender identity develops.-Play become more imaginative, more elaborate, and usually more social.-Altruism, aggression, and fear fullness are common.-Family is still the focus of social life but other children become more important.

Developmental milestones during early childhood (3-5 years)

Possible answers on activity 6.4

See student book, section 6.4

Lesson 10: Physical and cognitive developmental milestones during early childhood (4 periods)

Learning objective

Describe physical and cognitive developmental milestones of a child aged 3-5 years.

Teaching resources

Flashcards, flip chart, markers, books and internet connectivity if available, audio visual materials, handout, pictures, developmental chart.

Prerequisites/Revision/Introduction

The students are having knowledge about developmental milestone during infancy; the teacher will start from this and facilitate the students to describe physical and cognitive developmental milestones of a child aged 3-5 years. Teacher guides them to use this prerequisites effectively and arouse their interests and attention for maximum understanding of this lesson.

Learning activities

Activity 6.4.1.

- This activity needs to be done in pairs.
- Help students to form groups effectively.
- Guide them and make them focus on the activity.
- Help them to access other sources of information (they may visit the smart room and use internet connectivity for further information if it is available).
- Have groups present while other group's members comment and ask questions
- Facilitate them and help them to take a sound conclusion.

Possible answers on activity 6.4.1

See student book, section 6.8.1 on physical and cognitive developmental milestones and how to promote them.

Application activities

- Individually students will do this activity for the teacher to check objective achievement.

Possible answers to application activity 6.4.1

1. Physical development and health can help prepare infants and toddlers for activities that support language development, social skills, and other areas of learning for school success.
2. They fall in pre-operational stage.
3. The following can be done to promote child's cognitive development:
 - Give a child task of sorting by matching shapes, types, color or size.
 - Play "sizes" games where child puts things in order.
 - Have simple puzzles available for child to play with.
 - Have child arrange pictures in a sequence, such as photos of a child different ages
 - Play games that require child to match objects that are the same or different.
 - Encourage pretend play, and give child props and space in which to enter an imaginary world. If you join in, ask questions, but let child direct the play.
 - When child encounters a problem, have her/him help devise a possible solution.

Lesson 11: Social and language developmental milestones during early childhood (4 periods)

Learning objective

Describe social and language developmental milestones of a child aged 3-5 years.

Teaching resources

Flashcards, flip chart, markers, books and internet connectivity if available, audio visual materials, hand out pictures, developmental chart.

Prerequisites/Revision/Introduction

Students learnt about developmental milestone during infancy and developmental milestone during early childhood on physical and cognitive aspect; the teacher will start from this and facilitate the students to describe language and social developmental milestones of a child aged 3-5 years. Teacher guides them to use this prerequisite effectively and arouse their interests and attention for maximum understanding of this lesson.

Learning activities

Activity 6.4.2.

- Put students in small groups.
- Make field visit to the nearest pre-primary school.
- Facilitate discussion and sharing ideas in groups.
- -They take notes of their observation.
- Have some groups to present findings.
- Supplement students' answers by providing deep explanations.
- Provide constructive feedback.

Possible answers on activity 6.4.2

See student book, section 6.4.2 on social and language developmental milestones and how to promote them.

Application activities

- Ask students to do individually the questions in student book.
- Have collective correction in the classroom.
- Supplement students' answers by providing deep explanations.
- Provide constructive feedback.

Possible answers on application activity 6.4.2

- a) Keza is 3-4 years
- b) Those characteristics are related to social aspect
- c)
 - Ask questions that require child to make and express a choice.
 - Try to enrich and expand child's vocabulary.
 - Engage a child in activities and games that require listening and following directions.
 - Read and sing nursery rhymes.
 - Read and tell stories that have interesting characters and easy-to follow plots.
 - Discuss the stories together.

Lesson 12: Messages and recommendations practices during early childhood (4 periods)

Learning objective

Identify activities and games to promote a holistic development of a child aged 3-5 years.

Teaching resources

Flashcards, flip chart, markers, books and internet connectivity if available, audio visual materials, hand out pictures, developmental chart.

Prerequisites/Revision/Introduction

Students learnt about developmental milestone during infancy and developmental milestone during early childhood they have also studied recommendation to help infants grow holistically; the teacher will start from this and facilitate the students to Identify activities and games to promote a holistic development of a child aged 3-5 years. Teacher guides them to use this prerequisite effectively and arouse their interests and attention for maximum understanding of this lesson.

Learning activities

Activity 6.4.3.

- Ask students individually to read the questions in student' book.
- Provide clear guidelines.
- Have some students to share with colleagues.
- Supplement students' answers by providing deep explanations.
- Provide constructive feedback.

Possible answers on activity 6.4.3

All ideas will turn around key messages and recommendations practice during early childhood.

See student book, section 6.4.3.

Application activities

- Ask students to do individually the questions in student book.
- Have collective correction in the classroom.
- Supplement students' answers by providing deep explanations.
- Provide constructive feedback.

Possible answers on application activity 6.4.3

a) Children spend much time with their parents and they need their support. However, parents need skills on children development and they need to know what they should do for supporting children. Some parents lack the knowledge, skills and attitudes to support children's learning and development. Besides, early childhood is foundation for lasting life we all need to close fingers for supporting our children for good future of families and country. Children need to develop holistically, in language, emotional, socially, physical etc. Therefore, parents should ensure children are nourished well and safe, are given time for playing, access centers and play materials for learning. And whole community should love and protect children. We are hoping that this campaign will increase awareness to every one for all children benefit.

b) Possible objectives of campaign:

- To raise family and community awareness for supporting children's holistic development.
- To emphasize on importance of parental involvement in children 's learning.

Lesson 13. Developmental milestones during Middle & Late childhood (6-12 years) (4 periods)

Learning objective

Describe developmental milestones of a child aged 6-12 years on physical and cognitive aspects of human development.

Teaching resources

Flashcards, flip chart, markers, books and internet connectivity if available, audio visual materials, handout, pictures, developmental chart.

Prerequisites/Revision/Introduction

Students learnt about developmental milestone during infancy and early childhood, the teacher will start from this and facilitate the students to describe developmental milestones of a child aged 6-12 years on physical and cognitive aspects of human development.

Teacher guides them to use this prerequisite effectively and arouse their interests and attention for maximum understanding of this lesson.

Learning activities

Activity 6.5..

- Ask students individually to read the questions in student book.
- Provide clear guidelines.
- Have some students to share with colleagues.
- Supplement students' answers by providing deep explanations.
- Provide constructive feedback.

Possible answer on activity 6.5.

See student book, section 6.5

Application activities

- Distribute flash cards where questions are written.
- Provide guidelines.
- Have some students to present.
- Give constructive feedback.

Possible answers on application activity 6.5

1. a. This mother was not right because Kalisa is still developing in communication.
b. The advice I can give her is to help her son keep developing in communication by:
 - Asking him questions about school, friends, and experiences.
 - Have Kalisa retell stories.
 - Expand Kalisa's vocabulary by using bigger words.
 - Rephrase Kailsa's language if not correct.
2. Read, read, read!
 - Talk about the meaning of what is read.
 - Draw pictures of new words and ideas.
 - Break down new ideas and tasks step by step.
 - Practice basic math skills (i.e. addition, subtraction, patterns) using physical objects.

Lesson 14: Key messages and recommendations for middle and late childhood

Learning objective

Identify activities and games to promote holistic development of a child aged 6-12 years.

Teaching resources

Flashcards, flip chart, markers, books and internet connectivity if available, audio visual materials, handout, pictures, developmental chart.

Prerequisites/Revision/Introduction

Students learnt about activities and games to promote holistic development during infancy and early childhood, the teacher will start from this and facilitate the students to identify activities and games to promote holistic development during middle and late childhood, Teacher guides them to use this prerequisite effectively and arouse their interests and attention for maximum understanding of this lesson.

Learning activities

Activity 6.5.3.

- Form groups of five.
- Distribute the flash cards with a written questions.
- Guide students discussions.
- Have some groups to present.
- Give constructive feedback with deeper explanations.

Possible answer on question 6.5.3.

See student book, section 6.5.3

Application activities

- Distribute flash cards where questions are written.
- Provide guidelines.
- Have some students to present.
- Give constructive feedback.

Possible answers on application activity 6.5.3

See student book on heading 6.5.3 on key messages and recommendation practice to help children in middle and late childhood develop holistically.

Possible answers on assessment

- Izere is well developed cognitively and physically
- Izere is not well developed in social and communicative areas

For recommendations, see student book, section 6.5.3

Developmental milestones during Adolescence (13-20/21 years)

Possible answers on activity 6.6

Problems that most children who belong in that category usually face:

- Lack of information, ignorance concerning sex: the first menstruation and nocturnal emission will shock.
- Aggressiveness or withdrawal: this may happen when adolescents cannot adjust to the environment.
- Rebellious attitude: this happens when the sense of independence and responsibility is seldom recognized.
- Emancipation: this happens with the ambition for freedom from parental sovereign.
- Emotional tension: this is caused by self-respect and personal pride.

The answer on this sub question will depend on every learner's views. Request them to provide the additional ideas to support their answers.

Lesson 15: Early adolescence (2 periods)

Learning objective

Describe physical characteristics and body changes of early teens.

Teaching resources

Flashcards, flip chart, markers, books and internet connectivity if available, audio visual materials, hand out pictures, developmental chart.

Prerequisites/Revision/Introduction

Students learnt about developmental milestones from pre-natal to late childhood, the teacher will start from this and facilitate the students to understand developmental milestone within early teens, teacher guides them to use this prerequisite effectively and arouse their interests and attention for maximum understanding of this lesson.

Learning activities

Activity 6.6.1.

- Invite students to read the story in their books and work in pairs.
- Facilitate discussions.
- Have some pairs present their findings.
- Provide supplements and feedback.

Possible answers for the activity 6.6.1

Receive students answers and complete them using content in the student book, section 6.6.1 on characteristics of early teens.

Application activities

- Form small groups.
- Distribute sheets in which questions are written.
- Encourage discussion and collaboration in groups.
- Provide constructive feedback and deeper explanations.

Possible answers on application activity 6.6.1

1. The father of adolescent psychology is G. Stanley Hall.
2. Girls who mature early are characterized by the following:
 - They are attractive to older boys but not emotionally mature enough for more intimate relationships.
 - Are popular among their female peers because of superior status.
 - Social isolation: This is because they are in marginal social position, that is half- child, half woman and do not fit in older groups or groups of their age.
 - Develop primary and secondary sex characteristics as early as 9 years or less.
 - Early physical maturation in girls is often linked to poor academic performance and unplanned pregnancies.
 - They seem to be more flexible, independent and more satisfied with their lives in later years than those who mature late.

–

Boys who mature early generally show the following characteristics:

- They tend to be self-controlled, self-confident and attractive to the opposite sex and are likely to get earlier sexual experience than those with the late maturation.
 - They behave in a socially appropriate way and are popular and assertive in their peer groups and social situations.
 - They have a better body image and higher self-esteem than boys who mature late.
 - They are regarded as competent, natural leaders and often assume leadership roles
 - Due to their strength and size, they often do well in sports.
 - They are expected to live to the adult's expectation and should act more maturely than they are capable of doing.
3. See student book, section 6.6.1

Lesson 16: Middle adolescence (4 periods)

Learning objective

Describe developmental milestones of an adolescent aged 14-17 years.

Teaching resources

Flash cards, flip chart, markers, books and internet connectivity if available, audio visual materials, handout, pictures, developmental chart.

Prerequisites/Revision/Introduction

This lesson is interrelated with other lessons learnt previously. Students need to revise and use content learnt in previous lessons to better understand this lesson. They can focus on developmental milestones in different periods of human development like pre-natal, infancy, early childhood, middle childhood and late childhood. In addition to that they have also seen early adolescence. This content will help them to effectively go with the teacher with much attention and full participation which will help them in this lesson.

Learning activities

Activity 6.6.2.

- Invite students to read the story in their books and work in pairs.
- Facilitate discussions.
- Have some pairs present their findings.
- Provide supplements and feedback.

Possible answers on application activity 6.6.2

1. She was not proud of her face because of the acne.
2. She would get early pregnancy and leave the school.

Application activities

- Distribute sheets in which questions are written.
- Activity is done individually.
- Provide constructive feedback and deeper explanations.

Possible answers on application activity 6.6.2

Students will provide their ideas and teacher will enrich their understanding referring to student's book on heading 6.6.2.

Lesson 17: Late adolescence (4 periods)

Learning objective

Describe developmental milestones of an adolescent aged 18-21 years.

Teaching resources

Flashcards, flip chart, markers, books and internet connectivity if available, audio visual materials, hand out pictures, developmental chart.

Prerequisites/Revision/Introduction

This lesson is interrelated with other lessons learnt previously. Students need to revise and use content learnt in previous lessons to better understand this lesson. They can focus on developmental milestone during different stages of human development; in addition they have seen early adolescence and middle adolescence. This content will help them to effectively go with the teacher with much attention and full participation which will help them in this lesson.

Learning activities

Activity 6.6.3.

- Invite students to read the story in their books and work in pairs.
- Facilitate discussions.
- Have some groups present their findings.
- Provide supplements and feedback.

Possible answers on activity 6.6.3

Students will discuss and provide answers then the teacher will supplement them using ideas in student book, section 6.6.3.

Application activities

- Distribute sheets in which questions are written.
- Activity is done individually.
- Provide constructive feedback and deeper explanations.

Possible answers on application activity 6.6.3

1. True
2. During this stage, teens are entering early adulthood and have a stronger sense of their own individuality now and can identify their own values. Late adolescence has two meanings. First of all, it represents the final years of adolescence. It is when all the changes have taken place and the young person is ready to properly enter adulthood. During this stage an adolescent has grown in all potential and is regarded as an adult. However, many re-establish an «adult» relationship with their parents, considering them more an equal from whom to ask advice and discuss mature topics with, rather than an authority figure.

Lesson 18: Adolescent egocentrism and social problems (4 periods)

Learning objective

Explain adolescent egocentrism and social problems during adolescence.

Teaching resources

Flashcards, flip chart, markers, books and internet connectivity if available, audio visual materials, hand out pictures, developmental chart.

Prerequisites/Revision/Introduction

All previous lessons of this part of adolescence stage are correlated with this lesson. Students need to go back and revise with the help of the teacher. Go through the characteristics of each three stages of adolescence and do application questions reserved for every stage. This will wake students and become motivated to participate actively in this lesson.

Learning activities

Activity 6.6.4.

- Students observe the picture and are given time to discuss the question about the photo.
- Facilitate discussions.
- Have some groups present their findings.
- Provide supplements and feedback.

Possible answers on activity 6.6.4

Some of the problems that such behaviors may cause in society are the following: fighting, vagabondage, pregnancy, stealing, early marriage, school dropout, juvenile delinquency accidents, and psychological problems....

Help students to extend the list and encourage them to find the meaning.

Application activity 6.6.4

- Distribute sheets in which questions are written.
- Activity is done individually.
- Provide constructive feedback and deeper explanations.

Possible answers on application activity 6.6.4

1. Social problems of adolescents are like drug abuse, school dropout, juvenile delinquency...
2.
 - Both the school and the home should create an atmosphere that will strengthen the resistance of children to the pressures of delinquency.
 - Adolescents should not be subjected to any unnecessary temptation.
 - The school should be made an interesting and rewarding experience.
 - Adolescent should clearly understand that delinquent acts are punishable but once punished, accept the child again as a member of the class, family or community.

-
- Try to identify the early signs of maladjustment as well as the child's mixing with problematic friends in life.
- Both the school and the home should emphasize a stable system of moral values and the value of self-discipline.
- Direct the energies of these young growing people into socially acceptable channels.
- Potential delinquents should be given some special, responsible tasks. Show them that they are worth something.

Lesson 19: Key messages and recommendation practices during adolescence (3 periods)

Learning objective

Advising parents, teachers and community in general on how to help children effectively navigate their adolescence for smooth transition from childhood to adulthood.

Teaching resources

Flashcards, flip chart, markers, books and internet connectivity if available, audio visual materials, handout, pictures, developmental chart.

Prerequisites/Revision/Introduction

All previous lessons of this part of adolescence stage are correlated with this lesson. Students need to go back and revise with the help of the teacher; they will focus on the characteristics of each stage of adolescence and do application questions reserved for every stage they can also revise on adolescent's egocentrism and social problems. This will make students become more motivated to participate actively in this lesson of recommendations and practice during adolescence period.

Learning activities

Activity 6.6.5.

- Students will again observe the photo.
- Facilitate discussions about advice.
- Have some groups present their findings.
- Provide supplements and feedback.

Possible answer on activity 6.6.5.

Students will go back to the previous picture and propose advice; the teacher will complement them referring to student book, section 6.6.5

Application activities

- Distribute sheets in which questions are written.
- Activity is done individually.
- Provide constructive feedback and deeper explanations.

Possible answer on application activity 6.6.5

Help your child anticipate changes in his or her body; Start early conversations about other important topics; and keep conversations positive; Honor independence and individuality; Remember you're a parent and a friend; Try to be there after school; Keep your standards high; Make it a high priority to eat meals together; Keep the lines of communication humming; Continue family meetings.

Possible answers to the assessment on adolescence

1.
 - **Complexity:** The experiences gained from the environment make the adolescent's emotions more complex.
 - **Tolerance of loneliness:** Adolescents commonly want to be alone.
 - **Bearing tensions:** Adolescents develop competencies to bear tension in different social situations.
 - **Development of abstract emotions:** They can express their emotional feelings in relation to abstract objects.
 - **Realism in emotional experiences:** They can realistically recognize the strength and weakness of one's character.
 - **Ability to show increased compassion.** They are able to enter into kin ship with the feelings and impulses involved in any sort of emotional experience.

2.

- Because they physically look like as adults, adolescents are demanded by their parents to be more responsible and tact more like an adult while they do not possess the social and cognitive qualities necessary for them to be competent as an adult.
- The home ceases to be the centre of social and emotional interest and adolescents develop more relationships with people outside the family.
- Adolescents are ambivalent towards adults especially parents and teachers whom they may think are unreasonable.
- Parents don't allow adolescents to make their own choice of activities, friends and subjects among other things.

3.

- Cognitive development during adolescence. Most older teens can now think abstractly and hypothetically; can discern the underlying principles of a situation and apply them to new situations; can think about the future; and can consider many possibilities and logical outcomes of possible events.
- Youth develop a greater ability for complex thought (i.e., they can think abstractly, use reasoning skills, show more intellectual curiosity and can understand the hypothetical).
- Goal-setting, including long-term goals. Teens develop greater abilities for logic and reason; their thinking is predominantly concrete rather than abstract.
- Teens begin to question rules and beliefs they previously accepted at face value
- Cognitive development during adolescence. Most older teens can now think abstractly and hypothetically; can discern the underlying principles of a situation and apply them to new situations; can think about the future; and can consider many possibilities and logical outcomes of possible events.
- Youth develop a greater ability for complex thought (i.e., they can think abstractly, use reasoning skills, show more intellectual curiosity and can understand the hypothetical).
- Goal-setting, including long-term goals. Teens develop greater abilities for logic and reason; their thinking is predominantly concrete rather than abstract.
- Teens begin to question rules and beliefs they previously accepted at face value

Possible answers to the assessment on adolescence

4.

- a) See student book on adolescence and early childhood.
- b) Amina has eating disorder which is Anorexia nervosa.
- c) Causes may include the following:
 - Genetics. You may be more likely to develop an eating disorder if you have a family member who has one. This may be because of a genetic predisposition to traits associated with eating disorders, such as perfectionism. More research is needed to determine whether there's truly a genetic link.
 - Emotional well-being. People who have experienced trauma or have mental health conditions, such as anxiety or depression, may be more likely to develop an eating disorder. Feelings of stress and low self-esteem may also contribute to these behaviors.
 - Societal pressures. The current western ideal of body image, self-worth, and success equated with thinness can perpetuate the desire to achieve this body type. This may be emphasized further by pressure from the media and peers.
- d) If left untreated, eating disorders can lead to serious illness and even death. Along with the lower body weight, girls with anorexia nervosa can lose their menstrual periods (amenorrhea). The loss of periods is associated with osteopenia, early bone loss that can lead to painful fractures. Eating disorders are also linked to other serious health problems, such as kidney disease and heart disease. Each of these health problems requires specific tests and treatment. Teens should be proud of their body.
Seek advice to elders or parents.

Lesson 20: Developmental milestones during Adulthood (21-50/60 years) (4 periods)

Learning objective

Describe developmental milestones of an adult person on all aspects of human development

Teaching resources

Flashcards, flip chart, markers, books and internet connectivity if available, audio visual materials, hand out pictures, developmental chart.

Prerequisites/Revision/Introduction

During this lesson, students will use the knowledge got from previous lessons of this unit of developmental milestone especially the content of late adolescence. They can also revise on developmental milestone for other stages of human development, Guide students with questions to make them motivated and you may create stories that will facilitate your students to understand the content of this lesson.

Learning activities

Activity 6.7.

- Students read the scenario and discuss in about questions asked.
- Facilitate discussions and help students understand.
- Have some groups present their findings.
- Provide supplements and feedback.

Possible answers to the activity 6.7

- The main characteristics of adolescence are biological growth and development, an undefined status, increased decision making, increased pressures, and the search for self.
- Adults are characterized by maturity, self-confidence, autonomy, solid decision-making, and are generally more practical, multi-tasking, purposeful, self-directed, experienced, and less open-minded and receptive to change. All these traits affect their motivation, as well as their ability to learn. The physical abilities are at their peak, including muscle strength, reaction time, sensory abilities, and cardiac functioning. The aging process also begins during early adulthood and is characterized by changes in skin, vision, and reproductive capability.

Note:

- Students use different characteristics to differentiate adult and adolescence. They may refer to adolescence stages and compare their developmental domains with how they think may not be the same in adulthood stage. Allow them to discuss either in pairs or in groups.
- This question does not have exact answer, allow students to outline and explain contribution of adult people in the community and how they can help them. Request them to share their ideas in pairs and in plenary.

Application activities

- Let students read questions in their books and answer them.
- Activity is done individually.
- Provide constructive feedback and deeper explanations.

Possible answers to the application activity 6.7

1. It is during early adulthood when people generally form intimate relationships, both in friendship and love (17-45 years).
2. The following are the physical characteristics of a person experiencing the middle adulthood:
 - There is a decrease of height, and after 55 years, approximately 2 inches lost for men, and 1 inch for women.
 - There is an increasing of weight.
 - Their bone's density decreases as well and the loss is twice fast for women.
 - There is decreasing of strength, whereby 10% of their strength loses by 60 years.
 - The organs no longer function as efficiently as they once did.
 - Lung and heart capacities decrease.
 - There is a decreasing of vision and light sensitivity, and the hearing abilities decrease.
 - The bio psychosocial changes that accompany midlife are menopause (the cessation of menstruation) in women and male climacteric (male menopause) in men.
3. Crystallized intelligence is dependent upon accumulated knowledge and experience we have gathered throughout our lifetime. Fluid intelligence is more dependent on basic information-processing skills and starts to decline even prior to middle adulthood.

Lesson 21: Developmental milestones during advanced age (60+) (4 periods)

Learning objective

Describe developmental milestones of a person during advanced age on all aspects of human development.

Teaching resources

Flashcards, flip chart, markers, books and internet connectivity if available, audio visual materials, handout, pictures, developmental chart.

Prerequisites/Revision/Introduction

Guide students to revise on the previous lesson which is developmental milestone during middle and late adulthood, it is more related and inseparable with this lesson. Request them to revise a bit on it and ask them guiding questions. This will be a strong foundation for them to learn and understand this new lesson.

Learning activities

Activity 6.8.

- Students observe the picture and start discussing in pairs.
- Facilitate discussions and help students understand.
- Have pairs present their findings while others can comment, ask or complement their presentation.
- Provide supplements and feedback.

Possible answers to the activity 6.8

1. Physical characteristics of people who are in late adulthood:
 - Energy reserves dwindle (diminish).
 - Cells decay. Muscle mass decreases.
 - The immune system is no longer as capable as it once was in preventing diseases.
 - Body systems and organs, such as the heart and lungs, become less efficient. Overall, regardless of people's best hopes and efforts, aging translates into decline.
 - While energy is lost, the ability to conserve energy is gained.
 - Most hearing loss is noticed.
 - There is lessening or cessation of sexual functioning, sometimes because of physical symptoms such as erectile dysfunction in men, but often simply a decline in libido.

The older adults encounter mental, emotional and behavioral problems such as: depression, anxiety, and dementia (mental deterioration, also known as organic brain syndrome). They are also common diseases that attack them during this period. Those are like Alzheimer's disease, dementia, etc. During this late adulthood there are increased risks of aging associated with diseases and death.

2. Note that this question does not have direct answer. Students make a discussion in group and analyses the importance of old people in society.

Application activities

- Let students read questions in their books and answer them.
- Activity is done individually.
- Provide constructive feedback and deeper explanations.

Possible answers to the application activity 6.8

1. Dementia is the progressive deterioration in cognitive function, the ability to process thought (intelligence).
Senescence: Senescence or biological aging is the change in the biology of an organism as it ages after its maturity. Such changes range from those affecting its cells and their function to that of the whole organism.
2. Menopause: Menopause is the cessation of menstruation and ovulation in women as estrogen production dwindles. Menopause typically occurs between the ages of 45 and 55. Males also experience a form of menopause, with decreased production of sperm cells resulting from reduced levels of testosterone.
3. Progressive, age-related hearing impairment results primarily from destruction of receptor cells (tiny hair cells found in the cochlea), caused by continued exposure to excessive noise.
4. The general effect of Alzheimer's disease and its likely outcome. 217 Initially, the symptoms of Alzheimer's disease involve forgetfulness, particularly with respect to recent events. Eventually, as the disease progresses, the individual is no longer able to recognize family members or take care of him or herself. Alzheimer's disease is fatal.
5. Crystallized intelligence refers to knowledge that is accumulated and stored. Fluid intelligence refers to the ability to reason abstractly, solve logical problems, and make quick inferences.

6. Neuronal death and aging: In late adulthood, many individuals will lose about 5% to 10% of their neurons. However, there may be little noticeable difference due to the brain's many billions of neurons and system redundancy (other parts of the brain backing up the parts losing neurons). Aging can also be associated with decline in availability of neurotransmitters such as dopamine, serotonin, acetylcholine, and norepinephrine; these deficiencies may contribute to many of the declines seen in aging (e.g., reduced motor capacity and memory ability).

6.6. Additional information for teachers

Tips on how should an expectant mother take care of the pregnancy:

- Talk to your doctor about any over-the-counter and prescription medicines you are using. These include dietary or herbal supplements.
- Some medicines are not safe during pregnancy. At the same time, stopping medicines you need also can be harmful.
- Doctor may suggest taking prenatal vitamins with iron and folic acid to help protect you against anemia. These vitamins also protect the foetus against serious problems with the brain and spinal cord.
- Keep blood sugar level up by eating whole, healthy foods and plenty of proteins. Do this in small but frequent meals throughout the day. Vary your diet as much as possible. Choose fruits, vegetables, whole grains, calcium-rich foods, and foods low in saturated fat. The fetus gets all its food from you, so try to make healthy food choices. Try to have three meals every day or six smaller meals if you have problems with nausea or heartburn.
- Wash fruits and vegetables before eating. Don't eat uncooked or undercooked meats or fish. Always handle, clean, cook, eat, and store foods properly.
- Taking plenty of fluids, especially water to keep one hydrated. Plain water is great.
- Get plenty of rest. Take a nap before dinner. Take a nap around lunch time.
- Get early and regular prenatal care physical examinations. Whether this is your first pregnancy or third, health care is extremely important.
- Avoid very hot baths. The high heat raises your risk of miscarriage and birth defects.

- Get plenty of sleep and find ways to control stress.
- Read books, watch videos, go to a childbirth lessons. Classes can help you prepare for the birth of your baby.
- Stay away from chemicals like solvents (like some cleaners or paint thinners), lead, mercury, and paint (including paint fumes). Not all products have pregnancy warnings on their labels. If unsure about safety of a product, ask your doctor before using it.
- Do physical exercises and avoid drugs like cocaine, heroin, marijuana, tobacco and alcohol to void birth defects.
- Cocaine, heroin, marijuana and other drugs increase risk of miscarriage, premature birth and birth defects. A baby could also be born addicted to the drug you've been abusing, which can cause serious health problems.

6.7. End unit assessment

Possible answers to the assessment

1. Babies begin to engage many of their senses and to learn about the world around them during the last trimester of pregnancy and may be even before. A baby can hear the sounds of his mom's body her stomach growling, her heart beating, the occasional hiccup or burp, but he can also hear noises from beyond. Perhaps the most significant one a baby hears in uterus is his mother's voice.
2. Chronic maternal illness, certain maternal infections, maternal health and illness, maternal age, rhesus factors, mother's emotional state, radiation, maternal diseases, maternal nutrition, environmental hazards, psychological hazards ...

Note: Students will suggest many risk factors and propose the ones they are able to manage.

3.
 - Once the pregnancy is confirmed, the mother needs to visit a healthcare worker or clinic and continue to go for regular check-up at the clinic during the pregnancy to allow health care workers to treat and prevent potential health problems (Antenatal care).
 - Pregnant mothers need to get information about their pregnancy, what to expect and how to remain healthy while pregnant.
 - They need to take some vaccinations and engage in dialogues with their health care worker in order to increase the chances of delivering a health child.

- Pregnant mothers are encouraged to be tested for HIV when they visit their health care worker.
- Mothers who are pregnant and/or breastfeeding must eat healthy food. This helps to sustain the mother and the baby's good health.

Note: Students will propose other recommendation practice.

4. The sperm and ovum each contain chromosomes that act as a blueprint for human life. The genes contained in these chromosomes are made up of a chemical structure known as DNA (deoxyribonucleic acid) that contains the genetic code, or instructions, that make up all life.
5. You may confirm that a child has a particular problem when there is:
 - Delay or abnormal patterns of development in the areas of communication/language, motor skills, problem-solving or social and adaptive behavior. These concerns are usually based on comparison to other children of the same age.
 - Receptive Language Disorder. ...
 - Expressive Language Disorder. ...
 - Speech Production. ...
 - Cognitive Delay. ...
 - Gross Motor Delays. ...
 - Fine Motor Delays. ...
 - Emotional or behavioural delays.
6. The poem will base on support which parents, caregivers and teachers provide at each stage and each domain of human development.
7. This answer will turn around key messages and recommendation practices during infancy, early childhood, middle childhood and late childhood.

6.8 Additional activities

6.8.1 Remedial activities

1. Outline periods of human development.
 - Pre- natal stage
 - Infancy and toddlerhood period
 - Early childhood period
 - Adolescence
 - Adulthood and aging
2. What is milestone?

Milestones: Are behaviours or physical skills seen in infants and children as they grow and develop, the milestones are different for each age range; there is a normal range in which a child may reach each milestone. An important point in progress or development. Generally, milestones are things most children can do by a certain age.

Examples: Rolling over, crawling, walking, taking a first step, smiling for the first time

6.8.2. Consolidation activities

1. Explain major characteristics of early teens.

During the early adolescence stage, children often start to grow more quickly. They also begin notice other body changes, including hair growth under the arms and near the genitals, breast development in females and enlargement of the testicles in males. They usually start a year or two earlier in girls than boys, and it can be normal for some changes to start as early as age 8 for females and age 9 for males. Many girls may start their period at around age 12, on average 2-3 years after the onset of breast development.

2. Describe egocentric problems which are common during the adolescence period.
 - **Argumentativeness:** Adolescents have a tendency of regarding their views and principles as the best and most accurate. Parents and teachers should therefore, take parts in discussing with adolescent about new issues they discover and how they (adolescents) should react to them.
 - **Indecisiveness:** Adolescents face a problem of deciding on things. This is because they have a great number of choices in every aspect of life.
 - **Self-centered:** Adolescents have a particular perception of themselves. They think that they are special, unique and not subjected to natural rules that govern the world. For instance, a girl may think that she cannot get pregnant or a boy may think that he

is wise enough and cannot be addicted to smoking or cannot make a girl pregnant. They think that these things only happen to other people, but not them. This kind of thinking and reasoning make them fearlessly indulge in many risky ventures.

- **Finding fault with authority:** Since adolescence now have the ability to imagine an ideal world, they realize that people they have honored and given esteem to are not perfect as they thought. They therefore feel compelled to try to bring reality closer and to fantasy by pointing out all the shortcomings they notice.
- **Self-consciousness:** Adolescents have the mentality that others constantly watch and make comments about them. Adults should therefore avoid making public criticism or ridicule.
- During adolescence, many adolescents are more concerned with their body image.

3. Characterize cognitive development during adulthood.

Two forms of intelligence: Crystallized and fluid are the main focus of middle adulthood. Crystallized intelligence is dependent upon accumulated knowledge and experience we have gathered throughout our lifetime. Fluid intelligence is more dependent on basic information-processing skills and starts to decline even prior to middle adulthood. Cognitive processing speed slows down during this stage of life, as does the ability to solve problems and divide attention.

- Increase of practical problem-solving skills. These skills are necessary to solve real-world problems and figure out how to best achieve a desired goal.
- Decision making is based upon personal responsibilities towards others (this is called executive stage) cognitive decline.

6.8.3. Extended activities

Organize students to make a scenario that describes well characteristics of human beings in one period of human development and on one aspect and then other classmate will guess what is that period and on which aspect.

Example:

- I learn to read letters, sounds, words and sentences.
- I am able to count, write, add and subtract numbers.
- I am able to collect, sort, organize and classify.

Question: In which period am I? and what is the corresponding aspect ?

Answer: Middle childhood /Cognitive aspect.

UNIT 7

FACTORS OF HUMAN DEVELOPMENT (24 PERIODS)

7.1. Key unit competence

Examine the factors of human development.

7.2 Prerequisites

Students will use related skills and knowledge they learnt on different units in Biology during O-Level such as mitosis, meiosis, genetics, natural and artificial selection, response and coordination, reproduction in human beings, etc.) They will again use content of social studies learnt in upper primary. This will help them to understand easily the content of this unit. The teacher needs to guide them and use this knowledge effectively. This unit is also complementally with other pre-learnt units about human development. The teacher will bring activities that help students to recall easily the related content. Allow them to share ideas and make research whenever it is possible.

7.3 Cross-cutting issues to be addressed

Gender education: Remind students that both boys and girls should be treated equally and have the same rights and obligations as they are all affected by nurture and nature equally during their development. There is a strong ethical urgent to afford every individual their basic human rights and gender inequality results in women and girls being treated less favorably than men in schools and society should be removed. Therefore all learners need to be treated fairly and equally during their studies. People's opinion of gender roles should not deny or hinder one's right or responsibilities to meet his or her learning during this unit.

Comprehensive sexuality education : The teacher needs to equip students with all necessary information about sexuality that are linked to this unit as to furnish them with skills related to reproduction and how they affect their offspring hereditarily.

Environment and sustainability: During the study of this unit, students appreciate the environmental factors and how these influence their development. This will require them to have awareness on environment and understand how

to protect it for better influence. They need to understand that development of human being happen in environment and it should be safe for a better seek to human development.

Inclusive education: This will be much focused on as teacher understands the individual difference that may come as result of factors that influence development. Teacher will use different materials that cater for individual difference and encourage them to fulfill their potential throughout the entire unit. Remedial activities and coaching will be provided to learners.

Peace and values education: The need for Peace and Values Education in this unit is obvious. This is a broad cross cutting issue which will make students to appreciate the culture and values of Rwanda. Peace is clearly critical for society to thrive and for every individual to focus on personal achievement and their contribution to the success of the nation. Values education forms a key element of the strategy for ensuring young people recognize the importance of contributing to society, working for peace and harmony and being committed to avoiding conflict. Students will understand that we all have what link us as human being and this create our bond.

Standardization culture: During this unit students will understand clearly influence of both nature and nurture to human being and appreciate who they are as it is results of both. They will have to appreciate who they are and feel proud of themselves as they cannot change it.

7.4. Guidance on introductory activity

This activity will help students to get acquainted with this unit and have general overview of the whole unit.

- Students observe the images.
- Students brainstorm in pairs.
- Students can take notes on piece of papers.
- Pairs present their findings.
- Teacher complements them to strengthen their understanding.

Possible answer on introductory activity

This question does not have a precise answer; students will brainstorm and the teacher will compliment them.

7.5. List of lessons

	Lesson title/sub heading	Learning objective	Number of periods
1	Definition of key terms related to factors of human development	Define key terminologies related to factors of human development.	3
2	Biological factors (nature / heredity)	Describe how human development is influenced by heredity.	2
3	Function of genes and chromosomes in determining traits	Give examples of characteristics which are determined by biological factors.	2
4	Genetic abnormalities/ disorders	Recognize and explain genetic abnormalities.	4
5	Environmental factors (nurture / experiential)	Give examples to show how development is influenced by the environment (experiential factors).	2
6	Socializing agents	List and Explain agents of socialization.	2
7	Influence of physical / natural environment;	Explain the influence of physical environment to human development.	2
8	Impact of toxic stress	Judge the effect of toxic stress to development.	2
9	Impact of drug abuse on human development	Recognize how risk factors like drug abuse is harmful to human development.	3
10	End unit assessment		2
	Total number of periods		24

Lesson 1: Definition of key terms related to factors of human development (3 periods)

Learning objective

Define key terminologies related to factors of human development.

Teaching resources

Flashcards, flip chart, markers, books and internet connectivity if available, audio visual materials, hand out of factors of human development, chromosomal abnormalities fact sheet, printed case studies.

Prerequisites/Revision/Introduction

This lesson has interconnection with other lessons learnt in previous units. Students need to apply knowledge from other units learnt, especially unit 4 which is introduction to human development where they have studied key concepts related to human development, principles of human development, periods of human development and domains of human development and unit 5 in which they have studied theories of human development and also unit 7 which is developmental milestone. This content will help them to effectively go with the teacher with much attention and full participation which will help them to achieve their objective within this lesson.

Learning activities

Activity 7.1

- Students will be in the room with internet availability if possible.
- Relevant textbooks can be used to help in research.
- Invite them to observe the image shown in text books.
- Teacher draws a concept mapping diagrams on the chalkboard with key terminology in the center.
- Students are given time to go and write their findings on each key terminology.
- Teacher guides students to a clear conclusion about each given key terminology.
- If time allows let students do more research for better understanding of the given key concepts.

Possible answer on activity 7.1

Nature: It is the natural heredity genes that are present in person at birth; this refers to our inherited characteristics. Nature looks at the impact of such physical approaches as neurotransmitters and genome sequencing on child's development.

Nurture: Nurture defines the environment or surroundings of a person that shape and mold an individual's personality. It focuses on aspects such as peer pressure and social influence.

Heredity: Transmission of physical characteristics from parents to children through their genes. They are inborn traits or characteristics inherited from the biological parents. It influences all aspects of physical appearance such as height, weight, body structure, and the color of eyes, the texture of the hair, and even intelligence and aptitudes. Diseases and conditions such as heart disease, diabetes, and obesity...can also be passed through genes, there by affecting the growth and development of the child adversely.

Genes: It is a basic physical and functional unit of heredity. They are made up of DNA.

For example if both of your parents have green eyes you might inherit the trait for green eyes from them.

DNA: A self-replicating material that is present in nearly all living organisms as the main constituent of chromosomes. It is the carrier of genetic information.

Deoxyribonucleic acid (DNA) is made up of genes and gives instructions on each gene.

Environment: The world outside the self-beginning. It plays a critical role in the development of children and it represents the sum total of physical and psychological stimulation the child receives. Some of the environmental factors influencing early childhood development involve physical surroundings and geographical condition of the place the child lives in as well his social environment and relationships with family and peers.

Chromosome: A threadlike structure of nucleic acids and protein found in the nucleus of most living cells, carrying genetic information in the form of genes. It contains an important genetic substance called deoxyribonucleic acid (DNA) with associated molecules that have genetic information.

Chromosomal abnormalities: Chromosome abnormalities usually occur **when there is an error in cell division**. Some chromosomal abnormalities occur when there is an extra chromosome while others occur when a section of a chromosome is deleted or duplicated.

Example: Down syndrome, trisomy 18, trisomy 13, xyy syndrome, turner syndrome. Chromosomal abnormalities can be numerical or structural. A numerical abnormality means that an individual is either missing one of the chromosomes from a pair or has more than two chromosomes instead of a pair. A structural abnormality means that the chromosome's structure has been altered in one of several ways.

Toxic stress: This is the body's response to lasting and serious stress, without enough support from a caregiver. When a child doesn't get the help he needs, his body can't turn off the stress response normally. This lasting stress can harm a child's body and brain and can cause lifelong health problems. Toxic stress weakens the architecture of the developing brain, which can lead to lifelong problems in learning, behavior, physical and mental health. Examples of toxic stress include abuse, neglect, extreme poverty, violence, household dysfunction, and food scarcity.

Application activities

- Provide time to the students to do the activity.
- You may ask them to do this activity individually.
- Time should be enough to students to do the activity neatly.

Possible answer on application activity 7.1

1. Nature: Is the natural heredity genes that are present in person at birth; this refers to our inherited characteristics. Nature looks at the impact of such physical approaches as neurotransmitters and genome sequencing on child's development.

Nurture defines the environment or surroundings of a person that shape and mold an individual's personality. It focuses on aspects such as peer pressure and social influence.

2.

Chromosome abnormalities usually occur **when there is an error in cell division**. Chromosomal abnormalities occur when there is an extra chromosome while others occur when a section of a chromosome is deleted or duplicated.

Lesson 2: Biological factors (nature / heredity) (2 periods)

Learning objective

Describe how human development is influenced by heredity.

Teaching resources

Flashcards, flip chart, markers, books and internet connectivity if available, audio visual materials, hand out of factors of human development, chromosomal abnormalities fact sheet, printed case studies.

Prerequisites/Revision/Introduction

Students have to use learnt content from biology O-Level that are more related to heredity. They will also go back to the previous lesson (the first one of this unit) Teacher also needs to provide time for research so that students recall easily the content and apply it in this lesson.

Learning activities

Activity 7.2.

- Invite students to make observation of body parts indicated in the activity.
- They share in pairs about what they have observed.
- Students note their observation on a piece of paper.
- Teacher guides students to a clear conclusion.
- If time allows let students do more research for better understand.

Possible answer on activity 7.2

Teacher will guide students to share their answers with their colleagues and just provide justification. Their justification should be in line with the influence of heredity to human beings. There are many traits that we share from our parents such as: skin, colour, general body shape and size, hair and eyes colour and a thousand other characteristics.

Application activities

- Provide time to the students to do the activity.
- you may ask them to do this activity individually.
- Time should be enough to students to do the activity neatly.
- Make correction of the activity.

Possible answer on application activity 7.2

1. Heredity: Transmission of physical characteristics from parents to children through their genes. They are inborn traits or characteristics inherited from the biological parents. It influences all aspects of physical appearance such as height, weight, body structure, and the color of eyes, the texture of the hair, and even intelligence and aptitudes. Diseases and conditions like heart disease, diabetes, obesity can also be passed through genes, thereby affecting the child's growth and development.
2. Height, Weight, Hair loss (in men), Life expectancy, Vulnerability to specific illnesses (e.g. breast cancer in women).

Lesson 3: Function of genes and chromosomes in determining traits (2 periods)

Learning objective

Give examples of characteristics which are determined by biological factors.

Teaching resources

Flashcards, flip chart, markers, books and internet connectivity if available, audio visual materials, hand out of factors of human development, chromosomal abnormalities fact sheet, printed case studies.

Prerequisites/Revision/Introduction

Students use the content of senior three in biology especially on the unit that explains more on genes (unit 20: genetics). Allow them to make further research in library or in smart classroom if the internet is available.

Learning activities

Activity 7.3.

- Invite students to read the scenario in their textbooks.
- They work in pairs and answer asked questions on the scenario.
- Students note their answers on the paper.
- Students make presentation of their findings.
- Teacher guides students to a clear conclusion.

Possible answer on activity 7.3

The sex of the baby that has 2x sex cells is a girl.

The sex of the baby that has x and y is a boy.

Each baby will have 46 chromosomes because every parent contributes 23 chromosomes for each.

Application activities

- Provide time to the students to do the activity.
- This activity will be done individually.
- Time should be enough to students to complete the activity.
- Make correction of the activity.

Possible answer on application activity 7.3

1. a. False b. False
2. Genes decide almost everything about a living being, they affect specific trait. Genes affect hundreds of internal and external factors, such as whether a person will get a particular colour of eyes, Genes are a set of instructions that determine what the organism is like, its appearance, how it survives, and how it behaves in its environment.
3. A dominant gene is able to express itself even in the presence of its recessive allele, dominant gene must exhibit his dominance over the recessive ones while recessive allele or factor is unable to express its effect in the presence of dominant allele.

Lesson 4: Genetic abnormalities/disorders (4 periods)

Learning objective:

Recognize and explain genetic abnormalities.

Teaching resources:

Flashcards, flip chart, markers, books and internet connectivity if available, audio visual materials, hand out of factors of human development, chromosomal abnormalities fact sheet, printed case studies.

Prerequisites/Revision/Introduction

Students will be guided to use the content learnt in previous lesson especially functions of genes. Teacher will help them to revise so that they can recall the information related to genes. This will be a strong foundation for them to the understanding of this lesson.

Learning activities

Activity 7.4.

- Invite students to read the scenario in their textbooks.
- They work in pairs and answer asked questions on the scenario.
- Students note their answers on a piece of paper.
- Students make presentation of their findings.
- Teacher guides students to a clear conclusion.

Possible answers on activity 7.4

- a) He has flattened face, small nose, almond-shaped eyes because of large eyelid folds, respiratory and heart problems.
- b) He struggles in many activities and this is the 4th year in primary one.
- c) Genetic abnormality.

Application activities

- Provide time to the students to do the activity.
- This activity will be done individually.
- Time should be enough to students to complete the activity.
- Make correction of the activity.

Possible answers on application activity 7.4

1. a. False b. True c. False
2. The cause of mistakes that happen during the replication include exposure to radiation, drugs, or viruses or for no apparent reason.
3. Genetic disorders may be hereditary or non-hereditary, meaning that they might be passed down from the parents' genes. However, in some genetic disorders, defects may be caused by new mutations or changes to the DNA. In such cases, the defect will only be passed down if it occurs in the germline.
4. Ali had down syndrome.

Lesson 5: Environmental factors (nurture / experiential) (2 periods)

Learning objective

Give examples to show how development is influenced by the environment (experiential factors).

Teaching resources

Flashcards, flip chart, markers, books and internet connectivity if available, audio visual materials, hand out of factors of human development, chromosomal abnormalities fact sheet, printed case studies.

Prerequisites/Revision/Introduction

Recall on social studies and geography will help students. This recall will focus on content related to social studies and geography especially on components of physical environment and how these may have influence on people's lives. This content will help them to have a starting point that makes them to learn this lesson with high motivation and easily understand it.

Learning activities

Activity 7.5.

- Invite students to read the scenario in their textbooks.
- They work in pairs and answer asked questions on the scenario.
- Students note their answers on a piece of paper.
- Students make presentation of their findings.
- Teacher guides students to a clear conclusion.

Possible answer on activity 7.5

- The reason why the baby cries is because the mother has not formed an attachment to the baby.
- Advice is that the mother should increase time they stay with their babies and care for them.

By responding in a warm, loving and gentle way, parents help their child learn about communication, behavior and emotions. Parents make their child feel safe and secure, and promote a strong relationship with their children.

Application activities

- Provide time to the students to do the activity.
- This activity will be done individually.
- Time should be enough to students to complete the activity.
- Make correction of the activity.

Possible answers on application activity 7.5

- 1)
 - Strong attachments and relationships early in life means children are more likely to have better mental health and fewer behavior problems.
 - When the child feels safe and attached, s/he is likely to have the confidence to explore the world.
- 2) Free answers are accepted. Each student will describe the relationships of a person he/she knows with others and will show the impact it had on his/her life and current studies.

Lesson 6: Influence of Socializing Agents on Human Development

Learning objective

List and Explain agents of socialization.

Teaching resources

Flashcards, flip chart, markers, books and internet connectivity if available, audio visual materials, hand out of factors of human development, chromosomal abnormalities fact sheet, printed case studies.

Prerequisites/Revision/Introduction

Important and core knowledge that is much relevant to this lesson is about unit 6 (developmental milestone) especially on social aspect. In addition, students learnt about key messages and recommendation practice to help children grow holistically. This content will help them to have a starting point that makes them to learn this lesson with high motivation and easily understand it.

Learning activities

Activity 7.6.

- Invite students to think about the activity in their books.
- They use think pair and share about the question asked.
- Students note their answers on a piece of paper.
- Students make presentation of their findings.
- Teacher guides students to a clear conclusion.

Possible answers on activity 7.6

Students will generate ideas and the ideas will turn around the support that should be given to the child in order to promote social development.

Application activities

- Provide time to the students to do the activity.
- This activity will be done individually.
- Time should be enough to students to complete the activity.
- Make correction of the activity.

Possible answers on application activity 7.6

- 1) It is family the fundamental unit of the society
- 2) Socializing agents: Refer to the Student Book under heading 7.6
- 3) Answer:
 - i) b
 - ii) a
 - iii) b
 - iv) d
 - v) c

Lesson 7: Influence of physical /natural environment (2 periods)

Learning objective

Explain the influence of physical environment to human development.

Teaching resources

Flashcards, flip chart, markers, books and internet connectivity if available, audio visual materials, hand out of factors of human development, chromosomal abnormalities fact sheet, printed case studies.

Prerequisites/Revision/Introduction

Give students work that may help and attract attention towards physical environment. This may be related to questions of social studies that are related to components of physical environment and how these may have influence on people's lives. This lesson is also related to other previous lessons of this unit.

Learning activities

Activity 7.7.

- Invite students to think about the activity in their books.
- They use think pair and share about the question asked.
- Students note their answers on a piece of paper.
- Students make presentation of their findings.
- Teacher guides students to a clear conclusion.

Possible answer on activity 7.7

Students provide answers and teacher complement them but all the ideas will turn around how environment can influence human behavior and motivation to act. Everyone's behaviour will be influenced by the organization of school and after school activities, discipline, etc. of the school she is attending.

Application activities

- Provide time to the students to do the activity.
- this activity will be done individually.
- Time should be enough to students to complete the activity.
- Make correction of the activity.

Possible answer on application activity 7.7

Students will provide answers and teacher will complement them for more understanding

Example of the ideas:

An enriching and stimulating home environment fosters healthy growth and brain development by providing a child with love, emotional support, and opportunities for learning and exploration. Unlikely, a bad environment will impede the good development of an individual in all aspects of life.

Lesson 8: Impact of toxic stress (2 periods)

Learning objective

Judge the effect of toxic stress to development.

Teaching resources

Flashcards, flip chart, markers, books and internet connectivity if available, audio visual materials, hand out of factors of human development, chromosomal abnormalities fact sheet, printed case studies.

Prerequisites/Revision/Introduction

This lesson has interconnection with other lessons learnt previously. Students need to apply knowledge from this unit especially chromosomal abnormalities. This content will help them to effectively go with the teacher with much attention and full participation which will help them to achieve their objective within this lesson.

Learning activities

Activity 7.8.

- Invite students read the scenario in their books.
- They use think pair and share about the question asked.
- Students note their answers on a piece of paper.
- Students make presentation of their findings.
- Teacher guides students to a clear conclusion.

Possible answer on activity 7.8

On this activity the teacher helps students to form pairs and discuss on the scenario. Encourage them to share their ideas with their colleagues. Allow time to students to present in plenary session.

- Mugisha may develop fear and anxiety
- Mugisha may develop anger and become a violent learner.
- Mugisha may hate his father and all adult men.
- He might perform poorly in class works.
- Etc.

Application activities

- Provide time to the students to do the activity
- this activity will be done individually
- Time should be enough to students to complete the activity
- Make correction of the activity

Possible answer on application activity 7.9

This question does not have a precise answer. Students will write a case study referring to their community context and the teacher will keep guiding them.

Lesson 9: Impact of drug abuse on human development (3 periods)

Learning objective:

Recognize how risk factors like drug abuse is harmful to human development.

Teaching resources

Flashcards, flip chart, markers, books and internet connectivity if available, audio visual materials, hand out of factors of human development, chromosomal abnormalities fact sheet, printed case studies.

Prerequisites/Revision/Introduction

This lesson has interconnection with other lessons learnt previously. Students need to apply knowledge from this unit especially chromosomal abnormalities and impact of toxic stress. This content will help them to effectively go with the teacher with much attention and full participation which will help them to achieve their objective within this lesson.

Learning activities

Activity 7.9.

- Invite students to observe the picture.
- They use think pair and share about the question asked.
- Students note their answers on a piece of paper.
- Students make presentation of their findings.
- Teacher guides students to a clear conclusion.

Possible answer on activity 7.9

Students observe the picture and brainstorm about impact of drug abuse on human development (see student book on heading 7.9).

Application activity 7.9

- Provide time to the students to do the activity.
- This activity will be done individually.
- Time should be enough to students to complete the activity.
- Make correction of the activity.

Possible answer on application activity 7.9

The use of illegal drugs or the use of prescription or over-the-counter drugs for purposes other than those for which they are meant to be used, or in excessive amounts Paranoia, depression, anxiety, aggression, hallucination, etc.

7.6.Additional information for the teacher

Factors Affecting Growth and Development

The integrated nature of growth and maturation is largely maintained by a constant interaction of genes, hormones, nutrients and other factors. These factors also influence physical performance. Some are hereditary in origin. Others, such as season, dietary restriction, severe psychological stress, originate in the environment and simply affect the rate of growth at the time they are acting. Others again, such as socio-economic class, reflect a complicated mixture of hereditary and environmental influences and probably act throughout the whole period of growth.

Genetic factors such as the height, weight or body-build of a child or an adult always represent the resultant of both the genetical and environmental forces, together with their interaction. It is a long way from the possession of certain genes to the acquisition of a height of 2m. Gene depends on its expression firstly on the internal environment created by all the other genes, and secondly on the external environment.

The control of body size is certainly a complicated affair involving many genes, yet a disturbance in a single gene or group of genes may produce a widespread and drastic effect, as in the condition of achondroplasia, which is inherited as a simple dominant. On the other hand, the effects may be quite restricted and specific. The genetic control of dental maturation and eruption appears to be separate from that of skeletal maturation, and there is even evidence that the genes controlling the growth of different segments of the limbs are independent of each other. It is now believed that dental development and the sequence of ossification are primarily genetically controlled; the timing of ossification is partly influenced by genetic factors and partly by environmental ones.

Maturation as a whole is even more affected by environment, but genetic influences are still detectable. It seems that the genetic materials operate throughout entire period of growth. Heredity influenced the rate of growth of early matures or late matures. Chromosomal abnormalities suggest genetically control on growth. Genetic factors probably play the leading part in the difference between male and female patterns of growth.

Nutritional

Growth is closely related with nutrition. A sufficiency of food is essential for normal growth. An adequate supply of calories is naturally essential for the normal growth of humans and the need varies with the phase of development. Nine different amino acids have been claimed to be essential for growth and absence of any one will result in disordered or stunted growth. Other factors are also essential for growth. For example, zinc plays a part in protein synthesis and is a constituent of certain enzymes; a deficiency of zinc causes stunting, interference with sexual development and falling out of hair. Iodine is needed for the manufacture of the thyroid hormones. Bone will not grow properly without an adequate supply of calcium, phosphorus and other inorganic constituents such as magnesium and manganese. Iron is required for the production of hemoglobin.

Vitamins play an important part in growth. Vitamin A is thought to be control the activities of osteoblasts. In vitamin C deficiency the intercellular substance of bone is inadequately formed. Vitamin D deficiency is the cause of rickets. Malnutrition during childhood delays growth and malnutrition in the years preceding adolescence delays the appearance of the adolescent spurt. Growth studies have demonstrated that malnutrition may cause serious impairment of growth. The term malnutrition generally refers to the effects of an inadequate intake of calories or other major dietary components such as proteins. Malnutrition may also result from diseases which decrease the appetite or interfere with digestion and assimilation. A majority of malnourished children fail to achieve their full genetic potential of body growth (both linear and ponderal) and are thus stunted or wasted or both.

Cultural

The physical growth of human beings is definitely affected by cultural factors. Culture differs from ethnic group to ethnic group. The body growth differences correlate with varied cultural groups. The physical growth of the body follows some adaptations in different geographical areas of distribution of the groups.

Socioeconomic

Socioeconomic influence on human growth is also a well-known factor. Children from different socioeconomic levels differ in average body size at all ages that have been investigated. The upper groups being always more advanced along the course to maturity. The causes of this socio - economic difference are probably multiple. Nutrition is almost certainly one, and with it all the habits of regular meals, sleep, exercise and general organization that distinguish, from the point of view, a good home from a bad one. Growth differences are more closely related to the home conditions than to the strictly economic status of the families and home conditions reflect the intelligence and personality of the parents. Size of family exerts an indirect influence on the rate of growth. In a large family with limited income the children do not get proper nutrition. As a result the growth is affected. The number of children in the family exerts an effect on the children's rate of growth. Children in large families have been shown to be usually smaller and lighter than children in small families. Possibly this is because in large families children tend to get less individual care and attention. Healthy growth and development requires family- centered, community-based, culturally competent, coordinated care and support throughout the life course during preconception and prenatal periods, infancy, childhood, adolescence, and adulthood.

Environment

The environment plays a critical role in the development of children and it represents the sum total of physical and psychological stimulation the child receives. Some of the environmental factors influencing early childhood development involve the physical surroundings and geographical conditions of the place the child lives in, as well his social environment and relationships with family and peers. It is easy to understand that a well-nurtured child does better than a deprived one; the environment children are constantly immersed in contributes to this. A good school and a loving family build in children strong social and interpersonal skills, which will enable them to excel in other areas such as academics and extracurricular activities. This will, of course, be different for children who are raised in stressful environments.

7.7. End unit assessment (2 periods)

Answers to End unit assessment activities

1. Colour or the eyes
2. Physique
3. Heredity and environment are inseparably interwoven and both influence development
4. Welcoming, stimulating and interesting, comfortable, good natural lighting, appropriate temperature and ventilation, clean and well-maintained, variety of activities using indoor and outdoor environments, opportunities to experience risk and challenge.....
5. Confer to student book on key messages and recommendation practices.

7.8 .Additional activities

7.8.1. Remedial activities

1. Define genetic disorder
2. Outline any 4 traits that are determined by the interaction of both environment and heredity.

Answer:

1. A genetic disorder is a genetic problem caused by one or more abnormalities formed in the genome. Most genetic disorders are quite rare and affect one person in every several thousands or millions.
2. Somatic structure, Physical appearance, mental makeup, Social behaviour, Emotions.

7.8.2. Consolidation activities

1. Explain 3 forms of stress
2. Differentiate identical from fraternal twins

Answer:

We have 3 forms of stress:

- Positive stress which is response to a normal and essential part of a health development (an example of positive stress is being called for interview which requires an individual to prepare more and try harder).
- Tolerable stress which is response to activates the body's alert systems to a greater degree (an example is when a person is frightened by a car accident).

- Toxic stress is a response that occurs when a child experiences a strong, frequent and/or
 - Prolonged adversity which results in changes to their baseline state.
3. Identical twins happen when in the process of the fertilization of the ovum by the sperm, the ovum is made to split into two parts. In a normal process these parts are again united. Sometimes, however it so happens that these two split parts fails to unite together. The result is that each part is developed into a complete individual in the form of the pair of identical twins. They termed identical on account of identical nature of genetic material (exactly the same chromosomes and genes).

Fraternal twins: Normally in each menstrual cycle the female produce a single ovum that can be fertilized by a sperm cell. In exceptional case, two ova may be produced simultaneously and be fertilized at the same time by two different sperms. This result in conception of two individuals who may be grown simultaneously in the mother's womb. These individuals are known fraternal twins. It is not essential for them to belong to the same sex. They may have similar or opposite sex.

7.8.3. Extended activities

Explain how nature and nurture are intertwined in shaping human behaviour.

Note: On this activity, help students to debate on how nature and nurture are intertwined to shape human development.

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