



REPUBLIC OF KENYA

MINISTRY OF EDUCATION

JUNIOR SCHOOL CURRICULUM DESIGNS

**AGRICULTURE
FOR LEARNERS WITH HEARING IMPAIRMENT**

GRADE 7



KENYA INSTITUTE OF CURRICULUM DEVELOPMENT

A Skilled and Ethical Society

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FOREWORD

The Government of Kenya is committed to ensuring that policy objectives for Education, Training and Research meet the aspirations of the Constitution of Kenya 2010, the Kenya Vision 2030, National Curriculum Policy 2019, the United Nations Sustainable Development Goals (SDGs) and the Regional and Global conventions to which Kenya is a signatory. Towards achieving the mission of Basic Education, the Ministry of Education (MoE) has successfully and progressively rolled out the implementation of the Competency Based Curriculum (CBC) at Pre-Primary, Primary and Junior School levels.

The implementation of Competency Based Curriculum involves monitoring and evaluation to determine its success. After the five-year implementation cycle, a summative evaluation of the primary education cycle was undertaken to establish the achievement of learning outcomes as envisaged in the Basic Education Curriculum Framework. The Government of Kenya constituted a Presidential working Party on Education Reforms (PWPER) in 2022 to address salient issues affecting the education sector. PWPER made far reaching recommendations for basic education that necessitated curriculum review. The recommendations of the PWPER, monitoring reports, summative evaluation, feedback from curriculum implementers and other stakeholders led to rationalization and review of the basic education curriculum.

The reviewed Grade 7 curriculum designs for learners with hearing impairment build on competencies attained by learners at Grade 6. Emphasis at this grade is the development of basic literacy, numeracy and skills for interaction with the environment.

The curriculum designs present National Goals of Education, essence statements, general and specific expected learning outcomes for the subjects as well as strands and sub strands. The designs also outline suggested learning experiences, key inquiry questions, core competencies, Pertinent and Contemporary Issues (PCIs), values, and assessment rubric.

It is my hope that all Government agencies and other stakeholders in Education will use the designs to plan for effective and efficient implementation of the CBC.

HON. EZEKIEL OMBAKI MACHOGU, CBS
CABINET SECRETARY,
MINISTRY OF EDUCATION

PREFACE

The Ministry of Education (MoE) nationally implemented Competency Based Curriculum (CBC) in 2019. Grade one is the first grade of Primary education level while Grade 6 is the final grade of the level in the reformed education structure.

The reviewed Grade 7 curriculum furthers implementation of the CBC from Grade 6 in Primary level. The curriculum provides opportunities for learners to focus in a field of their choice to form a foundation for further education and training and/or gain employable skills. This is very critical in the realisation of the Vision and Mission of the on-going curriculum reforms as enshrined in the Sessional Paper No. I of 2019 whose title is: *Towards Realizing Quality, Relevant and Inclusive Education and Training for Sustainable Development* in Kenya. The Sessional Paper explains the shift from a content-focused curriculum to a focus on **nurturing every learner's potential**.

Therefore, the Grade 7 curriculum designs for learners with hearing impairment are intended to enhance the learners' development in the CBC core competencies, namely: Communication and Collaboration, Critical Thinking and Problem Solving, Creativity and Imagination, Citizenship, Digital Literacy, learning to Learn and Self-efficacy.

The curriculum designs provide suggestions for interactive and differentiated learning experiences linked to the various sub strands and the other aspects of the CBC. They also offer several suggested learning resources and a variety of assessment techniques. It is expected that the designs will guide teachers to effectively facilitate learners to attain the expected learning outcomes for Grade 7 and prepare them for smooth transition to Grade 8. Furthermore, it is my hope that teachers will use the adapted designs to make learning interesting, exciting and enjoyable.

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PRINCIPAL SECRETARY
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ACKNOWLEDGEMENT

The Kenya Institute of Curriculum Development (KICD) Act Number 4 of 2013 (Revised 2019) mandates the Institute to develop and review (*SNE adapt*) curricula and curriculum support materials for basic and tertiary education and training. The curriculum development process for any level of education involves thorough research, international benchmarking and robust stakeholder engagement. Through a systematic and consultative process, the KICD conceptualised the Competency Based Curriculum (CBC) as captured in the Basic Education Curriculum Framework (BECF)2017, that responds to the demands of the 21st Century and the aspirations captured in the Constitution of Kenya 2010, the Kenya Vision 2030, East African Community Protocol, International Bureau of Education Guidelines and the United Nations Sustainable Development Goals (SDGs).

KICD receives its funding from the Government of Kenya to facilitate successful achievement of the stipulated mandate and implementation of the Government and Sector (Ministry of Education (MoE) plans. The Institute also receives support from development partners targeting specific programmes. The revised Grade 7 curriculum designs for learners with hearing impairment were developed and adapted with the support of the World Bank through the Kenya Primary Education Equity in Learning Programme (KPEELP); a project coordinated by MoE. Therefore, the Institute is very grateful for the support of the Government of Kenya, through the MoE and the development partners for policy, resource and logistical support. Specifically, special thanks to the Cabinet Secretary-MoE and the Principal Secretary – State Department of Basic Education,

I also wish to acknowledge the KICD curriculum developers and other staff, all teachers, educators who took part as panellists; the Semi-Autonomous Government Agencies (SAGAs) and representatives of various stakeholders for their roles in the development and adaptation of the Grade 7 curriculum designs for learners with hearing impairment. In relation to this, I acknowledge the support of the Chief Executive Officers of the Teachers Service Commission (TSC) and the Kenya National Examinations Council (KNEC) for their support in the process of developing and adapting these designs. Finally, I am very grateful to the KICD Council Chairperson and other members of the Council for very consistent guidance in the process.

I assure all teachers, parents and other stakeholders that this curriculum design will effectively guide the implementation of the CBC at Grade 7 and preparation of learners with hearing impairment for transition to Grade 8.

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NATIONAL GOALS OF EDUCATION

Education in Kenya should:

i) Foster nationalism and patriotism and promote national unity.

Kenya's people belong to different communities, races and religions, but these differences need not divide them. They must be able to live and interact as Kenyans. It is a paramount duty of education to help young people acquire this sense of nationhood by removing conflicts and promoting positive attitudes of mutual respect which enable them to live together in harmony and foster patriotism in order to make a positive contribution to the life of the nation.

ii) Promote the social, economic, technological and industrial needs for national development.

Education should prepare the youth of the country to play an effective and productive role in the life of the nation.

a) Social Needs

Education in Kenya must prepare children for changes in attitudes and relationships which are necessary for the smooth progress of a rapidly developing modern economy. There is bound to be a silent social revolution following in the wake of rapid modernization. Education should assist our youth to adapt to this change.

b) Economic Needs

Education in Kenya should produce citizens with the skills, knowledge, expertise and personal qualities that are required to support a growing economy. Kenya is building up a modern and independent economy which is in need of an adequate and relevant domestic workforce.

c) Technological and Industrial Needs

Education in Kenya should provide learners with the necessary skills and attitudes for industrial development. Kenya recognizes the rapid industrial and technological changes taking place, especially in the developed world. We can only be part of this development if our education system is deliberately focused on the knowledge, skills and attitudes that will prepare our young people for these changing global trends.

iii) Promote individual development and self-fulfilment

Education should provide opportunities for the fullest development of individual talents and personality. It should help children to develop their potential interests and abilities. A vital aspect of individual development is the building of character.

- iv) Promote sound moral and religious values.**
Education should provide for the development of knowledge, skills and attitudes that will enhance the acquisition of sound moral values and help children to grow up into self-disciplined, self-reliant and integrated citizens.
- v) Promote social equality and responsibility.**
Education should promote social equality and foster a sense of social responsibility within an education system which provides equal educational opportunities for all. It should give all children varied and challenging opportunities for collective activities and corporate social service irrespective of gender, ability or geographical environment.
- vi) Promote respect for and development of Kenya's rich and varied cultures.**
Education should instil in the youth of Kenya an understanding of past and present cultures and their valid place in contemporary society. Children should be able to blend the best of traditional values with the changing requirements that must follow rapid development in order to build a stable and modern society.
- vii) Promote international consciousness and foster positive attitudes towards other nations.**
Kenya is part of the international community. It is part of the complicated and interdependent network of peoples and nations. Education should therefore lead the youth of the country to accept membership of this international community with all the obligations and responsibilities, rights and benefits that this membership entails.
- viii) Promote positive attitudes towards good health and environmental protection.**
Education should inculcate in young people the value of good health in order for them to avoid indulging in activities that will lead to physical or mental ill health. It should foster positive attitudes towards environmental development and conservation. It should lead the youth of Kenya to appreciate the need for a healthy environment.

LESSON ALLOCATION FOR JUNIOR SCHOOL

S/ No.	Learning Area	No. of Lesson
1	English for Learners with Hearing Impairment	5
2	Kiswahili for Learners with Hearing Impairment	4
3	Mathematics for Learners with Hearing Impairment	5
4	Religious Education	4
5	Integrated Science for Learners with Hearing Impairment	5
6	Agriculture for Learners with Hearing Impairment	4
7	Social Studies for Learners with Hearing Impairment	4
8	Creative Arts and Sports for Learners with Hearing Impairment	5
9	Pre- technical Studies for Learners with Hearing Impairment	4
10.	Pastoral/ Religious Instruction Programme	1
	Total	41

LEARNING OUTCOMES FOR JUNIOR SCHOOL

By end of Junior School, the learner should be able to:

- 1) Apply literacy, numeracy and logical thinking skills for appropriate self-expression.
- 2) Communicate effectively, verbally and non-verbally, in diverse contexts.
- 3) Demonstrate social skills, spiritual and moral values for peaceful co-existence.
- 4) Explore, manipulate, manage and conserve the environment effectively for learning and sustainable development.
- 5) Practise relevant hygiene, sanitation and nutrition skills to promote health.
- 6) Demonstrate ethical behaviour and exhibit good citizenship as a civic responsibility.
- 7) Appreciate the country's rich and diverse cultural heritage for harmonious coexistence.
- 8) Manage pertinent and contemporary issues in society effectively.
- 9) Apply digital literacy skills for communication and learning.

ESSENCE STATEMENT

Agriculture and nutrition for learners with hearing impairment is a learning area that anchors on the United Nation Sustainable development goals and the socio-economic pillar of Kenya Vision 2030 to promote health, hygiene, food and nutrition security through education. It is an integrated learning area comprising agriculture and home science concepts introduced in the upper primary curriculum. The learners with hearing impairment will deepen the acquired knowledge, skills, attitudes and values in conservation of resources, food production, hygiene and innovative production techniques. The curriculum will enrich learner's competencies in conservation of resources, crop and animal production, foods and nutrition, personal and environmental hygiene, basic clothing construction and laundry work. Agriculture and nutrition curriculum will form a foundation for specialisation in respective career pathways in senior school and beyond.

Agriculture and Nutrition for learners with hearing impairment in Junior School level will build on competencies introduced in the Upper Primary curriculum contributing to human capacity development. Learning experiences have been adapted and broken down to smaller deliverable steps to suit learners with Hearing Impairment. The suggested methods of instruction include: Inquiry based learning (IBL), Project based learning (PBL), Problem based learning (PBL) and pedagogical content knowledge (PCK) where more emphasis has been put on total communication as a mode of instruction in order to benefit both learners who are deaf and hard of hearing. The curriculum will focus on developing knowledge, skills, attitudes and values for conservation of resources, food production, hygiene and production techniques through innovative and adaptive technologies. The acquired knowledge, skills, attitudes and values will form a broad-spectrum foundation for development of agricultural competencies for senior school and beyond.

This design has been adapted to ensure that learners who are Deaf and those who are hard of hearing learn effectively. The adaptations include suggestions for provision of captioned videos, sign language interpretation, use of digital devices with assistive technology, models, , hands on demonstrations and adapted learning resources.

GENERAL LEARNING OUTCOMES

1. Participate actively in agricultural and household activities in conservation of resources.
2. Use scarce resources through innovative practices to contribute towards food and nutrition security.
3. Engage in food production processes for self-sustainability, health and economic development.
4. Adopt personal and environmental hygiene practices for healthy living.
5. Apply appropriate production techniques, innovative technologies, digital and media resources to enhance sustainable agricultural and household practices.
6. Appreciate agricultural and household skills as a worthy niche for hobby, career development, further education and training.

SUMMARY OF STRANDS AND SUB STRANDS

Strands	Sub strands
1.0 Conservation of Resources	1.1 Controlling soil pollution
	1.2 Constructing water retention structures
	1.3 Conserving food nutrients
	1.4 Growing trees
2.0 Food Production Processes	2.1 Preparing planting site and establishing crop
	2.2 Selected crop management practices
	2.3 Preparing animal products: Eggs and honey
	2.4 Cooking: Roasting and steaming
3.0 Hygiene Practices	3.1 Hygiene in rearing animals
	3.2 Laundry: Loose coloured items
4.0 Production Techniques	4.1 Sewing Skills: Knitting
	4.2 Constructing frames suspended garden
	4.3 Adding value to crop produce
	4.4 Making homemade soap

1.0 CONSERVATION OF RESOURCES

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested key inquiry questions
CONSERVATION OF RESOURCES	1.1 Conserving soil: Controlling soil pollution <ul style="list-style-type: none"> • <i>Waste water, excessive use of artificial fertilisers, agricultural chemicals and plastic wastes.</i> (7 lessons)	By the end of the sub strand, the learner should be able to; <ol style="list-style-type: none"> a) sign terms related to conserving soil and controlling soil, pollution in the environment, b) explain the causes of soil pollution in gardening, c) control soil pollution at home environment, d) demonstrate responsibility in using safe farming practices to conserve the soil. 	<ul style="list-style-type: none"> • in purposive groups, learners are guided to use print and non-print media to identify terms related to conserving soil and controlling soil pollution, • in purposive groups, learners are guided to use print media or watch signed videos or observe demonstrations on how to sign terms related to conserving soil and controlling soil pollution in the environment. • in pairs, learners are guided to fingerspell and sign terms related to conserving soil and controlling soil pollution. in the absence of mainstream signs, guide the learners to develop and harmonise meaningful signs for communication purposes. • in purposive groups, learners are guided to watch captioned video clips on causes of soil pollution. pause the video occasionally to allowing the learner to 	<ol style="list-style-type: none"> 1. How can household practices cause soil pollution? 2. Why is controlling soil pollution in the environment important?

			<p>take notes and to further elaborate on the information presented. additionally, playing the video multiple times is advisable for better comprehension.</p> <ul style="list-style-type: none"> ● in purposive groups, learners are guided to discuss and write summary notes on causes of soil pollution as seen from the video clips such as waste water, excessive use of artificial fertilisers, agricultural chemicals and plastic wastes. ensure learners are provided with supplementary notes on causes of soils pollution. ● in purposive groups, learners are guided to watch captioned video clips on soil pollution control practices and present their findings to plenary. correct any mistakes made after the presentations. ● in purposive groups, learners are guided to take an expedition within the school or the community to study how safe soil pollution control practices have been 	
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			<p>applied. ensure learners are provided with sign language interpretations and assistive hearing aids to help them interact with the community during the visit.</p> <ul style="list-style-type: none"> ● in groups, learners are guided to engage a resource person on measures to control soil pollution. ● in purposive groups, learners are guided to prepare charts and make class presentations on safe soil pollution control practices applied in the locality. ensure learners are seated in an appropriate arrangement that supports the use of bilingual communication during the discussion with both the hard of hearing and the deaf learners. ● in purposive groups, learners are guided to practise safe soil pollution control practices such as safe disposal of household waste water, used chemical containers and plastic wastes. 	
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Core competencies to be developed:

- Citizenship: The learner develops the skill of social cultural sensitivity and awareness as they practise safe soil pollution control practices in the community.
- Digital literacy: The learner develops the skill of interacting with digital technology as they use digital devices to watch video clips on soil pollution control practices and present their findings to plenary.
- Communication and collaboration: The learner develops signing skills as they fingerspell and sign terms related to conserving soil and controlling soil pollution.

Values:

- Responsibility: As a learner works hard while practising safe soil pollution control practices such as safe disposal of household waste.
- Patriotism: As a learner shows dedication when creating awareness on improper disposal of waste water.

Pertinent and Contemporary Issues:

- Environmental Education and climate change: Learners promote environmental cleanliness as they practise safe disposal of household waste water, used chemical containers and plastic wastes.

Link to other Learning Areas:

- Learners relate soil pollution to other forms of environmental pollution learnt in science and technology.

Suggested Learning Resources:

- Digital devices.
- Used chemical containers.
- Household waste water.
- Print reference materials.
- Charts on soil pollution control practices.
- Samples of farm fertiliser.
- Sign language dictionary.

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested key inquiry questions
<p>CONSERVATION OF RESOURCES</p>	<p>1.2 Conserving water: water retention structures (8 lessons)</p>	<p>By the end of the sub strand, the learner should be able to;</p> <p>a) sign terms related to conserving water and water retention structure,</p> <p>b) describe how surface run-off can be used in gardening,</p> <p>c) construct water retention structures to conserve surface runoff,</p> <p>d) adopt utilisation of surface run-off in gardening.</p>	<ul style="list-style-type: none"> ● in purposive groups, learners are guided to use print and non-print media to find words related to conserving water and water retention structure. ● in pairs, learners practice to fingerspell and sign terms related to conserving water and water retention structure. ● in purposive groups, learners are guided to use print and non-print media to search for information or captioned video clips on how surface run-off can be conserved in structures such as water retention ditches and water retention pits for gardening. ● in purposive groups, learners are guided to discuss and write summary notes on how surface run-off can be conserved in structures such as water retention ditches and water retention pits for gardening. ensure learners are seated in an appropriate arrangement that supports the use of bilingual 	<ol style="list-style-type: none"> 1. Why do we conserve water? 2. How can surface run-off be conserved for gardening purposes?

			<p>communication during the discussion with both the hard of hearing and the deaf learners.</p> <ul style="list-style-type: none"> ● in purposive groups, learners are guided to use digital devices to watch captioned videos on how to construct retention ditches or retention pits for water conservation. pause the video occasionally to allowing the learner to take notes and to further elaborate on the information presented. additionally, playing the video multiple times is advisable for better comprehension. ● in purposive groups, learners are guided to practise how to construct retention ditches or retention pits for water conservation. and establish a crop of their choice such as a banana sucker, sugarcane, napier grass or arrowroot. 	
<p>Core competencies to be developed:</p> <ul style="list-style-type: none"> ● Digital literacy: The learner develops connecting using technology as they use non print media to search for <i>captioned video clips</i> on how surface run-off can be conserved. ● Critical thinking and problem solving: The learner develops evaluation and decision-making skills as they practise how to construct retention ditches or retention pits for water conservation. 				

Values:

- Responsibility: As a learner displays self-drive while constructing retention ditches or retention pits for water conservation.
- Unity: As a learner cooperates with others while working in groups to construct water retention ditches and water retention pits.

Pertinent and contemporary issues:

- Environmental Education and climate change: Learners promote environmental conservation by constructing water retention structures for conserving surface runoff.
- Personal safety & Security: The learner observes safety for self and others when using garden tools and equipment to construct water retention ditches and water retention pits.

Link to other learning areas:

Pre-technical Studies: The learner observes safety for self and others while using garden tools and equipment to construct water retention ditches and water retention pits.

Suggested Learning Resources:

- Garden tools such as jembes, fork jembes, spades, pangas, slashers, watering cans.
- Digital devices with assistive technology.
- Print and non-print media.
- Planting materials such as banana suckers and sugarcane cuttings.

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested key inquiry questions
CONSERVATION OF RESOURCES	1.3 Conserving food nutrients <ul style="list-style-type: none"> • <i>Washing, peeling, cutting, cooking time, and covering</i> <p>(9 lessons)</p>	<p>By the end of the sub strand, the learner should be able to;</p> <p>a) sign terms related to conserving food nutrients in vegetables,</p> <p>b) identify ways of conserving vitamins and mineral salts in vegetables,</p> <p>c) conserve vitamins and mineral salts in vegetables,</p> <p>d) adopt conservation of vitamins and mineral salts in vegetables.</p>	<ul style="list-style-type: none"> ● in purposive groups, learners are guided to use print and non-print media to identify signs of terms related to conserving food nutrients. ● in purposive groups, learners are guided to use print media or watch videos or observe demonstrations on how to sign terms related to conserving food nutrients in vegetables. ● in pairs, learners practice to fingerspell and sign terms related to conserving food nutrients. in the absence of mainstream signs, learners are guided to harmonize meaningful signs for communication purposes. ● in groups, learners are guided to share personal experiences on ways of conserving vitamins and mineral salts in vegetables. ● in purposive groups, learners are guided to use print and non-print media to search for information on ways of conserving vitamins and 	<p>1.How do we conserve vitamins and mineral salts in vegetables?</p> <p>2.Why do we conserve vitamins and mineral salts in vegetables?</p>

			<p>mineral salts in vegetables such as washing, peeling, cutting, cooking time, and covering.</p> <ul style="list-style-type: none"> ● in groups, learners are guided to use digital devices to watch captioned video clips on ways of conserving vitamins and mineral salts in vegetables such as washing, peeling, cutting, cooking time, and covering. ● in pairs, learners are guided to discuss and write summary notes on ways of conserving vitamins and mineral salts in vegetables such as washing, peeling, cutting, cooking time, and covering. ensure learners are seated in an appropriate arrangement that supports the use of bilingual communication during the discussion with both the hard of hearing and the deaf learners. ● in groups, learners observe a demonstration on ways of conserving vitamins and mineral salts in vegetables such as washing, peeling, 	
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			<p>cutting, cooking time, and covering.</p> <ul style="list-style-type: none"> ● in purposive groups, learners are guided to conserve vitamins and mineral salts in vegetables during food handling, preparation and cooking. ● in pairs, learners are guided to handle, prepare and cook vegetables while observing appropriate ways of conserving vitamins and mineral salts. 	
<p>Core competencies to be developed: Digital literacy: The learner develops skills on connecting using technology as they use digital devices to watch captioned video clips on ways of conserving vitamins and mineral salts in vegetables</p>				
<p>Values: Respect: As a learner shows patience while discussing ways of conserving vitamins and mineral salts in vegetables in pairs.</p>				
<p>Pertinent and contemporary issues:</p> <ul style="list-style-type: none"> ● Safety and security: The learner observes safety and security at home when using sharp kitchen tools and equipment to cut and peel vegetables. ● Disaster Risk Reduction: The learner observes safety to prevent fire disaster in the kitchen while using fire to boil and cook. 				
<p>Link to other learning areas: Learners relate conservation of food nutrients to healthy growth and development learnt in integrated science.</p>				
<p>Suggested Learning Resources:</p> <ul style="list-style-type: none"> ● Digital devices. ● Print reference materials such as recipe books. ● Cooking tools, equipment and materials. 				

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested key inquiry questions
CONSERVATION OF RESOURCES	1.4 Growing trees (8 lessons)	<p>By the end of the sub strand, the learner should be able to:</p> <ul style="list-style-type: none"> a) sign terms related to growing of trees in conservation of resources, b) explain the importance of trees in conserving the environment, c) plant trees to conserve the environment, d) adopt tree planting as a way of conserving the environment. 	<ul style="list-style-type: none"> ● in purposive groups, learners are guided to use print and non-print media to identify key terms related to growing of trees in conservation of resources. ● in purposive groups, learners are guided to watch video clips or use print media or observe demonstrations on how to fingerspell and sign terms related to growing of trees in conservation of resources. ● in purposive groups, learners are guided to fingerspell and sign terms related to growing of trees in conservation of resources. ● in purposive groups, learners are guided to use print and non-print media to search for information on the importance of trees and present to plenary. ● in purposive groups, learners are guided to use digital devices to watch captioned video clips on the 	<ol style="list-style-type: none"> 1. How can growing trees conserve the environment? 2. Why is growing trees important?

			<p>importance of trees. pause the video occasionally to allowing the learner to take notes and to further elaborate on the information presented. additionally, playing the video multiple times is advisable for better comprehension.</p> <ul style="list-style-type: none"> ● learners are guided to write summary notes on the importance of trees in conserving the environment. ensure learners are provided with supplementary notes on the importance of trees in conserving the environment. ● in purposive groups, learners are guided to engage in planting of trees within the school and the locality. at least one tree either from seeds, or seedlings or cuttings and taking care of the seedlings until it is fully established. 	
<p>Core competencies to be developed:</p> <ul style="list-style-type: none"> ● Digital literacy: The learner develops skills in interacting with digital technology as they use digital devices to watch captioned video clips on the importance of trees. ● Self-efficacy: The learner develops leadership skills when they share and carry out tasks in groups to establish a tree of their choice. ● Citizenship: The learner demonstrates responsibility and care for the environment by planting trees for environmental conservation. 				
<p>Values: Responsibility: As the learner diligently plants a tree seed or seedling and takes care of it until it is fully established.</p>				

Pertinent and contemporary issues:

- Environmental education and climate change: The learner promotes environmental conservation by planting a tree seed or seedling and taking care of it until it is fully established.
- Safety and security: The learner observes safety and security for self and others as they use garden tools and equipment to plant trees.

Link to other learning areas:

Learners relate tree planting to conservation of natural resources learnt in social studies.

Suggested Learning Resources:

- Digital devices and print materials.
- Seeds of trees.
- Tree Seedlings.
- Organic manure.
- Mulching materials

Suggested Assessment Rubric

Level Indicator	Exceeds Expectations	Meets Expectations	Approaches Expectations	Below Expectations
Ability to sign terms related to conservation of resources.	Signs terms related to conservation of resources with exceptional accuracy demonstrating signing proficiency.	Signs terms related to conservation of resources accurately conveying the intended meaning clearly.	Signs terms related to conservation of resources with noticeable errors and inconsistencies in articulation.	Signs terms related to conservation of resources inaccurately and lack clarity in articulation.
Ability to describe how to conserve resources in the environment.	Describes four ways of conserving resources (controlling soil pollution, making water retention structures, conserving food nutrients, growing trees) in the environment with exemplified details.	Describes four ways of conserving resources (controlling soil pollution, making water retention structures, conserving food nutrients, growing trees) in the environment.	Describes two to three ways of conserving resources (controlling soil pollution, making water retention structures, conserving food nutrients, growing trees) in the environment.	Describes less than two ways of conserving resources (controlling soil pollution, making water retention structures, conserving food nutrients, growing trees) in the environment.
Ability to conserve resources	Conserves four resources (soil, water, food nutrients, and trees) in the environment through creative and innovative ways.	Conserves four resources (soil, water, food nutrients, and trees) in the environment.	Conserves two to three resources (soil, water, food nutrients, and trees) in the environment.	Conserves less than two resources (soil, water, food nutrients, and trees) in the environment.

2.0 FOOD PRODUCTION PROCESSES

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested key inquiry questions
FOOD PRODUCTION PROCESSES	2.1 Crop Establishment <ul style="list-style-type: none"> • <i>Preparing Planting Site</i> • <i>Planting</i> (9 lessons)	By the end of the sub strand, the learner should be able to; <ol style="list-style-type: none"> a) sign terms related to preparing planting site for planting, b) determine appropriate tilth for selected planting material, c) prepare a suitable tilth for establishing selected planting material, d) adopt appropriate tilth in establishing a selected planting material. 	<ul style="list-style-type: none"> • in purposive groups, learners are guided to use print and non-print media to search for terms related to preparing site and planting for food production. • in purposive groups, learners are guided to use print media or watch signed videos or observe a demonstration on how to sign terms related to preparing planting site for planting. • in pairs, learners are guided to fingerspell and sign terms related to preparing site and planting for food production processes. in the absence of mainstream signs, learners are guided to harmonize meaningful signs for communication purposes. • in groups, learners are guided to watch a captioned video on the appropriate tilth for various-sized seeds. • in purposive groups, learners are guided to discuss and make summary notes on appropriate tilth for each 	<ol style="list-style-type: none"> 1. Why do we prepare a planting site before planting? 2. How do you prepare a planting site?

			<p>material. ensure learners are seated in an appropriate arrangement that supports the use of bilingual communication during the discussion with both the hard of hearing and the deaf learners.</p> <ul style="list-style-type: none"> ● in groups, learners are guided to observe a demonstration on how to prepare of planting sites for planting. ● in purposive groups, learners are guided to practise how to prepare suitable sites for planting. guide the learners to use personal protective equipment to avoid injuries. ● in purposive groups, learners are guided to establish a planting material of their choice in the selected soil tith. 	
<p>Core competencies to be developed:</p> <ul style="list-style-type: none"> ● Critical thinking and problem solving: The learner develops observation skills as learnt relate size of planting materials to type of tith. ● Self-efficacy: The learner develops leadership skills when they share and carry out tasks in groups when preparing planting sites and establishing crops. 				
<p>Values:</p> <ul style="list-style-type: none"> ● Unity: As a learner cooperates with others while preparing planting sites and establishing crops. ● Responsibility: As a learner shows determination when performing roles and duties assigned during group activities to prepare planting sites and establish crops. 				

Pertinent and contemporary issues (PCIs):

Safety and security: The learners observe safety and security for self and others as they use garden tools and equipment to prepare planting sites and establish crops.

Link to other learning areas:

- The learner relates the concept of safety and security for self and others a concept from Pre-Technical Studies as they use garden tools and equipment to prepare planting sites and establish crops.
- Learners relate planting site (tilth) and seed size to concept of germination learnt in Integrated Science.

Suggested Learning Resources:

- Seeds from different crops of various sizes.
- Print reference materials.
- Digital devices.
- Medium sized seeds such as maize grains, beans.
- Large planting materials like tubers, suckers and cuttings.
- Suitable planting sites such as walls of buildings, fence lines, driveways in schools, suitable containers.
- Manure.
- Garden tools and equipment such as jembes, pangas, slashers, watering cans, wheelbarrow.

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested key inquiry questions
FOOD PRODUCTION PROCESSES	2.2 Selected management practices (8 lessons)	<p>By the end of the sub strand, the learner should be able to:</p> <ol style="list-style-type: none"> sign terms related to selected management practices in food production processes, explain management practices carried out on crops, carry out management practices in crop production, appreciate the importance of various management practices in crop production. 	<ul style="list-style-type: none"> ● in purposive groups, learners are guided to use print and non-print media to identify terms related to selected management practises in food production processes. ● in purposive groups, learners are guide to use print media or watch video clips or observe a demonstration on how to sign terms related to selected management practices in food production processes. ● in purposive groups, learners are guided to fingerspell and sign terms related to selected management practises in food production processes. in the absence of mainstream signs, learners are guided to harmonize meaningful signs for communication purposes. ● in purposive groups, learners are guided to watch captioned video, or a demonstration on management practices. ● in purposive groups, learners are guided to prepare a checklist to collect data on 	<ol style="list-style-type: none"> How can we carry out management practices in crop production? Why are management practices carried out on crops?

			<p>management practices in a nearby farm within the school or the community.</p> <ul style="list-style-type: none"> ● in purposive groups, learners are guided to visit nearby farms to carry out a field study on management practices carried out on crops. ● in purposive groups, learners are guided to perform tasks to carry out selected management practices (<i>gapping, thinning, weeding through physical methods, earthing-up</i>). ● in purposive groups, learners are guided to use print and non-print media to search for the importance of the selected management practices in crop production and make classroom presentations. correct any mistakes made after the presentations. 	
<p>Core competencies to be developed:</p> <ul style="list-style-type: none"> ● Digital Literacy: The learner develops digital citizenship skills as they observe safety precautions when using digital devices to watch captioned video on management practices. ● Communication and collaboration: The learner embraces teamwork as they work in groups to carry out selected management practices in crop production. 				

Values:

- Unity: As a learner cooperates with others while working in groups, allowing each member of the group to take turns to carry out selected management practices in crop production.
- Respect: As a learner displays patience towards each member of the group when they take turns to carry out selected management practices in crop production.
- Responsibility: as a learner observes safety and security for self and others when using garden tools and equipment to carry out selected management practices in crop production.

Pertinent and contemporary issues (PCIs):

Disaster Risk Reduction: The learner observes safety for self and others when using garden tools and equipment to carry out selected management practices in crop production.

Link to other learning areas:

Learners relate plant spacing and population that guide gapping and thinning to concepts of measurement and numbers in mathematics.

Suggested Learning Resources

- Digital devices.
- Print reference materials.
- Garden tools and equipment such as jembes, fork jembes, spades, pangas, slashers, watering cans.

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested key inquiry questions
FOOD PRODUCTION PROCESSES	2.3 Preparing animal products: Eggs and honey • <i>Eggs</i> • <i>Honey</i> (9 lessons)	By the end of the sub strand, the learner should be able to: a) <i>sign terms related to preparation of animal products,</i> b) explain how to prepare animal products for various purposes, c) prepare animal products for various purposes, d) embrace preparation of animal products for various purposes.	<ul style="list-style-type: none"> • in purposive groups, learners are guided to use print and non-print media to identify terms related to preparation of animal products. caution learners to observe proper cyber ethics while conducting online searches. • in purposive groups, learners are guided to use print media or watch video clips or observe demonstrations on how to sign terms related to preparation of animal products. • in pairs, learners are guided to fingerspell and sign terms related to preparation of animal products. in the absence of mainstream signs, learners are guided to harmonize meaningful signs for communication purposes. • in purposive groups, learners are guided to use print and non-print media or video clips to search for information, discuss and share experiences on how to prepare eggs and honey for 	<ol style="list-style-type: none"> 1. Why do we prepare animal products? 2. How can we prepare animal products?

			<p>use and storage as animal products.</p> <ul style="list-style-type: none"> • in purposive groups, learners are guided to make an academic expedition to a nearby farm to carry out a field study on how to prepare animal products; eggs and honey. • in purposive groups, learners are guided to use digital devices to take photos in preparation of animal products and mount them on a catalogue. • learners are guided to display the photos taken during the visit in class for peer assessment. • in purposive groups, learners are guided to prepare eggs (<i>sorting, grading, packing</i>) and honey under the tutelage of a resource person (<i>crushing and straining method, packing in appropriate containers</i>). ensure learners are provided with sign language interpretations and assistive hearing aids to help them interact with the community during the visit. 	
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			<ul style="list-style-type: none"> learners are guided to write summary notes on how animal products are prepared and present in plenary. correct any mistakes made after the presentations. in purposive groups, learners are guided to display prepared animal products and adopt the practice at home and in school. 	
<p>Core competencies to be developed:</p> <ul style="list-style-type: none"> Communication and collaboration: The learner develops signing skills as they fingerspell and sign terms related to preparation of animal products. Digital Literacy: The learner develops skills on connecting using technology as they use digital devices to take photos in preparation of animal products. 				
<p>Values:</p> <ul style="list-style-type: none"> Unity: As a learner cooperates with others while working in groups to display prepared animal products. Integrity: as the learner uses of ethically acceptable procedures in preparation and packaging of eggs and honey. 				
<p>Pertinent and contemporary issues (PCIs): Safety and security: The learners handle eggs with care to avoid breakage as they prepare them for use and storage.</p>				
<p>Link to other learning areas: Learners relate preparation of eggs and honey through sorting, grading and packing to concept of presentation of products for marketing learnt in Pre-technical studies.</p>				

Suggested learning resources:

- Digital devices.
- Resource person.
- Print reference materials.
- Realia- eggs and honey.
- Cooking tools and equipment. (*improvise or substitute as much as possible*)
- Food storage equipment.
- Cupboard.
- First aid kit.

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested key inquiry questions
FOOD PRODUCTION PROCESSES	2.4 Cooking food <ul style="list-style-type: none"> • <i>Grilling</i> • <i>Roasting</i> • <i>Steaming</i> (9 lessons)	By the end of the sub strand, the learner should be able to: <ol style="list-style-type: none"> a) sign terms related to cooking, grilling, roasting and steaming different types of foods, b) describe methods of cooking different types of foods, c) cook food using various methods, d) appreciate the use of varied methods of cooking food. 	<ul style="list-style-type: none"> • in purposive groups, learners are guided to use print and non-print media to search for terms related to cooking, grilling, roasting and steaming. caution learners to observe proper cyber ethics while conducting online searches. • in purposive groups, learners are guided to use print media or watch signed video clips or observe demonstrations on how to sign terms related to cooking, grilling, roasting and steaming different types of foods. • in purposive groups, learners are guided to fingerspell and sign terms related to cooking, grilling, roasting and steaming different types of foods. • in purposive groups, learners are guided to use digital resources, print materials or resource person to source for information on grilling, roasting and steaming foods. • in purposive groups, learners are guided to watch 	<ol style="list-style-type: none"> 1. Why should we use different methods of cooking food? 2. How do we cook different types of food?

			<p>captioned videos on how to grill, roast and steam different types of foods.</p> <ul style="list-style-type: none"> • in pairs, learners are guided to use grilling, steaming and roasting methods to prepare foods while observing safety of self and others. guide the learners to use personal protective equipment to avoid injury. • in purposive groups, learners are guided to make summary notes and make class presentations on the various methods of cooking food. ensure learners are provided with supplementary notes on how to prepare different types of food. • in purposive groups, learners are guided to clean up the area of cooking and store the cooking materials safely. 	
<p>Core competencies to be developed:</p> <ul style="list-style-type: none"> • Digital literacy: The learner develops digital citizenship skills as they observe cyber security while searching for information on methods of cooking such as grilling, roasting and steaming foods. • Communication and collaboration: The learner develops signing and observing skills as they fingerspell and sign terms related to cooking, grilling, roasting and steaming. 				
<p>Values:</p> <ul style="list-style-type: none"> • Love: As a learner shares cooking equipment while preparing foods using different methods. • Responsibility: as the learner takes care of cooking equipment as learners engage in steaming and roasting methods. 				

Pertinent and contemporary issues (PCIs):

- Disaster Risk Reduction: The learner observes safety to prevent fire disaster in the kitchen while using fire to grill, roast and steam foods.
- Safety and security: Learners observe safety for self and others while using steaming, grilling and roasting methods to prepare food and as they use sharp kitchen tools and equipment.

Link to other learning areas:

Learners relate cooking methods to transfer of heat learnt in Integrated science.

Suggested learning resources:

- Digital devices.
- Resource person.
- Print reference materials.
- Realia- local foodstuff. (*suitable for the purpose either grilling, roasting or steaming*)
- Cooking tools and equipment. (*improvise or substitute as much as possible*)
- Fuel - Cookers/stoves. (*choose which one is suitable*), Gas, Electric, Kerosene, Charcoal, Firewood, Solar
- Food storage equipment. (choose which one is locally available for use)
- Cupboard
- Charcoal cooler.
- Refrigerators.
- Roasting grills.
- Steamers.
- Skewers.
- Roasting dishes.
- Serving dishes.
- Cleaning aids such as detergents, cleaning cloths.
- First aid kit.

Suggested Assessment Rubric				
Indicator \ Level	Exceeds expectation	Meets expectation	Approaches expectation	Below expectation
Ability to sign terms related to cooking, grilling, roasting and steaming.	Signs terms related to cooking, grilling, roasting and steaming with exceptional accuracy demonstrating signing proficiency.	Signs terms related to cooking, grilling, roasting and steaming accurately conveying the intended meaning clearly.	Signs terms related to cooking, grilling, roasting and steaming with noticeable errors and inconsistencies in articulation.	Signs terms related to cooking, grilling, roasting and steaming inaccurately and lacks clarity in articulation.
Ability to prepare planting sites for planting.	Prepares planting site for planting by mixing organic matter into the soil thoroughly. Also, levels and smoothest the planting area, ensuring proper water flow and seed/seedling contact.	Prepares planting site for planting by mixing organic matter into the soil appropriately.	Prepares planting site for planting by mixing organic matter inconsistently or using insufficient quantity.	Prepares planting site for planting by mixing organic matter into the soil carelessly or using inappropriate materials.
Ability to select management practises	Selects management practices anticipating potential challenges and develops contingency plans for adaptation or adjustments. Also, demonstrates flexibility and willingness to adapt the plan based on ongoing monitoring and feedback.	Selects management practices anticipating potential challenges and develops contingency plans for adaptation or adjustments.	Selects management practices failing to anticipate potential challenges or relies on vague or ineffective contingency plans.	Selects management practices demonstrating no understanding of how to put chosen practices into action.
Ability to prepare eggs and honey as animal products.	Prepares eggs and honey by demonstrating a variety of safe and effective techniques for	Prepares eggs and honey competently using several techniques but	Prepares eggs and honey competently using limited techniques or	Prepares eggs and honey demonstrating no understanding of the basic techniques or

	cooking eggs considering desired consistency and dish requirements.	may require guidance for more complex methods.	struggles with proper execution.	requires extensive assistance.
Ability to describe methods of cooking different types of foods.	Describes each cooking method clearly and accurately, explaining its principles and key differences from other methods. Provides precise details about temperature ranges, timings, and suitable ingredients for each method.	Describes most methods accurately and provides generally accurate temperature ranges, timings, and ingredient compatibility.	Describes methods vaguely or with errors, potentially confusing them or their applications. Provides imprecise or inaccurate information about temperature, timing, and ingredients.	Demonstrates significant misunderstanding of cooking methods, providing inaccurate or incomplete descriptions. Gives unreliable information about temperature, timing, and ingredient compatibility.

3.0 HYGIENE PRACTICES

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested key inquiry questions
HYGIENE PRACTICES	3.1 Hygiene in rearing animals <ul style="list-style-type: none"> • <i>Clean feeders and waterers, clean and well-ventilated housing, clean animal</i> (9 lessons)	By the end of the sub strand, the learner should be able to; <ol style="list-style-type: none"> a) sign related to hygiene in rearing animals, b) describe hygiene practices in rearing domestic animals, c) carry out hygiene practices in rearing domestic animals, d) appreciate the importance of hygiene practices in rearing domestic animals. 	<ul style="list-style-type: none"> • in purposive groups, learners are guided to use print and non-print materials to search terms related to hygiene in rearing animals. caution learners to observe proper cyber ethics while conducting online searches. • in purposive groups, learners are guided to use print and non-print media or observe a demonstration on how to sign related to hygiene in rearing animals. • in purposive groups, learners are guided to fingerspell and sign terms related to hygiene in rearing animals. in the absence of mainstream signs, learners are guided to harmonize meaningful signs for communication purposes. • in purposive groups, learners are guided to use print and non-print media to search for information and captioned video clips on hygienic practices in rearing domestic animals such as pets. 	<ol style="list-style-type: none"> 1.How can we maintain hygiene while rearing animals? 2.Why do we maintain hygiene while rearing animals?

			<ul style="list-style-type: none"> ● in purposive groups, learners are guided to use digital devices to watch captioned videos on hygienic practices in rearing domestic animals such as pets. pause the video occasionally to allowing the learner to take notes and to further elaborate on the information presented. additionally, playing the video multiple times is advisable for better comprehension. ● in purposive groups, learners are guided to take an academic expedition to a nearby farm within the school or the community to find out appropriate hygiene practices in rearing domestic animals. when engaging a resource person; learners who are deaf should be provided with sign language interpretation. learners who are hard of hearing should be provided with assistive hearing aids and be allowed to sit at the front. ● learners are guided to write a summary report on 	
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			<p>appropriate hygiene practices in rearing domestic animals within the community.</p> <ul style="list-style-type: none"> ● in purposive groups, learners are guided to carry out appropriate hygiene practices in rearing domestic animals. guide the learners to use personal protective equipment to avoid injuries. ● in pairs, learners are guided to make summary notes on appropriate hygiene practices in rearing domestic animals and present in plenary. ensure learners are provided with supplementary notes on appropriate hygiene practices in rearing domestic animals. 	
<p>Core competencies to be developed:</p> <ul style="list-style-type: none"> ● Communication and collaboration: The learner develops signing and observing skills as they fingerspell and sign terms related to hygiene in rearing animals. ● Digital literacy: The learner develops the skill of digital citizenship as they use digital devices to search for information on hygienic practices in rearing domestic animals such as pets. ● Learning to learn: The learner applies the information obtained to enhance maintenance of hygiene in rearing domestic animals. 				
<p>Values:</p> <ul style="list-style-type: none"> ● Love: As a learner portrays care and compassion towards animals by carrying out appropriate hygiene practices in rearing domestic animals. ● Unity: The learner embrace teamwork as they carry out appropriate hygiene practices in rearing domestic animals. 				
<p>Pertinent and contemporary issues (PCIs): Health Promotion Issues: The learner promotes health by carrying out appropriate hygiene practices in rearing domestic animals such as cleaning feeders, waterers, animal houses and pets.</p>				

Link to other learning areas:

Learners relate hygiene practices in rearing domestic animals to concepts of animal production as an economic activity learnt in social studies.

Suggested Learning Resources:

- Feeders.
- Waterers.
- Animal houses/structures.
- Digital devices.
- Print reference materials.

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested key inquiry questions
HYGIENE PRACTICES	3.2 Laundry: Loose coloured items (8 lessons)	<p>By the end of the sub strand, the learner should be able to:</p> <ul style="list-style-type: none"> a) sign terms related to laundry in hygiene practises, b) describe how to launder a loose coloured article for hygiene purpose, c) launder a loose coloured article for hygiene purposes, d) embrace laundering of loose coloured articles for hygiene purposes. 	<ul style="list-style-type: none"> ● in the purposive group, learners are guided to use print and non-print media to identify terms related to laundry in hygiene practices. caution learners to observe proper cyber ethics while conducting online searches. ● in purposive groups, learners are guided to use print or digital resources or observe a demonstration on how to sign terms related to laundry in hygiene practises. ● in the purposive group, learners are guided to fingerspell and sign terms related to laundry in hygiene practices. ensure learners are seated in an appropriate arrangement that supports the use of bilingual communication during the discussion with both the hard of hearing and the deaf learners. ● in purposive groups, learners are guided to use digital devices to watch captioned video clip or a demonstration on how to launder a loose 	<ol style="list-style-type: none"> 1. Why do we practise laundry? 2. How are loose coloured articles laundered for hygienic purposes?

			<p>coloured (<i>kneading and squeezing, fixing colour</i>).</p> <ul style="list-style-type: none"> • in purposive groups, learners are guided to practise how to launder a loose coloured item using kneading and squeezing method and fixing colours using salt. 	
<p>Core competencies to be developed:</p> <ul style="list-style-type: none"> • Communication and collaboration: The learner develops signing and observing skills as they fingerspell and sign terms related to laundry in hygiene practices. • Digital Literacy: The learner develops skills on digital citizenship as they use digital devices to watch captioned video clips or a demonstration on how to launder a loose coloured. 				
<p>Values: Responsibility: As a learner displays self-drive while laundering a loose coloured item using kneading and squeezing methods and fixing colours using salt.</p>				
<p>Pertinent and contemporary issues (PCIs):</p> <ul style="list-style-type: none"> • Health Promotion Issues: The learner maintains hygiene while laundering loose coloured articles. • Safety and security: The learner observes caution when handling various solutions used in laundering loose coloured articles. 				
<p>Link to other learning areas: Learners relate laundering of loose coloured articles to concept of tie and dye technique of fixing colours learnt in creative art.</p>				
<p>Suggested Learning Resources:</p> <ul style="list-style-type: none"> • Salt. • Loose coloured articles. • Digital devices. • Basic laundry work equipment such as basins, buckets, clothesline, pegs, irons, ironing surfaces, hangers, soap dishes. 				

Suggested Assessment Rubric

Level Indicator	Exceeds Expectations	Meets Expectations	Approaches Expectations	Below Expectations
Ability to sign terms related to hygiene practices.	Signs terms sign terms related to hygiene practices with exceptional accuracy demonstrating signing proficiency.	Signs terms sign terms related to hygiene practices accurately conveying the intended meaning clearly.	Signs terms sign terms related to hygiene practices with noticeable errors and inconsistencies in articulation.	Signs terms sign terms related to hygiene practices inaccurately and lack clarity in articulation.
Ability to describe hygiene practices at household level.	Describes two hygiene practices (in rearing animals and laundering loose coloured items) with elaborate details.	Describes two hygiene practices (in rearing animals and laundering loose coloured items).	Describes one hygiene practice (in rearing animals or laundering loose coloured items).	Describes hygiene practices (in rearing animals or laundering loose coloured items) with partial details.
Ability to carry out hygiene practices at household level.	Carries out two hygiene practices (in rearing animals and laundering loose coloured items) at household level with innovative or notable attention to details.	Carries out two hygiene practices (in rearing animals and laundering loose coloured items) at household level.	Carries out one hygiene practice (in rearing animals or laundering loose coloured items) at household level.	Carries out hygiene practices (in rearing animals and laundering loose coloured items) at household level with some tasks that require corrections.
Ability to exhibit unity in practising hygiene.	Exhibits more than three indicators of unity (team spirit, collaboration with others and shares available resources) in practising hygiene.	Exhibits three indicators of unity (team spirit, collaboration with others and shares available resources) in practising hygiene.	Exhibits two indicators of unity (team spirit, collaboration with others and shares available resources) in practising hygiene.	Exhibits less than two indicators of unity (team spirit, collaboration with others and shares available resources) in practising hygiene.

4.0 PRODUCTION TECHNIQUES

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested key inquiry questions
PRODUCTION TECHNIQUES	4.1 Sewing skills: Knitting <ul style="list-style-type: none"> ● (Purl and Knit). (10 lessons) 	By the end of the sub strand, the learner should be able to: <ol style="list-style-type: none"> a) sign terms related to sewing skills in production techniques, b) describe knitting stitches used in making household articles, c) knit various articles for household use, d) embrace knitted articles for household use. 	<ul style="list-style-type: none"> ● in purposive groups, learners are guided to use print and non-print media to search for terms related to sewing skills in production techniques. ● in purposive groups, learners are guided to use print or non-print media or observe a demonstration on how to sign terms related to sewing skills in production techniques. ● in pairs, learners are guided to fingerspell and sign terms related to sewing skills in production techniques. in the absence of mainstream signs, learners are guided to harmonize meaningful signs for communication purposes. ● in purposive groups, learners are guided to use digital devices or real materials or print media to identify basic knitting stitches (<i>purl and knit</i>). ● in purposive groups, learners are guided to use digital devices to watch captioned videos on how to knit 	<ol style="list-style-type: none"> 1. How do you knit an article for household use? 2. Why do we knit household articles?

			<p>stitches. in cases where videos are not captioned, ensure the videos are supported by sign language interpretation and pause to allow the learner ample time to follow and interpret the videos. probe with questions to elicit response and enhance comprehension.</p> <ul style="list-style-type: none"> ● in purposive groups, learners are guided to use print and non-print media to search for more information on knitting stitches. ● in purposive groups, learners are guided to knit a simple household article such as tools bag, scarf, gloves, mats or table wipers under the tutelage of a resource person. 	
<p>Core competencies to be developed:</p> <ul style="list-style-type: none"> ● Communication and collaboration: The learner develops signing and observing skills as they fingerspell and sign terms related to sewing skills in production techniques. ● Digital literacy: The learner develops the skill of connecting with technology as they use digital devices to watch captioned videos on how to knit stitches. ● Creativity and imagination: The learner develops experimenting skills as learners knit a household article using basic knitting stitches. 				
<p>Values:</p> <ul style="list-style-type: none"> ● Love: As a learner shows compassion to others while participating in group activities. ● Integrity: as the learner prudently uses of materials and equipment in the knitting of household article. 				
<p>Pertinent and contemporary issues (PCIs): Safety and security: The learners observe safety for self and others as they use sharp tools for knitting.</p>				

Link to other learning areas:

The Learner relates knitting to weaving technique learnt in creative arts and sports.

Suggested Learning Resources:

- Digital Devices.
- Print reference resources.
- Knitting needles and yarns.
- Real knitting machines. (*circular, warp, flat, computerised*)

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested key inquiry questions
PRODUCTION TECHNIQUES	4.2 Constructing Framed Suspended Garden (10 lessons)	By the end of the sub strand, the learner should be able to: a) sign terms related to innovative gardening skills in production technique, b) describe framed suspended garden for growing crops, c) construct a framed structure for suspended garden, d) embrace the use of framed suspended gardens for growing crops.	<ul style="list-style-type: none"> ● in purposive groups, learners are guided to use print and non-print media to list terms related to innovative gardening skills in production technique. caution learners to observe proper cyber ethics while conducting online searches. ● in purposive groups, learners are guided to use print or non-print media or observe a demonstration on how to sign terms related to innovative gardening skills in production technique. ● in pairs, learners are guided to fingerspell and sign terms related to innovative gardening skills in production technique. ● in purposive groups, learners are guided to use print and non-print media to search for information on how framed suspended gardens are constructed. ● in purposive groups, learners are guided to watch captioned videos on how to innovate and construct 	<ol style="list-style-type: none"> 1. Why do we practise gardening skills? 2. How are framed suspended gardens constructed?

			<p>framed suspended gardens using locally available materials such as wires, wooden planks, metal bars and poles.</p> <ul style="list-style-type: none"> ● in purposive groups, learners are guided to innovate and construct framed suspended gardens using locally available materials such as wires, wooden planks, metal bars and poles. ensure learners are seated in an appropriate arrangement that supports the use of bilingual communication during the discussion with both the hard of hearing and the deaf learners. ● in purposive groups, learners are guided to establish a crop on the constructed framed suspended garden and present it for peer assessment. correct any mistakes made after the presentations. 	
<p>Core competencies to be developed:</p> <ul style="list-style-type: none"> ● Digital literacy: The learner develops the skill of connecting with technology as they use digital devices connected to the internet to search for information, photos, audiovisual clips and illustrations on framed suspended gardens to understand how they are constructed. 				

- Creativity and imagination: The learner develops the skill of decision making as they innovate and construct framed suspended gardens using locally available materials.
- Critical thinking and problem solving: The learner develops researching skills as they establish a crop on the constructed framed suspended garden.

Values:

- Unity: As a learner cooperates as they work in groups to construct framed suspended gardens.
- Responsibility: As a learner displays accountability while using workshop tools and equipment to construct the framed suspended gardens.

Pertinent and contemporary issues (PCIs):

- Environmental education and climate change: The learner re-use locally available materials to construct framed suspended gardens.
- Safety and Security: The learners observe safety for self and others as they use workshop tools and equipment to construct framed suspended gardens.

Link to other learning areas:

The learner relate value addition concept to commodity marketing learnt in Pre-technical Studies.

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested key inquiry questions
PRODUCTION TECHNIQUES	4.3 Adding Value to Crop Produce (8 lessons)	By the end of the sub strand, the learner should be able to: a) sign terms related to value addition technique, b) explain ways of adding value on crop produce, c) add value to a selected crop produce, d) appreciate the importance of value addition on crop produce.	<ul style="list-style-type: none"> • in purposive groups, learners are guided to use print and non-print media to search for terms related to value addition technique. • in purposive groups, learners are guided to use print and non-print media or observe a demonstration on how to fingerspell and sign terms related to value addition technique • in purposive groups, learners are guided to fingerspell and sign terms related to value addition technique. in the absence of mainstream signs, learners are guided to harmonize meaningful signs for communication purposes. • in purposive groups, learners are guided to use print and non-print media to search for information and videos on ways of adding value to crop produce such as potatoes, cassava, groundnuts, simsim, sweet potatoes and pumpkin and present to plenary. • in purposive groups, learners are guided to visit nearby 	<ol style="list-style-type: none"> 1. Why do we add value to crop produce? 2. How can we add value to crop produce?

			<p>farms to investigate how value has been added to crop produce. ensure the learners are provided with sign language interpretation and assistive hearing aids which can aid them interact with the community.</p> <ul style="list-style-type: none"> • in pairs, learners are guided to write an essay on how value has been added to crop produce in the locality. • in purposive groups, learners are guided to process a sample of crop produce to add value using appropriate methods like drying and frying. (<i>potatoes, cassava, groundnuts, simsim, sweet potatoes and pumpkin</i>) guide the learners to use personal protective equipment to avoid injuries. • in purposive groups, learners are guided to compare the processed crop produce in raw crop produce in terms of monetary value and storage life. 	
<p>Core competencies to be developed: Communication and collaboration: The learners develop signing and observing skills as they fingerspell and sign terms related to value addition technique.</p>				

- Digital literacy: The learner develops the skill of connecting with technology as they use digital devices to watch videos on ways of adding value to crops.
- Critical thinking and problem solving: The learners select a suitable method of adding value to a crop produce to prolong shelf life and for economic purposes.

Values:

Integrity: As a learner displays honesty while using ethically acceptable standards of processing crop produce to add value.

Pertinent and contemporary issues (PCIs):

Health Promotion Issues: The learners promote food nutrition and security as they process crop produce to increase shelf life and reduce food spoilage through value addition processes.

Links to Other learning areas:

- The learner relate value addition concept to commodity marketing learnt in Pre-technical Studies.

Suggested Learning Resources:

- Crop produce that can be used for value addition e.g. potatoes, mangoes, cassava, tomatoes, groundnuts, pumpkins.
- Kitchen utensils such as frying pans, spoons, knives, strainers.
- Cooking oil.
- Print reference materials.
- Digital devices.
- Transparent packaging bags and containers.

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested key inquiry questions
PRODUCTION TECHNIQUES	4.4 Making Homemade soap (8 lessons)	By the end of the sub strand, the learner should be able to: a) sign words related to homemade making soap, b) identify the forms of soap used at household level, c) make homemade soap using natural ingredients, d) embrace homemade soap for household use.	<ul style="list-style-type: none"> ● in purposive groups, learners are guided to use print and non-print media to search for terms related to making homemade soap. caution learners to observe proper cyber ethics while conducting online searches. ● in purposive groups, learners are guided to use print or non-print media or observe a demonstration on how to sign words related to homemade making soap. ● in purposive groups, learners are guided to fingerspell and sign terms related to making homemade soap. ● in purposive groups, are guided to use print and non-print media to search for information on forms of soap used at household level. <i>(liquid, cake/bar, paste, powder)</i> ● in purposive groups, learners are guided to use digital devices to watch captioned videos on how to make soap. ● in the purposive group, learners are guided to use 	<p>1.How can we make soap using natural ingredients?</p> <p>2.Why do we make homemade soap?</p>

			<p>natural ingredients such as ashes, salt, water, animal fats or plant oils to make soap and present for peer assessment.</p> <ul style="list-style-type: none"> ● in purposive groups, learners are guided to use the home-made soap for cleaning purposes. 	
<p>Core competencies to be developed:</p> <ul style="list-style-type: none"> ● Communication and collaboration: The learners develop signing and observing skills as they fingerspell and sign terms related to making homemade soap. ● Critical thinking and Problem solving: The learners identify and collect natural locally available materials and use the ingredients to make soap for cleaning. ● Creativity and imagination: The learners experiment with ideas on homemade soap to test if it works while exploring the different ways of improving it for various uses. ● Digital Literacy: The learner develops skills on digital citizenship as they use digital devices to watch captioned videos on how to make soap. 				
<p>Values:</p> <ul style="list-style-type: none"> ● Responsibility: The learner displays self-drive while carrying out assigned roles and duties during group activities to make homemade soap using natural ingredients. ● Unity: As a learner cooperates as they work in groups to make homemade soap using natural ingredients. 				
<p>Pertinent and contemporary issues:</p> <ul style="list-style-type: none"> ● Health Promotion Issues: The learning observes health and hygiene when they use the homemade soap for cleaning purposes. ● Environmental Education and Climate Change: The learner collects soap scraps and soap flakes, recycles them to make homemade soap for cleaning purposes. 				
<p>Link to other learning areas:</p> <p>The learner relates use of natural ingredients in making soap to concepts of recycling and reusing wastes learnt in Integrated Science.</p>				
<p>Suggested Learning Resources:</p> <p>Forms of soap and soapless detergents. (<i>liquid, foam, bar, powder, flakes</i>).</p> <ul style="list-style-type: none"> ● Print reference materials. ● Digital devices. 				

- Water. (*soft and hard, cold and warm-hot*).
- Knife.
- Grater.
- Ingredients for making homemade soap (*wood ashes, salt, fats/oils, and water*).
- Fragrances.
- Dyes.
- Perfumes.
- Antiseptic.
- Glycerine.
- Heating facility – cookers such as *jiko, stove, three stones fireplace or any source of heat*.

Suggested assessment rubric

Level \ Indicator	Exceeds Expectations	Meets Expectations	Approaches Expectations	Below Expectations
Ability to sign terms related to production techniques.	Signs terms related to production techniques. with exceptional accuracy demonstrating signing proficiency	Signs terms related to production techniques conveying the intended meaning clearly.	Signs terms related to production techniques. with noticeable errors and inconsistencies in articulation.	Signs terms related to production techniques inaccurately and lack clarity in articulation.
Ability to describe production techniques at household level.	Describes four production techniques (knitting, constructing framed garden, value addition on crop produce, and making soap) at household level with illustrative details.	Describes four production techniques (knitting, constructing framed garden, value addition on crop produce, and making	Describes two to three production techniques (knitting, constructing framed garden, value addition on crop produce,	Describes less than two production techniques (knitting, constructing framed garden, value addition on crop

		soap) at household level.	and making soap) at household level.	produce, and making soap) at household level.
Ability to apply production techniques at household level.	Applies four production techniques (knitting, constructing framed suspended garden, value addition on crop produce, and making soap) at household level with notable creativity.	Applies four production techniques (knitting, constructing framed suspended garden, value addition on crop produce, and making soap) at household level.	Applies two to three production techniques (knitting, constructing framed suspended garden, value addition on crop produce, and making soap) at household level.	Applies less than two production techniques (knitting, constructing framed suspended garden, value addition on crop produce, and making soap) at household level.
Ability to portray integrity in carrying out production techniques.	Portrays more than three indicators of integrity (prudent use of resources, adheres to ethical procedures, commitment to duty) in carrying out production tasks.	Portrays three indicators of integrity (prudent use of resources, adheres to ethical procedures, commitment to duty) in carrying out production tasks.	Portrays two indicators of integrity (prudent use of resources, adheres to ethical procedures, commitment to duty) in carrying out production tasks.	Portrays less than two indicators of integrity (prudent use of resources, adheres to ethical procedures, commitment to duty) in carrying out production tasks.

APPENDIX 1: GUIDELINES FOR INTEGRATING COMMUNITY SERVICE LEARNING AT JUNIOR SCHOOL

Introduction

Community Service Learning (CSL) is an experiential learning strategy that integrates classroom learning and community service to enable learners reflect, experience and learn from the community. The CSL activity is hosted as a strand in Social Studies. The Social Studies teacher will be expected to coordinate teachers from other learning areas to carry out the integrated CSL class activity. Learners will be expected to apply knowledge, skills, attitudes and values from the different Learning Areas to undertake the integrated CSL class activity. Learners will undertake one common integrated class CSL activity following a 6-step milestone approach that is:

Milestone	Description
Milestone 1	Problem Identification Learners study their community to understand the challenges faced and their effects on community members.
Milestone 2	Designing a solution Learners create an intervention to address the challenge identified.
Milestone 3	Planning for the Project Learners share roles, create a list of activities to be undertaken, mobilise resources needed to create their intervention and set timelines for execution
Milestone 4	Implementation The learners execute the project and keep evidence of work done.
Milestone 5	Showcasing /Exhibition and Report Writing Exhibitions involve showcasing learners' project items to the community and reflecting on the feedback Learners write a report detailing their project activities and learnings from feedback
Milestone 6	Reflection Learners review all project work to learn from the challenges faced. They link project work with academic concepts, noting how the concepts enabled them to do their project as well as how the project helped to deepen learning of the academic concepts.

Assessment of CSL integrated Activity

Assessment for the integrated CSL activity will be conducted formatively. The assessment will consider both the process and end product. This entails assessing each of the milestone stages of the integrated CSL class activity. It will focus on 3 components namely: skills from various learning areas applied in carrying out the activity, core competencies developed and values nurtured.

APPENDIX 2: LIST OF ASSESSMENT METHODS, LEARNING RESOURCES AND NON-FORMAL ACTIVITIES

Strand	Suggested Assessment Methods	Suggested Resources	Suggested Non-Formal Activities
1.0 Conservation of Resources	<ul style="list-style-type: none"> • Observation of learning activities. • Written tests and assignments • Projects. • Oral/signed assessment • Activity journals 	Digital resources Print materials (charts, reference books) Cooking tools and equipment Cleaning equipment and materials Selected gardening tools Selected foodstuffs General environment for space, samples of soils and plants	Learners to conduct school community awareness on conservation of various resources using existing formal interaction forums.
2.0 Food Production Processes	<ul style="list-style-type: none"> • Written tests and assignments • Graded observation • Projects • Activity journal 	Digital devices and print reference materials. General environment for space, soil and samples of plants. Selected Garden tools such as <i>jembes</i> , fork <i>jembes</i> , spade, <i>panga</i> , slasher, tape measure. Variety of planting materials First aid kit Cooking and cleaning equipment and materials Samples of animal products such as eggs and honey, milk and meat. Sample crop produce such as vegetables. Some small domestic animals such as rabbits, poultry or Guinea pigs.	Learners to prepare and manage a sample kitchen or backyard garden in the school for display. Learners to use existing school forums to display skills and products of the various learning experiences to extend knowledge and create awareness to the school community.

3.0 Hygiene Practices	<ul style="list-style-type: none"> • Written test • Oral/signed assessment on safety when handling animal. • Observation of learning • Oral/signed tests • Project • Activity journals 	<p>Cleaning equipment and materials Sample clothing and household articles Detergents, stain removal agents and disinfectants Digital devices and print reference materials General school environment</p>	<p>Learners to use existing school forums to sensitize the school community on hygiene practices.</p>
4.0 Production Techniques	<ul style="list-style-type: none"> • Written test • Oral/signed tests • Project • Activity journals Observation of learning • Written and oral tests 	<p>Sewing tools such as needles, crochet, scissors and tape measure. Sewing materials such as sample fabrics and yarns. Gardening tools such as tape measure and hammer. General school environment Worked samples (crocheted and knitted materials) Sample planting materials Selected foodstuffs.</p>	<p>Learners to use existing school forums to create awareness and enhance adoption of various production techniques.</p>