



**REPUBLIC OF KENYA**

**MINISTRY OF EDUCATION**

**JUNIOR SCHOOL CURRICULUM DESIGN**

**AGRICULTURE  
FOR LEARNERS WITH HEARING IMPAIRMENT**

**GRADE 8**



**KENYA INSTITUTE OF CURRICULUM DEVELOPMENT**

*A Skilled and Ethical Society*

First published 2023

Revised 2024

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**ISBN:**

Published and printed by Kenya Institute of Curriculum Development

## **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 rationalisation and review of the basic education curriculum.

The reviewed Grade 8 curriculum designs for learners with hearing impairment build on competencies attained by learners at Grade 7. 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 8 curriculum furthers implementation of the CBC from Grade----- 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 8 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 8 and prepare them for smooth transition to Grade 9. Furthermore, it is my hope that teachers will use the adapted designs to make learning interesting, exciting and enjoyable.

**DR. BELIO KIPSANG', CBS  
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 conceptualized the Competency Based Curriculum (CBC) as captured in the Basic Education Curriculum Framework (BECF)2017, that responds to the demands of the 21<sup>st</sup> 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 8 curriculum designs for learners with hearing impairment with 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 8 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 8 and preparation of learners with hearing impairment for transition to Grade 9.

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## NATIONAL GOALS OF EDUCATION

Education in Kenya should:

**1. 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.

**2. 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 the wake of rapid modernisation. 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 recognises 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.

**3. 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.



4. **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.
  
5. **Promote social equity 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.
  
6. **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.
  
7. **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.
  
8. **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 /Kenyan Sign Language	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
	<b>Total</b>	<b>41</b>

## **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, using sign language, 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 co-existence.
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**

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

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 the use of 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

<b>Strands</b>	<b>Sub strands</b>
<b>1.0 Conservation of Resources</b>	1.1 Soil conservation measures
	1.2 Water harvesting and storage
<b>2.0 Food Production Processes</b>	2.1 Kitchen and backyard gardening
	2.2 Poultry rearing in a fold
	2.3 Crop pest and disease control
	2.4 Preparation of animal products: Fish and poultry carcass
	2.5 Preserving milk and meat
	2.6 Cooking: Preparing a balanced meal
<b>3.0 Hygiene Practices</b>	3.1 Cleaning the kitchen
<b>4.0 Production Techniques</b>	4.1 Sewing Skills: Constructing household items
	4.2 Constructing innovative animal waterer
	4.3 ICT support services

## 1.0 CONSERVATION OF RESOURCES

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Questions
<b>CONSERVATION OF RESOURCES</b>	<b>1.1 Soil conservation measures (10 lessons)</b>	By the end of the sub strand, the learner should be able to: <ol style="list-style-type: none"> <li>a) sign words related to soil conservation measures in the environment,</li> <li>b) describe methods of soil conservation in agricultural environment,</li> <li>c) carry out soil conservation activities in the environment,</li> <li>d) demonstrate caring attitude towards soil in the environment.</li> </ol>	<ul style="list-style-type: none"> <li>• in groups, learners are guided to use print and non-print media to find signs of words related to conservation measures in the environment.</li> <li>• in purposive groups, learners are guided to watch a video or observe a demonstration on how to sign words related to soil conservation measures in the environment.</li> <li>• in pairs, learners practise to fingerspell and sign words related to soil conservation measures. in the absence of mainstream signs, the learner is guided to develop meaningful signs for communication purposes.</li> <li>• in groups, learners are guided to use print and non-print media to search information on methods of soil conservation and make summarised notes using digital devices and print media.</li> </ul>	<ol style="list-style-type: none"> <li>1. How can we conserve soil in the environment?</li> <li>2. Why is soil conservation important?</li> </ol>

			<ul style="list-style-type: none"> <li>• in purposive groups, learners observe illustrations of methods of soil conservation and discuss with peers. adopt a proper seating arrangement that allows learners to have a face-to-face conversation. preferably, a horseshoe seating arrangement.</li> <li>• in groups, learners are guided to prepare charts and make a class presentation on methods of soil conservation in an agricultural environment.</li> <li>• in groups, learners make an expedition in the school farm and identify methods of soil conservation in the agricultural environment under the guidance of a resource person. sign language interpretation should be provided if needed to enhance interaction.</li> <li>• in groups, learners observe a demonstration on some of the methods of soil conservation such as stone lines, trash lines, and soil bunds.</li> </ul>	
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			<ul style="list-style-type: none"> <li>● in purposive groups, learners are guided to carry out activities on soil conservation in the school such as strip cropping, grassed waterways, stone lines, trash lines, and soil bunds. caution the learners to use personal protective equipment to avoid injuries.</li> <li>● in pairs, learners use magazine cut-out to prepare a portfolio on methods of soil conservation and display it in class for peer review.</li> <li>● in groups, learners are guided to construct a farm model using materials such as cartons, cardboards, soil and papier-mâché to demonstrate farm layout with various soil conservation measures.</li> </ul>	
<p><b>Core Competencies:</b></p> <ul style="list-style-type: none"> <li>● Creativity and Imagination: The learner develops experimenting skills while constructing a farm model.</li> <li>● Self-efficacy: The learner develops leadership skills while constructing farm models in groups.</li> </ul>				
<p><b>Values:</b></p> <ul style="list-style-type: none"> <li>● Unity: The learner cooperates with peers when working in groups to carry out soil conservation measures.</li> <li>● Responsibility: The learner carries out assigned roles and activities on soil conservation in the school.</li> </ul>				

**Pertinent and contemporary issues:**

- Environmental education and climate change: The learner promotes environmental awareness as they make an expedition in the school farm to identify methods of soil conservation.

**Link to other Learning areas:**

- Learners relate construction of a farm model with conservation structures using artistic skills learnt in creative skills and sports.

**Suggested Learning Resources:**

- Stones.
- Shovels.
- Jembe.
- Planting material for grass or any cover crop.
- Soil.
- Signs Language Dictionary.
- Cartons/Cardboards.
- Digital devices.
- Relevant print references

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Questions
<b>CONSERVATION OF RESOURCES</b>	<b>1.2 Water harvesting and storage</b> (9 lessons)	By the end of the sub strand, the learner should be able to: a) sign words related to water harvesting and storage for domestic use, b) discuss ways of storing harvested water for domestic use, c) take part in harvesting and storing water in the school for domestic use, d) show responsibility in harvesting and storing water for domestic use.	<ul style="list-style-type: none"> <li>• in groups, learners are guided to use print and non-print media to find meaning and signs of words related to water harvesting and storage for domestic use.</li> <li>• in purposive groups, learners are guided to watch video clips or observe a demonstration on how to sign words related to water harvesting and storage for domestic use.</li> <li>• in pairs, learners are guided to practise to fingerspell and sign words related to water harvesting and storage for domestic use. in the absence of mainstream signs, the learner is guided to develop and harmonise meaningful signs for communication purposes.</li> <li>• in groups, learners are guided to take an expedition in the school compound to identify ways of storing harvested water for domestic use.</li> </ul>	<ol style="list-style-type: none"> <li>1. How can we harvest and store water for domestic purposes?</li> <li>2. Why is it important to harvest and store water?</li> </ol>

			<ul style="list-style-type: none"><li>• in purposive groups, learners are guided to discuss and make summarised notes on various ways of storing harvested water for domestic purposes.</li><li>• in group, learners are guided to prepare charts and make class presentations on ways of storing harvested water for domestic purposes.</li><li>• in groups, learners watch a captioned video on possible initiatives and maintenance practices that can be made to harvest and store rainwater and surface runoff in the school environment. occasionally pause the video, 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.</li><li>• in groups, learners are guided to initiate measures towards water harvesting and storage of their choice in the school.</li></ul>	
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<p><b>Core competencies:</b></p> <ul style="list-style-type: none"> <li>● Critical thinking and problem-solving skills: The learner evaluates and decides the best ways of storing harvested water for domestic purposes.</li> <li>● Digital literacy: The learner develops digital citizenship skills as they watch a captioned video using digital device while observing safety precautions and practices.</li> </ul>
<p><b>Values:</b></p> <ul style="list-style-type: none"> <li>● Responsibility: The learner carries out assigned roles and duties during group activities in initiating and maintaining water harvesting facilities.</li> <li>● Integrity: The learner applies laid down procedures when initiating measures towards water harvesting and storage.</li> </ul>
<p><b>Pertinent and contemporary issues:</b></p> <ul style="list-style-type: none"> <li>● Safety and Security: The learner practises internet safety and security by observing proper cyber ethics.</li> <li>● Environmental education and climate change: The learner observes environmental conservation as they adopt water harvesting and storage initiatives.</li> </ul>
<p><b>Link to other subjects:</b></p> <ul style="list-style-type: none"> <li>● Learners relate water harvesting and storage to conservation of the community environment learnt in Social Studies.</li> </ul>
<p><b>Suggested Learning Resources:</b></p> <ul style="list-style-type: none"> <li>● Garden tools such as jembe, fork jembes, spade, panga, slasher</li> <li>● Water storage containers with lids- tanks, drums, jerry cans, buckets</li> <li>● Gutters</li> <li>● Charts</li> <li>● Digital devices</li> <li>● Relevant reference materials</li> <li>● Signs Language Dictionary</li> </ul>

<b>Suggested Assessment Rubric</b>				
<b>Indicator \ Level</b>	<b>Exceeds expectation</b>	<b>Meets expectation</b>	<b>Approaches expectation</b>	<b>Below expectation</b>
Ability to sign words related to conservation water and soil resources.	Signs words related to conservation of water and soil resources with exceptional accuracy demonstrating signing proficiency.	Signs words related to conservation of water and soil resources accurately conveying the intended meaning clearly.	Signs words related to conservation of water and soil resources with noticeable errors and inconsistencies in articulation.	Signs words related to conservation of water and soil resources inaccurately and lack clarity in articulation.
Ability to describe methods of soil conservation in agriculture.	Describes methods of soil conservation in agriculture with deep understanding of various methods and can provide detailed and insightful descriptions.	Describes methods of soil conservation in agriculture with consistent and accurate descriptions of common soil conservation techniques.	Describes methods of soil conservation in agriculture recognizing correct techniques but may have occasional errors.	Describes methods of soil conservation in agriculture with limited understanding of basic soil conservation techniques
Ability to demonstrate ways of harvesting and storing water for domestic use.	Demonstrates ways of storing harvested water for domestic use with detailed explanations of storage techniques, considering factors such as capacity, materials, and efficiency.	Demonstrates ways of storing harvested water for domestic use with adequate explanations of different storage techniques, addressing key considerations such as capacity and materials.	Demonstrates ways of storing harvested water for domestic use with basic understanding of a few methods for storing harvested water.	Demonstrates ways of storing harvested water for domestic use with little consideration for key factors such as capacity and materials.

## 2.0 FOOD PRODUCTION PROCESSES

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Questions
<b>FOOD PRODUCTION PROCESSES</b>	<b>2.1 Kitchen and backyard gardening</b> (Sowing transplanting, watering reaping, plucking, wheelbarrow and trowels.) <b>(9 lessons)</b>	By the end of the sub strand, the learner should be able to: a) sign words related to kitchen and backyard gardening in food production, b) explain the role of kitchen and backyard garden in food production, c) establish a kitchen and backyard garden for food production, d) adopt the use of a kitchen and backyard garden for food production.	<ul style="list-style-type: none"> <li>• in groups, learners are guided to use print and non-print media to find words related to kitchen and backyard garden in food production.</li> <li>• in purposive, learners are guided to watch captioned videos or demonstration on how to sign words related to kitchen and backyard gardening in food production</li> <li>• in pairs learners are guided to fingerspell and sign words related to kitchen and backyard gardening. in the absence of mainstream signs, the learner is guided to develop and harmonise meaningful signs for communication purpose.</li> <li>• in groups, learners are guided to discuss and share experiences on roles of kitchen and backyard garden in food production such as <i>production of fresh healthy foods, saving</i></li> </ul>	<ol style="list-style-type: none"> <li>1. How does a kitchen garden contribute to food production?</li> <li>2. Why is the establishment of a kitchen and backyard garden crucial for enhancing food production?</li> </ol>

			<p><i>money, and being readily accessible.</i> adopt a proper seating arrangement that allows learners to have a face-to-face conversation. preferably, a horseshoe seating arrangement.</p> <ul style="list-style-type: none"> <li>• in groups, learners are guided to prepare charts and deliver a class presentation on the roles of kitchen and backyard garden in food production such as <i>production of fresh healthy foods, saving money, and being readily accessible.</i></li> <li>• in groups, learners are guided to watch a captioned video on how to set up a kitchen or backyard garden and grow various crops such as <i>vegetables, herbs and spices.</i> occasionally pause the video, allowing the learner to take notes and to further elaborate on the information presented. additionally, playing the video multiple times is</li> </ul>	
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			<p>advisable for better comprehension.</p> <ul style="list-style-type: none"> <li>• in purposive groups, learners are guided to take an expedition in the school community to observe the kitchen garden available in the locality.</li> <li>• in groups, learners are guided to carry out an activity to establish a kitchen or backyard garden and grow various crops such as <i>vegetables, herbs and spices</i>. caution the learners to use personal protective equipment to avoid injuries.</li> </ul>	
<p><b>Core competencies:</b></p> <ul style="list-style-type: none"> <li>• Learning to learn: The learner enhances investigation skills as they take an expedition in the school community to observe the kitchen garden.</li> <li>• Critical thinking and problem-solving skills: The learner enhances open mindedness and creativity as they take into account other possibilities and points of view as they carry out an activity to establish a kitchen or backyard garden</li> <li>• Digital literacy: The learner practises digital citizenship as they observe safety precautions when using digital media to search for words related to kitchen and backyard gardening in food production.</li> </ul>				
<p><b>Values:</b></p> <ul style="list-style-type: none"> <li>• Responsibility: The learner recognizes their role in providing food security through developing kitchen/backyard gardens to enhance food production.</li> <li>• Unity: The learner collaborates with peers to establish and manage a kitchen or backyard garden within the school environment.</li> </ul>				
<p><b>Pertinent and contemporary issues:</b></p> <ul style="list-style-type: none"> <li>• Health promotion: The learner understands the need for fresh food produced in a clean environment for healthy functioning of the body.</li> <li>• Disaster and risk reduction: The learner understands the need for kitchen gardening to reduce food insecurity that leads to hunger and starvation.</li> </ul>				

**Link to other subjects:**

- Learners relate growing of own food in kitchen or backyard garden to financial literacy skills learnt in Pre-technical studies.

**Suggested Learning Resources:**

- Relevant reference materials
- Digital devices
- Improvised modern gardening materials and equipment- sacks, old tyres, containers, plastic bottles
- Gardening tools and equipment - Watering cans, Jembe
- Suitable garden soil
- Organic manure
- Fertiliser
- Signs Language Dictionary
- Water
- Planting materials
- Seeds

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Questions
<b>FOOD PRODUCTION PROCESSES</b>	<b>2.2 Poultry Rearing in a Fold</b> (11 lessons)	By the end of the sub strand, the learner should be able to: <ol style="list-style-type: none"> <li>Sign words related to poultry rearing in a fold.</li> <li>describe a fold in poultry rearing,</li> <li>construct a fold for rearing poultry,</li> <li>rear poultry in a fold,</li> <li>show responsibility in rearing poultry.</li> </ol>	<ul style="list-style-type: none"> <li>in groups, learners are guided to use print and digital media to find signs and meaning of words related to poultry folds.</li> <li>in purposive groups, learners are guided to watch captioned video or observe a demonstration on how to sign words related to poultry rearing in a fold.</li> <li>in pairs, learners are guided to fingerspell and sign words related to poultry folds. in the absence of mainstream signs, the learner is guided to develop and harmonise meaningful signs for communication purposes.</li> <li>in groups, learners are guided to undertake a farm excursion around the schools and in the community to observe poultry rearing in a fold.</li> <li>in purposive groups, learners are guided to watch a captioned video on poultry folds and make summarised notes. pause the video,</li> </ul>	<ol style="list-style-type: none"> <li>How can we rear poultry in a fold for food production?</li> <li>How does the construction of a well-designed fold impact the overall health and productivity of poultry?</li> </ol>

			<p>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"> <li>• in groups, learners are guided to discuss and share experiences on how poultry folds look like. adopt a proper seating arrangement that allows learners to have a face-to-face conversation. preferably, a horseshoe seating arrangement.</li> <li>• in groups learners are guided to use locally available materials such as reused and recycled wires, plastic and wood materials to construct a poultry fold. guide the learners to use personal protective equipment to avoid injuries.</li> </ul> <p><b>Project</b></p> <ul style="list-style-type: none"> <li>• in groups, learners are guided to rear poultry of their choice in a fold unit to and practise moving of the folds, feeding, watering,</li> </ul>	
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			sanitation, protection from predators and harsh weather.	
<b>Core competencies:</b>				
<ul style="list-style-type: none"> <li>• Digital literacy: The learner enhances creating with technology skills as they use digital devices to observe and improve on various designs of poultry folds.</li> <li>• Learning to learn: The learner shares learnt knowledge during group discussions and class presentations.</li> </ul>				
<b>Values:</b>				
<ul style="list-style-type: none"> <li>• Unity: The learners collaborate and demonstrate teamwork while working in groups to construct a poultry fold.</li> <li>• Responsibility: The learner observes safety precautions while using objects with sharp edges (wires, plastic and wood) to construct a poultry fold.</li> </ul>				
<b>Pertinent and contemporary issues:</b>				
<ul style="list-style-type: none"> <li>• Environmental education and climate change: The learner reuses and recycles locally available materials to construct poultry fold.</li> <li>• Safety and Security: The learners observe safety for self and others as they use tools and equipment to construct poultry fold.</li> </ul>				
<b>Link to other subjects:</b>				
<ul style="list-style-type: none"> <li>• Learners relate dimensions of a poultry fold to measurements in Mathematics.</li> </ul>				
<b>Suggested Learning Resources:</b>				
<ul style="list-style-type: none"> <li>• Signs Language Dictionary</li> <li>• Digital devices</li> <li>• Materials for construction a fold such as recycled wood and wires</li> <li>• Tools</li> <li>• Chicken feeds</li> <li>• Feeders</li> <li>• Waterers</li> </ul>				

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Questions
<b>FOOD PRODUCTION PROCESSES</b>	<b>2.3 Crop Pest and Disease Control</b> (10 lessons)	By the end of the sub strand, the learner should be able to: <ol style="list-style-type: none"> <li>a) sign words related to crop management: pests and diseases control,</li> <li>b) identify vegetable crops attacked by pests and diseases,</li> <li>c) control pests and diseases on vegetable crops,</li> <li>d) acknowledge the importance of controlling pests and diseases in vegetable production.</li> </ol>	<ul style="list-style-type: none"> <li>● in groups, learners are guided to use print and digital devices to find the signs and meaning of words related to crop management, pests and diseases control. caution learners to observe proper cyber ethics while conducting online searches.</li> <li>● in purposive groups, learners are guided to watch signed video clips or observe a demonstration on how to sign words related to crop management, pests and diseases control.</li> <li>● in pairs, learners are guided to fingerspell and sign words related to crop management, pests and diseases control.</li> <li>● in groups, learners are guided to take a farm excursion to observe and identify vegetable crops that are attacked by pests (<i>punctured leaves, cut-off seedlings, curling leaves</i>) and the common sites where the pests are found.</li> <li>● in groups, learners are guided to observe images of various</li> </ul>	<ol style="list-style-type: none"> <li>1. How can we identify vegetable crops attacked by pests and diseases?</li> <li>2. How can we control pests and diseases in crops?</li> </ol>

			<p>pests and identify them by their names and sign names.</p> <ul style="list-style-type: none"> <li>● in groups, learners are guided to take a field excursion to a vegetable garden, observe and identify vegetable crops affected by disease (<i>wilting plants, black and brown spots and rotting of plant parts</i>).</li> <li>● in groups, learners are guided to engage a resource person on how to control pests on vegetables using methods such as <i>handpicking, removing affected crop parts, uprooting heavily affected crops and applying natural pesticides such as ash</i>. (sign language interpretation should be provided if needed to enhance interaction)</li> <li>● in groups, learners are guided to practise how to control pests on vegetables using methods such as <i>handpicking, removing affected crop parts, uprooting heavily affected crops and applying natural pesticides such as ash</i>.</li> <li>● in groups, learners are guided to observe a demonstration</li> </ul>	
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			<p>on how to control diseases on vegetables using methods such as <i>removing affected parts and uprooting heavily affected crops</i>.</p> <ul style="list-style-type: none"> <li>● in groups, learners are guided to practise how to control diseases on vegetables using methods such as <i>removing affected parts and uprooting heavily affected crops</i>.</li> <li>● in purposive groups, learners are guided to discuss and make presentations on the importance of controlling crop pests and diseases in vegetable production. adopt a proper seating arrangement that allows learners to have a face-to-face conversation. preferably, a horseshoe seating arrangement.</li> </ul>	
<p><b>Core competencies:</b></p> <ul style="list-style-type: none"> <li>● <b>Critical thinking and problem solving:</b> The learner enhances research skills as they use print and non-print media to find relevant signs of words related to crop management.</li> <li>● <b>Communication and collaboration:</b> The learners develop signing skills as they practise to fingerspell and signs of words related to crop management.</li> </ul>				
<p><b>Values:</b></p> <ul style="list-style-type: none"> <li>● <b>Unity:</b> The learner works in collaboration with peers in groups to control diseases on vegetables using various methods.</li> <li>● <b>Responsibility:</b> The learner takes care of vegetables by controlling pests and diseases.</li> </ul>				
<p><b>Pertinent and contemporary issues:</b></p> <ul style="list-style-type: none"> <li>● <b>Environmental education and climate change:</b> The learner avoids polluting the environment by appropriately using pesticides to control pests and diseases in vegetables.</li> </ul>				



- **Disaster risk reduction:** The learner mitigates the risk of food insecurity by effectively controlling pests and diseases in vegetable production.

**Link to other subjects:**

- Learners relate control of pests and diseases in crops to farming for economic activities learnt in social studies.

**Suggested Learning Resources:**

- Samples of crop materials affected by crop pests and diseases
- Field with growing vegetable crops.
- Sign Language Dictionary
- Digital devices
- Magnifying lenses
- Hand lens
- Charts displaying various crop pests and vegetable crops with symptoms of different diseases.
- Ash

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Questions
<b>FOOD PRODUCTION PROCESSES</b>	<b>2.4 Preparation of Animal Products</b> <ul style="list-style-type: none"> <li>• <i>Processing fish</i></li> <li>• <i>Dressing poultry</i></li> </ul> <b>(9 lessons)</b>	<p>By the end of the sub strand, the learner should be able to:</p> <ol style="list-style-type: none"> <li>a) sign words related to preparation of animal products,</li> <li>b) explain the importance of processing fish and dressing poultry carcass,</li> <li>c) process fresh fish for various purposes,</li> <li>d) dress poultry carcass for various purposes,</li> <li>e) uphold ethical and safety practices in preparation of animal products.</li> </ol>	<ul style="list-style-type: none"> <li>• in groups, learners are guided to use print and non-print media to find the meaning and sign of words related to preparation of animal products. caution learners to observe proper cyber ethics while conducting online searches.</li> <li>• in purposive groups, learners are guided to watch captioned videos or observe demonstrations on how to sign and fingerspell words related to preparation of animal products.</li> <li>• in pairs, learners are guided to fingerspell and sign words related to preparation of animal products. in the absence of mainstream signs, the learner is guided to develop and harmonise meaningful signs for communication purposes.</li> <li>• in purposive groups, learners are guided to discuss and share experiences on the</li> </ul>	<ol style="list-style-type: none"> <li>1. How can different tools and equipment be effectively utilised to allow, fresh fish and poultry carcass processing</li> <li>2. Why is it important to dress poultry carcass?</li> </ol>

			<p>importance of processing fish and dressing poultry. adopt a proper seating arrangement that allows learners to have a face-to-face conversation. preferably, a horseshoe seating arrangement.</p> <ul style="list-style-type: none"> <li>• in groups, learners are guided to watch a demonstration on how to process fresh fish through. provide the learner with a one-on-one demonstration on how to process fresh fish.</li> <li>• in groups, learners are guided to prepare charts and make a classroom presentation on the importance of processing fish and dressing poultry.</li> <li>• in pairs, learners are guided to practise processing fresh fish through scaling, gutting, cleaning, salting, and frying. caution the learners to use personal protective equipment to avoid injuries.</li> <li>• in groups, learners are guided to watch a</li> </ul>	
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			<p>captioned video on how to dress poultry carcass (<i>beheading, defeathering, and removal of offal, cleaning</i>) for various uses. occasionally pause the video, 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"> <li>• in groups, learners are guided to discuss and make summarised notes on how to dress poultry carcass (beheading, defeathering, and removal of offal, cleaning) for various uses.</li> <li>• in groups, learners observe a simulated demonstration on how to dress poultry carcass (beheading, defeathering, and removal of offal, cleaning) for various uses.</li> </ul>	
<p><b>Core Competencies:</b></p> <ul style="list-style-type: none"> <li>• <b>Learning to learn:</b> The learners work collaboratively to apply as they practise to process fresh fish.</li> <li>• <b>Self-efficacy:</b> The learner develops leadership skills as they share their thoughts and carry out tasks in groups to dress poultry and process fish.</li> </ul>				

**Values:**

- Integrity: The learner applies laid down procedures when dressing poultry.
- Respect: The learner appreciates diverse opinions as they discuss in groups how to dress poultry and process fish.

**Pertinent and contemporary issues:**

- Health Promotion Issues: The learners promote food nutrition and security as they observe the laid down procedures of dressing poultry and processing fish to maintain hygiene.
- Disaster risk reduction: The learner observes safety protocols when handling knives for the processing of fresh fish through scaling and gutting.

**Link to other subjects:**

- Learners relate the parts removed in fish and poultry to knowledge of parts of fish and birds learnt in integrated science.

**Suggested Learning Resources:**

- Fresh fish
- Live poultry
- Knife
- Basin.
- Digital devices
- Signs Language Dictionary
- Salt
- Frying equipment

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Questions
<b>FOOD PRODUCTION PROCESSES</b>	<b>2.5 Preserving animal products</b> <ul style="list-style-type: none"> <li>• <i>Milk</i></li> <li>• <i>Meat</i></li> </ul> (9 lessons)	By the end of the sub strand, the learner should be able to: <ol style="list-style-type: none"> <li>a) sign words related to preserving milk and meat at household level,</li> <li>b) explain the importance of preserving milk and meat at household level,</li> <li>c) preserve meat to prolong shelf life at household level,</li> <li>d) preserve milk to prolong shelf life at household level,</li> <li>e) Embrace the use of various methods to preserve animal products at household level.</li> </ol>	<ul style="list-style-type: none"> <li>• in groups, learners are guided to use print and non-print media to find signs and meaning of words related to preserving milk and meat at household level. caution learners to observe proper cyber ethics while conducting online searches.</li> <li>• in purposive groups, learners are guided to watch captioned videos or observe a demonstration on how to sign words related to preserving milk and meat at household level</li> <li>• in pairs, learners are guided to practices to fingerspell, sign and explain words related to preserving milk and meat at household level such as salting, smoking, drying, freezing, smoking and fermentation. in the absence of mainstream signs, the learner is guided to develop and harmonise meaningful signs for communication purposes.</li> </ul>	<ol style="list-style-type: none"> <li>1. How can we preserve milk and meat at household level?</li> <li>2. How does preserving milk contribute to prolonging its shelf life at the household level?</li> </ol>

			<ul style="list-style-type: none"><li>• in groups, learners are guided to search for information from digital and print resources, discuss and share experiences on the importance of preserving milk and meat at household level. adopt a proper seating arrangement that allows learners to have a face-to-face conversation. preferably, a horseshoe seating arrangement.</li><li>• in groups, learners are guided to watch a captioned video on how to preserve milk through methods. occasionally pause the video, 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.</li><li>• in groups, learners are guided to preserve milk through methods such as <i>boiling, fermenting and home cooling.</i></li><li>• in groups, learners are guided to observe a</li></ul>	
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			<p>simulated demonstration on how to preserve meat through methods such as <i>salting, boiling, drying and smoking</i>.</p> <ul style="list-style-type: none"> <li>• in groups, learners are guided to preserve meat through methods such as <i>salting, boiling, drying and smoking</i>.</li> </ul>	
<p><b>Core competencies:</b></p> <ul style="list-style-type: none"> <li>• Digital literacy: The learner uses digital devices connected to the internet to search for information on the importance of preserving milk and meat at household level.</li> <li>• Communication and collaboration: The learner develops teamwork skills as they work in groups to preserve meat</li> </ul>				
<p><b>Values:</b></p> <ul style="list-style-type: none"> <li>• Integrity: The learner displays honesty in preserving meat and milk by ensuring use of clean equipment.</li> <li>• Unity: The learner collaborates with others while working in groups to preserve milk through methods such as boiling, fermenting and home cooling.</li> </ul>				
<p><b>Pertinent and contemporary issues:</b></p> <ul style="list-style-type: none"> <li>• Disaster Risk Reduction: The learner observes safety to prevent fire disaster while using fire to boil as a method of preservation.</li> </ul>				
<p><b>Link to other subjects:</b></p> <ul style="list-style-type: none"> <li>• Learners relate preservation of meat and milk to basic principles of preservation learnt in Integrated Science.</li> </ul>				
<p><b>Suggested Learning Resources:</b></p> <ul style="list-style-type: none"> <li>• Samples of milk and meat.</li> <li>• Resource person.</li> <li>• Source of heat</li> <li>• Salt</li> <li>• Utensils such as sufurias, sieves</li> <li>• Gourds</li> <li>• Bottles with lids</li> <li>• Sign Language Dictionary</li> </ul>				



Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Questions
<b>FOOD PRODUCTION PROCESSES</b>	<b>2.6 Cooking: Preparing a Balanced Meal (11 lessons)</b>	<p>By the end of the sub strand, the learner should be able to:</p> <ul style="list-style-type: none"> <li>a) sign words related to cooking and preparation of a balanced meal,</li> <li>b) explain factors to consider in preparing a balanced meal,</li> <li>c) prepare a balanced meal for healthy living,</li> <li>d) use various styles to present the meal,</li> <li>e) adopt the use of a balanced meal in day-to-day life.</li> </ul>	<ul style="list-style-type: none"> <li>• in groups, learners are guided to use print and non-print media to find words related to cooking and a balanced meal. caution learners to observe proper cyber ethics while conducting online searches.</li> <li>• in purposive groups,</li> <li>• in pairs, learners are guided to fingerspell and sign words related to cooking and a balanced meal.</li>   <li>• in groups, learners are guided to discuss and share experiences on factors to consider in preparing a balanced meal such as age, health status, occasion and gender. adopt a proper seating arrangement that allows learners to have a face-to-face conversation. preferably, a horseshoe seating arrangement.</li> <li>• in groups, learners are guided to plan, and cook a balanced meal with protein, carbohydrate and vegetables.</li> </ul>	<ol style="list-style-type: none"> <li>1. How can we prepare a balanced meal for healthy living?</li>   <li>2. How is a balanced meal important</li> </ol>

			<p>caution the learners to keep a safe distance from the fire source to avoid accidents.</p> <ul style="list-style-type: none"> <li>• in groups, learners are guided to serve the balanced meal using serving styles such as family or blue plates to present the meal.</li> <li>• in groups, learners are guided to make various menus on a balanced diet and present in class for peer review.</li> </ul>	
<p><b>Core competencies:</b></p> <ul style="list-style-type: none"> <li>• Communication and collaboration: The learners develop signing skills as they communicate in sign language during group discussions on factors to consider in preparing a balanced meal.</li> <li>• Critical thinking and problem solving: The learner enhances explanation skills, enabling clear communication of findings and reasoning during class presentations.</li> </ul>				
<p><b>Values:</b>  Responsibility: The learners care for property as they use resources to cook a balanced meal with protein, carbohydrate and vegetables.</p>				
<p><b>Pertinent and contemporary issues:</b>  Disaster Risk Reduction: The learner observes safety to prevent fire disaster in the kitchen while using fire to prepare meals.</p>				
<p><b>Link to other subjects:</b></p> <ul style="list-style-type: none"> <li>• Learners relate consumption of balanced meals to prevention of lifestyle diseases learnt in Integrated Science.</li> </ul>				
<p><b>Suggested Learning Resources:</b></p> <ul style="list-style-type: none"> <li>• Digital devices</li> <li>• Charts</li> <li>• Sign Language Dictionary</li> <li>• Locally available source of protein, carbohydrates and vitamins,</li> <li>• Kitchen equipment such as cutlery, saucepans, ladle</li> <li>• Fuel and respective cooking equipment</li> </ul>				

<b>Suggested assessment rubrics</b>				
<b>Level</b> <b>Indicator</b>	<b>Exceeds expectation</b>	<b>Meets expectation</b>	<b>Approaches expectation</b>	<b>Below expectation</b>
Ability to sign words related to food production processes.	Signs words related to food production processes with exceptional accuracy demonstrating signing proficiency.	Signs terms related to food production processes accurately conveying the intended meaning clearly.	Signs terms related to food production processes with noticeable errors and inconsistencies in articulation.	Signs words related to food production processes inaccurately and lack clarity in articulation.
Ability to explain the role of kitchen and backyard garden in food production.	Explains the role of kitchen and backyard garden in food production clearly and accurately with in depth understanding of the diverse roles of kitchen and backyard gardens in food production.	Explains the role of kitchen and backyard garden in food production clearly and accurately.	Explains the role of the kitchen and backyard garden in food production with limited understanding of how kitchen and backyard gardens contribute to food production.	Explain the role of kitchen and backyard garden in food production with inaccuracies and limited understanding of how kitchen and backyard gardens contribute to food production.
Ability to rear poultry in a fold.	Rears poultry in a well-built fold that maximises space and promotes bird comfort and health with automated doors and feeders.	Rears poultry in a well-built fold that meets the birds' basic needs for shelter, protection, and access to food and water.	Rears poultry in a functional fold but lacks essential features like proper ventilation, secure fencing, or cleanable flooring.	Rears poultry in a poorly constructed fold inadequate for the number of birds
Ability to control pests and diseases on vegetable crops.	Controls pests and diseases on vegetable crops accurately by proficiently identifying and differentiating between pest and disease and employs advanced	Controls pests and diseases on vegetable crops accurately by identifying pests and diseases and utilising appropriate chemicals and	Controls a wider range of pests and diseases on vegetable crops using basic preventive measures such as farm chemicals and crop rotation	Controls obvious pests and diseases on vegetable crops using inappropriate or excessive chemicals causing harm to plants.

	diagnostic technique to control them	preventive measures to control them.		
Ability to demonstrate how to process fresh fish and dress poultry carcass for various purposes.	Demonstrates how to process fresh fish and dress poultry carcass for various purposes providing clear and comprehensive explanations, addressing various purposes such as cooking, storage, and presentation.	Demonstrates how to process fresh fish and dress poultry carcass for various purposes providing clear explanations, covering purposes such as cooking, storage, and presentation effectively.	Demonstrates how to process fresh fish and dress poultry carcass for various purposes providing explanations, covering purposes such as cooking, storage, and presentation in a straightforward manner.	Demonstrates how to process fresh fish and dress poultry carcass for various purposes providing limited explanations for purposes such as cooking, storage, and presentation.
Ability to explain the importance of preserving milk and meat at household level.	Explains the importance of preserving milk and meat at household level clearly articulating the impact of proper preservation on health, reducing waste, and ensuring food security.	Explains the importance of preserving milk and meat at household level demonstrating a good understanding of factors influencing preservation, including safety, nutrition, and sustainability.	Explains the importance of preserving milk and meat at household level demonstrating fundamental understanding of factors influencing preservation, including safety and nutrition.	Explains the importance of preserving milk and meat at household level demonstrating minimal understanding of factors influencing preservation.
Ability to prepare a balanced meal for healthy living.	Prepares a balanced meal for healthy living balancing proportions of carbohydrates, proteins, fats, vitamins, and minerals effectively.	Prepares a balanced meal for healthy living achieving a good balance of carbohydrates, proteins, fats, vitamins, and minerals in the meal.	Prepares a balanced meal for healthy living attempting to achieve a balance of carbohydrates, proteins, fats, vitamins, and minerals in the meal.	Prepares a balanced meal for healthy living using a limited variety of ingredients, with minimal consideration for nutrition.

### 3.0 HYGIENE PRACTICES

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Questions
<b>HYGIENE PRACTICES</b>	<b>3.1 Cleaning the Kitchen (9 lessons)</b>	By the end of the sub strand, the learner should be able to: a) sign words related to cleaning the kitchen to maintain hygiene, b) explain the routine cleaning practices of a kitchen, c) carry out cleaning of a kitchen to maintain hygiene, d) appreciate a clean kitchen for healthy living.	<ul style="list-style-type: none"> <li>• in groups, learners are guided to use print and non-print media to find signs and meaning of words related to cleaning the kitchen to maintain hygiene. caution learners to observe proper cyber ethics while conducting online searches.</li> <li>• in purposive groups, learners are guided to watch video clips or observe demonstrations on how to sign words related to cleaning the kitchen to maintain hygiene.</li> <li>• in pairs, learners practise to fingerspell and sign words related to cleaning the kitchen to maintain hygiene. in the absence of mainstream signs, the learner is guided to develop and harmonise meaningful signs for communication purposes.</li> </ul>	<ol style="list-style-type: none"> <li>1. How can daily, weekly and special cleaning enhance hygiene in the kitchen?</li> <li>2. How can sustainable environmental methods be implemented in the kitchen without compromising hygiene standards</li> </ol>

			<ul style="list-style-type: none"> <li>• in purposive groups, learners are guided to share experiences on routine cleaning of the kitchen and make summarised notes.</li> <li>• in groups, learners are guided to prepare charts and make class presentations on routine cleaning of the kitchen.</li> <li>• in groups, learners observe a simulated demonstration on routine cleaning of the kitchen.</li> <li>• in pairs, learners are guided to clean the kitchen to maintain hygiene applying. caution the learners to use personal protective equipment to avoid injuries.</li> <li>• in pairs, learners are guided to prepare a daily cleaning schedule and display in class for peer review.</li> </ul>	
<p><b>Core Competencies:</b></p> <ul style="list-style-type: none"> <li>• Digital literacy: The learner uses digital devices connected to the internet to search for information on methods of removing types of dirt from kitchen surface.</li> <li>• Communication and collaboration: The learner develops signing skills as they perform tasks in groups to maintain cleanliness in the kitchen.</li> </ul>				
<p><b>Values:</b></p> <ul style="list-style-type: none"> <li>• Love: The learner portrays a caring attitude towards family members by cleaning the kitchen to maintain hygiene.</li> <li>• Responsibility: The learner takes care of the kitchen by undertaking routine cleaning to promote health and hygiene at household level.</li> </ul>				

**Pertinent and contemporary issues:**

- Health Promotion Issues: The learner promotes health by carrying out cleaning of a kitchen to maintain hygiene.
- Safety and Security: The learner demonstrates concern for the safety of other family members by maintaining proper hygiene in the kitchen.

**Link to other subjects:**

- Learners relate cleaning the kitchen to prevent contamination of food to concepts of disease prevention learnt in Integrated Science. Integrated science.

**Suggested Learning Resources:**

- Detergents (*forms of soap and soapless detergents (liquid, foam, bar, powder, flakes)*)
- Water (*soft and hard*)
- Science Signs Specific Dictionary
- Cleaning equipment (Sweeping brooms, scrubbing brushes, basins, Dustpan)
- Cleaning materials (Dusters, mopping cloth/mops)
- Improvised abrasives such as crushed egg shells, fine sand, rough leaves, ashes
- Different surface to be cleaned (Earthenware, cemented, wooden, tiled, terrazzo)
- Safety gear such as aprons, face masks,
- Head gear such as head scarf, hats, hair covers, and hand gloves.

<b>Suggested Assessment Rubric</b>				
<b>Level</b> <b>Indicator</b>	<b>Exceeds expectation</b>	<b>Meets expectation</b>	<b>Approaches expectation</b>	<b>Below expectation</b>
Ability to sign words related to cleaning the kitchen to maintain hygiene.	Signs words related to cleaning the kitchen to maintain hygiene with exceptional accuracy demonstrating signing proficiency.	Signs words related to cleaning the kitchen to maintain hygiene accurately conveying the intended meaning clearly.	Signs words related to cleaning the kitchen to maintain hygiene with noticeable errors and inconsistencies in articulation.	Signs words related to cleaning the kitchen to maintain hygiene inaccurately and lack clarity in articulation.
Ability to explain the routine cleaning practices of a kitchen.	Explains the routine cleaning practices of a kitchen demonstrates an in-depth understanding of hygiene, safety, and best practices in kitchen cleaning.	Explains the routine cleaning practices of a kitchen demonstrating a good understanding of hygiene, safety, and best practices in kitchen cleaning.	Explains the routine cleaning practices of a kitchen demonstrates a fundamental understanding of hygiene, safety, and basic practices in kitchen cleaning.	Explains the routine cleaning practices of a kitchen demonstrating minimal understanding of hygiene, safety, and basic practices in kitchen cleaning.
Ability to carry out cleaning of a kitchen to maintain hygiene	Carries out cleaning of a kitchen to maintain hygiene systematically and explains the step.	Carries out cleaning of a kitchen to maintain hygiene following the prescribed procedure.	Carries out cleaning of a kitchen to maintain hygiene but misses a few steps.	Carries out cleaning of a kitchen to maintain hygiene but many steps.



#### 4.0 PRODUCTION TECHNIQUES

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Questions
<b>PRODUCTION TECHNIQUES</b>	<b>4.1 Sewing skills: Constructing household items</b> (14 lessons)	By the end of the sub strand, the learner should be able to: <ol style="list-style-type: none"> <li>a) sign words related to sewing skills: construction of household items,</li> <li>b) identify the types of seams used in making clothes,</li> <li>c) make samples of seams on a piece of cloth,</li> <li>d) construct a household item using seams,</li> <li>e) appreciate household items made by seams.</li> </ol>	<ul style="list-style-type: none"> <li>• in groups, learners are guided to use print and non-print media to find signs and meaning of words related to construction of household items by sewing. caution learners to observe proper cyber ethics while conducting online searches.</li> <li>• in purposive groups, learners are guided to watch signed videos or observe demonstrations on how to sign words related to sewing skills: construction of household items</li> <li>• in pairs, learners practise to fingerspell and sign words related to construction of household items. in the absence of mainstream signs, the learner is guided to develop and harmonise meaningful signs for communication purposes.</li> <li>• in groups, learners are guided to use digital devices to search for information on different types of seams</li> </ul>	<ol style="list-style-type: none"> <li>1. How can a household item be made using seams?</li> <li>2. Why is identifying types of seams crucial in clothing construction?</li> </ol>

			<p>used for making household items.</p> <ul style="list-style-type: none"> <li>• in groups, learners are guided to observe and manipulate various materials and household items made by using different types of seams.</li> <li>• in groups, learners are guided to observe a demonstration of the construction/making of <i>open and plain seams</i> on a piece of cloth using hand sewing.</li> <li>• in pairs, learners are guided to make samples of <i>open and plain seams</i> on a piece of cloth using hand sewing.</li> <li>• in groups, learners observe a demonstration on how to make a simple household article such as; <i>a lap bag, work bag, pillow case, cushion cover</i> using plain or open seams.</li> <li>• in pairs, learners are guided to construct simple household items such as; <i>a lap bag, work bag, pillow case, cushion cover</i> using plain or open seams and display it in class for peer review.</li> </ul>	
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**Core competencies:**

- Digital literacy: The learner uses digital devices connected to the internet to search information on different types of seams used for making household items.
- Creativity and imagination: The learners develop creativity skills as they make samples of open and plain seams or make samples of simple knitwear and join the knitwear using different joining stitches.

**Values:**

- Integrity: The learners prudently utilise materials to construct a household item using seams.
- Responsibility: The learners take care of the materials used during construction of household items.

**Pertinent and contemporary issues:**

- Safety and security: The learners observe safety for self and others as they use sharp tools for constructing household items using seams.

**Link to other subjects:**

- Learners relate construction of household items using seams to artistic skills (pattern work) learnt in Creative Arts and Sports.

**Suggested Learning Resources:**

- Samples of made seams
- Samples of knitwear
- Various clothing and household items made using different seams
- Fabrics/material
- Machine sewing threads
- Signs Language Dictionary

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Questions
<b>PRODUCTION TECHNIQUES</b>	<b>4.2 Constructing innovative animal waterer (10 lessons)</b>	<p>By the end of the sub strand, the learner should be able to:</p> <ul style="list-style-type: none"> <li>a) sign words related to constructing innovative animal waterer,</li> <li>b) explain challenges with animal waterers used in the community,</li> <li>c) design and construct an innovative waterer for water conservation,</li> <li>d) appreciate the use of innovative waterers in animal rearing.</li> </ul>	<ul style="list-style-type: none"> <li>• in groups, learners are guided to use print and non-print media to find signs and meaning of words related to construction of innovative animal waterers. caution learners to observe proper cyber ethics while conducting online searches.</li> <li>• in purposive groups, learners are guided to observe demonstrations on how to sign words related to constructing innovative animal waterer.</li> <li>• in pairs, learners are guided to practise to fingerspell and sign words related to construction of innovative animal waterers. in the absence of mainstream signs, the learner is guided to develop and harmonise meaningful signs for communication purposes.</li> <li>• in groups, learners are guided to visit animal rearing households, identify challenges of animal</li> </ul>	<ol style="list-style-type: none"> <li>1. How can we make an innovative waterer for small domestic animals?</li> <li>2. How can innovative designs enhance water conservation?</li> </ol>

			<p>waterers and take summarised notes.</p> <ul style="list-style-type: none"> <li>• in groups, learners are guided to prepare charts and make class presentations on existing animal waterers and their challenges.</li> <li>• in groups, learners are guided to brainstorm on meaningful ways to address challenges of existing animal waterers.</li> <li>• in purposive groups, learners are guided to search for information from digital and print media on innovative waterers and display the designs in class for peer review.</li> <li>• in groups, learners are guided to construct a waterer for small domestic animals to solve the identified problem using locally available materials.</li> <li>• in groups, learners are guided to use the constructed innovative waterer to test functionality, make adjustments and provide water to target animals either at home, in the school or selected household. caution</li> </ul>	
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			the learners to use personal protective equipment to avoid injuries.	
<b>Core Competencies:</b>				
<ul style="list-style-type: none"> <li>● Digital literacy: The learner uses digital devices connected to the internet to search for information on innovative waterers</li> <li>● Critical thinking and problem solving: Learners develop problem solving skills as they construct innovative waterer for a target animal.</li> </ul>				
<b>Values:</b>				
<ul style="list-style-type: none"> <li>● Unity: The learner collaborates with others while working in groups to construct innovative waterer for a target animal.</li> <li>● Social justice: The learners demonstrate equity by fairly allocating tasks as they construct the innovative waterer.</li> </ul>				
<b>Pertinent and contemporary issues:</b>				
<ul style="list-style-type: none"> <li>● Personal safety &amp; Security: The learner observes safety for self and others when using tools and equipment to construct water for a target animal.</li> </ul>				
<b>Link to other subjects:</b>				
<ul style="list-style-type: none"> <li>● Learners relate designing and construction of innovative waterer to drawing and designing skills learnt in Pre-Technical studies.</li> </ul>				
<b>Suggested Learning Resources:</b>				
<ul style="list-style-type: none"> <li>● Digital devices</li> <li>● Reference material</li> <li>● Signs Language Dictionary</li> <li>● Innovative poultry waterers.</li> <li>● Materials for constructing selected innovative waterer - used plastic containers</li> </ul>				

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Questions
<b>PRODUCTION TECHNIQUES</b>	<b>4.3 ICT support services</b>  <b>(9 lessons)</b>	By the end of the sub strand, the learner should be able to: a) sign words related to ICT in accessing support services, b) describe support services that can be accessed through use of ICT, c) access support services using ICT, d) show responsibility in use of ICT in accessing support services.	<ul style="list-style-type: none"> <li>• in groups, learners are guided to use print and non print media to find signs and meaning of words related to ict. caution learners to observe proper cyber ethics while conducting online searches.</li> <li>• in purposive groups, learners are guided to watch signed/captioned videos or demonstrations on how to sign words related to ict in accessing support services.</li> <li>• in pairs, learners are guided to practise fingerspelling and signing words related to ict.</li> <li>• in groups, learners are guided to discuss and share experiences of how ict can be used to access supplies and information for appropriate decision making. adopt a proper seating arrangement that allows learners to have a face-to-face conversation. preferably, a horseshoe seating arrangement.</li> <li>• in groups, learners are guided to observe a demonstration</li> </ul>	<ol style="list-style-type: none"> <li>1. How can we access support services using ICT?</li> <li>2. How do ICT-accessible support services improve efficiency?</li> </ol>

			<p>on how to use various digital devices to access online platforms for ict support services such as <i>weather forecast, veterinary services, supply services, extension services, market information and banking services, catering services, cleaning services.</i></p> <ul style="list-style-type: none"> <li>• in groups, learners are guided to access online platforms for ict support services such as <i>weather forecast, veterinary services, supply services, extension services, market information and banking services, catering services, cleaning services.</i></li> <li>• in groups, learners are guided to discuss and make summary notes on responsible use of ict platforms by observing ethical and security considerations.</li> <li>• in groups, learners are guided to prepare charts and deliver a class presentation on responsible use of ict platforms by observing ethical and security considerations.</li> </ul>	
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**Core Competencies:**

- Digital literacy: The learner uses digital devices connected to the internet to access online platforms for ICT support services in production techniques.
- Communication and collaboration: The learner develops signing skills as they practise fingerspelling and signing words related to ICT support services.

**Values:**

Responsibility: The learner observes safety precautions as they use safe and secure online sites to access ICT support services in production techniques.

Unity: The learners display team spirit and collaborate with others as they work in groups to access ICT support services in production techniques.

**Pertinent and contemporary issues:**

Safety and security: The learner observes internet safety and security as they use safe and secure online sites to access ICT support services in production techniques.

**Link to other subjects:**

Learners relate the access of ICT support services to digital technology skills learnt in Pre-Technical Studies.

**Suggested Learning Resources:**

- Smartphones
- Science Signs Specific Dictionary
- Internet Connectivity
- Source of Power
- Tablets
- Laptops
- Computers
- Software/Applications

<b>Suggested Assessment Rubric</b>				
<b>Indicator \ Level</b>	<b>Exceeds expectation</b>	<b>Meets expectation</b>	<b>Approaches expectation</b>	<b>Below expectation</b>
Ability to sign words related to construction of household items by sewing, construction of animals waterer and accessing ICT support services.	Signs words related to construction of household items by sewing, construction of animal waterer and accessing ICT support services with exceptional accuracy demonstrating signing proficiency.	Signs words related to construction of household items by sewing, construction of animal waterer and accessing ICT support services accurately conveying the intended meaning clearly.	Signs words related to construction of household items by sewing, construction of animal waterer and accessing ICT support services with noticeable errors and inconsistencies in articulation.	Signs words related to construction of household items by sewing, construction of animals waterer and accessing ICT support services inaccurately and lack clarity in articulation.
Ability to construct a household item using seams.	Constructs a household item using seams demonstrating deep understanding of various seam types and their applications.	Constructs household items using seams showing a good understanding of different seam types and their applications.	Constructs household items using seams demonstrating basic understanding of common seam types and their applications.	Constructs household items using seams displaying minimal understanding of seam types and their applications.
Ability to design and construct an innovative waterer for water conservation.	Designs and constructs an innovative waterer for water conservation with high level of functionality and sustainability in the design and construction of the waterer.	Designs and constructs an innovative waterer for water conservation with proficiency in the functionality and sustainability of the designed waterer.	Designs and constructs an innovative waterer for water conservation with satisfactory functionality and sustainability in the design and construction of the waterer.	Designs and constructs an innovative waterer for water conservation with limited functionality and sustainability in the design and construction of the waterer.
Ability to access support services using ICT	Accesses support services using ICT demonstrating an outstanding ability to access a wide range of support services using ICT tools.	Accesses support services using ICT effectively utilising common ICT resources to access required support services.	Accesses support services using ICT with basic understanding of features for support purposes.	Accesses support services using ICT with minimal proficiency in navigating relevant platforms and using features for support purposes.

## APPENDIX 1: GUIDELINES FOR INTEGRATING COMMUNITY SERVICE-LEARNING PROJECT

### Introduction

In Grade 8, learners will undertake an integrated Community Service Learning (CSL) project of choice from a single or combined subject. The CSL project will enable the learner to apply knowledge and skills from other subjects to address a problem in the community. The implementation of the integrated CSL project will take a Whole School Approach, where all members of the school community including teachers, school administration, parents/guardians/ local community and support staff. It will be a collaborative effort where the teacher of Social Studies coordinates and works with other subject teachers to design and implement the integrated CSL projects. The teachers will select a theme drawn from different Learning Areas and the broader categories of Pertinent and Contemporary Issues (PCIs) for the CSL project. It should also provide an opportunity for development of core competencies and nurturing of values. Learners will undertake **one common** integrated class CSL project following a 6-step milestone approach as follows:

Milestone	Description
Milestone 1	<p><b>Problem Identification</b> Learners study their community to understand the challenges faced and their effects on community members. Some of the challenges in the community can be:</p> <ul style="list-style-type: none"> <li>• Environmental degradation</li> <li>• Lifestyle diseases, Communicable and non-communicable diseases</li> <li>• Poverty</li> <li>• Violence and conflicts in the community</li> <li>• Food security issues</li> </ul>
Milestone 2	<p><b>Designing a solution</b> Learners create an intervention to address the challenge identified.</p>
Milestone 3	<p><b>Planning for the Project</b> Learners share roles, create a list of activities to be undertaken, mobilize resources needed to create their intervention and set timelines for execution</p>
Milestone 4	<p><b>Implementation</b> The learners execute the project and keep evidence of work done.</p>

Milestone 5	<p><b>Showcasing /Exhibition and Report Writing</b>  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</p>
Milestone 6	<p><b>Reflection</b>  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.</p>

**Note:** The milestones will be staggered across the 3 terms of the academic calendar.

**Assessment of CSL integrated Project**

Assessment for the integrated CSL project 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 project. It will focus on 3 components namely: skills from various learning areas applied in carrying out the project, core competencies developed and values nurtured.

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

<b>Strand</b>	<b>Suggested Assessment Methods</b>	<b>Suggested Resources</b>	<b>Suggested Non-Formal Activities</b>
<b>1.0 Conservation of Resources</b>	<ul style="list-style-type: none"> <li>• Observation of learning activities.</li> <li>• Written tests and assignments</li> <li>• Projects.</li> <li>• Oral assessment</li> <li>• Activity journals</li> </ul>	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.
<b>2.0 Food Production Processes</b>	<ul style="list-style-type: none"> <li>• Written tests and assignments</li> <li>• Graded observation</li> <li>• Projects</li> <li>• Activity journal</li> </ul>	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.

<b>3.0 Hygiene Practices</b>	<ul style="list-style-type: none"> <li>• Written test</li> <li>• Oral assessment on safety when handling animal.</li> <li>• Observation of learning</li> <li>• Oral tests</li> <li>• Project</li> <li>• Activity journals</li> </ul>	<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>
<b>4.0 Production Techniques</b>	<ul style="list-style-type: none"> <li>• Written test</li> <li>• Oral tests</li> <li>• Project</li> <li>• Activity journals Observation of learning</li> <li>• Written and oral tests</li> </ul>	<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>