



REPUBLIC OF KENYA

MINISTRY OF EDUCATION

PRIMARY SCHOOL CURRICULUM DESIGN

**AGRICULTURE
FOR LEARNERS WITH HEARING IMPAIRMENT**

GRADE 4



KENYA INSTITUTE OF CURRICULUM DEVELOPMENT

A Skilled and Ethical Society

First Published 2017

Revised 2024

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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 4 curriculum designs for learners with hearing impairment build on competencies attained by learners at Grade 3 *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.

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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 4 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 realization 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 4 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 4 and prepare them for smooth transition to Grade 5 Furthermore, it is my hope that teachers will use the adapted designs to make learning interesting, exciting and enjoyable.

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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 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 4 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 panelists; the Semi-Autonomous Government Agencies (SAGAs) and representatives of various stakeholders for their roles in the development and adaptation of the Grade 4 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 4 and preparation of learners with hearing impairment for transition to Grade 5

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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 instill 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 AT UPPER PRIMARY

S/No	Learning Area	Number of Lessons Per week
1.	English	5
2.	Kiswahili / Kenyan Sign Language	4
3.	Mathematics	5
4.	Religious Education	3
5.	Science & Technology	4
6.	Agriculture	4
7.	Social Studies	3
8.	Creative Arts	6
9.	Pastoral/Religious Instruction Programme	1
Total		35

LEVEL LEARNING OUTCOMES

By the end of the Primary Education, the learner should be able to:

- a) communicate appropriately using verbal and or non-verbal modes in a variety of contexts,
- b) apply acquired knowledge, skills, values and attitudes in everyday life,
- c) demonstrate social skills, moral and religious values for positive contribution to society,
- d) exploit one's talents for individual development and self-fulfilment,
- e) explore, manipulate, manage and conserve the environment for learning and sustainable development,
- f) use digital literacy skills for learning and enjoyment,
- g) value Kenya's rich and diverse cultural heritage for harmonious living,
- h) appreciate the need for, and importance of interdependence of people and nations.

ESSENCE STATEMENT

Agriculture and nutrition for learners with hearing impairment is an integrated learning area comprising aspects of agriculture and home science. The learners will acquire knowledge, skills, attitudes and values related to conservation of resources, food production, hygiene and related production techniques. The learning area anchors on socio-economic pillar of Kenya Vision 2030 to promote health, hygiene, food and nutrition security through education. The curriculum will develop competencies in personal and environmental hygiene, foods and nutrition, basic clothing construction, laundry, crop and animal production and conservation of resources. The acquired knowledge, skills and attitudes will form grounds for further development of the competencies in junior school and beyond.

Agriculture and Nutrition for learners with hearing impairment design has its learning experiences adapted and broken down to smaller deliverable steps. Further, this design has been adapted to ensure that learners who are Deaf and those with Hard of Hearing learn effectively. The adaptations include suggestions for provision of sign interpretation on aspects that require use of sound, use of digital devices with assistive technology, use of visual aids such as charts, maps and diagrams, use of hands-on activities, guided demonstrations, purposeful pairing and use of adapted learning resources. It has incorporated alternative learning outcomes and activities to enhance the acquisition of sign language vocabulary to learners with Hearing Impairments.

The design also suggests methods of instruction to 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.

SUBJECT GENERAL LEARNING OUTCOMES

By the end of Upper Primary 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 GRADE 4

Strands	Sub Strands	Suggested Number of Lessons
1.0 Conservation of Resources	1.1 Soil Conservation	7
	1.2 Water Conservation	7
	1.3 Fuel Conservation	7
	1.4 Conserving Wild Animals	8
2.0 Food Production Processes	2.1 Direct Sowing of Tiny Seeds	8
	2.2 Growing Fruits	16
	2.3 Uses of Domestic Animals	8
	2.4 Balanced Meal	9
	2.5 Cooking Food	11
3.0 Hygiene Practices	3.1 Personal Hygiene	10
	3.2 Domestic Hygiene	9
	3.3 Cleaning Personal Protective Equipment	9
4.0 Production Techniques	4.1 Making Tacking Stitches	11
Total Number of Lessons		120

NOTE:

The suggested number of lessons per sub strand may be more or less depending on the context.

1.0: CONSERVATION OF RESOURCES

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested Key inquiry questions
1.0 Conservation of Resources	1.1 Soil Conservation (7 lessons)	By the end of the sub strand, the learner should be able to: a) sign vocabularies and suitable materials used in soil conservation, b) identify suitable materials for making compost manure, c) prepare compost manure for farming, d) appreciate the importance of compost manure in farming.	<ul style="list-style-type: none"> • in purposive groups, learners are guided to watch a demonstration on how to sign vocabularies and suitable materials used in soil conservation, • in pairs, learners are guided to fingerspell and sign vocabularies and suitable materials used in soil conservation. • ensuring appropriate seating arrangement, learners are guided to discuss suitable materials for compost manure based on their local environment. • in purposive groups, learners are guided to observe pictures/ images / diagrams of suitable materials used for making compost manure. 	<ol style="list-style-type: none"> 1. How can composting conserve the environment? 2. Why is composting important in soil conservation?

			<p>Ensure the pictures/diagrams and images are labelled.</p> <ul style="list-style-type: none">• in purposive groups, learners are guided to tour the school compound to collect suitable materials and make compost manure using heap method.• in purposive groups, learners are guided to watch captioned/signed videos clips on how to prepare compost manure for farming. Ensure learners are supported by sign language instructions in case videos are not captioned.• in purposive groups, learners are guided to make compost manure using slashed vegetation, kitchen wastes and any other available organic wastes.• in purposive groups, learners make use of the prepared compost in a crop garden within the school or the community.	
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Core Competencies to be developed:

- Communication and collaboration: speaking and listening skills as the learners discuss the process of preparing compost manure.
- Digital literacy: interacting with digital technology as learners use the internet to watch captioned/signed videos clips on how to prepare compost manure for farming.

Values:

Unity: working together striving to achieve a common goal in the preparation of compost manure.

Pertinent and contemporary issues:

Care for the environment as the learner utilises waste organic materials in the preparation of compost manure.

Link to other subjects:

- Learners relate the environmental resource conservation skills to the waste disposal methods learnt in Science and Technology.

Suggested Learning Resources

- Digital devices
- Visual aids (Images, Charts, Diagrams)
- Print media (Course Book, Relevant reading materials)
- Science Specific Signs Dictionary
- Slashed vegetation
- kitchen waste

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested Key inquiry questions
1.0 Conservation of Resources	1.2 Water Conservation (7 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 irrigation as a way of conserving water, b) describe drip irrigation as a way of conserving water, c) carry out drip irrigation to conserve water, d) appreciate the use of drip irrigation to conserve water in farming. 	<ul style="list-style-type: none"> • in purposive groups, learners are guided to use print and no print media to search for signs of terms related to irrigation as a way of conserving water, • in pairs, learners are guided to fingerspell and sign terms related to irrigation as a way of conserving water. • in purposive groups, learners observe demonstrations on how to make drip irrigation equipment using locally available materials. • in purposive groups, learners are guided to visit the neighbouring farms to find out how drip irrigation is carried out. Ensure sign language instructions are provided. Also remind hard of hearing learners to put on hearing aids during the visit. 	<ol style="list-style-type: none"> 1. How do we use drip irrigation to conserve water? 2. Why is drip irrigation important?

			<ul style="list-style-type: none"> • in purposive groups, learners are guided to watch captioned video clips on how to innovate drip irrigation equipment using locally available materials. • in purposive groups, learners are guided to make drip irrigation equipment using locally available material such as water pipes and containers. • in purposive groups, learners are guided to practise the use of the innovative drip irrigation equipment in watering crops to appreciate its role in water conservation. 	
Core Competencies:				
Creativity and imagination: creativity skills in experimenting new ideas while innovating drip irrigation equipment.				
Values:				
Responsibility: undertaking tasks allocated in the innovative drip irrigation project.				
Pertinent and contemporary issues:				
Safeties of self and others as the learners' handles and work with tools and equipment in innovating drip irrigation.				
Link to other subjects:				
Learners relate construction skills in the construction of drip irrigation to skill in use of tools in Science and Technology.				
Suggested Learning Resources				

- Digital devices
- Visual aids (Images, Charts, Diagrams)
- Water Pipes
- containers
- Source of water.
- Science Specific Signs Dictionary

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested Key inquiry questions
1.0 Conservation of Resources	1.3 Fuel Conservation (7 lessons)	<p>By the end of the sub strand the learner should be able to:</p> <ul style="list-style-type: none"> a) sign term related to type of fuel used at home. b) identify types of fuels used at home, c) conserve fuels during cooking, d) appreciate the importance of conserving fuel to minimise wastage of resources. 	<ul style="list-style-type: none"> • in purposive groups, learners are guided to watch a demonstration on signing terms related to types of fuel used at home, • in pairs, learners are guided to fingerspell and sign terms related to types of fuel used at home. • in purposive groups, learners are guided to use print and non-print media to search for information on the types of fuel at home. • using appropriate seating arrangements that support bilingual communication, learners are guided to discuss the types of fuels such as <i>charcoal, firewood, gas and kerosene</i> used at home. • in purposive groups, learners use print and non- 	<p>How does reducing fuel wastage conserve our resources?</p>

			<p>print media to search for ways of conserving fuels.</p> <ul style="list-style-type: none"> • in purposive groups, learners are guided to practise ways of conserving fuels such as putting off fire when done and using fuel efficient equipment when cooking, • in purposive groups, learners are guided to discuss and make presentations on the importance of conserving fuels to minimise wastage. Ensure appropriate sitting arrangement that supports bilingual communication is adopted. 	
<p>Core Competencies: Critical thinking and problem solving: evaluation and decision making skills as learners explore ways of reducing wastage in use of fuels.</p>				
<p>Values: Responsibility: solving problems proactively as learners use fuels conservatively.</p>				
<p>Pertinent and contemporary issues: Safety of self and others as learners uses fuels and related fires.</p>				

Link to other subjects:

Learners relate the skills in conservation of fuels to types and sources of energy learnt in Science and Technology.

Suggested Learning Resource

- Digital devices
- Science Specific Signs Dictionary
- Fuels (Fire wood, charcoal and Gas)
- Science Specific Signs Dictionary

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested Key inquiry questions
1.0 Conservation of Resources	1.4 Conserving Wild Animals (8 lessons)	<p>By the end of the sub strand the learner should be able to:</p> <p>a) identify the sign names of the wild animals found within the locality.</p> <p>b) identify small wild animals that destroy crops,</p> <p>c) construct and use a scarecrow to keep off small wild animals from crops,</p> <p>d) appreciate the importance of living better with small wild animals.</p>	<ul style="list-style-type: none"> • in purposive groups, learners are guided to observe a demonstration on how to sign wild animals found within the environment, • in pairs, learners are guided to fingerspell and sign the names of wild animals found within the locality. • in purposive groups, learners are guided to brainstorm and share experiences on small wild animals such as <i>birds, hares, squirrels and monkeys</i> that destroy crops. • in pairs, learners are guided to prepare a catalogue of small wild 	<p>How can we keep off small wild animals?</p>

			<p>animals found within the locality.</p> <ul style="list-style-type: none"> • in purposive groups, learners are guided to discuss, construct a scarecrow using locally available materials and place the scarecrows in the immediate environment to keep off small wild animals. Let the discussions be based on bilingual communication. Also, adopt appropriate seating arrangements during the discussions. • in purposive groups, learners are guided to discuss and make presentations on the importance of coexisting with small world animals in the environment. Provide the learners with guiding questions on the importance of coexisting 	
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			with small world animals in the environment.	
Core Competencies:				
Creativity and imagination: observation and experimentation skills as learners create scarecrows to scare wild animals.				
Values:				
Responsibility: engaging in assigned roles and duties as learners construct the scarecrow to keep off wild animals.				
Pertinent and contemporary issues:				
Conservation of biodiversity as learners constructs scarecrows to keep off wild animals without killing them.				
Link to other subjects:				
Learners relate conservation of wild animals as part of natural resources learnt in Social Studies.				
Suggested Learning Resources				
<ul style="list-style-type: none"> ● Science Specific Signs Dictionary ● Digital devices ● Coursed books ● Old clothes and shoes ● Stuffing (Straw or leaves) ● String ● Pictures/ Images of small wild animals 				

Suggested Assessment Rubric

Level Indicator	Exceeds Expectations	Meets Expectations	Approaches Expectations	Below Expectations
Ability to sign words related to conservation of resources.	The learner signs words related to laboratory apparatus and instruments with exceptional accuracy demonstrating signing proficiency.	The learner signs words related to laboratory apparatus and instruments accurately conveying the intended meaning clearly.	The learner signs words related to laboratory apparatus and instruments with noticeable errors and inconsistencies in articulation.	The learner signs words related to laboratory apparatus and instruments inaccurately and lack clarity in articulation.
Ability to explain conservation of resources of <i>four</i> resources in the environment :(<i>soil, water, fuel, wild animal</i>).	The learner explains conservation of four resources.	The learner explains conservation of three resources.	The learner explains conservation of two resources.	The learner explains conservation of less than two resources.
Ability to conserve <i>four</i> resources in the environment: (<i>soil, water, fuel, wild animals</i>).	The learner conserves <i>four</i> resources in the environment.	The learner conserves <i>three</i> resources in the environment.	The learner conserves <i>two</i> resources in the environment.	The learner conserves <i>less than two</i> resources in the environment.
Ability to show four aspects of	The learners show four aspects of responsibility	The learners show three aspects of	The learners show two aspects of	The learners show <i>less than two</i> aspects of

<p>responsibility in conservation environmental resources:</p> <p><i>(Offers leadership, observes safety, shows initiative, shows dutifulness in tasks).</i></p>	<p>in conserving environmental resources.</p>	<p>responsibility in conserving environmental resources.</p>	<p>responsibility in conserving environmental resources.</p>	<p>responsibility in conserving environmental resources.</p>
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2.0 PRODUCTION PROCESSES

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested Key inquiry questions
2.0 Food Production Processes	2.1 Direct Sowing of Tiny Seeds (8 lessons)	<p>By the end of the sub strand the learner should be able to:</p> <ol style="list-style-type: none"> a) sign terms related to direct sowing of tiny seeds. b) identify crops established through direct sowing of tiny seeds, c) sow tiny seeds in a finely prepared seedbed, d) adopt direct sowing in the establishment of food crops. 	<ul style="list-style-type: none"> ● in purposive groups, learners are guided to observe a demonstration on how to sign terms related to sowing of tiny seeds, ● in pairs, learners are guided to fingerspell and sign terms related to direct sowing of tiny seeds. ● in purposive groups, learners are guided to discuss how to enumerate food crops such as <i>carrots and millet</i> that are established through direct sowing of tiny seeds (<i>crops that do not require transplanting</i>). ● in purposive groups, learners watch captioned/signed videos on how to sow the tiny seeds in a finely prepared ground or container seedbed. Ensure sign language instructions are 	<p>How does direct sowing of tiny seeds enhance the food production process?</p>

			<p>provided where videos are not captioned /signed.</p> <ul style="list-style-type: none"> ● in purposive groups, learners are guided to sow the tiny seeds in a finely prepared ground or container seedbed. ● using digital devices, learners are guided to watch captioned/signed video clips on how to take care of the tiny seeded crops in a seedbed to adopt the use of direct sowing in food production. ● in purposive groups, learners are guided to take care of the tiny seeded crops in a seedbed to adopt the use of direct sowing in food production. 	
Core Competencies:				
Learning to learn: own reflection as learners establishes tiny seeds in a prepared seedbed.				
Values:				
Respect: accommodation of diverse opinions while the learners undertake seed bed preparation tasks.				
Pertinent and contemporary issues:				
Food and nutritional security as learners grow crops on prepared seedbeds to contribute to food availability at household level.				
Link to other subjects:				

Learners relate the use of tools and equipment in preparation of seedbed and sowing tiny seeds to concepts of tools in making work easier learnt in Science and Technology.

Suggested Learning Resources

- Science Specific Signs Dictionary
- Digital devices
- Tiny seeds (Carrots and Millet seeds)
- Course books
- Print media

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested Key inquiry questions
2.0 Food Production Processes	2.2 Growing Fruits (16 lessons)	<p>By the end of the sub strand the learner should be able to:</p> <ul style="list-style-type: none"> a) sign various fruits found within the locality. b) identify fruits that can grow the locality, c) grow a fruit crop suited in the locality, d) appreciate the importance of consuming fruits for nutrition. 	<ul style="list-style-type: none"> • in purposive groups, learners are guided to observe a demonstration on how to fingerspell and sign various fruits found within the locality, • in pairs, learners are guided to fingerspell and sign various fruits found in the locality. • in purposive groups, learners are guided to brainstorm and share information on different types of fruits that can grow in their locality. • in purposive group, learners are guided to establish and take care of a fruit crop that can suitably grow in the locality such as woody fruit tree (for example, tree tomato and guava) and climbing fruits (such as passion fruit, kiwi, grapes, blackberries, raspberries), • in groups, learners are guided to watch captioned video clips on 	<p>How do we grow fruits?</p>

			how to harvest ripe fruits for consumption.	
Core Competencies:				
Self-efficacy: self- confidence as learners realise the benefit of growing their own fruits for consumption.				
Values:				
Responsibility: as learners take care of growing fruits.				
Pertinent and contemporary issues:				
Health promotion awareness as learners appreciates the importance of consuming fruits.				
Link to other subjects:				
Learners relate growing of fruits as an economic activity as learnt in Social Studies.				
Suggested Learning Resources				
<ul style="list-style-type: none"> ● Science Specific Signs Dictionary ● Digital devices ● Various fruits from the locality ● Pictures/ images (Passion fruit, Kiwi, Grapes, Blackberries, Raspberries) ● Course books ● Print media 				

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested Key inquiry questions
2.0 Food Production Processes	2.3 Uses of Domestic Animals (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 various domestic animals in the community, b) identify types of domestic animals in the community, c) relate various domestic animals to their uses, d) appreciate the importance of domestic animals for food production. 	<ul style="list-style-type: none"> • in purposive groups, learners are guided to fingerspell and sign various domestic animals found in the community, • in groups, learners are guided to brainstorm and share experiences on the types of domestic animals (cattle, sheep, goats, and poultry) found in their community and their uses. • in purposive groups, learners are guided to prepare a checklist and tour around the school to identify the types of domestic animals found in the community. • in pairs, learners are guided to prepare a chart matching the domestic animals to their uses and present to plenary 	How do domestic animals contribute to food production?

			<p><i>(cattle, sheep, goat and poultry).</i></p> <ul style="list-style-type: none"> • in purposive groups, learners are guided to develop a catalogue on domestic animals and their importance in food production. • in groups, learners are guided to debate on the importance of domestic animals in food production. Ensure the debate is based on bilingual communication and appropriate sitting arrangement is adopted. 	
<p>Core Competencies: Self-efficacy: self-confidence as learners makes presentations on uses of domestic animals.</p>				
<p>Values: Respect: open mindedness as learners listens and accommodate others opinions during presentations on importance of domestic animals.</p>				
<p>Pertinent and contemporary issues: Animal welfare as the learners appreciates the importance of domestic animals to humans.</p>				
<p>Link to other subjects: Learners relate animals reared in their community to knowledge learnt in Social Studies on social economic activities.</p>				
<p>Suggested Learning Resources</p> <ul style="list-style-type: none"> • Science Specific Signs Dictionary 				

- Digital devices
- Pictures of various domestic animals
- Relevant captioned videos on domestic animals

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested Key inquiry questions
2.0 Food Production Processes	2.4 Balanced Meal (9 lessons)	<p>By the end of the sub strand the learner should be able to:</p> <p>a) sign terms related to meals in food productions.</p> <p>b) explain importance of eating a balanced meal,</p> <p>c) select food from different food groups to make a balanced meal,</p> <p>d) appreciate the importance of eating a balanced meal.</p>	<ul style="list-style-type: none"> ● in purposive groups, learners are guided to observe a demonstration on how to sign terms related to meal in food productions, ● in pairs, learners are guided to fingerspell and sign terms related to meals in food productions. ● using a sitting arrangement that allows bilingual communication, learners are guided to discuss or use digital devices to search for the importance of eating a balanced meal (variety and proportion). ● in purposive groups, tour around the school and the community to collect samples of different foods. 	How does a balanced meal impact on health?

			<ul style="list-style-type: none"> • under the tutelage of a resource person, learners are guided to select foods from locally available foods to comprise a balanced meal (energy giving, body building and protective foods). • learners are guided to keep a journal for one week on meals they take to appreciate the importance of a balanced meal. 	
<p>Core Competencies: Communication and collaboration: team work as learners contribute to the discussion on the importance of a balanced meal.</p>				
<p>Values: Unity: collaboration with others as learners selects foods to comprise balanced meals.</p>				
<p>Pertinent and contemporary issues: Health awareness promotions as learners discuss the importance of eating a balanced meal.</p>				
<p>Link to other subjects: Learners relate the importance of eating a balanced meal to knowledge learnt in Science and Technology on healthy eating habits.</p>				
<p>Suggested Learning Resources</p> <ul style="list-style-type: none"> • Science Specific Signs Dictionary • Digital devices • Pictures of sample foods from the locality 				

- Utensils
- Cooking oil
- Source of heat
- Course books
- Print media

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested Key inquiry questions
2.0 Food Production Processes	2.5 Cooking Food <ul style="list-style-type: none"> • <i>Boiling food</i> • <i>Shallow frying food</i> (11 lessons)	By the end of the sub strand the learner should be able to: <ol style="list-style-type: none"> a) sign different methods of cooking food in food production processes. b) describe methods of cooking food, c) cook food using different methods, d) embrace boiling and shallow frying in food production. 	<ul style="list-style-type: none"> • in purposive groups, learners are guided to observe a demonstration on how to sign different methods of cooking food in food production processes, • in pairs learners are guided to fingerspell and sign different methods of cooking food in food production processes. • in purposive groups, learners are guided to captioned watch video clips or demonstration on boiling and shallow frying methods of cooking. Ensure learners are provided with sign language interpretation in cases where videos are not captioned. 	How can we cook food using boiling and shallow frying methods?

			<ul style="list-style-type: none"> • in pairs, learners are guided to cook food using boiling and shallow frying methods, • in pairs, learners are guided to serve the boiled and shallow fried food to embrace the various methods of food production. 	
<p>Core Competencies: Learning to learn: organising own learning as learners apply laid down procedure in boiling and shallow frying food.</p>				
<p>Values: Responsibility: observes safety precautions when boiling and shallow frying food.</p>				
<p>Pertinent and contemporary issues: Safety of self and others to avoid accidents as they boil and fry food.</p>				
<p>Link to other subjects: Learners relate handling of accidents to skills learnt from first aid in Science and Technology.</p>				
<p>Suggested Learning Resources</p> <ul style="list-style-type: none"> • Science Specific Signs Dictionary • Digital devices • Relevant captioned videos • Utensils • Cooking oil • Source of heat • Course books 				

- Print media

Suggested Assessment Rubric

Level Indicator	Exceeds Expectations	Meets Expectations	Approaches Expectations	Below Expectations
Ability to sign words related to food production processes.	The learner signs words related to metals and alloys with exceptional accuracy demonstrating signing proficiency.	The learner signs words related to metals and alloys accurately conveying the intended meaning clearly.	The learner signs words related to metals and alloys with noticeable errors and inconsistencies in articulation.	The learner signs words related to metals and alloys with minimal clarity in articulation.
Ability to describe food production processes at household level: <i>(direct sowing of seeds, growing of fruits, uses of domestic animals, balanced diet, boiling and shallow frying).</i>	The learner describes <i>six</i> food production processes at household level.	The learner describes <i>five</i> food production processes at household level.	The learner describes <i>two to four</i> food production processes at household level.	The learner describes <i>less than two</i> food production processes at household level.
Ability to carry out various food production	The learner carries out <i>six</i> food production	The learner carries out <i>five</i> food production	The learner carries out <i>two to four</i> food	The learner carries out <i>less than two</i> food

<p>processes at household level:</p> <p><i>(Direct sowing of seeds, growing of fruits, uses of domestic animals, balanced diet, boiling and shallow frying).</i></p>	<p>processes at household level.</p>	<p>processes at household level.</p>	<p>production processes at household level.</p>	<p>production processes at household level.</p>
<p>Ability to exhibit integrity in carrying out food production processes:</p> <p><i>(Utilising resources prudently, is accountable, shows honesty, applies ethically acceptable procedures).</i></p>	<p>The learner exhibits <i>four</i> indicators of integrity in carrying out food production processes.</p>	<p>The learner exhibits <i>three</i> indicators of integrity in carrying out food production processes.</p>	<p>The learner exhibits <i>two</i> indicators of integrity in carrying out food production processes.</p>	<p>The learner exhibits <i>less than two</i> indicators of integrity in carrying out food production processes.</p>

3.0 HYGIENE PRACTICES

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested Key inquiry questions
3.0 Hygiene Practices	3.1 Personal Hygiene (10 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 personal hygiene in daily life. b) identify healthy practices that promote personal hygiene, c) apply healthy practices that promote personal hygiene, d) embrace healthy practices to promote personal hygiene in daily life. 	<ul style="list-style-type: none"> • in purposive groups, learners are guided to watch captioned video clips or demonstrations on how to sign terms related to personal hygiene in daily life, • in pairs, the learners are guided to fingerspell and sign terms related to personal hygiene in daily life. • in purposive groups, learners are guided to brainstorm and enumerate practices that promote personal hygiene such as <i>hand washing, use of personal protective equipment and use of clean water,</i> • in purposive groups, learners are guided to watch captioned videos or one on one demonstration on appropriate practices that promote personal hygiene in daily life. • in purposive groups, learners are guided to perform appropriate practices that promote personal 	<p>How does personal hygiene promote good health?</p>

			<p>hygiene such as <i>hand washing, use of personal protective equipment and use of clean water,</i></p> <ul style="list-style-type: none"> learners are guided to keep a diary log of various health hygiene practices for a specified period of time to embrace personal health promotion. 	
<p>Core Competencies: Self-efficacy: practice of good grooming as learners applies skills learnt on personal hygiene.</p>				
<p>Values: Responsibility: taking charge of their own body as they practise personal hygiene and use personal protective equipment.</p>				
<p>Pertinent and contemporary issues: Prevention of communicable diseases as learners practise personal hygiene.</p>				
<p>Link to other subjects: Learners relate personal hygiene practices to prevention of communicable diseases learnt in Science and Technology.</p>				
<p>Suggested Learning Resources</p> <ul style="list-style-type: none"> Science Specific Signs Dictionary Digital devices Relevant captioned videos Source of clean water Soap Personal protective equipment Course books Print media 				

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested Key inquiry questions
3.0 Hygiene Practices	3.2 Domestic Hygiene (9 lessons)	<p>By the end of the sub strand the learner should be able to:</p> <ol style="list-style-type: none"> sign term related to domestic hygiene in daily life. describe the various methods used for cleaning home environment, use appropriate methods to clean home environment, appreciate a clean environment in promoting domestic hygiene. 	<ul style="list-style-type: none"> in purposive groups, learners are guided to watch video clips or a one-on-one demonstration on fingerspelling and signing term related to domestic hygiene, in pairs, learners are guided to fingerspell and sign terms related to domestic hygiene. in purposive groups, learners are guided to discuss the methods of cleaning home environment <i>such as mopping, dusting, sweeping and disposal of refuse</i>. Ensure learners adopt appropriate sitting arrangements that support bilingual communication. 	<p>How can we maintain hygiene in the home environment?</p>

			<ul style="list-style-type: none"> • in purposive groups, learners are guided to perform tasks to apply the methods of cleaning home environment in school. • learners are guided to maintain a clean-living environment using applicable methods in their classroom contexts while using improvised and locally available resources. 	
Core Competencies:				
Creativity and imagination: thoughtful choices as learners use improvised and locally available cleaning resources.				
Values:				
Responsibility: accountability as learners engages in activities of cleaning home environments.				
Pertinent and contemporary issues:				
Environmental awareness as learners maintains a clean healthy environment.				
Link to other subjects:				
Learners relate a clean environment to control of communicable diseases learnt in Science and Technology.				
Suggested Learning Resources				
<ul style="list-style-type: none"> • Science Specific Signs Dictionary • Digital devices • Relevant captioned videos 				

- Sweeping broom
- Dust pan
- Mopping rug
- Course books
- Print media

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested Key inquiry questions
3.0 Hygiene Practices	3.3 Cleaning Personal Protective Equipment (9 lessons)	By the end of the sub strand the learner should be able to: <ol style="list-style-type: none"> a) sign personal protective equipment used when cleaning the environment. b) identify personal protective, equipment in day-to-day life, c) clean personal protective equipment for hygiene purposes, d) appreciate clean personal protective equipment in promoting hygiene. 	<ul style="list-style-type: none"> • in purposive groups, learners are guided to use print and non-print media to search for information or observe a demonstration to identify common personal protective equipment <i>such as gloves, dust masks, gumboots, headgear, overall and canvas shoes,</i> • in purposive groups, learners are guided to watch video clips or demonstrations on how to fingerspell and sign personal protective equipment used when cleaning the environment. 	How does cleaning of personal protective equipment promote hygiene?

			<ul style="list-style-type: none">• in pairs, learners are guided to fingerspell and sign personal protective equipment used when cleaning the environment.• in purposive groups, learners watch video clips or one on one demonstration on appropriate methods to clean personal protective equipment.• in purposive groups, learners are guided to perform various tasks to apply appropriate methods to clean personal protective equipment such as <i>gumboots or canvas shoes</i>,• in purposive groups, learners are guided to	
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			make a display of cleaned personal protective equipment for peer assessment.	
Core Competencies:				
Digital literacy: use of digital technology as learners searches for information on personal protective equipment.				
Values:				
Responsibility: safety and care of self as learners clean personal protective equipment.				
Pertinent and contemporary issues:				
Personal safety as learners exercises caution while undertaking cleaning activity.				
Link to other subjects:				
Learners relate use of personal protective equipment to personal safety skills learnt in Science and Technology.				
Suggested Learning Resources				
Science Specific Signs Dictionary, Digital devices, variety of PPEs (gloves, masks, gumboots, head gear, overall), Cleaning materials and equipment such; detergent and clean water, pictures or videos on ways of good grooming, clothes lines, pegs. Stain removal agents, Course books, Print media				

Suggested Assessment Rubric

Level Indicator	Exceeds Expectations	Meets Expectations	Approaches Expectations	Below Expectations
Ability to sign words related to hygiene practices	The learner signs words related to metals and alloys with exceptional accuracy demonstrating signing proficiency.	The learner signs words related to metals and alloys accurately conveying the intended meaning clearly.	The learner signs words related to metals and alloys with noticeable errors and inconsistencies in articulation.	The learner signs words related to metals and alloys with minimal clarity in articulation.
Ability to describe practices that promote hygiene: <i>(Personal hygiene, domestic hygiene and cleaning personal protective equipment).</i>	The learner describes <i>three</i> practices that promote hygiene.	The learner describes <i>two</i> practices that promote hygiene.	The learner describes <i>one</i> practice that promotes hygiene.	The learner <i>makes a partial description of a practice</i> that promotes hygiene.
Ability to apply health practices to promote hygiene. <i>(Personal hygiene, domestic hygiene and</i>	The learner applies <i>three</i> health practices to promote hygiene.	The learner applies <i>two</i> health practices to promote hygiene.	The learner applies <i>one</i> health practice to promote hygiene.	The learner <i>partially applies one</i> health practice to promote hygiene.

<i>cleaning personal protective equipment).</i>				
<p>Ability to exhibit responsibility while undertaking health practices that promote hygiene:</p> <p><i>(Respects other learners' property, offers leadership, accepts consequences, and cares for property).</i></p>	<p>The learner exhibits <i>four</i> indicators of responsibility while undertaking health practices that promote hygiene.</p>	<p>The learner exhibits <i>three</i> indicators of responsibility while undertaking health practices that promote hygiene.</p>	<p>The learner exhibits <i>two</i> indicators of responsibility while undertaking health practices that promote hygiene.</p>	<p>The learner exhibits <i>less than two</i> indicators of responsibility while undertaking health practices that promote hygiene.</p>

4.0 PRODUCTION TECHNIQUES

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested Key inquiry questions
4.0 Production Techniques	4.1 Making Tacking Stitches (11 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 tacking stitches in production techniques. b) identify the types of tacking stitches in sewing, c) make an item using tacking stitches, d) appreciate the importance of tacking stitches. 	<ul style="list-style-type: none"> ● in purposive groups, learners are guided to watch video clips or demonstrations on how to sign terms related to tacking stitches in production techniques, ● in pairs, learners are guided to fingerspell and sign terms related to tacking stitches in production techniques. ● in purposive groups, learners are guided to use print and non-print media to search for samples of tacking stitches (<i>even tacking; long and short tacking</i>) used in sewing. ● in purposive groups, learners are guided to watch video clips or demonstrations on how to make simple items using tacking stitches. ● in purposive groups, learners are guided to make sample 	How can we use tacking stitches in making items?

			<p>item such as a handkerchief or clothing for a scarecrow using tacking (even tacking or long and short taking) stitches,</p> <ul style="list-style-type: none"> ● in purposive groups, learners are guided to make presentations using a display of sample items to appreciate the importance of tacking stitches. 	
<p>Core Competencies: Creativity and imagination: experimentation skills as learners observe, innovate and try out on tacking stitches.</p>				
<p>Values: Unity: display of team spirit as learners shares resources in the making of tacking stitches.</p>				
<p>Pertinent and contemporary issues: Safety of self and others as learners uses needles and other sharp tools in sewing task.</p>				
<p>Link to other subjects: Learners relate skills in measuring materials and precision in tacking stitches to measurements in Mathematics.</p>				
<p>Suggested Learning Resources Science Specific Signs Dictionary, Digital devices, Threads, Needles Scissors Course books, print media, needles, crocheting hooks, scissors, tape measures, sewing thread, yarn, dressmaker pins, fabric, pin cushion, thimbles</p>				

Suggested Assessment Rubric

Level Indicator	Exceeds Expectations	Meets Expectations	Approaches Expectations	Below Expectations
Ability to sign words related to making tacking stitches.	The learner signs words related to waves in nature with exceptional accuracy demonstrating signing proficiency.	The learner signs words related to waves in nature accurately to convey the intended meaning.	The learner signs words related to waves in nature with noticeable errors and inconsistencies in articulation.	The learner signs words related to waves in nature inaccurately and lack clarity in articulation.
Ability to use tacking stitches in making an item: <i>(Makes appropriate choice of stitch, makes the stitch, ensures evenness of the stitch and firmness of stitch to the purpose).</i>	The learner makes an appropriate choice of stitch, makes the stitch, ensures evenness of the stitch and firmness of stitch to the purpose.	The learner makes an appropriate choice of stitch, makes the stitch, ensures evenness of the stitch.	The learner makes an appropriate choice of stitch, makes the stitch.	The learner makes an appropriate choice of stitch.
Ability to work in unity in making an item <i>(Sharing resources, working in teams, appreciating efforts of</i>	The learner exhibits <i>four</i> indicators of unity while making an item using tacking stitches.	The learner exhibits <i>three</i> indicators of unity while making an item using tacking stitches.	The learner exhibits <i>two</i> indicators of unity while making an item using tacking stitches.	The learner exhibits <i>less than two</i> indicators of unity while making an item using tacking stitches.

<i>others, respecting others' opinions).</i>				
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APPENDIX 1: COMMUNITY SERVICE-LEARNING PROJECT

CSL at Upper Primary (Grade 4-6)

At this level, the goal of the CSL activity is to provide linkages between concepts learnt in the various Learning Activities and the real-life experiences. Learners begin to make connections between what they learn and the relevance to their daily life. CSL is hosted in the Social Studies learning area. The implementation of the CSL activity is a collaborative effort where the class teacher coordinates and works with other subject teachers to design and implement the integrated CSL activity. Though they are teacher-guided, the learners should progressively be given more autonomy to identify problems and come up with solutions. The safety of the learners should also be taken into account when selecting the CSL activity. The following steps for the integrated CSL activity should be staggered across the school terms:

Steps in carrying out the integrated CSL activity
<p>1) Preparation</p> <ul style="list-style-type: none"> • Map out the targeted core competencies, values and specific learning areas skills for the CSL activity • Identify resources required for the activity (locally available materials) • Adapt the resources required for the activity to fit learners with hearing impairment. • Stagger the activities across the term (Set dates and time for the activities) • Communicate to learners, parents/caregivers/guardians, school administration, teachers and other relevant stakeholders in the school community

- Identify and develop assessment tools

2) **Implementation CSL Activity**

- Assigning roles to learners.
- Ensure every learner actively participates in the activity
- Ensure learners are provided with sign language interpretation as they interact with the community.
- Observe learners as they carry out the CSL activity and record feedback.
- Use an appropriate assessment tool to assess both the process and the product (Assess learner's work from the beginning to the end product)
- Assess the targeted core competencies, values and subject skills.

3) Reflection on the CSL Activity

Conduct a self-evaluation session with learners on the integrated CSL activity undertaken by discussing the following:

- what went well and why
- what did not go well and why,
- what can be done differently next time
- what they have learnt.

There will be **one** integrated CSL activity that will be conducted **annually**. The thematic areas for the integrated CSL activity will be derived from the broader categories of the PCIs and concepts from the various Learning Areas. Teachers are expected to vary the themes yearly to allow learners to address different PCIs within their contexts. There should be a linkage between the skills from the learning areas and the themes.

The integrated CSL activity will take a Whole School Approach (WSA) where the entire school community is involved (learners, parents/caregivers/guardians, school administration, teachers). Parents/caregivers/guardians are key stakeholders in the planning and execution of the CSL activity. Although the teacher takes the lead role in the planning and integration of the CSL activity, learners will be expected to participate actively in the whole process.

The CSL activity provides an opportunity for the development of core competencies and the nurturing of various values. The teacher is expected to vary the core competencies and values emphasised in the activity yearly.

Assessment of the CSL Activity

Assessment of the integrated CSL activity will focus on 3 components namely: skills from various learning areas applied in carrying out the activity, and core competencies and values demonstrated. Assessment should focus on both the process and end

product of the CSL activity. The teacher will assess learners in groups using various tools such as an observation schedule, checklist or rating scale or any other appropriate tool.

APPENDIX II: LIST OF ASSESSMENT METHODS, LEARNING RESOURCES AND SUGGESTED ASSESSMENT METHODS

Strand	Suggested Assessment Methods	Suggested Learning Resources	Suggested Non-formal Activities
1.0 Conservation of Resources	<ul style="list-style-type: none"> – Observation of learning – Tests (written oral or signed) – Project 	Suitable organic materials for composting such as slashed vegetation, kitchen wastes and animal wastes, digging tools such as Jembes and spade, metal pipes, plastic pipes, assorted containers	<ul style="list-style-type: none"> • Collect suitable composting materials from the environment, • Visit gardens in the neighbourhood to observe water measures and integrated farming.

Strand	Suggested Assessment Methods	Suggested Learning Resources	Suggested Non-formal Activities
		<p>such bottles, buckets and Jerri cans, mulching materials such as dry grass, suitable cover crop, Stakes for erecting shade, Charts, pictures and video clips, cooking pans and pots suitable materials for making a scarecrow such as sticks or pieces of timber, nails, threads and wires, stuffing materials and old clothes, wild animal repellents such as smoke and smelly substances, resource person, materials for controlling soil erosion such as stones, wire mesh, poles, twigs. materials for making physical deterrents such as innovation lights, deflectors, safe traps.</p>	<ul style="list-style-type: none"> • Learners to initiate soil conservation measures in the school based on common forms of erosion in the environment. • Learners to initiate water harvesting and conservation based on common forms of water wastage points in the school. • Learners to initiate bird feeding tables to attract and nourish wild birds using waste foods. • Learners debate on advantages and disadvantages of fuels. • Making exhibitions of fuel saving energy cookers, improvised baking ovens, simple hand washing facilities, deterrents
2.0 Food Production Processes	Observation of learning	Container or ground gardens/ open spaces for gardening, tiny seeds such as carrots and millet, fruit	<ul style="list-style-type: none"> • Participate in 4k clubs, ASK shows and famer’s days

Strand	Suggested Assessment Methods	Suggested Learning Resources	Suggested Non-formal Activities
	<ul style="list-style-type: none"> – Tests (written and oral or signed) – Project 	<p>seeds or seedlings, garden tools and equipment such as pangas, jembes and forked jembes, watering cans, charts, photographs or video clips on domestic animals, pictures, video clips, different types of foodstuffs, kitchen tools and equipment (cooking pans and pots, chopping boards, kitchen knife, wooden spoon, frying spoon), suitable frying equipment and materials, source of heat, resource person. Suitable vegetable seeds in the locality, assorted cereals and pulses, natural preservatives such as ash, air tight containers, small domestic animal such as rabbit or guinea pig, improvised feeders and waterers, housing structure for the small domestic animals, variety of fruits and vegetables, drying rack, netting</p>	<ul style="list-style-type: none"> • Learners make presentations in assemblies and open days on benefits of eating organically grown foods. • Learners create talking walls on various themes to educate the community • Create journals and logs on healthy eating habits. • Peers teach others on use and care of kitchen equipment.

Strand	Suggested Assessment Methods	Suggested Learning Resources	Suggested Non-formal Activities
		materials, improvised baking equipment,	
3.0 Hygiene Practices	Observation of learning – Tests (written and oral or signed) – Project	Hand washing materials and equipment, variety of PPEs (gloves, masks, gumboots, head gear, overall), Cleaning materials and equipment such as buckets/basin, brooms, brushes, floor clothes, detergent and clean water, canvas shoes, resource person, pictures or videos on ways good grooming, different surfaces in the home environment such as cemented, tiled, earthen and wooden), fast and white coloured items, clothe lines, pegs. Stain removal agents	<ul style="list-style-type: none"> • Learners’ fingerspell and sign names of materials and equipment used in washing and cleaning. • Learners draw posters on washing of hands. • Learners make leaky tins of tippy taps for washing hands and place them in the different types of the school compound. • Compose and sign-sings <i>Usafi</i> songs and poems on good grooming.
4.0 Production Techniques	Observation of learning – Tests (written and oral) – Project	Needle work tools such as needles, crocheting hooks, scissors, tape measures, sewing thread, yarn, dressmaker pins, fabric, pin cushion, thimbles., sacks, plastic bottles, walls, wooden frames,	<ul style="list-style-type: none"> • Use clubs to sensitise the school community on repair of garments. • Sensitise learners in health clubs on stain removal.

Strand	Suggested Assessment Methods	Suggested Learning Resources	Suggested Non-formal Activities
		topsoil, manures, poles, plastic sheet, offcuts/timber, top soil, manures,	<ul style="list-style-type: none"> • Draw pictures of different needle work tools. • Carry out an exhibition to display crocheted items.