



**REPUBLIC OF KENYA
MINISTRY OF EDUCATION**

PRIMARY SCHOOL CURRICULUM DESIGN

GRADE 5

**AGRICULTURE
FOR LEARNERS WITH PHYSICAL IMPAIRMENT**



KENYA INSTITUTE OF CURRICULUM DEVELOPMENT

A Skilled and Ethical Society

First Published in 2023

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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 rationalisation and review of the basic education curriculum. The reviewed Grade Five curriculum designs for learners with physical impairment build on competencies attained by learners at Grade four. 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 Five curriculum furthers implementation of the CBC from Grade Four 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 Five curriculum designs for learners with physical 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 Five and prepare them for smooth transition to Grade Six. 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 conceptualised the Competency Based Curriculum (CBC) as captured in the Basic Education Curriculum Framework (BECF) 2017, that responds to the demands of the 21st Century and the aspirations captured in the Constitution of Kenya 2010, the Kenya Vision 2030, East African Community Protocol, International Bureau of Education Guidelines and the United Nations Sustainable Development Goals (SDGs).

KICD receives its funding from the Government of Kenya to facilitate successful achievement of the stipulated mandate and implementation of the Government and Sector (Ministry of Education (MoE) plans. The Institute also receives support from development partners targeting specific programmes. The revised Grade Five curriculum designs for learners with physical 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 Five curriculum designs for learners with Physical 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 Five and preparation of learners with physical impairment for transition to Grade Six.

A handwritten signature in blue ink, appearing to read 'Charles O. Ong'ondo', written in a cursive style.

PROF. CHARLES O. ONG'ONDO, PhD, MBS
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NATIONAL GOALS OF EDUCATION

1. **Foster nationalism, patriotism, and promote national unity**

Kenya's people belong to different communities, races and religions and should be able to live and interact as one people. Education should enable the learner acquire a sense of nationhood and patriotism. It should also promote peace and mutual respect for harmonious co-existence.

2. **Promote social, economic, technological and industrial needs for national development**

Education should prepare the learner to play an effective and productive role in the nation.

a) **Social Needs**

Education should instil social and adaptive skills in the learner for effective participation in community and national development.

b) **Economic Needs**

Education should prepare a learner with requisite competences that support a modern and independent growing economy. This should translate into high standards of living for every individual.

c) **Technological and Industrial Needs**

Education should provide the learner with necessary competences for technological and industrial development in tandem with changing global trends.

3. **Promote individual development and self-fulfillment**

Education should provide opportunities for the learner to develop to the fullest potential. This includes development of one's interests, talents and character for positive contribution to the society.

4 Promote sound moral and religious values

Education should promote acquisition of national values as enshrined in the Constitution. It should be geared towards developing a self-disciplined and ethical citizen with sound moral and religious values.

5. Promote social equity and responsibility

Education should promote social equity and responsibility. It should provide inclusive and equitable access to quality and differentiated education; including learners with special educational needs and disabilities. Education should also provide the learner with opportunities for shared responsibility and accountability through service learning.

6. Promote respect for and development of Kenya's rich and varied cultures

Education should instil in the learner appreciation of Kenya's rich and diverse cultural heritage. The learner should value own and respect other people's culture as well as embrace positive cultural practices in a dynamic society.

7. Promote international consciousness and foster positive attitudes towards other nations

Kenya is part of the interdependent network of diverse peoples and nations. Education should therefore enable the learner to respect, appreciate and participate in the opportunities within the international community. Education should also facilitate the learner to operate within the international community with full knowledge of the obligations, responsibilities, rights and benefits that this membership entails.

8. Good health and environmental protection

Education should inculcate in the learner the value of physical and psychological well-being for self and others. It should promote environmental preservation and conservation, including animal welfare for sustainable development.

LESSON ALLOCATION AT UPPER PRIMARY

S/No	Learning Area	Number of Lessons Per Week
1.	English	5
2.	Kiswahili / Kenya Sign Language	4
3.	Mathematics	5
4.	Religious Education	3
5.	Science & Technology	4
6.	Agriculture and Nutrition	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-fulfillment,
- 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 is an integrated learning area comprising aspects of agriculture and home science. The learners with Physical Impairment 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, and 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 forms grounds for further development of the competencies in junior school and beyond.

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

Strands	Sub Strands	Suggested Number of Lessons
1.0 Conservation of Resources	1.1 Soil Conservation	8
	1.2 Water Conservation	9
	1.3 Conserving Wild Animals	6
2.0 Food Production Processes	2.1 Growing Vegetables	9
	2.2 Uses of Domestic Animals	8
	2.3 Preservation of Cereals and Pulses	10
	2.4 Food Nutrients	10
	2.5 Cooking Food	9
3.0 Hygiene Practices	3.1 Good Grooming Practices	7
	3.2 Home Hygiene	9
	3.3 Laundering Cotton Item	10
4.0 Production Techniques	4.1 Repairing Garments	11
	4.2 Constructing Innovative Gardens	14
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 (8 lessons)	By the end of the sub-strand the learner should be able to: <ol style="list-style-type: none"> a) identify sites for soil improvement in the school or community, b) construct organic waste pit for soil improvement, c) demonstrate use of plant remains for soil improvement. 	Learners are guided to: <ul style="list-style-type: none"> • Discuss and identify sites in the school or community that have poor soil for crop growth. Learners with speech difficulties could use Alternative and Augmentative modes of Communication-AAC (residual speech/ digital devices with text-to-speech application/point/sign/write) to express their views as they discuss. • Construct a pit, a site or a structure for damping plant residue and suitable food remains and organic kitchen wastes in school. Learners with manipulation difficulties could use alternative functional part, 	How can we improve the soil using suitable organic wastes?

			<p>adapted tools or be supported by peer, learner support assistant or teacher to perform the task.</p> <ul style="list-style-type: none"> Plant crop in a residue pit to observe and appreciate soil improvement from accumulated organic wastes. Learners with hand coordination difficulties could use adapted gardening tools and equipment or be supported to perform the task by peers, learner support assistant or teacher to perform the task. 	
<p>Core competencies: Critical thinking and problem solving: observation skills as learners identify appropriate sites for soil improvement.</p>				
<p>Values: Unity: collaborative skills as learners construct organic waste pit for soil improvement.</p>				
<p>Pertinent and contemporary issues: Environmental conservation as learners recycle organic wastes through the organic waste pit.</p>				
<p>Link to other subjects: Learners relate the construction and use of organic waste pit to waste management skills learnt in Science and Technology</p>				

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested key inquiry questions
1.0 Conservation of Resources	1.2. Water Conservation (9 lessons)	By the end of the sub strand the learner should be able to; <ol style="list-style-type: none"> a) identify ways of conserving water for household gardening, b) practice water conservation within the school or community, c) appreciate importance of conserving water in the community. 	Learners are guided to: <ul style="list-style-type: none"> ● Use devices or other resources to search for information on ways of water conservation such as <i>mulching, cover cropping and shading</i> in kitchen and backyard gardening. Learners with manipulation difficulties could use adapted digital resources with appropriate accessibility features or be supported by peers, learner support assistants or the teacher to use the digital devices. ● Practice various ways of conserving water in farming (<i>mulching, shading, cover cropping</i>) within the school. Learner with manipulation difficulties could use alternative functional part of the body/ appropriate 	How can we conserve soil water in household gardening practices?

			<p>Assistive technology with physical support. Learners with hand coordination difficulties could use alternative functional parts of the body to carry out the task or be supported by peer, learner support assistant or teacher as they give oral descriptions of ways of conserving water in farming.</p> <ul style="list-style-type: none"> ● Experiment mulching (mulch some crops and leave others un-mulched and compare moisture conservation). Learners with hand coordination difficulties could use adapted tools to perform the task or describe the procedure of mulching as they are supported by a learner support assistant to do it. 	
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			<ul style="list-style-type: none"> • Make presentations to share experiences on importance of conserving water (mulching, cover cropping and shading) in kitchen and backyard gardening activities. Learners with speech difficulties could use Alternative and Augmentative modes of Communication-AAC (residual speech/ digital devices with text-to-speech application/point/sign/write) to express their views as they make presentations. 	
Core competencies:				
Learning to learn: learning independently as learners engage in self-driven tasks for water conservation.				
Values:				
Integrity: taking personal responsibility in the use of digital devices while searching for information on water conservation.				
Pertinent and contemporary issues:				
Environmental awareness as the learners conserve soil moisture through gardening practices.				
Link to other subjects:				
Learners relate water conservation to knowledge on natural resources in the environment learnt in Social Studies.				

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested key inquiry questions
1.0 Conservation of Resources	1.3 Conserving Wild Animals (6 lessons)	By the end of the sub strand the learner should be able to; <ol style="list-style-type: none"> a) identify ways of repelling wild animals to avoid damage of property, b) repel wild animals to avoid destruction of property, c) appreciate importance of living better with wild animals. 	Learners are guided to: <ul style="list-style-type: none"> • watch video clips or listen to a resource person on safe ways of repelling wild animals (such as use of smoke, smells) to avoid damage on property (crops and domestic animals) and live better with wild animals. Preferential seating could be accorded learners with short stature while watching and Light intensity be adjusted for those who are sensitive to light. • In purposive pairs learners innovate safe ways of repelling small wild animals (<i>smoke, use of smell repellent or any other</i>). Learners with manipulation difficulties could use alternative functional parts of the body/ appropriate Assistive technology. Those who may not perform the practical task could 	How can we repel wild animals to avoid destruction of property?

			<p>describe it while being offered physical support.</p> <ul style="list-style-type: none"> • Discuss and make presentations on importance of conserving wild animals in the environment. . Learners with speech difficulties could use Alternative and Augmentative modes of Communication-AAC (residual speech/ digital devices with text-to-speech application/point/sign/write) to express their views as they discuss. 	
<p>Core competencies: Critical thinking and problem solving: evaluation and decision making skill as learners explore ways of solving destruction of property by wild animals.</p>				
<p>Values: Patriotism: learners show love for the environment by conserving animal diversity.</p>				
<p>Pertinent and contemporary issues: Conservation of biodiversity as learners appreciate cultural heritage in their community.</p>				
<p>Link to other subjects: Learners relate conservation of wild animals to conservation of natural resources learnt in Social Studies.</p>				

Suggested Assessment Rubric

Level Indicator	Exceeds Expectations	Meets Expectations	Approaches Expectations	Below Expectations
Ability to describe conservation of resources in the environment: <i>(soil, water and wild animals).</i>	The learner describes conservation measures of <i>three</i> resources in the environment.	The learner describes conservation measures of <i>two</i> resources in the environment.	The learner describes conservation measures of <i>one</i> resources in the environment.	The learner makes a <i>partial description of</i> a resource in the environment.
Ability to conserve resources in the environment: <i>(soil, water and wild animals).</i>	The learner conserves <i>three</i> resources in the environment.	The learner conserves <i>two</i> resources in the environment.	The learner conserves <i>one</i> resources in the environment.	The learner <i>partially conserves</i> a resources in the environment.
Ability to show critical thinking and problem solving in conservation of resources: <i>(seeks information, finds help when needed, explores possible solutions, completes task).</i>	The learner shows <i>four</i> indicators of critical thinking and problem solving in conservation of resources.	The learner shows <i>three</i> indicators of critical thinking and problem solving in conservation of resources.	The learner shows <i>two</i> indicators of critical thinking and problem solving in conservation of resources.	The learner shows <i>less than two</i> indicators of critical thinking and problem solving in conservation of resources.

2.0 FOOD PRODUCTION PROCESSES

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested key inquiry questions
2.0 Food Production Processes	2.1 Growing Vegetables (9 lessons)	By the end of the sub strand the learner should be able to; a) identify gardening practices in rowing vegetables, b) establish a nursery bed for vegetables, c) care for vegetable seedlings after transplanting, d) appreciate the importance of vegetables in provision of healthy meals.	Learners are guided to: <ul style="list-style-type: none"> • Brainstorm and share experiences on gardening practices of vegetables in a <i>nursery bed</i>. Learners with speech difficulties could use Alternative and Augmentative modes of Communication-AAC (residual speech/ digital devices with text-to-speech application/point/sign/write) to express their views. • In purposive groups prepare a nursery bed (<i>container or ground nursery</i>), sow vegetable seeds and take care of the seedlings. Learners with manipulation difficulties could use adapted tools to perform the task or describe the procedure as they are 	How does growing vegetables contribute to food production?

			<p>given physical support to accomplish the task.</p> <ul style="list-style-type: none"> • Transplant vegetable seedlings and take care of the seedlings. Learners with manipulation difficulties could use adapted tools to perform the task or describe the procedure as they are given physical support to accomplish the task. • Make class presentations on importance of growing vegetables as a source of food for animals and humans. Learners with speech difficulties could use Alternative and Augmentative modes of Communication-AAC (residual speech/ digital devices with text-to-speech application/point/sign/write) to make class presentations. 	
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<p>Core competencies: Self-efficacy: self-drive as learners undertake projects to grow vegetable crops.</p>
<p>Values: Social justice: learners foster fairness in sharing and undertaking of duties in the vegetable production project.</p>
<p>Pertinent and contemporary issues: Financial literacy as the learners appreciate saving on cost at school or family level by growing own vegetables.</p>
<p>Link to other subjects: Learners relate growing of vegetables to social economic activities in the community learnt through Social Studies.</p>

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested key inquiry questions
<p>2.0 Food Production Processes</p>	<p>2.2 Uses of Domestic Animals (8 lessons)</p>	<p>By the end of the sub strand the learner should be able to;</p> <p>a) identify uses of various domestic animals in food production processes, b) relate various domestic animals to their uses, c) appreciate the importance of domestic animals in food production.</p>	<p>Learners are guided to:</p> <ul style="list-style-type: none"> • In pairs brainstorm and share experiences on the uses of domestic animals in food production (<i>bees, rabbits, camels, fish, pigs, donkeys, dogs and cats</i>). Learners with speech difficulties could use Alternative and Augmentative modes of Communication- AAC (residual speech/ digital devices with text-to-speech application/point/sign/write) to express their views. 	<p>How are domestic animals important in food production?</p>

			<ul style="list-style-type: none"> • Match domestic animals to their uses. Learners with manipulation difficulties could match the domestic animals using adapted writing tools or digital device with appropriate accessibility features or be assisted to match. • Make class presentations on importance of domestic animals in various food production processes while relating contributions of all the scoped animals. Learners with speech difficulties could use Alternative and Augmentative modes of Communication- AAC (residual speech/ digital devices with text-to-speech application/point/sign/write) to express their views. 	
<p>Core competencies: Communication: speaking clearly and effectively as learners make presentations on uses of domestic animals in food production.</p>				

Values:

Patriotism: appreciating own culture by recognizing diversity of domestic animals reared in the country.

Pertinent and contemporary issues:

Food and nutrition security as the learners appreciate the direct and indirect uses of domestic animals in food production.

Link to other subjects:

Learners relate the rearing and uses of domestic animals as socio-economic activity learnt in Social Studies.

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested key inquiry questions
2.0 Food Production Processes	2.3 Preservation of Cereals and Pulses (10 lessons)	By the end of the sub strand the learner should be able to; <ol style="list-style-type: none"> describe methods of preserving cereals and pulses in the locality, preserve cereals and pulses for food security, appreciate the importance of preserving cereals and pulses for food security. 	Learners are guided to: <ul style="list-style-type: none"> In purposive pairs brainstorm and share experiences on methods of preserving and storing cereals and pulses (<i>such as sun drying, use of ashes, use of airtight containers</i>) at household level. Learners with speech difficulties could use Alternative and Augmentative modes of Communication-AAC (residual speech/ digital devices with text-to-speech application/point/sign/write) to express their views. 	How does preservation and storage of cereals and pulses enhance food security?

			<ul style="list-style-type: none"> ● In purposive groups, preserve and store cereals and pulses using methods such as sun drying, use of ash and airtight containers. Learners with manipulation difficulties could use alternative functional parts of the body or be supported by peers, learner support assistants or the teacher to carry out the task. Those who asthmatic should use face mask when carrying out this task. ● Make class presentations to share experiences on importance of preserving and storing cereals and pulses. Learners with speech difficulties could use residual speech/ digital devices with text-to-speech application/point/sign or write to make class presentations 	
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<p>Core competencies: Critical thinking and problem solving: exploring ways of preserving and storing cereals and pulses to prevent spoilage.</p>
<p>Values: Unity: taking turns while undertaking tasks in preservation of cereals and pulses.</p>
<p>Pertinent and contemporary issues: Food and nutrition security as learners preserve available cereals and pulses to prevent food wastage and spoilage.</p>
<p>Link to other subjects: Learners relate skills in preservation of cereals and pulses to farming activities in the community learnt in Social Studies.</p>

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested key inquiry questions
<p>2.0 Food Production Processes</p>	<p>2.4 Food Nutrients (10 lessons)</p>	<p>By the end of the sub strand the learner should be able to;</p> <ol style="list-style-type: none"> explain functions of food nutrients in the body, categorise foods based on their major nutrients, identify nutritional diseases and disorders associated with poor eating habits, appreciate the importance of various nutrients in the body. 	<p>learners are guided to:</p> <ul style="list-style-type: none"> Search and share information on functions of food nutrients (<i>carbohydrates, vitamins, proteins, fats</i>). Learners with speech difficulties could use Alternative and Augmentative modes of Communication-AAC (residual speech/ digital devices with text-to-speech application/point/sign/write) to express their views. Use samples of food materials and photographs to categorise foods based on their major 	<p>Why is the knowledge of food nutrients important in food production?</p>

			<p>nutrients (<i>protein rich foods, carbohydrates rich foods, vitamins and minerals rich foods</i>). Learners with manipulation difficulties could use alternative functional parts of the body, adapted digital device or be supported by peers, learner support assistants or the teacher to carry out the task.</p> <ul style="list-style-type: none"> • Use print and digital devices to search for information on various nutritional diseases and disorders such as kwashiorkor, marasmus, goiter and anaemia. Learners with manipulation difficulties could use adapted digital devices with appropriate accessibility features or be assisted by peer, learner support assistant or teacher to operate the digital devices. Those who are using print media could use page turners and book holders. • Make class presentations on the importance of various nutrients 	
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			in the body. Learners with speech difficulties could use Alternative and Augmentative modes of Communication-AAC (residual speech/ digital devices with text-to-speech application/point/sign/write) to make class presentations	
Core Competencies: Digital literacy: interaction with digital technologies while searching for information on food nutrients.				
Values: Unity: respect of each other's opinions while making presentations on importance of nutrients in the body.				
Pertinent and contemporary issues: Health promotion as learners learn the importance of food nutrients in the body.				
Link to other subjects: Learners relate food nutrients to prevention of non-communicable diseases learnt in Science and Technology.				

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>Dry Fat Frying</i> • <i>Deep Frying</i> 	By the end of the sub strand the learner should be able to; a) describe various methods of cooking food,	Learners are guided to: <ul style="list-style-type: none"> • Watch video clip or demonstration on dry fat frying and deep frying methods of cooking. Preferential seating should be accorded learners 	How can we cook foods using dry fat frying and deep frying methods?

	(9 lessons)	<p>b) cook foods using various methods,</p> <p>c) embrace dry fat frying and deep frying in food production.</p>	<p>with short stature while watching and Light intensity be adjusted for those who are sensitive to light.</p> <ul style="list-style-type: none"> • Cook foods using dry fat frying and deep frying methods. Learners with manipulation difficulties could use alternative functional parts of the body, use adapted cooking tool and equipment or be supported by peers, learner support assistants or the teacher to carry out the task. • Serve foods that have been cooked through dry fat frying and deep frying methods. Learners with manipulation difficulties could use alternative functional parts of the body, use adapted cooking tool and equipment or be supported by peers, learner support assistants or the teacher to carry out the task. 	
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<p>Core Competencies: Learning to learn: self-discipline as learners work cautiously to fry foods.</p>
<p>Values: Responsibility: taking personal initiative to observe safety as learners handle hot oils and equipment in frying foods.</p>
<p>Pertinent and contemporary issues: Safety and security for self and others as learners handle hot equipment and fat while frying food.</p>
<p>Link to other subjects: Learners relate safety and first aid from burns and scald to knowledge learnt in Science and Technology.</p>

Suggested Assessment Rubric

Level Indicator	Exceeds Expectations	Meets Expectations	Approaches Expectations	Below Expectations
Ability to describe food production processes: (<i>growing vegetables, use of domestic animals, preservation of cereals and pulses, cooking by frying</i>).	The learner describes <i>four</i> food production processes.	The learner describes <i>three</i> food production processes.	The learner describes <i>two</i> food production processes.	The learner describes <i>less than two</i> food production processes.
Ability to apply food production processes at household level.	Applies <i>four</i> food production processes at household level.	Applies <i>three</i> food production processes at household level.	Applies <i>two</i> food production processes at household level.	Applies <i>less than two</i> food production processes at household level.

<p><i>(growing vegetables, use of domestic animals, preservation of cereals and pulses, cooking by frying).</i></p>				
<p>Ability to upholds integrity in carrying out activities of food production processes: <i>(commitment to tasks, is honest, has prudence in use of resources and accountable).</i></p>	<p>The learner upholds <i>four</i> indicators of integrity in carrying out activities of production processes.</p>	<p>The learner upholds <i>three</i> indicators of integrity in carrying out activities of production processes.</p>	<p>The learner upholds <i>two</i> indicators of integrity in carrying out activities of production processes.</p>	<p>The learner upholds <i>less than two</i> indicators of integrity in carrying out activities of 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 Good Grooming Practices <ul style="list-style-type: none"> • <i>Dressing</i> • <i>Etiquette</i> <p>(7 lessons)</p>	By the end of the sub strand the learner should be able to; <ol style="list-style-type: none"> a) describe good grooming as a daily health habit, b) practice good grooming as a daily health habit, c) appreciate good grooming as a healthy habit. 	Learners are guided to: <ul style="list-style-type: none"> • In purposive groups discuss and share experiences on aspects of good grooming (dressing and etiquette) for different occasions. Learners with speech difficulties could use Alternative and Augmentative modes of Communication-AAC (residual speech/ digital devices with text-to-speech application/point/sign/write) to express their views. • Demonstrate different ways of dressing and etiquette for different activities. Learners with manipulation difficulties could use dressing aids or be given physical support when performing the task. • In purposive pairs, conduct class modelling on different 	How does good grooming promote personal hygiene?

			ways of dressing and etiquette to appreciate good grooming habits for different activities. Learners with manipulation difficulties could use dressing aids or be given physical support when performing the task.	
Core competencies: Self-efficacy: identification of self as learners develop good grooming habits.				
Values: Respect: positive regard for self and others as learners adopt good grooming habits.				
Pertinent and contemporary issues: Health promotion as learners adopt preventive health practices through good grooming habits.				
Link to other subjects: Learners relate good grooming habits to self-discovery learnt in Social Studies.				

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested key inquiry questions
3.0 Hygiene Practices	3.2 Home Hygiene (9 lessons)	By the end of the sub strand the learner should be able to; a) identify surfaces made from different materials in home environment,	Learners are guided to: <ul style="list-style-type: none"> Discuss and share experiences on surfaces made from different materials such as <i>glass, wooden, earthen floors, cemented and tile.</i> Learners with speech difficulties	How do you clean surfaces made from different materials?

		<p>b) clean different types of surfaces in the home environment,</p> <p>c) appreciate living in a clean home environment to promote healthy living.</p>	<p>could use Alternative and Augmentative modes of Communication-AAC (residual speech/ digital devices with text-to-speech application/point/sign/write) to express their views.</p> <ul style="list-style-type: none"> • Clean different types of surfaces such as <i>glass, wooden, earthen floors, cemented and tiled</i>. Learners with manipulation difficulties could clean surfaces that are within their reach using alternative functional parts of the body or be supported by peers, learner support assistants or the teacher to perform the task • Maintain cleanliness of surfaces in the school environment to appreciate living in clean environment. Learners with manipulation difficulties could clean surfaces that are within their reach using alternative functional parts of the body or be supported by peers, learner support assistants or the teacher to perform the task 	
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<p>Core Competencies: Communication and collaboration: listening and speaking skills using facts to support opinions in brainstorming on home hygiene.</p>
<p>Values: Unity: taking turns in activities while learners participate in cleaning surfaces.</p>
<p>Pertinent and contemporary issues: Safety of self and others while learners clean surfaces at home.</p>
<p>Link to other subjects: Learners relate cleaning of surfaces to prevention of contamination and prevention of spreading communicable diseases learnt in Science and Technology.</p>

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested key inquiry questions
3.0 Hygiene Practices	3.3 Laundering Cotton Item (10 lessons)	By the end of the sub strand the learner should be able to; a) describe how to launder a cotton item, b) launder a cotton item for personal hygiene, c) appreciate importance of laundry work for hygiene purposes.	Learners are guided to: <ul style="list-style-type: none"> • Watch a clip or observe a demonstration on how to launder a cotton item (<i>white and fast coloured cotton</i>). Preferential seating should be accorded learners with short stature while watching and Light intensity be adjusted for those who are sensitive to light. • Launder a white and fast coloured cotton item. Learners with manipulation difficulties 	How does laundering cotton items promote hygiene?

			<p>could use alternative functional parts of the body or be supported by peers, learner support assistants or the teacher to launder the item. Those with weak lower limbs could perform this task while seated.</p> <ul style="list-style-type: none"> • Practice laundering of white and fast coloured items at home to appreciate the importance of laundry work for personal hygiene. Learners with hand coordination difficulties could use adaptive technology for laundry work or be supported to perform the task. 	
<p>Core Competencies: Leaning to learn: sharing of ideas when carrying out activities with peers in laundering cotton items.</p>				
<p>Values: Responsibility: taking care of personal items in the laundering of cotton items.</p>				
<p>Pertinent and contemporary issues: Personal hygiene as they clean cotton items to promote health.</p>				
<p>Link to other subjects: Learners relate personal hygiene to communicable diseases learnt in science and technology.</p>				

Suggested Assessment Rubric

Level Indicator	Exceeds Expectations	Meets Expectations	Approaches Expectations	Below Expectations
Ability to describe hygiene practices as a daily health habit: (<i>good grooming, home hygiene, laundering items</i>).	The learner describes <i>three</i> hygiene practices observed as daily health habit.	The learner describes <i>two</i> hygiene practices observed as daily health habit.	The learner describes <i>one</i> hygiene practices observed as daily health habit.	The learner gives <i>partial description</i> of hygiene practices observed as daily health habit.
Ability to carry out hygiene practices as a daily health habit. (<i>good grooming, home hygiene, laundering items</i>).	The learner carries out <i>three</i> hygiene practices observed as daily health habit. (good grooming, home hygiene, laundering items) as daily health with specific attention to details.	The learner carries out <i>two</i> hygiene practices observed as daily health habit.	The learner carries out <i>one</i> hygiene practices observed as daily health habit.	The learner partially carries out <i>a</i> hygiene practice observed as daily health habit.
Ability to exhibit responsibility in hygiene practices: (<i>care for self, own property and others, observes safety and is self-directed</i>).	The learner exhibits <i>four</i> aspects of responsibility in hygiene practices.	The learner exhibits <i>three</i> aspects of responsibility in hygiene practices.	The learner exhibits <i>two</i> aspects of responsibility in hygiene practices.	The learner exhibits <i>less than two</i> aspects of responsibility in hygiene practices.

4.0 PRODUCTION TECHNIQUES

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested key inquiry questions
4.0 Production Techniques	4.1 Repairing Garments (11 lessons)	By the end of the sub strand the learner should be able to; <ol style="list-style-type: none"> a) identify stitches used in repairing garment, b) make samples of stitches used to repair garments, c) use the stitches to repair gaping seam d) adopt the use of stitches to repair of garments. 	Learners are guided to: <ul style="list-style-type: none"> ● Use pictures, samples of garments, video clips and charts to identify stitches such as <i>back stitch and running stitch</i> used in repairing garment. Preferential seating should be given to those with short stature while watching and Light intensity be adjusted for those who are sensitive to light. ● Make samples of running and back stitches. Learners with manipulation difficulties could use adapted sewing tools or describe the procedure of making running and back stitch as the learner support assistant helps them to accomplish the task. 	How can we repair garments?

			<ul style="list-style-type: none"> ● Use back stitch and running stitch to repair gapping seam. Learners with hand coordination difficulties could use alternative functional parts of the body to repair gapping seams or be supported by peer, learner support assistant or teacher to perform the task. ● Make use of back stitch and running stitch repair their daily wear. Learners with hand coordination difficulties could use alternative functional parts of the body to repair. 	
Core Competencies:				
Critical thinking and problem solving: evaluation and decision making skills as learners explore ways of repairing garment.				
Values:				
Responsibility: taking care of personal items through repairing of gaping seams.				
Pertinent and contemporary issues:				
Financial literacy as learners save costs by repairing own clothes.				
Link to other subjects:				
Learners relate cloth repairing skills such as use of colours to choice of colours learnt in Creative Arts for aesthetic purposes.				

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested key inquiry questions
4.0 Production Techniques	4.2 Constructing Innovative Gardens <ul style="list-style-type: none"> • <i>Horizontal gardens</i> • <i>Vertical gardens</i> <p>(14 lessons)</p>	<p>By the end of the sub strand the learner should be able to;</p> <ol style="list-style-type: none"> a) distinguish between horizontal and vertical innovative gardening, b) construct innovative gardens for growing crops, c) adopt the use of innovative gardens in growing crops. 	<p>Learners are guided to:</p> <ul style="list-style-type: none"> • Watch or observe stimulus materials (video clips, pictures and photographs) on innovative gardening practices to differentiate between <i>vertical and horizontal gardens</i>. Preferential seating should be given to those with short stature while watching and Light intensity be adjusted for those who are sensitive to light. • Use <i>sacks, plastic bottles, walls, plastic pipes</i> among others to construct vertical and horizontal gardens for growing crops. Learners with manipulation difficulties could use alternative functional parts of the body or be supported by peers, learner support assistants or the teacher to construct. 	<p>How can gardening be done on vertical and horizontal spaces?</p>

			<ul style="list-style-type: none"> Use the vertical and horizontal gardens to grow appropriate crop. Learners with hand coordination difficulties could be purposively paired or be supported to perform the task. 	
Core competencies:				
Creativity and imagination: designing and assembling skills as learners innovate vertical and horizontal gardens.				
Values:				
Unity: team spirit as learners take turns in constructing vertical and horizontal garden.				
Pertinent and contemporary issues:				
Environmental awareness as learners learn how to utilise limited spaces through use of vertical and horizontal gardens.				
Link to other subjects:				
Learners relate designing structures and use of craft tools to skills learnt in creative arts.				

Suggested Assessment Rubric

Level Indicator	Exceeds Expectations	Meets Expectations	Approaches Expectations	Below Expectations
Ability to explain various techniques in production processes: (<i>repair of garments, construction of vertical, and construction of horizontal gardens</i>).	The learner explains <i>three</i> production techniques.	The learner explains <i>two</i> production techniques.	The learner explains <i>one</i> production techniques.	The learner gives partial explanation of a production technique.

Ability to apply various techniques in production processes: (<i>repair of garments, construction of vertical, and construction of horizontal gardens</i>).	The learner applies <i>three</i> techniques in various production processes.	The learner applies <i>two</i> techniques in various production processes.	The learner applies <i>one</i> techniques in various production processes.	The learner partially applies <i>a</i> technique in a production process.
Ability to exhibit creativity and imagination in carrying out various production techniques: (<i>Generates new ideas, combines different concepts, uses creativity in work contexts, actualises imagined ideas</i>).	The learner exhibits <i>four</i> indicators of creativity and imagination in various production techniques.	The learner exhibits <i>three</i> indicators of creativity and imagination in various production techniques.	The learner exhibits <i>two</i> indicators of creativity and imagination in various production techniques.	The learner exhibits <i>less than two</i> indicators of creativity and imagination in various production techniques.

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

1) Preparation

- 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)
- 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
- 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
Conservation of Resources	-Observation of learning -Tests (written and oral) -Project	-Suitable organic materials for composting such as slashed vegetation, kitchen wastes and animal wastes, digging tools such as adapted jembes and spade, metal pipes, plastic pipes, assorted containers 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 scare crow such as sticks or pieces of timber, nails, threads and wires, stuffing materials and old clothes, wild animal repellants such as smoke and smelly substances, resource person, materials for controlling soil erosion such as stones, wire mesh, poles, twigs. materials for making physical	<ul style="list-style-type: none"> • Collect suitable composting materials from the environment, • Visit gardens in the neighbourhood to observe water conservation measure and integrated farming. • 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 form of water wastage points in the school. • Learners to initiate bird feeding table to attract and nourish wild birds using waste foods. • Learners debate on advantages and disadvantages of fuels. • Making exhibitions of fuel saving energy cookers,

		deterrents such as innovation lights, deflectors, safe traps. adapted writing tools adapted digital devices, learner support assistant	improvised baking ovens, simple hand washing facilities, deterrents
Food Production Processes	Observation of learning -Tests (written and oral) -Project	Container or ground gardens/open spaces for gardening, tiny seeds such as carrots and millet, garden tools and equipment such as adapted pangas, jembes and forked jembes, adapted watering cans, charts, photographs or video clips on domestic animals, pictures, kitchen tools and equipment (adapted 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	<ul style="list-style-type: none"> • Participate in 4k clubs, ASK shows and famer’s days • 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. • Peer teach other on use and care of kitchen equipment.

		and vegetables, drying rack, netting materials, improvised baking equipment, learner support assistant	
Hygiene Practices	Observation of learning -Tests (written and oral) -Project	Hand washing materials and equipment, variety of PPEs (gloves, masks, gumboots, head gear, overall,). Cleaning materials and equipment such as adapted 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, adapted digital devices, learner support assistants	<ul style="list-style-type: none"> • 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 sing <i>Usafi</i> songs and poems on good grooming.
Production Techniques	Observation of learning -Tests (written and oral) -Project	Needle work tools such as adapted needles, crocheting hooks, scissors, tape measures, sewing thread, yarn, dress maker pins, fabric, pin cushion, thimbles., sacks, plastic bottles, walls , wooden frames, topsoil, manures, poles, plastic	<ul style="list-style-type: none"> • Use clubs to sensitize the school community on repair of garments. • Sensitize learners in health clubs on stain removal. • Draw pictures of different needle work tools.

		sheet, offcuts/timber, top soil, manures,	<ul style="list-style-type: none"> • Carry out an exhibition to display crocheted items.
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NOTE: Assessment methods may be modified to accommodate a learner’s diverse needs so that he/she can participate and achieve the learning outcomes. The table below shows how modes of assessment may be adapted for learners with physical impairment:

S/No	Assessment Methods/Modes And Suggested Adaptations	
	Methods	Suggested Adaptations
	Written assessment	<ul style="list-style-type: none"> • Typing, stamping or signing • Description of the task as a scribe or learner support assistant writes Audio visual recording of the learner as he/she makes oral responses • Provision of Adapted digital devices and writing/drawing resources • Adjustment of time according to individual needs • Providing illustrations to be interpreted for activities that involve drawing • Use of worksheets
	Oral or Aural assessment	<ul style="list-style-type: none"> • Written responses • Use of AAC (<i>Augmentative and Alternative modes of Communication</i>) e.g. <i>talking books, gestures, body movement, sign language, alphabet cards, facial expressions</i> • Adjustment of time according to individual needs

	Portfolio	<ul style="list-style-type: none"> • Use of E-Portfolio • Provision of physical support • Use of assistive technology • Provision of Adapted digital devices and writing/drawing resources • Adjustment of time according to individual needs • Description of how to carry out a practical activity while being audio/video recorded
	Practical assessment/ Experiments	<ul style="list-style-type: none"> • Provision of physical support • Provision of Adapted resources (learner specific) • Description of how to carry out a practical activity while being audio/video recorded • Adjustment of time according to individual needs • Rest intervals according to individual needs • Environmental adaptation
	Project	<ul style="list-style-type: none"> • Provision of physical support • Provision of Adapted resources (learner specific) • Description of how to carry out a practical activity while being audio/video recorded • Adjustment of time according to individual needs • Environmental adaptation

Note: Safety of all learners should be observed during assessment