



KENYA INSTITUTE OF CURRICULUM DEVELOPMENT
A skilled and Ethical Society

UPPER PRIMARY SCHOOL CURRICULUM DESIGN

AGRICULTURE AND NUTRITION

GRADE 4

First Published 2017

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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 / 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) Demonstrate mastery of number concepts to solve problems in day to day life
- c) Demonstrate social skills, moral and religious values for positive contribution to society
- d) Develop one's interests and talents for personal fulfilment
- e) Make informed decisions as local and global citizens of a diverse, democratic society in an interdependent world.
- f) Explore, manipulate, manage and conserve the environment effectively for learning and sustainable development
- g) Acquire digital literacy skills for learning and enjoyment.
- h) Appreciate the country's rich, diverse cultural heritage for harmonious living

ESSENCE STATEMENT

Agriculture and Nutrition 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.

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.

DRAFT

SUMMARY OF STRANDS AND SUB STRANDS GRADE 4

S/N	STRANDS	SUB STRANDS
1.0	Conservation of Resources	1.1 Soil Conservation
		1.2 Water Conservation
		1.3 Fuel Conservation
		1.4 Conserving Wild Animals
2.0	Food Production Processes	2.1 Direct Sowing of Tiny Seeds
		2.2 Growing fruits
		2.3 Uses of Domestic Animals
		2.4 Balanced Diet
		2.5 Boiling and Shallow Frying Food
3.0	Hygiene Practices	3.1 Personal Hygiene
		3.2 Domestic Hygiene
		3.3 Cleaning Personal Protective Equipment
4.0	Production Techniques	4.1 Making Tacking Stitches

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) Identify suitable materials for making compost manure b) Prepare compost manure for farming c) Appreciate importance of compost manure in farming.	Learners are guided to: <ul style="list-style-type: none"> • Discuss suitable materials for compost manure based on their local environment. • Collect and compost suitable materials and make compost manure using heap method. • Practise the learnt skills in making compost manure <i>using slashed vegetation, kitchen wastes and any other available organic wastes</i> and using it in their gardening activities. • Develop communication skills during the discussion; care for environment while collecting waste organic matter; and unity while working together in the composting activity. 	How can composting conserve the environment?
Core Competencies to be developed: Communication and collaboration: speaking and listening skills as the learners discuss the process of preparing compost manure.				
Values: Unity: working together striving to achieve common goal in the preparation of compost manure.				
Pertinent and contemporary issues: Care for the environment as learner utilize 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.

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested Key inquiry questions
1.0 Conservation of Resources	1.2 Water Conservation (7 lessons)	By the end of the sub strand the learner should be able to: a) Describe drip irrigation as a way of conserving water b) Carry out drip irrigation to conserve water c) Appreciate use of drip irrigation in conserving water in farming.	Learners are guided to: <ul style="list-style-type: none"> • Watch video clips or use print media or observe drip irrigation in neighbouring households to guide them discuss drip irrigation concept. • Innovate drip equipment using water pipes and available containers and use the drip irrigation in gardening activities • Develop creativity skills when innovating drip irrigation equipment; practice responsibility in task allocation; and personal safety while working with tools and equipment. 	How do we use drip irrigation to conserve water?
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: Safety of self and others as the learners handle 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.				
Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested Key inquiry questions
1.0 Conservation of Resources	1.3 Fuel Conservation (7 lessons)	By the end of the sub strand the learner should be able to: a) Identify types of fuels used at home b) Use and conserve fuels in cooking c) Appreciate the importance of conserving fuel to minimize wastage of resources.	Learners are guided to: <ul style="list-style-type: none"> • Discuss to enumerate the types of fuels such as <i>charcoal, firewood, gas, kerosene</i>, used at home. • Practise ways of conserving fuels such as putting off fire when done and using fuel efficient equipment when cooking. • Develop problem solving skills as they solve problems of fuel by reducing wastage in use of fuel, show responsibility by practicing advance preparation of foodstuffs, observe safety in use of fuel. 	How does reducing fuel wastage conserve our resources?
Core Competencies: Critical thinking and problem solving: evaluation and decision making skills as learners explore ways of reducing wastage in use of fuels.				
Values: Responsibility: solving problems proactively as learners use fuels conservatively.				
Pertinent and contemporary issues: Safety of self and others as learners use fuels and related fires.				

Link to other subjects: Learners relate the skills in conservation of fuels to types and sources of energy learnt in Science and Technology.				
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)	By the end of the sub strand the learner should be able to: a) Identify small wild animals that destroy crops b) Construct and use a scarecrow to keep off small wild animals from crops c) Appreciate the importance of living better with small wild animals.	Learners are guided to: <ul style="list-style-type: none"> Brainstorm and share experiences on small wild animals such as <i>birds, hares, squirrels, monkeys</i>, that destroy crops. Discuss, construct a scarecrow using locally available materials and install the scarecrows in the immediate environment to keep off small wild animals. Develop creativity skills as they design a scarecrow, demonstrate responsibility in allocating roles to construct and practice animal protection by safely keeping off the small wild animal. 	How does reducing fuel wastage conserve our resources?
Core Competencies: Creativity and imagination: observation and experimentation skills as learners create scarecrow 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 construct scarecrow 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.

Assessment Rubric

Indicator	Exceeds expectation	Meets expectation	Approaches expectation	Below expectation
Ability to demonstrate knowledge on conservation of resources	Demonstrates exceptional ability to express and present ideas on conservation of soil, water, fuel and wild animals.	Demonstrates ability to express and present ideas on conservation of soil, water, fuel and wild animals.	Demonstrates moderate ability to express and present ideas on conservation of soil, water, fuel and wild animals.	Demonstrates minimal ability to express and present ideas on conservation of soil, water, fuel and wild animals.
Ability to conserve resources	Creatively applies appropriate measures to conserve resources (soil, water, fuels and wild animals).	Applies appropriate measures to conserve resources (soil, water, fuels and wild animals).	Partially applies appropriate measures to conserve resources (soil, water, fuels and wild animals).	Partially applies measures that require improvement to conserve resources (soil, water, fuels and wild animals).
Ability to show responsibility in conservation of resources	Shows leadership, personal initiative and dutifulness in undertaking tasks in conservation of resources (soil, water, fuel and wild animals).	Shows personal initiative and dutifulness in undertaking tasks in conservation of resources (soil, water, fuel and wild animals).	Shows dutifulness in undertaking tasks in conservation of resources (soil, water, fuel and wild animals).	Requires prompt to undertake tasks in conservation of resources (soil, water, fuel and wild animals).

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 Direct Sowing of Tiny Seeds (8 lessons)	By the end of the sub strand the learner should be able to: a) Identify crops established through direct sowing of tiny seeds b) Sow tiny seeds in a finely prepared seedbed. c) Adopt direct sowing in establishment of food crops.	Learners are guided to: • Discuss 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>). • Sow the tiny seeds in a finely prepared ground or container seedbed. • Develop learning to learn as they address challenges in establishing tiny seeds, develop tolerance and respect while undertaking the seedbed preparation task and resolve food security in growing a crop.	How does direct sowing of tiny seeds enhance food production process?
Core Competencies: Learning to learn: own reflection as learners establish 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.				

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested Key inquiry questions
2.0 Food Production Processes	2.2 Growing fruits (16 lessons)	By the end of the sub strand the learner should be able to: a) Identify fruits that can grow the locality, b) Grow a fruit crop suited in the locality, c) Appreciate the importance of consuming fruits for nutrition.	Learners are guided to: <ul style="list-style-type: none"> • Brainstorm and share information on different types of fruits that can grow in their locality. • Establish and take care 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, black berries, rasp berries), • Develop self-efficacy when they produce own fruits for consumption; responsibility while caring for the growing fruits; and promote health by consuming fruits.. 	How do we grow fruits?
<p>Core Competencies: Self-efficacy: self- confidence as learners realise the benefit of growing own fruits for consumption.</p>				
<p>Values: Responsibility: as learners take care of growing fruits.</p>				
<p>Pertinent and contemporary issues: Health promotion awareness as learners appreciate the importance of consuming fruits.</p>				
<p>Link to other subjects: Learners relate growing of fruits as an economic activity as learnt in Social Studies.</p>				

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)	By the end of the sub strand the learner should be able to: a) Identify types of domestic animals in the community b) Relate various domestic animals to their uses c) Appreciate the importance of domestic animals for food production.	Learners are guided to: <ul style="list-style-type: none"> • Share experiences on the types of domestic animals (cattle, sheep, goats, poultry) found in their community and their uses. • Match the domestic animals to their uses (<i>cattle, sheep, goat and poultry</i>). • Make class presentations using photos or other visuals importance of domestic animal. • Develop self –efficacy as they confidently make class presentations; respect others while listening to the presentations; and appreciate the uses of domestic animals 	How does domestic animal contribute to food production?
<p>Core Competencies: Self-efficacy: self-confidence as learners make presentations on uses of domestic animals.</p>				
<p>Values: Respect: open mindedness as learners listen and accommodate others opinions during presentations on importance of domestic animals.</p>				
<p>Pertinent and contemporary issues: Animal welfare as the learners appreciate importance of domestic animals to humans.</p>				
<p>Link to other subjects:</p>				

Learners relate animals reared in their community to knowledge learnt in Social Studies on social economic activities.

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested Key inquiry questions
2.0 Food Production Processes	2.4 Balanced Diet (9 lessons)	By the end of the sub strand the learner should be able to: a) Explain importance of eating a balanced diet b) Select food from different food-groups to make a balanced diet c) Appreciate the importance of eating a balanced diet.	Learners are guided to: <ul style="list-style-type: none"> • Discuss or use digital devices to search for importance of eating a balanced diet (variety and proportion). • Select foods from locally available foods that comprise a balanced diet. • Exhibit unity in making collaborative presentations of a balanced meal, and promote health awareness through the class presentations. 	How does a balanced diet impact on health?
Core Competencies: Communication and collaboration: team work as learners contribute in the discussion on importance of a balanced diet.				
Values: Unity: collaboration with others as learners select foods that comprise balanced diet.				
Pertinent and contemporary issues: Health awareness promotion as learners discuss the importance of eating a balanced diet.				
Link to other subjects: Learners relate the importance of eating balanced diet to knowledge learnt in Science and Technology on healthy eating habits.				

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested Key inquiry questions
2.0 Food Production Processes	2.5 Boiling and Shallow Frying Food (11 lessons)	By the end of the sub strand the learner should be able to: a) Describe boiling and shallow frying as methods of cooking b) Cook food using boiling and shallow frying methods c) Embrace boiling and shallow frying in food production.	Learners are guided to: <ul style="list-style-type: none"> • Watch video clip or demonstration on boiling and shallow frying methods of cooking. • Cook and serve boiled and shallow fried foods. • Demonstrate learning to learn by working cautiously while boiling and shallow frying ; following cooking steps; and promoting safety measures while working with fire and fats. 	How can we cook foods using boiling and frying methods?
Core Competencies: Learning to learn: organizing own learning as learners apply laid down procedure in boiling and shallow frying foods.				
Values: Responsibility: observes safety precautions when boiling and shallow frying foods.				
Pertinent and contemporary issues: Safety of self and others to avoid accidents as they boil and fry foods.				
Link to other subjects: Learners relate handling of accidents to skills learnt of first aid in Science and Technology.				

Assessment Rubric

Indicator	Exceeds expectation	Meets expectation	Approaches expectation	Below expectation
Ability to explain food production processes at household level	Explains five food production processes (direct sowing of seeds, growing of fruits, uses of domestic animals, balanced diet, boiling or shallow frying) at household level giving exemplary details.	Explains five food production processes (direct sowing of seeds, growing of fruits, uses of domestic animals, balanced diet, cooking by boiling and frying at household level	Explains two to four food production processes (direct sowing of seeds, growing of fruits , uses of domestic animals, balanced diet, cooking by boiling and frying at household level	Explains less than two food production processes (direct sowing of seeds, growing of fruits, uses of domestic animals, balanced diet, cooking by boiling and frying at household level
Ability to carry out various food production	Carries out five food production processes (direct sowing of	Carries out five food production processes (direct sowing of seeds,	Carries out two or four food production processes (direct sowing	Carries out less than two food production processes (direct sowing

processes at household level	seeds, growing of fruits, use of domestic animals, balancing a meal, cooking by boiling and frying) at household level using exemplary skills	growing of fruits, use of domestic animals, balancing a meal, cooking by boiling and frying) at household level	of seeds, growing of fruits, use of domestic animals, balancing a meal, cooking by boiling and frying) at household level	of seeds, growing of fruits, use of domestic animals, balancing a meal, cooking by boiling and frying) at household level
Ability to demonstrate integrity in carrying out food production processes	Displays more than four aspects of integrity (utilizing resources prudently, is accountable, displays honesty and applies ethically acceptable procedures) in carrying out food production processes	Display four aspects of integrity (utilizing resources prudently, is accountable, displays honesty and applies ethically acceptable procedures) in carrying out food production processes	Displays two or three aspects of integrity (utilizing resources prudently, is accountable, displays honesty and applies ethically acceptable procedures) in carrying out food production processes	Applies integrity in less than two (utilizing resources prudently, is accountable, displays honesty and applies ethically acceptable procedures) in carrying out food production processes

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)	By the end of the sub strand the learner should be able to: a) Identify health practices that promote personal hygiene b) Apply health practices that promote personal hygiene c) Embrace health practices to promote personal hygiene in daily life.	Learners are guided to: <ul style="list-style-type: none"> • Brainstorm and enumerate practices that promote personal hygiene such as <i>hand washing, use of personal protective equipment, use of clean water and cleaning foods.</i> • Demonstrate appropriate practices that promote personal hygiene such as <i>hand washing, use of personal protective equipment, use of clean water and cleaning foods.</i> • Demonstrate self -efficacy through practising good grooming ; and responsibility as they carry out health practices. 	How does personal hygiene promote good health?
Core Competencies: Self-efficacy: practice of good grooming as learners apply skills learnt on personal hygiene.				
Values: Responsibility: taking charge of own body as they practice personal hygiene and use personal protective equipment.				
Pertinent and contemporary issues: Prevention of communicable diseases as learners practice personal hygiene.				
Link to other subjects:				

Learners relate personal hygiene practices to prevention of communicable diseases learnt in Science and Technology.				
Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested Key inquiry questions
3.0 Hygiene Practices	3.2 Domestic Hygiene (9 lessons)	By the end of the sub strand the learner should be able to: a) Describe the various methods used for cleaning home environment b) Use appropriate methods to clean home environment c) Appreciate a clean environment in promoting domestic hygiene	Learners are guided to: <ul style="list-style-type: none"> • Discuss the methods of cleaning home environment <i>such as mopping, dusting, sweeping and disposal of refuse.</i> • Apply the methods <i>such as mopping, dusting, sweeping and disposal of refuse</i> to maintain hygiene in the environment. The methods to be applied using improvised and locally available resources. • Develop creativity in the use of improvised resources while cleaning; accountability in taking care of living places; and environmental awareness in maintaining clean environment. 	How can we maintain hygienic in the home environment?
Core Competencies: Creativity and imagination: thoughtful choices as learners use improvised and locally available cleaning resources.				
Values: Responsibility: accountability as learners engage in activities of cleaning home environment.				
Pertinent and contemporary issues: Environmental awareness as learners maintain clean health environment.				
Link to other subjects:				

Learners relate clean environment to control of communicable diseases learnt in Science and Technology.				
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: a) Identify personal protective equipment in day to day life b) Clean personal protective equipment for hygiene purposes c) Appreciate clean personal protective equipment in promoting hygiene.	Learners are guided to: <ul style="list-style-type: none"> • Search for information or observe a demonstration to identify common personal protective equipment <i>such as gloves, dust masks, gum boots, head gear, overall and canvas shoes.</i> • Apply appropriate methods to clean personal protective equipment such as <i>gumboots or canvas shoes.</i> • Develop digital literacy as they search for personal protective equipment; responsibility as they care for personal protective items; and personal safety skills as they exercise caution in the cleaning activity. 	How does cleaning of personal protective equipment promote hygiene?
Core Competencies: Digital literacy: use of digital technology as learners search 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 exercise 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.				

Assessment Rubric

Indicator	Exceeds expectation	Meets expectation	Approaches expectation	Below expectation
Ability to describe practices that promote hygiene	Describes three practices (personal hygiene, domestic hygiene and cleaning personal PPEs) in exemplary details to promote hygiene	Describes three practices (personal hygiene, domestic hygiene and cleaning personal PPEs) to promote hygiene	Describes two practices (personal hygiene, domestic hygiene and cleaning personal PPEs) to promote hygiene	Describes less than two practices (personal hygiene, domestic hygiene and cleaning personal PPEs) to promote hygiene
Ability to apply health practices to promote hygiene	Applies three health practices (personal hygiene, domestic hygiene and cleaning personal PPEs) to promote hygiene using both conventional and innovative approaches.	Applies three health practices (personal hygiene, domestic hygiene and cleaning personal PPEs) to promote hygiene	Applies two health practices (personal hygiene, domestic hygiene and cleaning personal PPEs) to promote hygiene	Applies less than two health practices (personal hygiene, domestic hygiene and cleaning personal PPEs) to promote hygiene
Ability to demonstrate responsibility while undertaking health practices that promote hygiene	Shows leadership qualities in caring and observing safety in undertaking health practices that promote hygiene	Shows care and observes safety in undertaking health practices that promote hygiene	Shows care or observes safety in undertaking health practices that promote hygiene	Shows care or observes safety with need for some guiding support that undertake health practices.

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)	By the end of the sub strand the learner should be able to: a) Identify the types of tacking stitch in sewing b) Make an item using tacking stitches c) Appreciate the importance of tacking stitches.	Learners are guided to: • Observe samples of tacking stitches (<i>even tacking; long and short tacking</i>) used in sewing. • Make sample item such as a handkerchief or scarecrow clothing using tacking (even tacking or long and short stitches) stitches. • Apply creativity and innovativeness in making an item; demonstrate unity while sharing sewing items; and exercise personal safety while working with sharp sewing tools.	How can we use tacking stitches in making items?
Core Competencies: Creativity and imagination: experimentation skills as learners observe, innovate and try out on tacking stitches.				
Values: Unity: display of team spirit as learners share resources in the making of tacking stitches.				
Pertinent and contemporary issues: Safety of self and others as learners use needles and other sharp tools in sewing task.				
Link to other subjects:				

Leaners relate skills in measuring materials and precision in tacking stitches to measurements in Mathematics.

Assessment Rubric

Indicator	Exceeds expectation	Meets expectation	Approaches expectation	Below expectation
Ability to identify the types of tacking stitches used in sewing	Identify two types of tacking stitches used in sewing with details that relate to their applications.	Identify two types of tacking stitches used in sewing	Identify one type of tacking stitches used in sewing	Identify one type of tacking stitches used in sewing when given some prompt cues.
Ability to make an item using tacking stitches	Creatively makes an item using tacking stitches that are firm	Makes an item using tacking stitches that are firm	Makes an item using tacking stitches that are loose	Makes an incomplete item using tacking stitches that are loose.
Ability to work in unity in making an item	Exhibits more than three aspects of unity (sharing resources, working in teams, appreciating efforts of others) while making an item	Exhibits three aspects of unity (sharing resources, working in teams, appreciating efforts of others) while making an item	Exhibits two aspects of unity (sharing resources, working in teams, appreciating efforts of others) while making an item	Exhibits less than two aspects of unity (sharing resources, working in teams, appreciating efforts of others) while making an item

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
1.0 Conservation of Resources	<ul style="list-style-type: none"> -Observation of learning -Tests (written and oral) -Project 	<ul style="list-style-type: none"> -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 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, improvised baking

		deterrents such as innovation lights, deflectors, safe traps.	ovens, simple hand washing facilities, deterrents
2.0 Food Production Processes	<p>Observation of learning</p> <ul style="list-style-type: none"> -Tests (written and oral) -Project 	<p>Container or ground gardens/ open spaces for gardening, tiny seeds such as carrots and millet, fruit 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</p>	<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.

		fruits and vegetables, drying rack, netting materials, improvised baking equipment,	
3.0 Hygiene Practices	<p>Observation of learning</p> <ul style="list-style-type: none"> -Tests (written and oral) -Project 	<p>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</p>	<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.
4.0 Production Techniques	<p>Observation of learning</p> <ul style="list-style-type: none"> -Tests (written and oral) -Project 	<p>Needle work tools such as 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 sheet, offcuts/timber, top soil, manures,</p>	<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. -carry out an exhibition to display crotched items.

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