

PRIMARY SCHOOL CURRICULUM DESIGN

GRADE 4

AGRICULTURE

FOR LEARNERS WITH PHYSICAL IMPAIRMENT



KENYA INSTITUTE OF CURRICULUM DEVELOPMENT

A Skilled and Ethical Society

First Published in 2023

All rights reserved. No part of this book may be reproduced, stored in a retrieval system or transcribed, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the publisher.

ISBN: 978-9914-43-443-9

Published and printed by Kenya Institute of Curriculum Development

FOREWORD

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

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

The reviewed Grade Four 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 Four curriculum furthers implementation of the CBC from Grade Three 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 Four 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 Four and prepare them for smooth transition to Grade Five. 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
STATE DEPARTMENT FOR BASIC EDUCATION
MINISTRY OF EDUCATION

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 Four 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 Four 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 Four and preparation of learners with physical impairment for transition to Grade Five.

PROF. CHARLES O. ONG'ONDO, PhD, MBS DIRECTOR/CHIEF EXECUTIVE OFFICER

KENYA INSTITUTE OF CURRICULUM DEVELOPMENT

TABLE OF CONTENTS

FOREWORD	ii
PREFACE	iii
ACKNOWLEDGEMENT	iv
TABLE OF CONTENTS	vi
NATIONAL GOALS OF EDUCATION	
LESSON ALLOCATION AT UPPER PRIMARY	X
LEVEL LEARNING OUTCOMES	
ESSENCE STATEMENT	xii
SUBJECT GENERAL LEARNING OUTCOMES	xiii
1.0: CONSERVATION OF RESOURCES	
2.0 FOOD PRODUCTION PROCESSES	10
3.0 HYGIENE PRACTICES	
4.0 PRODUCTION TECHNIQUES	29
APPENDIX 1: COMMUNITY SERVICE LEARNING PROJECT	32
APPENDIX II: LIST OF ASSESSMENT METHODS, LEARNING RESOURCES AND SUGGSTED ASSESSMENT	
METHODS	35

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-fulfillment

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) 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, 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.

SUMMARY OF STRANDS AND SUB STRANDS GRADE 4

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

NOTE:

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

1.0: CONSERVATION OF RESOURCES

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested Key inquiry questions
1.0 Conservation of Resources	1.1 Soil Conservation (7 lessons)	By the end of the sub strand, the learner should be able to; a) identify suitable materials for making compost manure, b) prepare compost manure for farming, c) appreciate importance of compost manure in farming.	 Discuss suitable materials for compost manure based on their local 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. Collect and compost suitable materials and make compost manure using heap method. Learners with manipulation difficulties could use any functional part of the body or appropriate Assistive technology with physical support. Learners who may not perform the collect could point/ carry out the task 	How can composting conserve the environment?

orally while being offered physical support. • Practice the learnt skills in making compost manure using slashed vegetation, kitchen wastes and any other available organic wastes and using it in their gardening activities. Learners with manipulation difficulties could use alternative functional parts of the body or be supported to carry out the tasks. • Make use of the prepared compost in a crop garden to appreciate its importance. Learners with manipulation difficulties could use alternative functional parts of the body or be supported by
the body or be supported by peers, learner support assistants or the teacher to carry out the tasks.

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	1.2 Water	By the end of the sub strand	Learners are guided to:	How do we use
Conservation of Resources	Conservation (7 lessons)	 the learner should be able to; a) describe drip irrigation as a way of conserving water, b) carry out drip irrigation 	Watch video clips or use print media or observe drip irrigation in neighbouring households to guide them discuss drip irrigation concept. As learners	drip irrigation to conserve water?
		to conserve water, c) appreciate use of drip irrigation to conserve water in farming.	watch, preferential position could be given to learner with short stature. Light intensity should be adjusted for learners who are sensitive to light.	
			Innovate drip irrigation equipment using water pipes and available containers and use the drip irrigation in gardening	

activities. 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
tasks.
Make use of the innovative drip
irrigation equipment in watering
crops to appreciate its role in
water conservation. Learners
with manipulation difficulties
could use adapted tools and
equipment or be supported to
perform the task by peers,
learner support assistant or
teacher.

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) conserve fuels during cooking, c) appreciate the importance of conserving fuel to minimize wastage of resources.	 Discuss to enumerate the types of fuels such as <i>charcoal</i>, <i>firewood</i>, <i>gas and kerosene</i> used at home. 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. Practise ways of conserving fuels such as putting off fire when done and using fuel efficient equipment when cooking. 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 tasks. 	How does reducing fuel wastage conserve our resources?

Discuss and make presentations on importance of conserving fuels to minimize wastage. Learners with speech difficulties could be given more time to express their views or point/sign/write) to express their views.	
views.	

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	1.4 Conserving	By the end of the sub strand	Learners are guided to:	How can we keep off
Conservation	Wild Animals	the learner should be able to;	Brainstorm and share	small wild animals?
of Resources		a) identify small wild	experiences on small wild	
	(8 lessons)	animals that destroy crops,	animals such as birds, hares,	
		b) construct and use a	squirrels and monkeys that	
		scarecrow to keep off	destroy crops. Learners with	

small wild animals from	speech difficulties could use
crops,	Alternative and Augmentative
c) appreciate the importance	modes of Communication-AAC
of living better with small	(residual speech/ digital devices
wild animals.	with text-to-speech
	application/point/sign/write) to
	express their views.
	Discuss, construct a scarecrow
	using locally available materials
	and place the scarecrows in the
	immediate environment to keep
	off small wild animals. Learners
	with manipulation difficulties
	could use alternative functional
	parts of the body or be
	supported by peers, learner
	supported by peers, learner support assistants or the teacher
	to carry out the tasks.
	Discuss and make presentations
	on importance of coexisting
	with small world animals in the
	environment. Learners with
	speech difficulties could use
	residual speech/ digital devices
	with text-to-speech application

	or point/sign or write to express their views.	
--	--	--

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.

Suggested Assessment Rubric

Level	Exceeds Expectations	Meets Expectations	Approaches Expectations	Below Expectations
Indicator				
Ability to explain conservation of resources of <i>four</i> resources in the environment: (soil, water, fuel, wild animal).	The learner explains conservation of four resources.	The learner explains conservation of three resources.	The learner explains conservation of two resources.	The learner explains conservation of less than two resources.
Ability to conserve four	The learner conserves four resources in the	The learner conserves three resources in the	The learner conserves <i>two</i> resources in the	The learner conserves <i>less</i> than two resources in the
resources in the environment:	environment.	environment.	environment.	environment.

(soil, water, fuel, wild animal).				
Ability to show four aspects of responsibility in conservation environmental resources: (offers leadership, observes safety, shows initiative, shows dutifulness in tasks).	The learners shows four aspects of responsibility in conserving environmental resources.	The learners shows three aspects of responsibility in conserving environmental resources.	The learners shows two aspects of responsibility in conserving environmental resources.	The learners shows <i>less</i> than two aspects of responsibility in conserving environmental 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 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.	 Discuss to enumerate food crops such as carrots and millet that are established through direct sowing of tiny seeds (crops that do not require transplanting) 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. Sow the tiny seeds in a finely prepared ground or container seedbed. Learners with manipulation difficulties could use alternative functional parts of the body or be supported by peers, learner support assistants or the teacher to sow tiny seeds. 	How does direct sowing of tiny seeds enhance food production process?

Take care of the tiny seeded
crops in a seedbed to adopt the
use of direct sowing in food
production. Learners with
manipulation difficulties could
use any functional part of the
body/ appropriate Assistive
technology with physical
support. Learners who may not
perform the practical
task could point/ carry out the
task orally while being offered
physical support to take care of
tiny seeds.

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	2.2 Growing	By the end of the sub strand	Learners are guided to:	How do we grow
Production	Fruits	the learner should be able to;	Brainstorm and share	fruits?
Processes		a) identify fruits that can	information on different types	
	(16 lessons)	grow the locality,	of fruits that can grow in their	
		b) grow a fruit crop suited in	locality. Learners with speech	
		the locality,	difficulties could use	
		c) appreciate the importance	Alternative and Augmentative	
		of consuming fruits for	modes of Communication-	
		nutrition.	AAC (residual speech/ digital	
			devices with text-to-speech	
			application/point/sign/write)	
			to express their views.	
			• Establish and take care of a	
			fruit crop that can suitably	
			grow in the locality such as	
			woody fruit tree (for example,	
			tree tomato and guava) and	
			climbing fruits (such as	
			passion fruit, kiwi, grapes,	
			blackberries, raspberries).	
			Learners with manipulation	
			difficulties could use any	
			functional part of the body/	
			appropriate Assistive	

technology with physical
support.
Harvest ripe fruits for
consumption to appreciate
their importance in the body.
Learners with manipulation
difficulties could use
alternative functional parts of
the body or be supported by
peers, learner support
assistants or the teacher to
perform the tasks.

Self-efficacy: self- confidence as learners realise the benefit of growing own fruits for consumption.

Values:

Responsibility: as learners take care of growing fruits.

Pertinent and contemporary issues:

Health promotion awareness as learners appreciate the importance of consuming fruits.

Link to other subjects:

Learners relate growing of fruits as an economic activity as learnt in Social Studies.

Strand	Sub strand	Specific learning outcomes	Suggested learning experiences	Suggested Key inquiry questions
2.0 Food	2.3 Uses of	By the end of the sub strand	Learners are guided to:	How do domestic
Production	Domestic	the learner should be able to;	Share experiences on the	animals contribute
Processes	Animals	a) identify types of domestic animals in the	types of domestic animals (cattle, sheep, goats, and	to food production?
	(8 lessons)	community, b) relate various domestic animals to their uses, c) appreciate the importance of domestic animals for food production.	poultry) found in their community and their uses. 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. • Match the domestic animals to their uses (cattle, sheep, goat and poultry). Learners with manipulation difficulties could use alternative functional parts of the body or	
			be supported by peers, learner support assistants or the teacher to perform the task.	

Make class presentations
using photos or other visuals
on importance of domestic
animals in food production
Learners with speech
difficulties could use residual
speech/ digital devices with
text-to-speech application or
point/sign or write as they
make class presentations.

Self-efficacy: self-confidence as learners make presentations on uses of domestic animals.

Values:

Respect: open mindedness as learners listen and accommodate others opinions during presentations on importance of domestic animals.

Pertinent and contemporary issues:

Animal welfare as the learners appreciate importance of domestic animals to humans.

Link to other subjects:

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	2.4 Balanced	By the end of the sub strand	Learners are guided to:	How does a
Production	Meal	the learner should be able to;	E .	balanced meal
Processes		a) explain importance of	to search for importance of	impact on health?
	(9 lessons)	eating a balanced meal,	eating a balanced meal	

b) select food from	(variety and proportion)	
different food groups to	Learners with speech	
make a balanced meal,	difficulties could use	
c) appreciate the	Alternative and Augmentative	
importance of eating a	modes of Communication-	
balanced meal.	AAC (residual speech/ digital	
	devices with text-to-speech	
	application/point/sign/write) to	
	express their views. As they	
	search, 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.	
	Select foods from locally	
	available foods to comprise a	
	balanced meal (energy giving,	
	body building and protective	
	foods). Learners with	
	manipulation difficulties could	
	use alternative functional parts	
	of the body or be supported by	
	1 1	
	peers, learner support	

	assistants or the teacher to perform the task. • Keep a journal for one week on meals they take to appreciate the importance of a balanced meal. Learners with manipulation difficulties could use adapted digital devices or be supported to perform the task by peers, learner support assistant or teacher to keep the journal.
--	---

Communication and collaboration: team work as learners contribute in the discussion on importance of a balanced meal.

Values:

Unity: collaboration with others as learners select foods to comprise balanced meal.

Pertinent and contemporary issues:

Health awareness promotion as learners discuss the importance of eating a balanced meal.

Link to other subjects:

Learners relate the importance of eating balanced meal 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 Cooking Food Boiling food Shallow frying food (11 lessons)	By the end of the sub strand the learner should be able to; a) describe methods of cooking food, b) cook food using different methods, c) embrace boiling and shallow frying in food production.	 Watch video clip or demonstration on boiling and shallow frying methods of cooking. As learners watch, light intensity should be adjusted for learners who are sensitive to light. Cook food using boiling and shallow frying methods. Learners with manipulation difficulties could use any functional part of the body/appropriate Assistive technology with physical support. Learners who may not perform the practical task could point/ carry out the task orally while being offered physical support. Safety precaution should be observed as learners cook. 	How can we cook food using boiling and shallow frying methods?

Serve the boiled and shallow
fried food to embrace the
various methods of food
production. 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. Safety precaution
should be observed as
learners serve boiled and
fried foods.

Learning to learn: organizing own learning as learners apply laid down procedure in boiling and shallow frying food.

Values:

Responsibility: observes safety precautions when boiling and shallow frying food.

Pertinent and contemporary issues:

Safety of self and others to avoid accidents as they boil and fry food.

Link to other subjects:

Learners relate handling of accidents to skills learnt of first aid in Science and Technology.

Suggested Assessment Rubric

Level	Exceeds Expectations	Meets Expectations	Approaches Expectations	Below Expectations
Indicator	•	_		•
Ability to describe	The learner describes <i>six</i>	The learner	The learner describes two to	The learner describes
food production	food production	describes five food	four food production	less than two food
processes at	processes at household	production processes	processes at household	production processes at
household level:	level.	at household level.	level.	household level.
(direct sowing of				
seeds, growing of				
fruits, uses of				
domestic animals,				
balanced diet,				
boiling and				
shallow frying).				
Ability to carry out	The learner carries out	The learner carries	The learner carries out <i>two</i>	The learner carries out
various food	six food production	out five food	to four food production	less than two food
production	processes at household	production processes	processes at household	production processes at
processes at	level.	at household level.	level.	household level.
household level:				
(direct sowing of				
seeds, growing of				
fruits, uses of				
domestic animals,				
balanced diet,				
boiling and				
shallow frying).				

Ability to exhibit	The learner exhibits four	The learner exhibits	The learner exhibits <i>two</i>	The learner exhibits
integrity in	indicators of integrity in	three indicators of	indicators of integrity in	less than two indicators
carrying out food	carrying out food	integrity in carrying	carrying out food	of integrity in carrying
production	production processes.	out food production	production processes.	out food production
processes:		processes.		processes.
(utilising				
resources				
prudently, is				
accountable,				
shows honesty,				
applies ethically				
acceptable				
procedures).				

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 healthy practices that promote personal hygiene, b) apply healthy practices that promote personal hygiene, c) embrace healthy practices to promote personal hygiene in daily life.	 Brainstorm and enumerate practices that promote personal hygiene such as hand washing, use of personal protective equipment and use of clean water. 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 appropriate practices that promote personal hygiene such as hand washing, use of personal protective equipment and use of clean water. Learners with 	How does personal hygiene promote good health?

manipulation difficulties
could use alternative
functional parts of the body
or be supported by peers,
learner support assistants or
the teacher to demonstrate.
Keep a dairy log of various
health hygiene practices for
a specified period of time to
embrace personal health
promotion. Learners with
manipulation difficulties
could use alternative
functional parts of the body
or be supported by peers,
learner support assistants or
the teacher to keep a dairy
log.

Self-efficacy: practice of good grooming as learners apply skills learnt on personal hygiene.

Values:

Responsibility: taking charge of own body as they practise personal hygiene and use personal protective equipment.

Pertinent and contemporary issues:

Prevention of communicable diseases as learners practise 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.	 Discuss the methods of cleaning home environment such as mopping, dusting, sweeping and disposal of refuse. 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) during discussion. Apply the methods such as mopping, dusting, sweeping and disposal of refuse to maintain hygiene in the environment. Learners with manipulation difficulties could use adapted cleaning tools or use alternative functional parts of the body or be supported by peers, learner support assistants or the teacher to carry out the task. 	How can we maintain hygiene in the home environment?

Maintain clean living environment using applicable methods in their classroom contexts while using improvised and locally available resources. Learners with manipulation difficulties could use adapted cleaning tools or use alternative
· · · · · · · · · · · · · · · · · · ·
difficulties could use adapted
g .
functional parts of the body or
be supported by peers, learner
support assistants or the teacher
to carry out the task.

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 healthy 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	3.3 Cleaning	By the end of the sub strand the	Learners are guided to:	How does cleaning
Practices	Personal	learner should be able to;	• Search for information or	of personal
	Protective	a) identify personal protective,	observe a demonstration to	protective
	Equipment	equipment in day to day life,	identify common personal	equipment promote
		b) clean personal protective	protective equipment such as	hygiene?
		equipment for hygiene	gloves, dust masks, gumboots,	
	(9 lessons)	purposes,	headgear, overall and canvas	
		c) appreciate clean personal	shoes. Learners with	
		protective equipment in	manipulation difficulties	
		promoting hygiene.	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.	
			Apply appropriate methods to	
			clean personal protective	
			equipment such as gumboots	
			or canvas shoes. Learners	
			with hand coordination	
			difficulties could use adapted	
			cleaning tools and equipment	
			or be given physical support	

by peer, learner support
assistant or teacher to perform
the task.
Make display of cleaned
personal protective equipment
to appreciate and promote
hygiene. Learners with
manipulation difficulties
could use adapted cleaning
tools or use alternative
functional parts of the body or
be supported by peers, learner
support assistants or the
teacher to carry out the task.

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.

Suggested Assessment Rubric

Level Indicator	Exceeds Expectations	Meets Expectations	Approaches Expectations	Below Expectations
Ability to describe practices that promote hygiene: (personal hygiene, domestic hygiene and cleaning personal protective equipment).	The learner describes <i>three</i> practices that promote hygiene.	The learner describes <i>two</i> practices that promote hygiene.	The learner describes <i>one</i> practices that promote hygiene.	The learner makes partial description of a practice that promote hygiene.
Ability to apply health practices to promote hygiene. (Personal hygiene, domestic hygiene and cleaning personal protective equipment).	The learner applies three health practices to promote hygiene.	The learner applies <i>two</i> health practices to promote hygiene.	The learner applies one health practices to promote hygiene.	The learner partially applies one health practice to promote hygiene.
Ability to exhibit responsibility while undertaking health practices that promote hygiene: (respects other learners property, offers leadership, accepts consequences, cares for property).	The learner exhibits four indicators of responsibility while undertaking health practices that promote hygiene.	The learner exhibits three indicators of responsibility while undertaking health practices that promote hygiene.	The learner exhibits <i>two</i> indicators of responsibility while undertaking health practices that promote hygiene.	The learner exhibits less than two indicators of responsibility while undertaking health practices that promote hygiene.

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 stitches 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 (even tacking; long and short tacking) used in sewing, Make sample item such as a handkerchief or clothing for a scarecrow using tacking (even tacking or long and short taking) stitches. Learners with manipulation difficulties to use adapted sewing tools and equipment or be supported to perform the task Make presentations using a display of sample items to appreciate the importance of tacking stitches. Learners with speech difficulties could use Alternative and Augmentative modes of Communication-AAC (residual speech/ digital devices with text-to-speech 	How can we use tacking stitches in making items?

application/point/sign/write)	
during presentations.	

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.

Suggested Assessment Rubric

Level	Exceeds Expectations	Meets Expectations	Approaches Expectations	Below Expectations
Indicator		_		_
Ability to use tacking stitches in making an item: (Makes appropriate	The learner makes appropriate choice of stitch, makes the stitch, and ensures	The learner makes appropriate choice of stitch, makes the stitch, and ensures	The learner makes appropriate choice of stitch, makes the stitch.	The learner makes appropriate choice of stitch.
choice of stitch, makes the stitch, and ensures evenness of the stitch and firmness of stitch to	evenness of the stitch and firmness of stitch to the purpose.	evenness of the stitch.		
the purpose).				

Ability to work in	The learner exhibits	The learner exhibits	The learner exhibits <i>two</i>	The learner exhibits
unity in making an	<i>four</i> indicators of	three indicators of	indicators of unity while	less than two indicators
item	unity while making an	unity while making	making an item using	of unity while making
(Sharing resources,	item using tacking	an item using	tacking stitches.	an item using tacking
working in teams,	stitches.	tacking stitches.		stitches.
appreciating efforts				
of other, respects				
others opinions).				
,				

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 SUGGSTED ASSESSMENT METHODS

Strand	Suggested Assessment Methods	Suggested Learning Resources	Suggested Non-formal Activities
1.0 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	 Collect suitable composting materials from the environment, Visit gardens in the neighbourbood to observe water 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 ovens, simple

Strand	Suggested Assessment Methods	Suggested Learning Resources	Suggested Non-formal Activities
		physical deterrents such as innovation lights, deflectors, safe traps, adapted digital devices, page turners, Related Service Providers Physiotherapists, Occupational Therapists, Speech Therapists, Resource Persons, Learner Support Assistant	hand washing facilities, deterrents
2.0 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, fruit seeds or seedlings, garden tools and equipment such as adapted 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 (adapted cooking pans and pots, chopping boards, kitchen knife, wooden spoon, frying	 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.

Strand	Suggested	Suggested Learning Resources	Suggested Non-formal Activities
	Assessment Methods		
	Wethous	spoon), suitable frying adapted equipment and materials, source of heat, resource person. Suitable vegetable seeds in the locality, assorted cereals and pulses, natural preservatives such as ash, air tight containers, small domestic animal such as rabbit or guinea pig, improvised feeders and waterers, housing structure for the small domestic animals, variety of fruits and vegetables, drying rack, netting materials, improvised baking equipment, adapted digital devices, Related Service Providers Physiotherapists, Occupational Therapists, Speech Therapists, Resource Persons, Learner Support	
3.0 Hygiene Practices	Observation of	Assistant Hand washing materials and	Learners draw posters on
	learning – Tests (written	equipment, variety of PPEs (gloves, masks, gumboots, head gear,	washing of hands. • Learners make leaky tins of
	and oral)	overall), Cleaning materials and	• Learners make leaky tins of tippy taps for washing hands and

Strand	Suggested Assessment Methods	Suggested Learning Resources	Suggested Non-formal Activities
	- Project	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, adapted digital devices, Related Service Providers Physiotherapists, Occupational Therapists, Speech Therapists, Resource Persons, Learner Support Assistant	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	Observation of learning - Tests (written and oral) - Project	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	 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.

Strand	Suggested Assessment Methods	Suggested Learning Resources	Suggested Non-formal Activities
		sheet, offcuts/timber, top soil, manures,	 Carry out an exhibition to display crotched items.

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
1.	Written assessment	 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
2.	Oral or Aural assessment	 Written responses Use of AAC (Augmentative and Alternative modes of Communication) e.g. talking books, gestures, body movement, sign language, alphabet cards, facial expressions Adjustment of time according to individual needs

3.	Portfolio	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
4.	Practical assessment/	Provision of physical support
	Experiments	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
5.	Project	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