KENYA INSTITUTE OF CURRICULUM DEVELOPMENT

A Skilled and Ethical Society

JUNIOR SCHOOL CURRICULUM DESIGN

AGRICULTURE

GRADE 8

First published 2023

Revised 2024

ISBN: 978-9914-43-980-9

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, the 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 the 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 of the primary education cycle, feedback from curriculum implementers and other stakeholders, led to rationalisation and review of the basic education curriculum.

The reviewed Grade 8 curriculum designs build on competencies attained by learners at the end of Grade 7. Further, they provide opportunities for learners to continue exploring and nurturing their potentials as they prepare to transit to Senior School.

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 the Competency-Based Curriculum (CBC) in 2019. Grade 8 is the second grade of Junior School in the reformed education structure.

The reviewed Grade 8 curriculum furthers implementation of the CBC from Grade 7. The main feature of this level is a broad curriculum for the learner to explore talents, interests and abilities before selection of pathways and tracks at the Senior School education level. 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: *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 n**urturing every Learner's potential.**

Therefore, the Grade 8 curriculum designs are intended to enhance the learners' development in the CBC core competencies, namely: communication and collaboration, critical thinking and problem solving, creativity and imagination, citizenship, digital literacy, learning to learn and self-efficacy.

The curriculum designs provide suggestions for interactive and differentiated learning experiences linked to the various sub-strands and the other aspects of the CBC. They also offer several suggested learning resources and a variety of assessment techniques. It is expected that the designs will guide teachers to effectively facilitate learners to attain the expected learning outcomes for Grade 8 and prepare them for a smooth transition to Grade 9. Furthermore, it is my hope that teachers will use the designs to make learning interesting, exciting and enjoyable.

DR. BELIO KIPSANG', CBS
PRINCIPAL SECRETARY
STATE DEPARTMENT FOR BASIC EDUCATION
MINISTRY OF EDUCATION

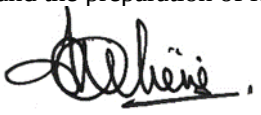
ACKNOWLEDGEMENT

The Kenya Institute of Curriculum Development (KICD) Act Number 4 of 2013 (Revised 2019) mandates the Institute to develop and review 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 documented in the Basic Education Curriculum Framework (BECF) 2017, that the curriculum responds to the demands of the 21st Century and the aspirations of the Constitution of Kenya 2010, the Kenya Vision 2030, East African Community Protocol, the International Bureau of Education Guidelines, and the United Nations Sustainable Development Goals (SDGs).

KICD receives its funding from the Government of Kenya to facilitate the achievement of the stipulated mandate and implementation of the government and sector (Ministry of Education MoE) plans. The Institute also receives support from development partners targeting specific programmes. The revised Grade 8 curriculum designs were developed with the support of the World Bank through the Kenya Primary Education Equity in Learning Programme (KPEELP. Therefore, the Institute is very grateful to the Government of Kenya, through the MoE and the development partners for the policy, resource and logistical support. Specifically, special thanks go to the Cabinet Secretary, in the ministry and the Principal Secretary- in the State Department of Basic Education.

We also wish to acknowledge the KICD curriculum developers and other staff, all teachers and educators who took part as panelists; the semi-autonomous government agencies (SAGAs) and representatives of various stakeholders for their roles in the development of the Grade 8 curriculum designs. In relation to this, we 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 the designs. Finally, we are very grateful to the chairperson of the KICD Council, and other members of the Council for the very consistent guidance in the process.

We assure all teachers, parents and other stakeholders that this curriculum design will effectively guide the implementation of the CBC at Grade 8 and the preparation of learners for transition to Grade 9.



PROF. CHARLES O. ONG'ONDO, PhD, MBS
DIRECTOR/CHIEF EXECUTIVE OFFICER
KENYA INSTITUTE OF CURRICULUM DEVELOPMENT

TABLE OF CONTENTS

FOREWORD iii
PREFACE iv
ACKNOWLEDGEMENT v
TABLE OF CONTENTS vi
NATIONAL GOALS OF EDUCATION vii
LESSON ALLOCATION AT JUNIOR SCHOOL ix
LEARNING OUTCOMES FOR JUNIOR SCHOOL x
ESSENCE STATEMENT x
GENERAL LEARNING OUTCOMES xi
SUMMARY OF STRANDS AND SUB-STRANDS xii
STRAND 1.0 CONSERVATION OF RESOURCES 1
STRAND 2.0 FOOD PRODUCTION PROCESSES 4
STRAND 3.0 HYGIENE PRACTICES 12
STRAND 4.0 PRODUCTION TECHNIQUES 14
APPENDIX 1: GUIDELINES FOR INTEGRATING COMMUNITY SERVICE LEARNING (CSL) PROJECT 19
APPENDIX 2: ASSESSMENT METHODS, LEARNING RESOURCES AND NON-FORMAL ACTIVITIES 21

NATIONAL GOALS OF EDUCATION

Education in Kenya should:

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

   The people of Kenya 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, to live together in harmony and foster patriotism, and 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 that requires 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 that provides equal educational opportunities for all. It should give all children varied and challenging opportunities for collective activities and corporate social service irrespective of gender, ability or geographical environment.

6. Promote respect for and development of Kenya's rich and varied cultures
Education should instil in the youth of Kenya an understanding of past and present cultures and their valid place in contemporary society. Children should be able to blend the best of traditional values with the changing requirements that must follow rapid development 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 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 JUNIOR SCHOOL

S/No	Learning Area	Number of Lessons per Week (40 Minutes per Lesson)
1.	English	5
2.	Kiswahili / Kenya Sign Language	4
3.	Mathematics	5
4.	Religious Education	4
5.	Social Studies	4
6.	Integrated Science	5
7.	Pre-Technical Studies	4
8.	Agriculture	4
9.	Creative Arts and Sports	5
	Pastoral / Religious Instructional Programme	1*
Total		**40 + 1***

LEARNING OUTCOMES FOR JUNIOR SCHOOL

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

1. Apply literacy, numeracy and logical thinking skills for appropriate self-expression.
2. Communicate effectively, verbally and non-verbally, in diverse contexts.
3. Demonstrate social skills, spiritual and moral values for peaceful co-existence.
4. Explore, manipulate, manage and conserve the environment effectively for learning and sustainable development.
5. Practise relevant hygiene, sanitation and nutrition skills to promote health.
6. Demonstrate ethical behaviour and exhibit good citizenship as a civic responsibility.
7. Appreciate the country's rich and diverse cultural heritage for harmonious co-existence.
8. Manage pertinent and contemporary issues in the society effectively.
9. Apply digital literacy skills for communication and learning.

ESSENCE STATEMENT

Agriculture is a learning area that anchors on the United Nation Sustainable Development Goals and the socio-economic pillar of Kenya Vision 2030;- to promote health, hygiene, food and nutrition security through education. It is an integrated learning area comprising of agriculture and home science concepts introduced in the upper primary curriculum. The learners will deepen the acquired knowledge, skills, attitudes and values in conservation of resources, food production, hygiene and innovative production techniques. The curriculum will enrich learners' competencies in conservation of resources, crop and animal production, foods and nutrition, personal and environmental hygiene, basic clothing construction and laundry work. The curriculum will form firm grounds for specialization in career pathways in senior school and beyond.

GENERAL LEARNING OUTCOMES

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

1. Participate actively in agricultural and household activities geared towards 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, and digital and media resources to enhance sustainable agricultural and household practices.
6. Appreciate agricultural and household skills as a worthy niche for hobby, career development, further education and training.

SUMMARY OF STRANDS AND SUB-STRANDS

Strands	Sub-Strands	Suggested Number of Lessons
1.0 Conservation of Resources	1.1 Soil Conservation Measures	10
	1.2 Water Harvesting and Storage	9
2.0 Food Production Processes	2.1 Kitchen and Backyard Gardening	9
	2.2 Poultry Rearing in a Fold	11
	2.3 Crop Pest and Disease Control	10
	2.4 Preparation of Animal Products	9
	2.5 Preserving Animal Products	9
	2.6 Cooking: Preparing a Balanced Meal	11
3.0 Hygiene Practices	3.1 Cleaning the Kitchen	9
4.0 Production Techniques	4.1 Sewing Skills: Constructing Household Items	14
	4.2 Constructing Innovative Animal Waterer	10
	4.3 ICT Support Services	9
	Total Number of Lessons	**120**

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

STRAND 1.0 CONSERVATION OF RESOURCES

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
1.0 Conservation of Resources	**1.1 Soil Conservation Measures** (10 lessons)	By the end of the sub-strand the learner should be able to: a) describe methods of soil conservation in agricultural environment, b) carry out soil conservation activities in the environment c) demonstrate caring attitude towards soil in the environment.	Learners are guided to: • search and share information on methods of soil *conservation (strip cropping, grassed water ways, stone lines, trash lines, soil bunds)* using digital devices and print media, • explore the school environment and carry out activities on soil conservation in the school such as strip cropping, grassed water ways stone lines, trash lines and soil bunds, • construct a farm model using materials such as cartons, cardboards, soil and papier-mache for displaying soil conservation measures on a farm.	How can we conserve soil in the environment?
Core competencies to be developed: Creativity and Imagination: These are enhanced as learners demonstrate methods of soil conservation using a farm model.				
Values: Unity: This is enhanced as the learner collaborates with others while working in teams to construct a farm model.				
Pertinent and contemporary issues (PCIs): Environmental awareness as learners conserve soil from erosion.				
Link to other learning areas: Learners relate construction of a farm model with conservation structures using artistic skills learnt in Creative Arts and Sports.				

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
1.0 Conservation of Resources	**1.2 Water Harvesting and Storage** (9 lessons)	By the end of the sub-strand the learner should be able to: a) discuss ways of storing harvested water for domestic use, b) take part in harvesting and storing water in the school for domestic use, c) show responsibility in harvesting and storing water for domestic use.	Learners are guided to: • search and share information in groups, on how harvested water can be stored for domestic purposes, using methods such as *shallow water pans, water ponds and suitable water containers,* • initiate measures of their choice towards water harvesting and storage in the school, • make class presentations on possible initiatives and maintenance practices that can be made to harvest and store rain water and surface run-off in the school environment.	How can we harvest and store water for domestic purposes?
Core competencies to be developed: Critical thinking and problem solving: open-mindedness and creativity skills as learners analyse and initiate water harvesting and storage measures.				
Values: Responsibility: learners undertake assigned roles while participating in water harvesting and storage initiatives in the school.				
Pertinent and contemporary issues (PCIs): Environmental conservation: This is developed as learners harvest and store rainwater in the school environment.				
Link to other learning areas: Learners relate water harvesting and storage to conservation of the community environment learnt in Social Studies.				

Suggested Assessment Rubric

Level / Indicator	Exceeding Expectations	Meeting Expectations	Approaching Expectations	Below Expectations
Ability to describe conservation measures of environmental resources: *(soil erosion control by cultural methods; and water conservation through harvesting and storage).*	The learner can describe conservation measures with clearly referenced details.	The learner can describe conservation measures with clear details.	The learner can describe conservation measures with some few unclear details.	The learner can describe conservation measures with a lot of unclear details.
Ability to carry out conservation measures on environmental resources: *(soil erosion control by cultural methods; and water conservation through harvesting and storage).*	The learner can identify sites that require conservation, determine applicable measures, assemble requirements, carry out a sustainable conservation activity.	The learner can identify sites that require conservation, determine applicable measures, assemble requirements, carry out the conservation activity.	The learner can identify sites that require conservation, determine applicable measures, assemble requirements for the activity.	The learner can identify sites that require conservation and determine applicable conservation measures.
Ability to exhibit responsibility in conserving soil and water resources: *(dependable in areas of strength, proactively solves problems in tasks, participates actively in assigned tasks, observes safety precautions).*	The learner exhibits *four* indicators of responsibility in the conservation of environmental resources.	The learner exhibits *three* indicators of responsibility in the conservation of environmental resources.	The learner exhibits *two* indicators of responsibility in the conservation of environmental resources.	The learner exhibits *less than two* indicators of responsibility in the conservation of environmental resources.

STRAND 2.0 FOOD PRODUCTION PROCESSES

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
2.0 Food Production Processes	**2.1 Kitchen and Backyard Gardening** (9 lessons)	By the end of the sub-strand the learner should be able to: a) explain the role of kitchen and backyard garden in food production, b) establish a kitchen and backyard garden for food production, c) adopt the use of kitchen and backyard garden for food production.	Learners are guided to: • use digital and print resource to search for the roles of kitchen and backyard garden in food production such as *production of fresh healthy foods, saving money and readily accessible food*, • prepare a kitchen or backyard garden and plant various crops such as *vegetables, herbs and spices*, • take care of the crops established in the kitchen and backyard garden to adopt their use in food production.	How does kitchen garden contribute to food production?
Core competencies to be developed: Critical thinking and problem solving: evaluation and decision skills as the learners establish a kitchen or a backyard garden for food production.				
Values: Unity: collaboration with others while learners establish a kitchen or backyard garden.				
Pertinent and contemporary issues (PCIs): Poverty eradication as learners establish their garden to grow own foods.				
Link to other learning areas: Learners relate growing of own food in kitchen and backyard garden to financial literacy skills learnt in Pre-Technical Studies.				

-Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
2.0 Food Production Processes	**2.2 Poultry Rearing in a Fold** (11 lessons)	By the end of the sub-strand the learner should be able to: a) describe a fold in poultry rearing, b) construct a fold for rearing poultry, c) rear poultry in a fold, d) show responsibility in rearing of poultry.	Learners are guided to: • search and observe video clips or images on poultry folds and share experiences on how poultry folds look like, • use locally available materials such as reused and recycled wires, plastic and wood materials to construct a poultry fold, • **conduct a project:** learners to rear poultry of their choice in a fold unit to practise moving of the folds, feeding, watering, sanitation, protection from predators and harsh weather.	How can we rear poultry in a fold for food production?
Core competencies to be developed: Creativity and imagination: networking skills as learners undertake group task and gain new perspective on how to construct a poultry fold.				
Values: Responsibility: carrying out assigned tasks in the project for construction of a poultry fold.				
Pertinent and contemporary issues (PCIs): Financial literacy as learners recycle and reuse materials to save on costs in construction of a poultry fold.				
Link to other learning areas: Learners relate dimensions of a poultry fold to measurements in Mathematics.				

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
2.0 Food Production Processes	**2.3 Crop Pest and Disease Control** (10 lessons)	By the end of the sub-strand the learner should be able to: a) identify vegetable crops attacked by pests and diseases, b) control pests and diseases on vegetable crops, c) acknowledge importance of controlling pests and diseases in vegetable production.	Learners are guided to: • take a field excursion to observe and identify vegetable crops that are attacked by pests; *(punctured leaves, cut-off seedlings, curling leaves)* and the common sites where the pests are found, • take a field excursion to a vegetable garden, observe and identify vegetable crops affected by disease, *(wilting plants, black and brown spots and rotting of plant parts),* • control pests on vegetables using methods such as handpicking, removing affected crop parts, uprooting heavily affected crops, and applying natural pesticides such as ash, • control diseases on vegetables using methods such as removing affected parts and uprooting heavily affected crops,	1. How can we identify vegetable crops attacked by pests and diseases? 2. How can we control pests and diseases affecting crops?

			• discuss and make presentations on importance of controlling crop pests and diseases in vegetable production,	
Core competencies to be developed: Learning to learn: learners carry out research during field excursion to identify vegetable crop pests and diseases.				
Values: Respect: accommodating diverse opinions while learners discuss and make presentations on the importance of controlling pests and diseases in vegetable crops.				
Pertinent and contemporary issues (PCIs): Disaster risk reduction as learners control pests and diseases to prevent outbreaks.				
Link to other learning areas: Learners relate control of pest and diseases in crops to farming for economic activities learnt in Social Studies.				

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
2.0 Food Production Processes	**2.4 Preparation of Animal Products** • *Processing fish* • *Dressing poultry* (9 lessons)	By the end of the sub-strand the learner should be able to: a) explain the importance of processing fish and dressing poultry carcass, b) process fresh fish for various purposes, c) dress poultry carcass for various purposes, d) uphold ethical and safety practices in preparation of animal products.	Learners are guided to: • discuss and share experiences on the importance of processing fish and dressing poultry, • process fresh fish through *scaling, gutting, cleaning, salting, and frying*, • dress poultry carcass *(beheading, defeathering, removal of offal, cleaning)* for various uses, • make presentations to create awareness on ethical issues (humane killing and handling while slaughtering) and safety practices in preparation of animal products.	1. How can we process fresh fish? 2. How can we dress poultry carcass?
Core competencies to be developed: Learning to learn: collaborative working as learners undertake processing of fish and poultry.				
Values: Integrity: application of ethical procedures in the processing of fish and poultry.				
Pertinent and contemporary issues (PCIs): Animal welfare: learners practise humane killing of poultry during slaughtering.				
Link to other learning areas: Learners relate the parts removed in fish and poultry to knowledge of parts of fish and birds learnt in Integrated Science.				

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
2.0 Food Production Processes	**2.5 Preserving animal products** • *Milk* • *Meat* (9 lessons)	By the end of the sub-strand the learner should be able to: a) explain the importance of preserving milk and meat at household level, b) preserve meat to prolong shelf life at household level, c) preserve milk to prolong shelf life at household level, d) embrace the use of various methods to preserve animal products at household level.	Learners are guided to: • search for information from digital and print resources, discuss and share experiences on the importance of preserving milk and meat at household level, • preserve milk through methods such as *boiling, fermenting and home cooling techniques*, • preserve meat through methods such as *salting, boiling, drying and smoking*, • make presentations to promote applicable methods of preserving animal products to embrace their use at household level,	How can we preserve milk and meat at household level?
Core competencies to be developed: Digital literacy: interacting with digital technology as learners search for information on milk and meat preservation.				
Values: Integrity: honesty in the process of preserving meat and milk using ethically acceptable procedures.				
Pertinent and contemporary issues (PCIs): Food hygiene as learners ensure use of clean equipment and appropriate environment in the preservation of meat and milk.				
Link to other learning areas: Learners relate preservation of meat and milk to basic principles of preservation learnt in Integrated Science.				

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
2.0 Food Production Processes	**2.6 Cooking: Preparing a Balanced Meal** (11 lessons)	By the end of the sub-strand the learner should be able to: a) explain factors to consider in preparing a balanced meal, b) prepare a balanced meal for healthy living, c) use various styles to present the meal, d) adopt the use of a balanced meal in the day to day life.	Learners are guided to: • discuss and share experiences on factors to consider in preparing a balanced meal such as age, health status, occasion and gender, • plan and cook a balanced meal that include proteins, carbohydrate, vitamins and minerals, • serve the balanced meal using appropriate serving styles such as *family or blue plate* to present the meal, • make various menus on balanced meal and present in class.	How can we prepare a balanced meal for healthy living?
Core competencies to be developed: Creativity and imagination: networking skills as learners share new ideas that inspire creative thinking in preparing and presenting meals.				
Values: Integrity: prudent use of resources in the preparation of balanced meal.				
Pertinent and contemporary issues (PCIs): Health promotion as learners adopt the use of balanced meal in day to day life.				
Link to other learning areas: Learners relate consumption of balanced meal to prevention of lifestyle diseases learnt in Integrated Science.				

Suggested Assessment Rubric

Level / Indicator	Exceeding Expectations	Meeting Expectations	Approaching Expectations	Below Expectations
Ability to explain the aspects of food production processes: *(kitchen and backyard gardening, rearing poultry in a fold, pest and disease control in vegetables, preparation of fish and poultry, preserving milk and meat, and cooking a balanced meal).*	The learner can explain *eight* food production processes.	The learner can explain *six to seven* food production processes.	The learner can explain *three to five* food production processes.	The learner can explain *less than three* food production processes.
Ability to carry out various food production processes: *(kitchen and backyard gardening, rearing poultry in a fold, pest and disease control in vegetables, preparation of fish and poultry, preserving milk and meat, and cooking a balanced meal).*	The learner can carry out *eight* food production processes.	The learner can carry out *six to seven* food production processes.	The learner can carry out *three to five* food production processes.	The learner can carry out *less than three* food production processes.
Ability to exhibit integrity in carrying out the various food production processes: *(adherence to ethical procedures, use of resources prudently, is honest and accountable in allocated tasks).*	The learner exhibits *four* indicators of integrity in carrying out food production processes.	The learner exhibits *three* indicators of integrity in carrying out food production processes.	The learner exhibits *two* indicators of integrity in carrying out food production processes.	The learner exhibits *less than two* indicators of integrity in carrying out food production processes.

STRAND 3.0 HYGIENE PRACTICES

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
3.0 Hygiene Practices	**3.1 Cleaning the Kitchen** (9 lessons)	By the end of the sub-strand the learner should be able to: a) explain the routine cleaning practices of a kitchen, b) carry out cleaning of a kitchen to maintain hygiene, c) appreciate the importance of a clean kitchen for healthy living.	Learners are guided to: • share experiences on routine cleaning of the kitchen, *(daily, weekly, special cleaning)* • clean the kitchen to maintain hygiene, *(daily, weekly and special cleaning)* • make discussions and presentations on the importance of a clean kitchen for healthy living.	How can daily, weekly and special cleaning enhance hygiene in the kitchen?
Core competencies to be developed: Learning to learn: organizing own learning as learners apply appropriate procedures in cleaning the kitchen.				
Values: Responsibility: engaging in assigned roles when cleaning the kitchen to maintain hygiene.				
Pertinent and contemporary issues (PCIs): Health promotion as learners maintain hygiene by cleaning the kitchen.				
Link to other learning areas: Learners relate cleaning the kitchen and preventing contamination of food to concepts of disease prevention learnt in Integrated Science.				

Suggested Assessment Rubric

Level / Indicator	Exceeding Expectations	Meeting Expectations	Approaching Expectations	Below Expectations
Ability to explain routine cleaning practices of a kitchen.	The learner explains routine cleaning practices of a kitchen with elaborate details.	The learner explains routine cleaning practices of a kitchen.	The learner explains routine cleaning practices of a kitchen with some details that require clarity.	The learner explains routine cleaning practices of a kitchen with some details that require clarity and correction for accuracy.
Ability to carry out routine cleaning of kitchen to maintain hygiene: *(daily, weekly and special).*	The learner can carry out *three* routine cleaning procedures of the kitchen to maintain hygiene.	The learner can carry out *two* routine cleaning procedures of the kitchen to maintain hygiene.	The learner can carry out *one* routine cleaning procedure of the kitchen to maintain hygiene.	The learner can partially carry out *a* routine cleaning procedure of the kitchen to maintain hygiene.
Ability to shows responsibility while cleaning the kitchen: *(engages in assigned roles, cares for kitchen surfaces, observes safety, and offers leadership in cleaning).*	The learner shows *four* aspects of responsibility while cleaning the kitchen.	The learner shows *three* aspects of responsibility while cleaning the kitchen.	The learner shows *two* aspects of responsibility while cleaning the kitchen.	The learner shows *less than two* aspects of responsibility while cleaning the kitchen.

STRAND 4.0 PRODUCTION TECHNIQUES

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
4.0 Production Techniques	**4.1 Sewing Skills: Constructing Household Items** (14 lessons)	By the end of the sub-strand the learner should be able to: a) identify types of seams used in making household items, b) make samples of seams on a piece of cloth, c) construct a household item using seams, d) appreciate the use of seam in making household items.	Learners are guided to: • search for information on different types of seams used in making household items, (open and plain seams) • make samples of *open and plain seams* on a piece of cloth using hand sewing, • make a simple household article such as *lap bag, work bag, pillow case, cushion cover* using plain or open seams, • display samples of household items they make to appreciate the use of seams in making household items.	How can a household item be made using seams?
Core competencies to be developed: Creativity and imagination: experimenting skills as learners construct household items using seams.				
Values: Responsibility: undertaking assigned roles as the learners construct household items using seams.				
Pertinent and contemporary issues (PCIs): Safety for self and others as learners use sharp tools in construction of household items using seams.				
Link to other learning areas: Learners relate construction of household items using seams to artistic skills (pattern work) learnt in Creative Arts and Sports.				

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
4.0 Production Techniques	**4.2 Constructing Innovative Animal Waterer** (10 lessons)	By the end of the sub-strand the learner should be able to: a) explain challenges with animal waterers used in the community, b) design and construct an innovative waterer for water conservation, c) appreciate use of innovative waterers in animal rearing.	Learners are guided to: • visit animal rearing households, identify challenges of animal waterers, and make presentations to explain the challenges of the existing waterers, • search for information from digital and print media on innovative waterers, design and construct a waterer for small domestic animal to solve the identified problem using locally available materials, • use the constructed innovative waterer to test functionality, make adjustments and provide water to target animal either at home, in the school or selected households to appreciate use of innovative waterers.	How can we make an innovative waterer for small domestic animals?

Core competencies to be developed: Critical thinking and problem solving: reflection skills as learners develop innovative waterers for domestic animals.
Values: Social justice: fairness as learners carry out allocated tasks in construction of innovative animal waterer.
Pertinent and contemporary issues (PCIs): Environmental awareness as learners use and reuse available materials in construction of animal waterer.
Link to other learning areas: Learners relate designing and construction of innovative waterer to drawing and designing skills learnt in Pre-technical Studies.

Strand	Sub-Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
4.0 Production Techniques	**4.3 ICT Support Services** (9 lessons)	By the end of the sub-strand the learner should be able to: a) describe support services that can be accessed through use of ICT, b) access support services using ICT, c) show responsibility in use of ICT in accessing support services.	Learner is guided to: • discuss and share experiences on how ICT can be used to access supplies and information for appropriate decision making, • access online platforms for ICT support services such as *weather forecast, veterinary services, supply services, extension services, market information and banking services, catering services, cleaning services.* • discuss and adhere to responsible use of ICT platforms by observing ethical and security considerations.	How can we access support services using ICT?
Core competencies to be developed: Digital literacy: digital citizenship skills as learners access online platform for ICT support services.				
Values: Integrity: ethical use of online support services.				
Pertinent and contemporary issues (PCIs): Cyber security: This is developed as the learners observe online security guideline to prevent cyber-attacks.				
Link to other learning areas: Learners relate the access of ICT support services to digital technology skills learnt in Pre-technical Studies.				

Suggested Assessment Rubric

Level / Indicator	Exceeding Expectations	Meeting Expectations	Approaching Expectations	Below Expectations
Ability to describe various production techniques at household level. *(construction of household items using seams, constructing animal waterer, and using ICT support services).*	The learner can describe *three* production techniques.	The learner can describe *two* production techniques.	The learner can describe *one* production technique.	The learner can partially describe *a* production technique.
Ability to carry out various production techniques at household level. *(construction of household items using seams, constructing animal waterer, and using ICT support services).*	The learner can carry out *three* production techniques.	The learner can carry out *two* production techniques.	The learner can carry out *one* production technique.	The learner can partially carry out *a* production technique.
Ability to exhibits integrity in the use of production techniques: *(prudent use of resources, adherence to ethical procedures, is accountable in the allocated task and self-disciplined).*	The learner exhibits *four* indicators of integrity in the use of production techniques.	The learner exhibits *three* indicators of integrity in the use of production techniques.	The learner exhibits *two* indicators of integrity in the use of production techniques.	The learner exhibits *one* indicator of integrity in the use of production techniques.

APPENDIX 1: GUIDELINES FOR INTEGRATING COMMUNITY SERVICE LEARNING (CSL) PROJECT

Introduction

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

Milestone	**Description**
Milestone 1	**Problem Identification** Learners study their community to understand the challenges faced and their effects on community members. Some of the challenges in the community can be: • Environmental degradation • Lifestyle diseases, communicable and non-communicable diseases • Poverty • Violence and conflicts in the community • Food security issues
Milestone 2	**Designing a solution** Learners create an intervention to address the challenge identified.

Milestone 3	**Planning for the Project** Learners share roles, create a list of activities to be undertaken, mobilise resources needed to create their intervention and set timelines for execution.
Milestone 4	**Implementation** The learners execute the project and keep evidence of work done.
Milestone 5	**Showcasing /Exhibition and Report Writing** Exhibitions involve showcasing learners' project items to the community and reflecting on the feedback. Learners write a report detailing their project activities and lessons from the feedback.
Milestone 6	**Reflection** Learners review all project work to learn from the challenges faced. They link project work with academic concepts, noting how the concepts enabled them to do their project, as well as how the project helped to deepen learning of the academic concepts.

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

Assessment of CSL integrated Project

Assessment for the integrated CSL project will be conducted formatively. The assessment will consider both the process and end product. This entails assessing each of the milestone stages of the integrated CSL class project. It will focus on 3 components namely: skills from various learning areas applied in carrying out the project, core competencies developed and values nurtured.

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

Strand	Suggested Assessment Methods	Suggested Resources	Suggested Non-Formal Activities
1.0 Conservation of Resources	• Observation of learning activities • Written tests and assignments • Projects • Oral assessment • Activity journals	Digital resources. Print materials. (charts, reference books) Cooking tools and equipment. Cleaning equipment and materials. Selected gardening tools. Selected foodstuffs. General environment for space, samples of soils and plants.	Learners to conduct school community awareness on conservation of various resources using existing formal interaction forums.
2.0 Food Production Processes	• Written tests and assignments • Graded observation • Projects • Activity journal	Digital devices and print reference materials. General environment for space, soil, and samples of plants. Selected Garden tools such as *jembes, fork jembes, spade, panga, slasher, tape measure*. Variety of planting materials First aid kit. Cooking and cleaning equipment and materials. Samples of animal products such as eggs and honey, milk and meat.	Learners to prepare and manage a sample kitchen or backyard garden in the school for display. Learners to use existing school forums to display skills and products of the various learning experiences to extend knowledge and create awareness to the school community.

		Sample crop produce such as vegetables. Some small domestic animals such as rabbits, poultry or Guinea pigs.	
3.0 Hygiene Practices	• Written test • Oral assessment on safety when handling animal. • Observation of learning • Oral tests • Project • Activity journals	Cleaning equipment and materials. Sample clothing and household articles. Detergents, stain removal agents and disinfectants. Digital devices and print reference materials. General school environment.	Learners to use existing school forums to sensitize the school community on hygiene practices.
4.0 Production Techniques	• Written test • Oral tests • Project • Activity journals Observation of learning • Written and oral tests	Sewing tools such as needles, crochet, scissors and tape measure. Sewing materials such as sample fabrics and yarns. Gardening tools such as tape measure and hammer. General school environment Worked samples. (crocheted and knitted materials) Sample planting materials. Selected foodstuffs.	Learners to use existing school forums to create awareness and enhance adoption of various production techniques.