



**KENYA INSTITUTE OF CURRICULUM DEVELOPMENT**  
*A Skilled and Ethical Society*

**JUNIOR SCHOOL CURRICULUM DESIGN**

**AGRICULTURE**

**GRADE 7**

First published 2022

Revised 2024

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## **FOREWORD**

The Government of Kenya is committed to ensuring that policy objectives for Education, Training, and Research meet the aspirations of the Constitution of Kenya 2010, the Kenya Vision 2030, 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 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, and feedback from curriculum implementers and other stakeholders led to rationalisation and review of the basic education curriculum.

The reviewed Grade 7 curriculum designs build on competencies attained by learners at the end Grade 6. 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.



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## **PREFACE**

The Ministry of Education (MoE) nationally implemented Competency Based Curriculum (CBC) in 2019. Grade 7 is the first grade of Junior School in the reformed education structure.

The reviewed Grade 7 curriculum furthers implementation of the CBC from Grade 6. 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 ongoing 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 7 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 design will guide teachers to effectively facilitate learners to attain the expected learning outcomes for Grade 7 and prepare them for a smooth transition to 8. Furthermore, it is my hope that teachers will use the designs to make learning interesting, exciting, and enjoyable.



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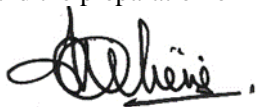
## **ACKNOWLEDGEMENT**

The Kenya Institute of Curriculum Development (KICD) Act Number 4 of 2013 (Revised 2019) mandates the Institute to develop and review 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, which responds to the demands of the 21<sup>st</sup> Century and the aspirations of 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 the 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 7 curriculum designs were developed 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,

We 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 of the Grade 7 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 KICD Council Chairperson and other members of the Council for 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 in Grade 7 and the preparation of learners for transition to Grade 8.



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## **NATIONAL GOALS OF EDUCATION**

Education in Kenya should:

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

Kenya's people belong to different communities, races, and religions, but these differences need not divide them. They must be able to live and interact as Kenyans. It is a paramount duty of education to help young people acquire this sense of nationhood by removing conflicts and promoting positive attitudes of mutual respect which enable them to live together in harmony and foster patriotism 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 in adapting 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 needs 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

| S/No         | Learning Area                                | Number of Lessons per Week<br>(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*  |
| <b>Total</b> |  | <b>40 + 1*</b>  |

## **LEARNING OUTCOMES FOR JUNIOR SCHOOL**

By the 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, and 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 society effectively.
9. Apply digital literacy skills for communication and learning.

## **ESSENCE STATEMENT**

Agriculture is a learning area that anchors on the United Nations Sustainable development goals and the socio-economic pillar of Kenya Vision 2030. It aims to promote health, hygiene, food, and nutrition security through education. An integrated learning area, it comprises agriculture and home science concepts introduced in the upper primary curriculum. Learners will deepen their acquired knowledge, skills, attitudes, and values in conservation of resources, food production, hygiene, and innovative production techniques. The curriculum will enrich learner's competencies in conserving resources, crop and animal production, foods and nutrition, personal and environmental hygiene, basic clothing construction, and laundry work. The curriculum will form a firm foundation for specialisation in career pathways in senior school and beyond.

## **GENERAL LEARNING OUTCOMES**

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

1. Participate actively in agricultural and household activities in the conservation of resources.
2. Use scarce resources through innovative practises 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 practises for healthy living.
5. Apply the use of appropriate production techniques, innovative technologies, and digital and media resources to enhance sustainable agricultural and household practises.
6. Appreciate agricultural and household skills as a worthy niche for a hobby, career development, further education, and training.

### SUMMARY OF STRANDS AND SUB-STRANDS

| <b>Strands</b>                       | <b>Sub-Strands</b>                          | <b>Suggested Number of Lessons</b> |
|--------------------------------------|---|------------------------------------|
| <b>1.0 Conservation of Resources</b> | 1.1 Controlling Soil Pollution              | 7                                  |
|                                      | 1.2 Constructing Water Retention Structures | 8                                  |
|                                      | 1.3 Conserving Food Nutrients               | 9                                  |
|                                      | 1.4 Growing Trees                           | 8                                  |
| <b>2.0 Food Production Processes</b> | 2.1 Crop Establishment                      | 9                                  |
|                                      | 2.2 Selected Crop Management Practises      | 8                                  |
|                                      | 2.3 Preparing Animal Products               | 9                                  |
|                                      | 2.4 Cooking Food                            | 9                                  |
| <b>3.0 Hygiene Practises</b>         | 3.1 Hygiene in Rearing Animals              | 9                                  |
|                                      | 3.2 Laundry: Loose-coloured Items           | 8                                  |
| <b>4.0 Production Techniques</b>     | 4.1 Knitting Skills                         | 10                                 |
|                                      | 4.2 Constructing Framed Suspended Garden    | 10                                 |
|                                      | 4.3 Adding Value to Crop Produce            | 8                                  |
|                                      | 4.4 Making Homemade Soap                    | 8                                  |
| <b>Total Number of Lessons</b>       |   | <b>120</b>                         |

**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)                 |
|--------------------------------------|--|---|--|---|
| <b>1.0 Conservation of Resources</b> | <b>1.1 Controlling Soil Pollution</b><br><br>(7 lessons) | By the end of the sub-strand the learner should be able to:<br>a) explain the causes of soil pollution in gardening,<br>b) control soil pollution in the home environment,<br>c) demonstrate responsibility in using safe farming practises to conserve the soil. | Learners are guided to: <ul style="list-style-type: none"> <li>• search and watch a video clip or print media on causes of soil pollution and then share experiences on causes of soil pollution such as <i>wastewater, excessive use of artificial fertilizers, agricultural chemicals, and plastic wastes</i>.</li> <li>• engage in safe soil pollution control practises such as safe disposal of household wastewater, used chemical containers, and plastic wastes.</li> <li>• create awareness messages against improper disposal of wastewater, dumping of soil pollutants, used chemical containers and plastic wastes, and use of correct types and amounts of farm chemicals and fertilizers.</li> </ul> | How can household practises cause soil pollution? |

**Core Competencies:**

Citizenship: civic skills as learners promote control of soil pollution to enhance soil conservation in the community.

**Values:**

Patriotism: awareness of own responsibility as the learners engage in activities that promote soil pollution control.

**Pertinent and Contemporary Issues:**

Environmental conservation as learners protect soil against pollution.

**Link to other Learning Areas:**

Learners relate soil pollution to other forms of environmental pollution learnt in Integrated Science.

| Strand  | Sub-Strand  | Specific Learning Outcomes  | Suggested Learning Experiences   | Suggested Key Inquiry Question(s)   |
|---|---|---|--|---|
| <b>1.0 Conservation of Resources</b>  | <b>1.2 Constructing Water Retention Structures</b><br><br>(8 lessons) | By the end of the sub-strand the learner should be able to:<br>a) describe how surface run-off can be used in gardening<br>b) construct water retention structures to conserve surface runoff,<br>c) adopt utilisation of surface run-off in gardening. | Learners are guided to:<br><ul style="list-style-type: none"> <li>• search for information and discuss how surface run-off can be conserved in structures such as water retention ditches and water retention pits for gardening.</li> <li>• construct retention ditches or retention pits for water conservation.</li> <li>• establish a crop of their choice such as a <i>banana sucker</i>, <i>sugarcane</i>, <i>napier grass</i>, or <i>arrowroot</i> to adopt the utilisation of surface run-off in gardening.</li> </ul> | <ol style="list-style-type: none"> <li>1. How can surface run-off be conserved for gardening purposes?</li> <li>2. How does the construction of water retention structures conserve water?</li> </ol> |
| <b>Core Competencies:</b><br>Critical thinking and Problem-solving: decision-making skills as learners construct water retention structures to control run-off.   |   |   |  |   |
| <b>Values:</b><br>Unity: collaboration with others as learners engage in project activities to construct water retention structures.  |   |   |  |   |
| <b>Pertinent and Contemporary Issues:</b><br>Environmental protection as learners construct water retention structures to harness run-off and use it in gardening activities.   |   |   |  |   |
| <b>Link to other Learning Areas:</b><br>Learners relate the construction of run-off control structures to the destruction of the environment by excess water in socio-economic amenities as learnt in Social Studies. |   |   |  |   |

| <b>Strand</b>  | <b>Sub-Strand</b>                                       | <b>Specific Learning Outcomes</b>   | <b>Suggested Learning Experiences</b>   | <b>Suggested Key Inquiry Question(s)</b>                |
|--|---|---|---|---|
| <b>1.0 Conservation of Resources</b>   | <b>1.3 Conserving Food Nutrients</b><br><br>(9 lessons) | By the end of the sub-strand the learner should be able to:<br>a) identify ways of conserving vitamins and minerals in vegetables<br>b) conserve vitamins and minerals in vegetables<br>c) adopt conservation of vitamins and minerals in vegetables. | Learners are guided to:<br><ul style="list-style-type: none"> <li>• search for information and discuss on ways of conserving vitamins and minerals in vegetables such as washing, peeling, cutting, cooking time, and covering.</li> <li>• conserve vitamins and minerals in vegetables during food handling, preparation, and cooking.</li> <li>• Discuss and make presentations on how they can adopt appropriate ways of handling, preparing, and cooking vegetables to conserve vitamins and minerals.</li> </ul> | How do we conserve vitamins and minerals in vegetables? |
| <b>Core Competencies:</b><br>Learning to learn: carrying out research and sharing information on ways of conserving food nutrients.                        |   |   |   |   |
| <b>Values:</b><br>Integrity: prudent use of resources as learners conserve food nutrients.   |   |   |   |   |
| <b>Pertinent and Contemporary Issues:</b><br>Health promotion as learners conserve nutrients in food production processes.                                 |   |   |   |   |
| <b>Link to other Learning Areas:</b><br>Learners relate the conservation of food nutrients to healthy growth and development learnt in Integrated Science. |   |   |   |   |



| Strand   | Sub-Strand                                  | Specific Learning Outcomes  | Suggested Learning Experiences   | Suggested Key Inquiry Question(s)               |
|--|---|---|--|---|
| <b>1.0 Conservation of Resources</b>   | <b>1.4 Growing Trees</b><br><br>(8 lessons) | By the end of the sub-strand the learner should be able to:<br>a) explain the importance of trees in conserving the environment<br>b) plant trees to conserve the environment<br>c) adopt tree planting as a way of conserving the environment. | Learners are guided to:<br><ul style="list-style-type: none"> <li>• search for information on the importance of trees and make presentations in class to share their findings.</li> <li>• plant at least one tree either from seeds, seedlings or cuttings.</li> <li>• take care of the seedlings until it is fully established to adopt tree planting for conservation of the environment.</li> </ul> | How can growing trees conserve the environment? |
| <b>Core Competencies:</b><br>Citizenship: active community life skills as learners plant trees to conserve the environment.                    |   |   |  |   |
| <b>Values:</b><br>Patriotism: loving the country by conserving the environment through tree planting.  |   |   |  |   |
| <b>Pertinent and Contemporary Issues:</b><br>Environmental protection as learners establish trees in the community to enhance the environment. |   |   |  |   |
| <b>Link to other Learning Areas:</b><br>Learners relate tree planting to the conservation of natural resources learnt in Social Studies.       |   |   |  |   |

### SUGGESTED ASSESSMENT RUBRIC

| <b>Level</b><br><b>Indicator</b>   | <b>Exceeding Expectations</b>  | <b>Meeting Expectations</b>   | <b>Approaching Expectations</b>   | <b>Below Expectations</b>   |
|--|--|---|---|---|
| Ability to describe ways of conserving resources in the environment:<br><i>(controlling soil pollution, making water retention structures, conserving food nutrients, growing trees).</i>      | The learner describes <i>four</i> ways of conserving resources.  | The learner describes <i>three</i> ways of conserving resources.  | The learner describes <i>two</i> ways of conserving resources.  | The learner describes <i>less than two</i> ways of conserving resources.  |
| Ability to conserve resources in the environment:<br>(soil, water, food nutrients, trees).   | The learner conserves <i>four</i> resources in the environment.  | The learner conserves <i>three</i> resources in the environment.  | The learner conserves <i>two</i> resources in the environment.  | The learner conserves <i>less than two</i> resources in the environment.  |
| Ability to show responsibility in conserving resources in the environment:<br><i>(caring for resources, observing safety, participating in assigned roles, offering leadership to others).</i> | The learner shows <i>four</i> indicators of responsibility in conserving resources in the environment. | The learner shows <i>three</i> indicators of responsibility in conserving resources in the environment. | The learner shows <i>two</i> indicators of responsibility in conserving resources in the environment. | The learner shows <i>less than two</i> indicators of responsibility in conserving resources in the environment. |

## STRAND 2.0 FOOD PRODUCTION PROCESSES

| Strand  | Sub-Strand  | Specific Learning Outcomes   | Suggested Learning Experiences  | Suggested Key Inquiry Question(s)                               |
|---|---|--|---|---|
| <b>2.0 Food Production Processes</b>  | <b>2.1 Crop Establishment</b> <ul style="list-style-type: none"> <li>• <i>Preparing Planting Site</i></li> <li>• <i>Planting</i></li> </ul> (9 lessons) | By the end of the sub-strand the learner should be able to: <ol style="list-style-type: none"> <li>a) determine appropriate tilth for selected planting material,</li> <li>b) prepare a suitable tilth for establishing selected planting material,</li> <li>c) adopt appropriate tilth in establishing a selected planting material.</li> </ol> | Learners are guided to: <ul style="list-style-type: none"> <li>• observe provided planting materials and suggest appropriate tilth for each material (<i>small-sized seeds for fine tilth, medium-sized seeds for medium tilth, and large planting materials like tubers, suckers, and cuttings for coarse tilth</i>).</li> <li>• prepare suitable sites (<i>fine tilth for small seeds, medium tilth for medium-sized seeds, coarse tilth for large planting materials like tubers, suckers, and cuttings</i>).</li> <li>• establish a planting material of their choice in the selected soil tilth and take care of the crop to adopt the use of appropriate tilth in crop production.</li> </ul> | How does planting material determine planting site preparation? |
| <b>Core Competencies:</b><br>Critical thinking and problem-solving: observation skills as learner relate the size of planting materials to the type of tilth. |   |  |   |   |
| <b>Values:</b><br>Unity: collaboration with other learners in the preparation of sites and planting.  |   |  |   |   |
| <b>Pertinent and Contemporary Issues:</b><br>Safety of self and others as learners use tools and equipment to prepare planting sites.                         |   |  |   |   |
| <b>Link to other Learning Areas:</b><br>Learners relate planting site (tilth) and seed size to the concept of germination learnt in Integrated Science.       |   |  |   |   |

| Strand   | Sub-Strand   | Specific Learning Outcomes  | Suggested Learning Experiences  | Suggested Key Inquiry Question(s)                             |
|--|--|---|---|---|
| <b>2.0 Food Production Processes</b>   | <b>2.2 Selected Crop Management Practises</b><br><br>(8 lessons) | By the end of the sub-strand the learner should be able to:<br>a) explain management practises carried out on crops<br>b) carry out management practises in crop production<br>c) appreciate the importance of various management practises in crop production. | Learners are guided to:<br><ul style="list-style-type: none"> <li>• watch a video, or a demonstration on management practises (<i>gapping, thinning, weeding, earthing-up</i>).</li> <li>• carry out selected management practises (<i>gapping, thinning, weeding through physical methods, earthing-up</i>).</li> <li>• make class presentations on the importance of the selected management practises in crop production.</li> </ul> | How can we carry out management practises in crop production? |
| <p><b>Core competencies:</b><br/>Self-efficacy: effective communication skills as learners make presentations on importance of selected crop management practises.</p>               |  |   |   |   |
| <p><b>Values:</b><br/>Respect: open-mindedness as learners appreciate the opinions of others during presentations</p>  |  |   |   |   |
| <p><b>Pertinent and Contemporary Issues:</b><br/>Safety and security for self and others in the use of tools and equipment to carry out crop management practises.</p>               |  |   |   |   |
| <p><b>Link to other Learning Areas:</b><br/>Learners relate plant spacing and population that guides gapping and thinning to concepts of measurement and numbers in Mathematics.</p> |  |   |   |   |

| Strand  | Sub-Strand  | Specific learning outcomes   | Suggested learning experiences  | Suggested Key Inquiry Question(s)   |
|---|---|--|---|-------------------------------------|
| <b>2.0 Food Production Processes</b>  | <b>2.3 Preparing Animal Products</b><br><ul style="list-style-type: none"> <li>• Eggs</li> <li>• Honey</li> </ul> (9 lessons) | By the end of the sub-strand the learner should be able to:<br>a) explain how to prepare animal products for various purposes,<br>b) prepare animal products for various purposes<br>c) embrace preparation of animal products for various purposes. | Learners are guided to:<br><ul style="list-style-type: none"> <li>• search for information, discuss, and share experiences on how to prepare eggs and honey for use and storage.</li> <li>• prepare eggs (<i>sorting, grading, packing</i>) and honey (<i>crushing and straining method, packing in appropriate containers</i>).</li> <li>• display prepared animal products to embrace the practise of preparing animal products.</li> </ul> | How can we prepare animal products? |
| <b>Core Competencies:</b>   |   |  |   |                                     |
| Digital literacy: digital citizenship skills while observing netiquette in the use and search of information on the internet.   |   |  |   |                                     |
| <b>Values:</b>  |   |  |   |                                     |
| Integrity: use of ethically acceptable procedures in the preparation and packaging of eggs and honey.   |   |  |   |                                     |
| <b>Pertinent and Contemporary Issues:</b>   |   |  |   |                                     |
| Food hygiene on the use of clean tools and equipment when preparing eggs and honey.   |   |  |   |                                     |
| <b>Link to other Learning Areas:</b>  |   |  |   |                                     |
| Learners relate the preparation of eggs and honey through sorting, grading, and packing to the concept of presentation of products for marketing learnt in Pre-Technical Studies. |   |  |   |                                     |

| Strand  | Sub-Strand   | Specific Learning Outcomes   | Suggested learning experiences  | Suggested Key Inquiry Question(s)                    |
|---|--|--|---|--|
| <b>2.0 Food Production Processes</b>  | <b>2.4 Cooking Food</b> <ul style="list-style-type: none"> <li>• <i>Grilling</i></li> <li>• <i>Roasting</i></li> <li>• <i>Steaming</i></li> </ul><br>(9 lessons) | By the end of the sub-strand, the learner should be able to: <ol style="list-style-type: none"> <li>a) describe methods of cooking different types of foods</li> <li>b) cook food using various methods</li> <li>c) appreciate the use of varied methods of cooking food.</li> </ol> | Learners are guided to: <ul style="list-style-type: none"> <li>• use digital resources, print materials, or resource persons to source for information on grilling, roasting, and steaming foods</li> <li>• practise grilling, steaming, and roasting methods to prepare foods while observing the safety of self and others.</li> <li>• serve grilled, steamed, and roasted foods to appreciate the various methods of cooking.</li> </ul> | Why should we use different methods of cooking food? |
| <b>Core competencies:</b><br>Digital Literacy: connecting and using technology to search for information on methods of cooking. |  |  |   |  |
| <b>Values:</b><br>Responsibility: taking care of cooking equipment as learners engage in steaming and roasting methods.         |  |  |   |  |
| <b>Pertinent and Contemporary Issues:</b><br>Safety of self and others as learners use sharp tools and fuels in cooking.        |  |  |   |  |
| <b>Link to other Learning Areas:</b><br>Learners relate cooking methods to the transfer of heat learnt in Integrated Science.   |  |  |   |  |

### SUGGESTED ASSESSMENT RUBRIC

| <b>Indicator</b> \ <b>Level</b>   | <b>Exceeding Expectations</b>  | <b>Meeting Expectations</b>   | <b>Approaching Expectations</b>   | <b>Below Expectations</b>   |
|---|--|---|---|---|
| Ability to describe food production processes ( <i>preparation of sites, planting, management practises, preparing eggs, preparing honey, grilling, roasting, steaming</i> ).           | The learner describes <i>eight</i> food production processes.  | The learner describes <i>six to seven</i> food production processes.                                  | The learner describes <i>three to five</i> food production processes.                               | The learner describes <i>less than three</i> food production processes.                                       |
| Ability to carry out various food production processes: ( <i>preparation of sites, planting, management practises, preparing eggs, preparing honey, grilling, roasting, steaming</i> ). | The learner carries out <i>eight</i> food production processes.                                      | The learner carries out <i>six to seven</i> food production processes.                                | The learner carries out <i>three to five</i> food production processes.                             | The learner carries out <i>less than three</i> food production processes.                                     |
| Ability to exhibit integrity in the food production processes: ( <i>is self-disciplined, honest, uses prudent use of resources, and adherence to ethical procedures</i> ).              | The learner shows <i>four</i> indicators of integrity in carrying out the food production processes. | The learner shows <i>three</i> indicators of integrity in carrying out the food production processes. | The learner shows <i>two</i> indicators of integrity in carrying out the food production processes. | The learner shows <i>less than two</i> indicators of integrity in carrying out the food production processes. |

### STRAND 3.0 HYGIENE PRACTISES

| Strand   | Sub-Strand   | Specific Learning Outcomes   | Suggested Learning Experiences  | Suggested Key Inquiry Question(s)                  |
|--|--|--|---|--|
| <b>3.0 Hygiene Practises</b>   | <b>3.1 Hygiene in Rearing Animals</b><br><br>(9 lessons) | By the end of the sub-strand the learner should be able to:<br>a) describe hygiene practises in rearing domestic animals<br>b) carry out hygiene practises in rearing domestic animals<br>c) appreciate importance of hygiene practises in rearing domestic animals. | Learners are guided to: <ul style="list-style-type: none"> <li>• search for information on hygienic practises (<i>clean feeders and waterers, clean and well-ventilated houses, clean animal</i>) in rearing domestic animals such as pets.</li> <li>• carry out appropriate hygiene practises in rearing domestic animals such as <i>cleaning feeders, waterers, cleaning animal structures</i>.</li> <li>• make a class presentation on the importance of hygiene in rearing domestic animals.</li> </ul> | How can we maintain hygiene while rearing animals? |
| <b>Core Competencies:</b><br>Learning to Learn: sharing learnt knowledge as learners apply information to carry out hygiene in animal rearing practises.                                 |  |  |   |  |
| <b>Values:</b><br>Responsibility: engaging in assigned roles while carrying out hygiene practises in rearing domestic animals.   |  |  |   |  |
| <b>Pertinent and Contemporary Issues:</b><br>Animal welfare as learners observe hygiene practises in rearing domestic animals.   |  |  |   |  |
| <b>Link to other Learning Areas:</b><br>Learners relate hygiene practises in rearing domestic animals to concepts of animal production as an economic activity learnt in Social Studies. |  |  |   |  |



| Strand  | Sub-Strand  | Specific Learning Outcomes   | Suggested Learning Experiences  | Suggested Key Inquiry Question(s)                                  |
|---|---|--|---|--|
| <b>3.0 Hygiene Practises</b>  | <b>3.2 Laundry: Loose-coloured Items</b><br><br>(8 lessons) | By the end of the sub-strand, the learner should be able to:<br>a) describe how to launder a loose-coloured article for hygiene purposes<br>b) launder a loose-coloured article for hygiene purposes<br>c) embrace laundering of loose-coloured articles for hygiene purposes. | Learners are guided to: <ul style="list-style-type: none"> <li>• watch a video clip or a demonstration on how to launder a loose-coloured (sorting, washing by kneading and squeezing, drying, finishing).</li> <li>• launder a loose-coloured item (sorting, washing by kneading and squeezing, drying, finishing).</li> <li>• display the clean loose-coloured articles to embrace appropriate laundry for hygiene purposes.</li> </ul> | How do you launder a loose-coloured article for hygienic purposes? |
| <b>Core Competencies:</b><br>Learning to Learn: reflection of own work as learners launder loose-coloured articles for hygiene purposes.  |   |  |   |  |
| <b>Values:</b><br>Responsibility as learners undertake assigned roles to launder loose-coloured articles.   |   |  |   |  |
| <b>Pertinent and Contemporary Issues:</b><br>Health promotion as learners maintain hygiene through laundering a loose-coloured article.   |   |  |   |  |
| <b>Link to other Learning Areas:</b><br>Learners relate laundering of loose-coloured articles to the concept of tie and dye technique of fixing colours learnt in Creative Arts and Sports. |   |  |   |  |

### SUGGESTED ASSESSMENT RUBRIC

| <b>Level</b><br><b>Indicator</b>   | <b>Exceeding Expectations</b>  | <b>Meeting Expectations</b>  | <b>Approaching Expectations</b>   | <b>Below Expectations</b>   |
|--|--|--|---|---|
| Ability to describe hygiene practises at the household level: ( <i>hygiene in rearing animals and laundering loose-coloured items</i> ).           | The learner describes hygiene practises at the household level with elaborate details.   | The learner describes hygiene practises.   | The learner describes hygiene practises at the household level with some few details missing.     | The learner describes hygiene practises at the household level with lots of missing details.                |
| Ability to carry out hygiene practises at the household level: ( <i>hygiene in rearing animals and laundering loose-coloured items</i> ).          | The learner can identify the required hygienic practise, required hygienic measures, can assemble require resources, and carry out the practise. | The learner can identify the required hygienic practise, required hygienic measures, and can assemble require resources. | The learner can identify the required hygienic practise and required hygienic measures.           | The learner can identify the required hygienic practise.  |
| Ability to exhibit unity in practising hygiene: ( <i>team spirit, collaboration with others, respects others and shares available resources</i> ). | The learner exhibits <i>four</i> indicators of unity in practising hygiene at the household level.   | The learner exhibits <i>three</i> indicators of unity in practising hygiene at the household level.                      | The learner exhibits <i>two</i> indicators of unity in practising hygiene at the household level. | The learner exhibits <i>less than two</i> indicators of unity in practising hygiene at the household level. |

## STRAND 4.0: PRODUCTION TECHNIQUES

| Strand  | Sub-Strand                                     | Specific Learning Outcomes   | Suggested Learning Experiences   | Suggested Key Inquiry Question(s)             |
|---|--|--|--|---|
| <b>4.0 Production Techniques</b>  | <b>4.1 Knitting Skills</b><br><br>(10 lessons) | By the end of the sub-strand the learner should be able to:<br>a) describe knitting stitches used in making household articles<br>b) knit various articles for household use<br>c) embrace knitting skills in making household articles. | Learners are guided to: <ul style="list-style-type: none"> <li>• use digital devices or real materials or print media to identify basic knitting stitches (<i>purl and knit</i>).</li> <li>• knit a simple household article such as a <i>tool bag, scarf, gloves, mats, or table wipers</i>.</li> <li>• display knitted work to embrace the use of knitted articles for household use.</li> </ul> | How do you knit an article for household use? |
| <b>Core Competencies:</b><br>Creativity and imagination: experimenting skills as learners knit a household article using basic knitting stitches. |  |  |  |   |
| <b>Values:</b><br>Integrity: prudent use of materials and equipment in the knitting of household articles.  |  |  |  |   |
| <b>Pertinent and Contemporary Issues:</b><br>Safety of self and others as learners use sharp knitting tools.                                      |  |  |  |   |
| <b>Link to other Learning Areas:</b><br>Learners relate knitting to weaving techniques learnt in Creative Arts and Sports.                        |  |  |  |   |

| Strand  | Sub-Strand  | Specific Learning Outcomes  | Suggested Learning Experiences  | Suggested Key Inquiry Question(s)             |
|---|---|---|---|---|
| <b>4.0 Production Techniques</b>  | <b>4.2 Constructing Framed Suspended Garden</b><br><br>(10 lessons) | By the end of the sub-strand the learner should be able to:<br>a) describe a framed suspended garden for growing crops,<br>b) construct a framed structure for a suspended garden,<br>c) embrace the use of framed suspended gardens for growing crops. | Learners are guided to:<br><ul style="list-style-type: none"> <li>• search for photos, videos, and illustrations on framed suspended gardens to describe how they are constructed.</li> <li>• innovate and construct framed suspended gardens using locally available materials such as wires, wooden planks, metal bars, and poles.</li> <li>• establish a crop on the constructed framed suspended garden to embrace their use in growing crops.</li> </ul> | How are framed suspended gardens constructed? |
| <b>Core Competencies:</b>   |   |   |   |   |
| Creativity and imagination: experimenting skills as learners innovate framed suspended gardens.   |   |   |   |   |
| <b>Values:</b>  |   |   |   |   |
| Unity: team work as learners undertake the project for the construction of a framed suspended garden.   |   |   |   |   |
| <b>Pertinent and Contemporary Issues:</b>   |   |   |   |   |
| Environmental awareness as learners utilise limited space when constructing framed suspended gardens.   |   |   |   |   |
| <b>Link to other Learning Areas:</b>  |   |   |   |   |
| Learners relate designing, sketching, and construction of framed suspended gardens to skills in drawing, designing, and the use of related tools learnt in Pre-Technical Studies. |   |   |   |   |

| Strand   | Sub-Strand   | Specific Learning Outcomes   | Suggested Learning Experiences   | Suggested Key Inquiry Question(s)   |
|--|--|--|--|---|
| <b>4.0 Production Techniques</b>   | <b>4.3 Adding Value to Crop Produce</b><br><br>(8 lessons) | By the end of the sub-strand the learner should be able to:<br>a) explain ways of adding value on crop produce<br>b) add value to a selected crop produce<br>c) appreciate the importance of value addition on crop produce. | Learners are guided to: <ul style="list-style-type: none"> <li>• discuss ways of adding value to crop produce such as potatoes, cassava, groundnuts, simsim, sweet potatoes, and pumpkin.</li> <li>• process a provided sample of crop produce such as potatoes, cassava, groundnuts, simsim, sweet potatoes and pumpkin to add value using appropriate methods like drying and frying.</li> <li>• compare the processed crop produce to raw crop produce in terms of monetary value and storage life to appreciate the importance of value addition.</li> </ul> | Why do we add value to crop produce?<br>How can we add value to crop produce? |
| <p><b>Core Competencies:</b><br/>Critical thinking and Problem-solving: evaluation and decision-making skills as learners carry out value addition to selected crop produce.</p> |  |  |  |   |
| <p><b>Values:</b><br/>Integrity: applying laid down procedures when learners ethically process crop produce to add value.</p>  |  |  |  |   |
| <p><b>Pertinent and Contemporary Issues:</b><br/>Food and nutrition security as learners process crop produce for value addition.</p>  |  |  |  |   |
| <p><b>Link to other Learning Areas:</b><br/>Learners relate the value addition concept to commodity marketing learnt in Pre-Technical Studies.</p>                               |  |  |  |   |

| Strand  | Sub-Strand   | Specific Learning Outcomes   | Suggested Learning Experiences  | Suggested Key Inquiry Question(s)               |
|---|--|--|---|---|
| <b>4.0 Production Techniques</b>  | <b>4.4 Making Homemade Soap</b><br><br>(8 lessons) | By the end of the sub-strand the learner should be able to:<br>a) identify the forms of soap used at the household level<br>b) make homemade soap using natural ingredients<br>c) embrace homemade soap for household use. | Learners are guided to:<br><ul style="list-style-type: none"> <li>• brainstorm and share experiences on forms of soap (<i>liquid, cake/bar, paste, powder</i>) used at the household level.</li> <li>• use natural ingredients such as ashes, salt, water, animal fats, or plant oils to make soap.</li> <li>• use the homemade soap to maintain cleanliness at the household level.</li> </ul> | How can we make soap using natural ingredients? |
| <p><b>Core Competencies:</b><br/>Critical thinking and Problem-solving: open-mindedness and creativity skills as learners make homemade soap using natural ingredients.</p>             |  |  |   |   |
| <p><b>Values:</b><br/>Responsibility: engaging in assigned roles while making homemade soap.</p>  |  |  |   |   |
| <p><b>Pertinent and Contemporary Issues:</b><br/>Financial literacy as learners save on costs by using locally available resources to make homemade soap.</p>                           |  |  |   |   |
| <p><b>Link to other Learning Areas:</b><br/>Learners relate the use of natural ingredients in making soap to concepts of recycling and reusing wastes learnt in Integrated Science.</p> |  |  |   |   |

### Suggested Assessment Rubric

| <b>Indicator \ Level</b>  | <b>Exceeding Expectations</b>  | <b>Meeting Expectations</b>   | <b>Approaching Expectations</b>   | <b>Below Expectations</b>   |
|---|--|---|---|---|
| Ability to describe production techniques at the household level:<br><i>(knitting, constructing framed gardens, value addition on crop produce, and making soap).</i> | The learner describes <i>four</i> production techniques at the household level.    | The learner describes <i>three</i> production techniques at the household level.    | The learner describes <i>two</i> production techniques at the household level.    | The learner describes <i>less than two</i> production techniques at the household level.    |
| Ability to apply production techniques at the household level:<br><i>(knitting, constructing framed gardens, value addition on crop produce, and making soap).</i>    | The learner applies <i>four</i> production techniques at the household level.      | The learner applies <i>three</i> production techniques at the household level.      | The learner applies <i>two</i> production techniques at the household level.      | The learner applies <i>less than two</i> production techniques at the household level.      |
| Ability to portray integrity in production techniques:<br><i>(is honest, uses resources prudently, adheres to ethical procedures, has a commitment to duty).</i>      | The learner portrays <i>four</i> indicators of integrity in production techniques. | The learner portrays <i>three</i> indicators of integrity in production techniques. | The learner portrays <i>two</i> indicators of integrity in production techniques. | The learner portrays <i>less than two</i> indicators of integrity in production techniques. |

## **APPENDIX 1: GUIDELINES FOR INTEGRATING COMMUNITY SERVICE LEARNING PROJECT**

### **Introduction**

Community Service Learning (CSL) is an experiential learning strategy that integrates classroom learning and community service, enabling learners to reflect on, experience, and learn from the community. The CSL activity is hosted as a strand within Social Studies. The Social Studies teacher will be responsible for coordinating teachers from other learning areas to carry out the integrated CSL class activity. Learners will be expected to apply knowledge, skills, attitudes and values from the different Learning Areas to carry out the integrated CSL class activity. Learners will undertake one common integrated class CSL activity following a 6-step milestone approach that is:

| <b>Milestone</b> | <b>Description</b>  |
|------------------|---|
| Milestone 1      | <b>Problem Identification</b><br>Learners study their community to understand the challenges faced and their effects on community members.  |
| Milestone 2      | <b>Designing a solution</b><br>Learners create an intervention to address the challenge identified.   |
| Milestone 3      | <b>Planning for the Project</b><br>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      | <b>Implementation</b><br>The learners execute the project and keep evidence of work done.   |



|             |   |
|-------------|---|
| Milestone 5 | <p><b>Showcasing /Exhibition and Report Writing</b><br/> Exhibitions involve showcasing learners’ project items to the community and reflecting on the feedback. Learners write a report detailing their project activities and learnings from feedback.</p>                                  |
| Milestone 6 | <p><b>Reflection</b><br/> 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 the learning of the academic concepts.</p> |

**Assessment of CSL integrated Activity**

Assessment for the integrated CSL activity will be conducted formatively. The assessment will consider both the process and the end product. This entails assessing each of the milestone stages of the integrated CSL class activity. It will focus on three components namely: skills from various learning areas applied in carrying out the activity, 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  |
|--------------------------------------|---|---|--|
| <b>1.0 Conservation of Resources</b> | <ul style="list-style-type: none"> <li>• Observation of learning activities.</li> <li>• Written tests and assignments</li> <li>• Projects.</li> <li>• Oral assessment</li> <li>• Activity journals</li> </ul> | Digital resources<br>Print materials (charts, reference books)<br>Cooking tools and equipment<br>Cleaning equipment and materials<br>Selected gardening tools<br>Selected foodstuffs<br>General environment for space, samples of soils and plants  | Learners to conduct school community awareness on the conservation of various resources using existing formal interaction forums.  |
| <b>2.0 Food Production Processes</b> | <ul style="list-style-type: none"> <li>• Written tests and assignments</li> <li>• Graded observation</li> <li>• Projects</li> <li>• Activity journal</li> </ul>   | Digital devices and print reference materials.<br>General environment for space, soil, and samples of plants.<br>Selected Garden tools such as <i>jembes</i> , fork <i>jembes</i> , spade, <i>panga</i> , slasher, and tape measure.<br>Variety of planting materials<br>First aid kit<br>Cooking and cleaning equipment and materials<br>Samples of animal products such as eggs and honey, milk, and meat.<br>Sample crop produce such as | Learners to prepare and manage a sample kitchen or backyard garden in the school for display.<br><br>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. |

|                                  |   |  |   |
|----------------------------------|---|--|---|
|                                  |   | vegetables.<br>Some small domestic animals such as rabbits, poultry, or Guinea pigs.   |   |
| <b>3.0 Hygiene Practises</b>     | <ul style="list-style-type: none"> <li>• Written test</li> <li>• Oral assessment on safety when handling animals.</li> <li>• Observation of learning</li> <li>• Oral tests</li> <li>• Project</li> <li>• Activity journals</li> </ul> | <p>Cleaning equipment and materials</p> <p>Sample clothing and household articles</p> <p>Detergents, stain removal agents, and disinfectants</p> <p>Digital devices and print reference materials</p> <p>General school environment</p>  | Learners to use existing school forums to sensitise the school community on hygiene practises.                        |
| <b>4.0 Production Techniques</b> | <ul style="list-style-type: none"> <li>• Written test</li> <li>• Oral tests</li> <li>• Project</li> <li>• Activity journals</li> <li>• Observation of learning</li> <li>• Written and oral tests</li> </ul>                           | <p>Sewing tools such as needles, crochet, scissors, and tape measure.</p> <p>Sewing materials such as sample fabrics and yarns.</p> <p>Gardening tools such as tape measure and hammer.</p> <p>General school environment</p> <p>Worked samples (crocheted and knitted materials)</p> <p>Sample planting materials</p> <p>Selected foodstuffs.</p> | Learners to use existing school forums to create awareness and enhance the adoption of various production techniques. |