

LOWER PRIMARY SCHOOL CURRICULUM DESIGN

ENVIRONMENTAL ACTIVITIES

GRADE 3

FOR LEARNERS WITH VISUAL IMPAIRMENT



First Published in 2017

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FOREWORD

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

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

The reviewed Grade 3 curriculum designs for learners with visual impairment build on competencies attained by learners at Grade 2. Emphasis at this grade is the development of basic literacy, numeracy and skills for interaction with the environment.

The curriculum designs present National Goals of Education, essence statements, general and specific expected learning outcomes for the subjects as well as strands and sub strands. The designs also outline suggested learning experiences, key inquiry questions, core competencies, Pertinent and Contemporary Issues (PCIs), values, and assessment rubric.

It is my hope that all Government agencies and other stakeholders in Education will use the designs to plan for effective and efficient implementation of the CBC.

HON. EZEKIEL OMBAKI MACHOGU, CBS CABINET SECRETARY, MINISTRY OF EDUCATION

PREFACE

The Ministry of Education (MoE) nationally implemented Competency Based Curriculum (CBC) in 2019. Grade one is the first grade of Primary education level while Grade 6 is the final grade of the level in the reformed education structure.

The reviewed Grade 3 curriculum furthers implementation of the CBC from Grade 2 in Primary level. The curriculum provides opportunities for learners to focus in a field of their choice to form a foundation for further education and training and/or gain employable skills. This is very critical in the realisation of the Vision and Mission of the on-going curriculum reforms as enshrined in the Sessional Paper No. I of 2019 whose title is: *Towards Realizing Quality, Relevant and Inclusive Education and Training for Sustainable Development* in Kenya. The Sessional Paper explains the shift from a content-focused curriculum to a focus on **nurturing every learner's potential.**

Therefore, the Grade 3 curriculum designs for learners with visual impairment are intended to enhance the learners' development in the CBC core competencies, namely: Communication and Collaboration, Critical Thinking and Problem Solving, Creativity and Imagination, Citizenship, Digital Literacy, learning to Learn and Self-efficacy.

The curriculum designs provide suggestions for interactive and differentiated learning experiences linked to the various sub strands and the other aspects of the CBC. They also offer several suggested learning resources and a variety of assessment techniques. It is expected that the designs will guide teachers to effectively facilitate learners to attain the expected learning outcomes for Grade 3 and prepare them for smooth transition to Grade 4. Furthermore, it is my hope that teachers will use the adapted designs to make learning interesting, exciting and enjoyable.

DR. BELIO KIPSANG', CBS
PRINCIPAL SECRETARY
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ACKNOWLEDGEMENT

The Kenya Institute of Curriculum Development (KICD) Act Number 4 of 2013 (Revised 2019) mandates the Institute to develop and review (*SNE adapt*) curricula and curriculum support materials for basic and tertiary education and training. The curriculum development process for any level of education involves thorough research, international benchmarking and robust stakeholder engagement. Through a systematic and consultative process, the KICD conceptualised the Competency Based Curriculum (CBC) as captured in the Basic Education Curriculum Framework (BECF)2017, that responds to the demands of the 21st Century and the aspirations captured in the Constitution of Kenya 2010, the Kenya Vision 2030, East African Community Protocol, International Bureau of Education Guidelines and the United Nations Sustainable Development Goals (SDGs).

KICD receives its funding from the Government of Kenya to facilitate successful achievement of the stipulated mandate and implementation of the Government and Sector (Ministry of Education (MoE) plans. The Institute also receives support from development partners targeting specific programmes. The revised Grade 3 curriculum designs for learners with visual impairment were developed and adapted with the support of the World Bank through the Kenya Primary Education Equity in Learning Programme (KPEELP); a project coordinated by MoE. Therefore, the Institute is very grateful for the support of the Government of Kenya, through the MoE and the development partners for policy, resource and logistical support. Specifically, special thanks to the Cabinet Secretary-MoE and the Principal Secretary – State Department of Basic Education,

I also wish to acknowledge the KICD curriculum developers and other staff, all teachers, educators who took part as panelists; the Semi-Autonomous Government Agencies (SAGAs) and representatives of various stakeholders for their roles in the development and adaptation of the Grade 3 curriculum designs for learners with visual impairment. In relation to this, I acknowledge the support of the Chief Executive Officers of the Teachers Service Commission (TSC) and the Kenya National Examinations Council (KNEC) for their support in the process of developing and adapting these designs. Finally, I am very grateful to the KICD Council Chairperson and other members of the Council for very consistent guidance in the process.

I assure all teachers, parents and other stakeholders that this curriculum design will effectively guide the implementation of the CBC at Grade 3 and preparation of learners with visual impairment for transition to Grade 4.

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

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NATIONAL GOALS OF EDUCATION

1. Foster nationalism, patriotism, and promote national unity

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

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

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

a) Social Needs

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

b) Economic Needs

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

c) Technological and Industrial Needs

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

3. Promote individual development and self-fulfilment

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

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

5. Promote social equity and responsibility

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

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

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

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

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

8. Good health and environmental protection

Education should inculcate in young people the value of good health in order for them to avoid indulging in activities that will lead to physical or mental ill health. It should foster positive attitudes towards environmental development and conservation. It should lead the youth of Kenya to appreciate the need for a healthy environment.

LESSON ALLOCATION AT LOWER PRIMARY

S/ No.	Learning Area	No. of Lessons
1	Mathematical Activities for Learners with Visual Impairment	5
2	English Language Activities for Learners with Visual Impairment	5
3	Environmental Activities for Learners with Visual Impairment	4
4	Creative Activities for Learners with Visual Impairment	7
5	Religious Education Activities	3
6	Kiswahili language activities for Learners with Visual Impairment	4
7	Braille Literacy Activities	2
8.	Pastoral/ Religious Instruction Programme	1
	Total	31

LEVEL LEARNING OUTCOMES FOR PRIMARY EDUCATION

By the end of the Primary Education, the learner should be able to:

- 1. Communicate appropriately using verbal and or non-verbal modes in a variety of contexts.
- 2. Apply acquired knowledge, skills, values and attitudes in everyday life.
- 3. Demonstrate social skills, moral and religious values for positive contribution to society.
- 4. Exploit one's talents for individual development and self-fulfilment.
- 5. Explore, manipulate, manage and conserve the environment for learning and sustainable development.
- 6. Use digital literacy skills for learning and enjoyment.
- 7. Value Kenya's rich and diverse cultural heritage for harmonious living.
- 8. Appreciate the need for, and importance of interdependence of people and nations.

ESSENCE STATEMENT

Environmental Activities is an integrated learning area comprising both environmental, hygiene and nutrition concepts. The learning area builds on knowledge, skills, attitudes and values developed in Grade 2 Environmental Activities. Skills of observation, identification, classification, manipulation, recording, interpretation, prediction, environmental conservation, intrapersonal and interpersonal skills are further developed. Experiential learning will be utilised to enable the learner explore the environment through hands-on activities for learning and enjoyment. This will enable the learner to develop a sense of connection and appreciation to the immediate natural environment and its cultural diversity. The learning area endeavours to nurture an engaged and environmentally aware citizen. The competencies acquired will be up-scaled in upper grades through concepts in related learning areas.

Further, this design has been adapted to ensure that learners with blindness or low vision learn effectively. The adaptations include suggestions for provision of verbal descriptions on aspects that require use of sight, use of digital devices with assistive technology, tactile diagrams, print with appropriate contrast, font size and font types, hands on demonstrations, purposeful pairing and adapted learning resources. The design has also incorporated alternative learning outcomes and activities in areas that pose challenges to learners with visual impairments.

GENERAL LEARNING OUTCOMES

By the end of Lower Primary, the learner with visual impairment should be able to:

- a) acquire appropriate practical skills and values for problem solving in conserving the environment,
- b) communicate appropriate messages for conserving the environment,
- c) demonstrate appropriate values, attitudes and practices for sustainable interactions,
- d) explore the natural resources in the immediate environment for learning and enjoyment,
- e) practise proper hygiene and good health habits to promote the well-being of self, others and the environment,
- f) apply acquired competences in solving environmental challenges for sustainable development,
- g) participate in community service learning to promote environmental and social well-being,
- h) observe safety precautions to limit risks to self and others while exploring the environment,
- i) appreciate the country's rich and diverse cultural heritage for harmonious living in the community.

SUMMARY OF STRANDS AND SUB STRANDS

Strands	Sub Strands	Suggested Number of Lessons
1.0 Social Environment	1.1 Our Living Environment	12
	1.2 Family Needs	10
	1.3 Food in Our Environment	8
	1.4 Our Community	10
	1.5 Cultural Events	8
2.0 Natural Environment	2.1 Weather	10
	2.2 Soil	8
	2.3 Heat	10
3.0 Resources In Our Environment	3.1 Water	12
	3.2 Plants	12
	3.3 Animals	8
	3.4 Waste Materials	12

STRAND 1.0: SOCIAL ENVIRONMENT

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
1.0 Social Environment	1.1 Our Living Environment (12 lessons)	By the end of the sub strand, the learner should be able to: a) identify beddings for appropriate use, b) carry out hygiene practices in sleeping areas for a healthy environment, c) manage bedwetting for personal hygiene, d) desire to adhere to hygiene practices in the sleeping place for personal wellbeing,	 Learners with low vison are guided to use digital devices with assistive technology to watch video clips or observe pictures of various items used as beddings such as mats, mattresses, bed sheets, bed covers, and blankets and identify those found in their home or school. Learners with blindness listen to verbal description of the video clips or pictures of the beddings such as mats, mattresses, bed sheets, bed covers, and blankets and identify them. Learners with low vision are given an orientation to a sleeping area to identify the beddings while learners with low vision are given an orientation to a sleeping area to manipulate the beddings. In groups, learners are guided to role play in turns how to clean and organise the sleeping area (washing, drying and airing beddings, sweeping/mopping 	Why is personal hygiene important in the sleeping place?

school.

Digital Literacy: Learners develop digital citizenship as they observe safety precautions and practices when using digital devices to search and watch videos or listen to audio clips on problems related to bed wetting.

Values:

Responsibility: Learners enhance personal responsibility when they wash and care for their beddings.

Pertinent and Contemporary Issues:

Life skills: Learners enhance consistency when they regularly maintain cleanliness and orderliness in the sleeping area at home or school..

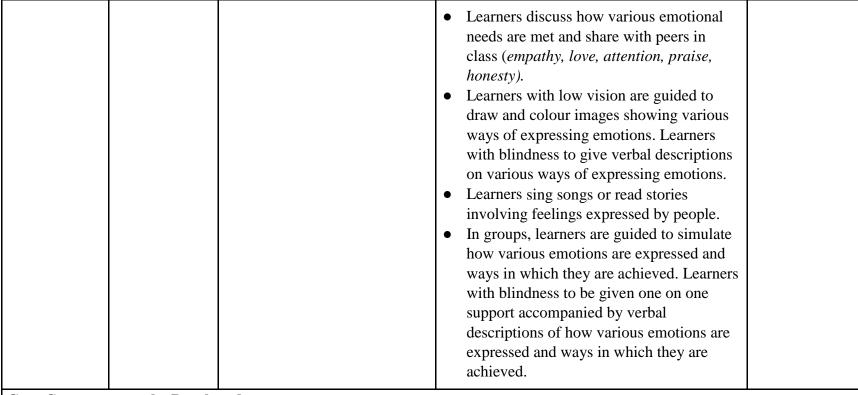
Link to other Learning Areas:

Materials used as beddings can be used when learning new words in English Activities.

Suggested Learning Resources

Approved support learning materials, beddings (mats, mattresses, bed sheets, bed covers, and blankets), brooms, clothesline, mop, brooms, waste bins, basin, soap, pegs, charts, video clips of beddings, digital devices with assistive technology, pictures of beddings.

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
1.0 Social Environment	1.2 Family Needs (Emotional needs) (10 lessons)	By the end of the sub strand, the learner should be able to: a) identify different types of emotions expressed by people in daily life, b) use facial expressions to express different types of emotions, c) describe ways in which emotional needs are met in real life situation, d) illustrate different emotions expressed by self and others, e) appreciate the importance of achieving emotional needs in character formation.	 Learners brainstorm on what emotional needs are and mention them in class (sad, happy, angry, fear, surprise, joy). Learners with low vision are guided to use digital devices with assistive technology to watch video clips or observe pictures of people expressing various emotions (sad, happy, angry, fear, surprise, joy) while learners with blindness listen to audio clips or picture descriptions of how people express the emotions (sad, happy, angry, fear, surprise, joy). In groups, learners are guided to simulate different ways of expressing emotions such as sadness, happiness, anger, fear, surprise and joy. Learners are guided to use digital devices with assistive technology to search for various emojis that show different emotions. Learners with low vision are guided to match pictures or emojis with the particular emotions. Learners with blindness to be given clear verbal descriptions of the pictures or emojis and guided to match them with emotions. 	How do people express the way they feel?



Self-efficacy: learner identifies and talks about the need for help when simulating expressions of emotional needs.

Values

Love: learners portray a caring attitude when comforting others who are hurting.

Pertinent and Contemporary Issues:

Life skills: learner identifies different emotions expressed by self and others.

Link to other Learning Areas:

- Emotional needs can be used by learners when learning about God's Creation in **Religious Activities.**
- The words used to express emotions relates with learning new words in Language Activities.

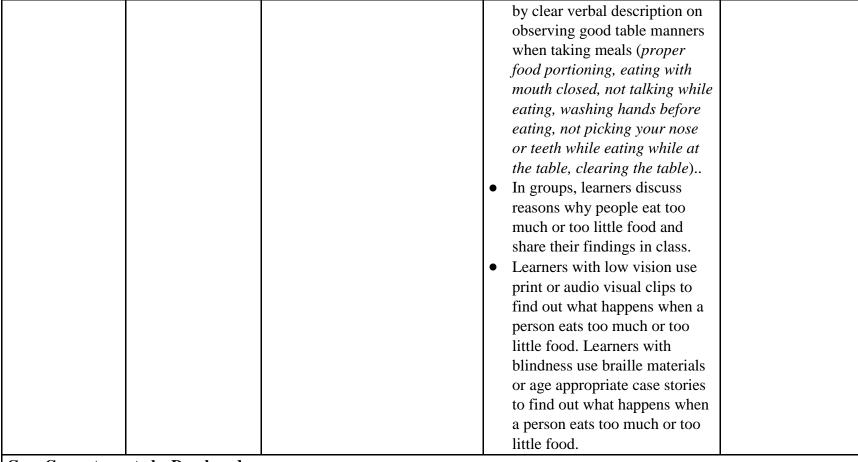
Suggested Learning Resources

Approved support learning materials, pictures, crayons, digital devices with assistive technology, flash cards, braille cards, emojis,

manila papers, charts.

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
1.0 Social Environment	1.3 Food in our Environment (8 lessons)	By the end of the sub strand, the learner should be able to: a) identify common foods found in the immediate environment, b) classify foods into the three food groups that comprise a balanced meal, c) observe table manners during meals for social wellbeing, d) embrace good eating habits to promote good health.	 Learners are guided to talk about different foods found in their locality. Learners with low vision are guided to use digital devices with assistive technology or print materials with appropriate font to search for information on food groups and share in class. Learners with blindness to use digital devices with assistive technology or braille materials to search for the information on food groups and share in class. Learners with low vision use pictures cards of common food items or real foods to classify the foods into three groups namely energy giving, body building and protective foods. Learners with blindness are guided to manipulate and use 	 How is food classified? Why should we observe table manners during meals?

 ,
verb descriptions of common
food items and classify the
foods into three groups namely
energy giving, body building
and protective foods.
Learners are guided to use
digital devices with assistive
technology, print or braille
materials to search for
information on table manners
and share with peers.
• Learners participate in a
demonstration on good table
manners then practice them.
Learner with blindness to be
given verbal descriptions
during the demonstration on
good table manners and then
practice them.
• In groups, learners are guided
to practise observing good
table manners when taking
meals (proper food portioning,
eating with mouth closed, not
talking while eating, washing
hands before eating, not
picking your nose or teeth
while eating while at the table,
clearing the table). Learners
with blindness to be given one
on one guidance accompanied
on one Burgines accompanies



Self-efficacy: Learner develops self-awareness when finding out what happens when a person eats too much or too little food.

Values:

Responsibility: Learner enhances self-drive as they observe good table manners when taking meals.

Pertinent and Contemporary Issues:

Health promotion issues: Learners advocate for eating the right amount of food to prevent non communicable diseases-lifestyle diseases.

Link to other Learning Areas:

Grouping food items relates to skills of sorting and grouping learnt in Mathematical Activities.

Suggested learning experiences

Approved support learning materials, pictures of food items, real food items, digital devices with assistive technology, assorted cutlery, assorted utensils.

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
1.0 Social Environment	1.4 Our Community (10 lessons)	By the end of the sub strand, the learner should be able to: a) identify ways of keeping safe in the community, b) classify places in the community as safe and unsafe for personal wellbeing, c) apply basic road signs for personal safety, d) Acknowledge the importance of keeping safe in the community.	 Learners are guided to talk about their experiences regarding safety in the community and share with peers in class. Learners are guided to brainstorm on how to keep safe in the community (road safety, responding to strangers, avoiding open pits, keeping company, emergency contacts, safe routes, internet safety, bullying awareness, and fire safety) and present their findings. Learners with low vision use pictures, flash cards or video games showing various places (safe and unsafe) and sort them into the two categories; safe and unsafe. Learners with blindness use picture descriptions, braille cards or audio clips with various places (safe and unsafe) and sort them into the two categories; safe and unsafe. In groups, learners discuss dangerous places in the community and present their findings in class (Rivers, roads, dams, forests, open pits, abandoned buildings). 	How do we keep safe in the community?

	 Learners keenly and actively follow a story from resource a person on different ways of keeping safe in the community, Learners with low vision are guided to use digital devices with assistive technology to observe video clips or pictures of road signs and identify the basic road safety practices. Learners with blindness listen to verbal description of the video clips or pictures of road signs and point out the basic road safety practices. In groups, learners role play on how to use basic road signs. Learners with blindness to be given one on one
	 demonstration alongside verbal descriptions during the role play. Learners find out from parents or guardians the appropriate ways of responding to strangers. Learners ask parents or guardians to take them for a safety walk around their neighborhood so as to identify safe and unsafe places and share their findings with peers.

Core Competency to be Developed
Communication and collaboration: Learners develop listening skills as they keenly and actively follow a case story from resource persons on different ways of keeping safe in the community.

Values

Love: learners enhance a caring attitude as they share learning resources with peers while working.

Pertinent and Contemporary Issues:

Life skills: Learners develop early safety and security awareness as they avoid dangerous places and observe safety in the community.

Link to other Learning Areas:

Basic road safety draws knowledge and concepts from colours in Creative Activities.

Suggested Learning Resources

Approved learning support materials, local environment, flash cards, braille cards, pictures, digital devices with assistive technology, road signs, charts.

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
1.0 Social Environment	1.5 Cultural Events (8 lessons)	By the end of the sub strand, the learner should be able to: a) identify cultural events carried out in the community for awareness, b) recognise cultural events that promote social wellbeing in the community, c) classify cultural events into those that promote environmental care and social well-being in the community d) embrace cultural events that promote social well-being in the community.	 Learners share experiences on cultural events in their community. In groups, learners practise singing and dancing to songs performed during cultural events in the community. Learners are guided to brainstorm and point out cultural events that promote social well-being and environmental care, Learners engage with a resource person to enlighten them on various cultural events carried out in the community and take notes. Learners with low vision use pictures or video clips of various cultural events into those that promote environmental care and those that promote social well-being in the community (child naming, initiation, dowry ceremonies, harvesting, planting). Learners with blindness use picture descriptions or audio clips to classify the cultural events into those that promote environmental care and those that promote environmental care and those that promote social well-being in the community (child naming, initiation, dowry ceremonies, harvesting, planting). In groups, learners are guided to simulate cultural events performed by various 	

	communities that promote care for the	
	environment.	
	 Learners find out from parents or 	
	guardians or elders about cultural events	
	that promote social well-being and share	
	with peers in class.	

Citizenship: learners develops active community life skills as they find out from parents, guardians and elders about cultural events that promote social well-being.

Values

Responsibility: learners enhances diligence when they accept assigned roles during cultural events in the community.

Pertinent and Contemporary Issues:

Social cohesion when singing songs in indigenous languages during cultural events.

Link to other Learning Areas:

Participation in cultural events relates to skills of singing and dancing in Creative Activities.

Suggested Learning Resources

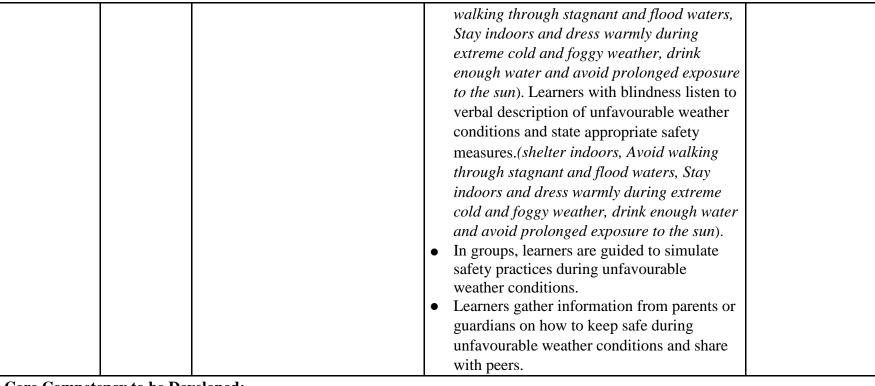
Approved support learning materials, pictures and paintings, digital devices with assistive technology, art facts, journals and magazines, traditional regalia, resource person, traditional musical instruments.

SUGGESTED ASSESSMENT RUBRIC

Level	Exceeds	Meets Expectations	Approaches	Below Expectations
Indicator	Expectations		Expectations	_
Ability to demonstrate	Demonstrates 4	Demonstrates 3	Demonstrates 2	Demonstrates 1
hygienic practices	hygienic practices	hygienic practices	hygienic practices	hygienic practice
observed in sleeping	observed in sleeping	observed in sleeping	observed in sleeping	observed in sleeping
areas	areas	areas	areas	areas
Ability to recognize	Recognizes 6 emotions	Recognizes 4 to 5	Recognizes 3 emotions	Recognizes 1 to 2
emotions expressed by	expressed by self and	emotions expressed by	expressed by self and	emotions expressed by
self and others	others	self and others	others	self and others
Ability to practice good	Practises good healthy	Practises good healthy	Practises good healthy	Practises good healthy
healthy habits during	habits during meals	habits during meals	habits during meals with	habits during meals only
meals	spontaneously		constant reminder	when prompted
Ability to observe	Observes safety	Observes safety	Observes safety	Observes safety
safety precautions	precautions always	precautions in the	precautions	precautions rarely
in the immediate	in the immediate	immediate	sometimes in the	in the immediate
environment	environment	environment	immediate	environment
			environment	
Ability to classify	Classifies cultural	Classifies cultural	Classifies cultural	Classifies cultural
cultural events that	events that promote	event that promote	events that promote	events that promote
promote	environmental care	environmental care	environmental care	environmental care
environmental care	and social well-	and social well-	and social well-	and social well-
and social well-	being with in-depth	being	being with less	being without
being	details		details	details

STRAND 2.0: NATURAL ENVIRONMENT

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
2.0 Natural Environment	2.1 Weather (10 lessons)	By the end of the sub strand, the learner should be able to: a) describe unfavourable weather conditions for appropriate action, b) explain dangers of unfavourable weather conditions on people and environment, c) respond appropriately to unfavourable weather conditions for safety, d) appreciate the importance of keeping safe during unfavourable weather conditions.	 In groups learners are guided to discuss and share their experiences on unfavourable weather conditions. Learners with low vision use digital devices with assistive technology and print media to search for information on unfavourable weather conditions (heavy rainfall, drought, strong winds, extreme heat, snow, fog) and share their findings with peers. Learners with blindness use digital devices with assistive technology and braille materials to search for information on unfavourable weather conditions (heavy rainfall, drought, strong winds, extreme heat, snow, fog) and share their findings with peers. Learners are guided to discuss what happens during the unfavourable weather conditions in the environment (floods, water scarcity, loss of lives, and destruction of property). In groups, learners are guided to read or listen to stories about appropriate responses to unfavourable weather conditions, Learners are guided to match unfavourable weather conditions with their corresponding safety measures. (shelter indoors, Avoid 	How can we keep safe during unfavourable weather conditions?



Communication and collaboration: learner develops listening and speaking skills while actively engaging in discussions on what happens during unfavourable weather conditions.

Values:

Social justice: learner enhances cooperation as they equitably share available learning resources when searching for information on unfavourable weather conditions.

Pertinent and Contemporary Issues:

Life skills: learner makes right choices on the clothes to wear during unfavourable weather conditions.

Link to other Subjects:

Reading and listening to stories about appropriate responses to unfavourable weather conditions relates to active listening skills in English Activities.

Suggested Learning Resources
Approved support learning materials, pictures, digital devices with assistive technology, print weather charts, paints, painting brushes, cotton wool.

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
2.0 Natural Environment	2.2 Soil (8 lessons)	By the end of the sub strand, the learner should be able to: a) differentiate different types of soil in the locality, b) care for soil in the environment for conservation, c) plant trees in the immediate environment to promote soil conservation, d) embrace soil conservation activities in the environment.	 In groups, learners move around the school environment and collect different soil samples. Learners with blindness to be given one on one support accompanied by verbal descriptions of different types of soil samples to collect during the walk. In groups, learners are guided to use the sense of touch to explore various samples of soil (sand, loam and clay soils) to feel the texture. Learners with low vision mount the different soil samples on a chart using adhesive glue and display the chart in class. Learners with blindness to be given verbal description of different soil samples and be guided to mount the soil on a chart. 	2. What can you do to protect our soil?

	 Learners find out the types of soil found in their locality from parents or guardians and share with peers. In groups, learners discuss how to care for soil in the environment (manuring, mulching, planting trees,) and share with peers. Learners carry out tree planting activities in the community and 	
	activities in the community and care for them. Learners with blindness to be paired with a sighted peer to carry out the activity.	

Communication and collaboration: learner develops decision making abilities when actively participating in communal tree planting activities.

Values:

Patriotism: learner enhances awareness of their responsibilities in the society when they engage in tree planting activities.

Pertinent and Contemporary Issues:

Health promotion issues: learner promotes hygiene practices when they wash their hands after manipulating soils.

Link to other learning area:

Characteristics of soils can be used by learners when learning about modelling in Creative Activities.

Suggested Learning Resources

Approved support learning materials, soil samples, manilla paper, glue, pictures, watering cans, tree seedlings, charts, farm tools, digital devices with assistive technology.

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
2.0 Healthy Environment	2.3 Heat (10 lessons)	By the end of the sub strand, the learner should be able to: a) identify sources of heat in the environment, b) state the uses of heat in the environment, c) conserve heat in the environment for efficiency, d) appreciate the importance of different sources of heat in daily life.	 In groups, learners brainstorm and share on sources of heat in their homes. Learners are guided to talk about sources of heat in the environment. Learners with low vision use pictures or video clips to find out various sources of heat in the environment (sun, charcoal, firewood and kerosene, electricity, gas). Learners with blindness use picture descriptions or audio clips to find out various sources of heat in the environment (sun, charcoal, firewood and kerosene, electricity, gas). Learners are guided to discuss uses of heat in the environment and share in class (cooking, warming, ironing, drying). Learners are guided to discuss basic conservation measures and share their findings in class (turning off heat sources when not in use, using energy saving stoves and protecting the fireplace from wind). In groups, learners brainstorm on how to keep safe when dealing with 	Why is heat important in daily life?

present their findings in class(avoid playing with fire and electrical appliances, prolonged exposure to sun, be aware of fire alarms, be accompanied by responsible adults around fireplace) In groups, learners simulate how to conserve heat in the environment. Learners with blindness are guided through step by step verbal description of the simulation. Learners carry out heat conservation activities such as turning off heat sources when not in use, using and protecting the fireplace from wind while observing safety of self and others. Learners with blindness could be paired with a sighted peer when carrying out the activity. Learners share with peers on how to keep safe when dealing with heat from various sources of heat. Learners find out from parents or guardians the ways of conserving heat from different sources at home
and share with others.

Respect: learner enhances open mindedness when they appreciate diverse opinions during group discussions on various sources of heat in the environment.

Pertinent and Contemporary Issues

Socio-economic and environmental issues: learner enhances safety and security when sharing with peers on how to keep safe when dealing with heat from various sources of heat.

Link to other subjects:

Uses of heat relate to concept about drying clay models in Creative activities.

Suggested Learning Resources

Approved support learning materials, charcoal, fire wood, iron box, pictures, digital devices with assistive technology, charts

SUGGESTED ASSESSMENT RUBRIC

Level	Exceeds	Meets	Approaches	Below Expectations
Indicator	Expectations	Expectations	Expectations	
Ability to respond	Responds appropriately to	Responds	Responds appropriately to	Responds appropriately
appropriately to	unfavourable weather	appropriately to	specified unfavourable	to extreme unfavourable
unfavourable weather	conditions in different	unfavourable	weather conditions	weather conditions only
conditions in the	settings	weather conditions		
locality		in the locality		
Ability to carry out	Carries out 3 basic soil	Carries out 2 basic	Carries out 1 basic soil	Carries out 1 basic soil
basic soil conservation	conservation activities in	soil conservation	conservation activities in	conservation activities in
activities in the	the environment	activities in the	the environment	the environment with
environment		environment		assistance
Ability to carry out	Carries out activities of	Carries out	Carries out activities of	Carries out activities of
activities of conserving	conserving heat in the	activities of	conserving heat in the	conserving heat rarely
heat in the environment	environment always	conserving heat in	environment less often	
		the environment		

STRAND 3.0: RESOURCES IN OUR ENVIRONMENT

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
3.0 Resources in Our Environment	3.1 Water (12 lessons)	By the end of the sub strand, the learner should be able to: a) state ways in which water is contaminated in the environment, b) carry out activities that are used to make water clean, c) conserve water at home and school as scarce resource, d) value the importance of clean and safe water for healthy living.	 Learners are guided to brainstorm on sources and uses of water in the environment. Learners with low vision observe pictures or watch video clips on how water can be contaminated in the environment (Human activities-washing clothes, bathing, urinating, swimming; Animals- drinking directly from water source, excreting in water sources). Learners with blindness are guided to listen to verbal descriptions of pictures or audio clips on how water can be contaminated in the environment (Human activities-washing clothes, bathing, urinating, swimming; Animals-drinking directly from water source, excreting in water sources). Learners with low vision make improvised water filter using locally available materials. Learners with blindness to be given clear verbal descriptions of the procedure followed in making an improvised water filter. 	 How can we keep water clean? How can we make water safe for drinking?

Learners are guided to use digital devi with assistive technology to search for the procedure of filtering water using different materials such as a piece of cloth, improvised water filter or a siev. In groups, learners clean dirty water through filtration using different materials (a piece of cloth, improvised water filter or a sieve). Learners with blindness to be given a step by step verbal description of how to filter wat and carry out the activity with support. Learners are guided to discuss how to make water safe for drinking by boilir it. In groups, learners are guided to use water in carrying out various activities such as washing clothes, cleaning han washing dishes, cleaning vegetables a fruits. In groups, learners discuss ways in why water can be reused and share their findings in class (watering plants, washing toilets, sprinkling on earthen surfaces). In groups, leaners engage in activities reusing water in school and at home. Learners are guided to make posters o ways of conserving water in the environment.	r ve. d eer t. ng s ds, nd nich floor of

Creativity and imagination: learner develops unique and new ideas when using locally available materials to make improvised water filters.

Values:

Unity: learner enhances team spirit as they work collaboratively when making a water filter from locally available materials.

Pertinent and Contemporary Issues:

Life skills: learner enhances unity and cooperation instead of competition as they make improvised filters from locally available materials.

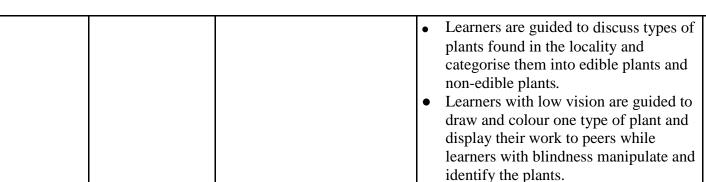
Link to other learning areas

Making improvised filters from locally available materials can be used by learners when learning about sequencing in mathematics.

Suggested Learning Resources

Approved support learning materials, dirty water, sieves, soil, pebbles, charcoal, pictures.

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
3.0 Resources in Our Environment	3.2 Plants (12 lessons)	By the end of the sub strand, the learner should be able to: a) identify safety measures to observe when handling different plants, b) classify plants in the environment into edible and non-edible, c) make a kitchen garden using locally available materials, d) appreciate plants as a source of food.	 Learners engage in a discussion with a resource person about measures observed when handling plants in the environment. Learners with low vision use digital devices with assistive technolgy to watch video clips or read print media on safety measures to be observed when handling plants in the environment (wearing protective gear, knowledge of poisonous plants, hand washing, use of tools, and disposal of plant waste). Learners with blindness listen to audio clips or read braille materials on safety measures to be observed when handling plants in the environment. (wearing protective gear, knowledge of poisonous plants, hand washing, use of tools, and disposal of plant waste) Learners take a guided nature walk to observe or manipulate different plants found in the immediate environment, take photos of the plants and pick some of them. Learners with blindness to be given one on one support accompanied by clear verbal descriptions during the walk. 	Why are plants important in the environment?



- Learners with low vision use digital devices with assistive technology or print media while learners with blindness use digital devices with assistive technology or braille materials to search on items used to make kitchen gardens (old tires, basins, pipes, sacks, hanging/floating pots, plastic containers, hanging walls).
- In groups, learners are guided to create a kitchen garden in school using locally available materials and plant different vegetables (kales, spinach, tomatoes, onions, black nightshade, Dania) as a class activity.

Digital literacy: learner manipulates digital devices when they search for various forms of kitchen garden from the internet.

Values:

Responsibility: learner embraces hard work when they complete assigned tasks as they engage in kitchen garden creating activities at school.

Pertinent and Contemporary Issues:

Safety: Learner enhances safety skills when handling different plants in the environment during nature walk.

Link to other learning areas

Creating a kitchen garden draws knowledge from concepts of measurement (length) in Mathematical Activities.

Suggested Learning Resources

Approved support learning materials, different plants, resource person, digital devices with assistive technology, print and braille charts, paints, crayons, colour pencils, farm tools, seedlings, manure, water.

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
3.0 Resources in Our Environment	3.3 Animals (8 lessons)	By the end of the Sub Strand, the learner should be able to: a) explain the importance of domestic animals to human beings, b) state different ways of caring for domestic animals for safety, c) care for domestic animals in the locality for economic empowerment, d) reflect on the value of domestic animals to human beings.	 In groups, learners share ideas on types of animals found in the locality, In groups, learners are guided to talk about the various uses of domestic animals to human beings and share their findings in class (source of food, security, companionship, manure, animal power, sports, source of energy-biogas). Learners use digital devices with assistive technology to search for uses of domestic animals to human beings and make notes. Learners are guided to discuss ways of caring for domestic animals such as cleaning the habitants, grooming, feeding and watering animals. Learners participate in a demonstration on how to care for domestic animals (cleaning the habitants, grooming, feeding, and watering animals). Learners with 	How do we care for animals at home and school?

	blindness to be given verbal description of the activities during the demonstration. Learners visit a farm in the locality and observe or listen to verbal description of different ways of caring for domestic animals. Learners sing songs about the importance of animals to human beings. Learners gather more information from parents or guardians on use and care for domestic animals and share with peers. Learners are guided to care for a domestic animal in school or at home.
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Learning to learn: learner develops the skill of working independently as they role play on how to care for domestic animals.

Values:

Love: learner enhances compassion as they role play on how to care for domestic animals.

Pertinent and Contemporary Issues:

Socio-economic and environmental issues: learner promotes animal welfare education when they advocate for care of animals including those that provide animal power.

Link to other Learning Areas:

Care of animals can be used by learners when learning about creation in Religious Activities.

Suggested Learning Resources

Approved support learning materials, food items, resource person, animal habitats, picture of domestic animals, real domestic animals, charts

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
3.0 Resources in Our Environment	3.4 Waste Materials (12 lessons)	By the end of the sub strand, the learner should be able to: a) identify waste materials which can be used to generate income, b) describe ways in which waste materials can generate income for economic empowerment, c) manage waste materials in the environment for hygiene, d) value the use of different waste materials for economic empowerment.	 Learners observe or listen to verbal descriptions of pictures or video clips of different types of waste and identify waste materials found in the locality. Learners are guided to discuss various ways of using waste to generate income in the immediate environment. Learners with low vision use digital devices with assistive technology and print to search for more information on ways of making money from waste. Learners with blindness use digital devices with assistive technology and braille materials to search for more information on ways of making money from waste. Learners are guided to discuss safety measures to be observed when handling waste materials such as wearing protective clothing, avoiding handling chemical waste, separating different types of waste, disposing different waste materials safely. 	How can waste materials be used to generate income?

 In groups, learners are guided to undertake waste management activities in the surroundings using unique and new ideas. Learners with blindness are guided to give verbal description of how to undertake waste management activities in the surroundings using unique and new ideas. In groups, learners are guided to
surroundings using unique and new
In groups, learners are guided to
undertake a project that will put waste materials from the
environment into appropriate use. • Learners display transparency when
accounting for money generated
from the project.

Creativity and Imagination: Learner develops unique and new ideas when undertaking activities that can manage waste materials in the environment.

Values:

Integrity: Learner enhances accountability in displaying transparency when accounting for money generated from the projects.

Pertinent and Contemporary Issues:

Health promotion issues: Learner develops habits of safety and hygiene when handling waste materials.

Link to other Learning Areas:

Income generation from items made from waste materials is related to concepts of measurement (money) in Mathematical Activities.

Suggested Learning Resources

Approved support learning materials, bottles(glass and plastics), old cans, waste paper, waste clothing materials, knitting yarn, paints, painting brush, pair of scissors, personal protective (equipment-gloves, aprons, gumboots, masks), pictures, digital devices with assistive technology.

SUGGESTED ASSESSMENT RUBRIC

Level	Exceeds	Meets Expectations	Approaches	Below Expectations
Indicator	Expectations		Expectations	
Ability to classify plants in the environment into edible and non-edible	Classifies plants in the environment into edible and non-edible with indepth details	Classifies plants in the environment into edible and non-edible	Classifies plants in the environment into edible and non-edible with minimal details	Classifies plants in the environment into edible and non-edible without details
Ability to observe safety measures when making a kitchen garden	Observes safety measures when making a kitchen garden regularly	Observes safety measures to observe when making a kitchen garden	Observes safety measures when making a kitchen garden sometimes	Observes safety measures when making a kitchen garden with prompts
Ability to conserve water at home and school	Conserves water at home and school all the time	Conserves water at home and school	Conserves water at home and school sometimes	Conserves water at home and school rarely
Ability to care for domestic animals	Cares for domestic animals always	Cares for domestic animals	Cares for domestic animals sometimes	Cares for domestic animals rarely
Ability to describe ways in which waste materials can generate income	Describes ways in which waste materials can generate income with in-depth details	Describes ways in which waste materials can generate income	Describes ways in which waste materials can generate income with minimal details	Describes ways in which waste materials can generate income without details
Ability to carry out activities to manage waste in the environment	Carries out activities to manage waste in the environment always	Carries out activities to manage waste in the environment	Carries out activities to manage waste in the environment sometimes	Carries out activities to manage waste in the environment rarely

APPENDIX I

Community Service Learning at Lower Primary

At this sub-level, the goal of the CSL activity is to provide linkages between concepts learnt in the various Learning Activities and the real life experiences. Learners begin to make connections between what they learn and the relevance to their daily life. CSL is hosted in the Environmental Activities learning area. The class teacher is expected to identify and guide learners to undertake age-appropriate whole-class integrated CSL activity within the school. The safety of the learners should also be taken into account when selecting the CSL activity. The following steps for the integrated CSL activity should be staggered across the school terms:

Steps in carrying out the integrated CSL activity

1) Preparation

- Determine the activity for the learners
- Map out the targeted core competencies, values and specific learning areas skills for the CSL activity
- Identify resources required for the activity (locally available materials)
- Stagger the activities across the term (Set dates and time for the activities)
- Communicate to learners, parents/caregivers/guardians, school administration, teachers and other relevant stakeholders in the school community
- Identify and develop assessment tools

2) Implementation of CSL Activity

- Assigning roles to learners.
- Ensure every learner actively participates in the activity
- Observe learners as they carry out the CSL activity and record feedback.
- Use an appropriate assessment tool to assess both the process and the product (Assess learner's work from the beginning to the end product)
- Assess the targeted core competencies, values and subject skills.

3) Reflection on the CSL Activity

Conduct a self-evaluation session with learners on the integrated CSL activity undertaken by discussing the following:

- what went well and why?
- what did not go well and why?
- what can be done differently next time?
- what they have learnt?

There will be **one** integrated CSL activity that will be conducted **annually.** The thematic areas for the integrated CSL activity will be derived from the broader categories of the PCIs and concepts from the various Learning Areas. The teachers are expected to vary the themes yearly to allow learners to address different PCIs within their contexts. There should be a linkage between the skills from the learning areas and the themes.

The integrated CSL activity will take a Whole School Approach (WSA) where the entire school community is involved (learners, parents/caregivers/guardians, school administration, teachers). Parents/caregivers/guardians are key stakeholders in the planning and execution of the CSL activity. Although the teacher takes the lead role in the planning and integration of the CSL activity, learners will be expected to participate actively in the whole process.

The CSL activity provides an opportunity for the development of core competencies and the nurturing of various values. The teacher is expected to vary the core competencies and values emphasised in the activity yearly.

Assessment of the CSL Activity

Assessment of the integrated CSL activity will focus on 3 components namely: skills from various learning areas applied in carrying out the activity, and core competencies developed and values nurtured. Assessment should focus on both the process and end product of the CSL activity. The teacher will assess learners in groups using various tools such as an observation schedule, checklist, rating scale or any other appropriate assessment tool.

APPENDIX II

Suggested Learning Resources, Assessment Methods and Non formal Activities

Suggested Assessment Methods

- Observation,
- Written test,
- Oral questions,
- Aural questions,
- Peer assessment,
- Self-assessment

Non formal Activities that Support Learning

- School routine activities
- Games and sports
- Clubs and societies