



**REPUBLIC OF KENYA
MINISTRY OF EDUCATION**

UPPER PRIMARY LEVEL DESIGNS

GRADE SIX

BRAILLE SKILLS

FOR LEARNERS WITH BLINDNESS



KENYA INSTITUTE OF CURRICULUM DEVELOPMENT

FEBRUARY 2021

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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 Kenya Constitution 2010, the Kenya Vision 2030, the United Nations Sustainable Development Goals (SDGs), and the regional and global conventions to which Kenya is a signatory. In relation to this, the Ministry of Education (MoE) embarked on curriculum reforms that culminated in the full implementation of the Competency Based Curriculum (CBC) in January 2019, from the level of Early Years Education (Pre-Primary 1 and 2, Lower Primary Grades 1, 2 and 3) and foundation level. The roll out of the curriculum in Grade 4 and intermediate level followed this in 2020. In readiness for the progression of the Grade 4 cohort, the curriculum designs for Grade 5 were developed and adapted for learners with special needs.

Grade 6 designs have also been developed and adapted. These curriculum designs are intended to ensure that the core competencies attained by learners at Grade 5 are enhanced even as further opportunities are provided for identification and nurturing of every learner's potential as learners prepare to transit to Junior Secondary school.

The curriculum designs include the general and specific learning outcomes for the learning areas (subjects), as well as strands and sub-strands. The designs also outline suggested learning experiences, key inquiry questions, assessment rubric, pertinent and contemporary issues, values, and Community Service Learning (CSL) activities.

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

PROF. GEORGE A. O. MAGOHA, MBS, EBS, CBS

CABINET SECRETARY

MINISTRY OF EDUCATION

PREFACE

The Ministry of Education (MoE) is currently implementing the second phase of the curriculum reforms with the roll out of the Competency Based Curriculum (CBC) at Grade 4 and intermediate level in 2020. This is the first cohort of the Upper Primary and intermediate levels in the new education structure. Grade 5 and 6 designs have also been developed and adapted for learners with visual impairment.

Grade 6, being the final stage of the upper primary level, is critical in realizing 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**.

The Grade 6 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 also link the activities in the main learning areas to the other aspects of the CBC, including links to Pertinent and Contemporary Issues (PCIs), Values, and Community Service Learning (CSL). The designs also offer suggested interactive learning activities and a variety of assessment techniques adapted to suit learners with visual impairment. It is expected that the curriculum designs will guide teachers to enable learners attain the expected learning outcomes for Grade 6 and effectively prepare them for the next grade.

It is my expectation that teachers will use the designs to make learning interesting, exciting and enjoyable.

JULIUS O. JWAN, PhD

PRINCIPAL SECRETARY

STATE DEPARTMENT OF EARLY YEARS AND BASIC EDUCATION

MINISTRY OF EDUCATION

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ACKNOWLEDGEMENT

The Kenya Institute of Curriculum Development (KICD) Act Number 4 of 2013 (Revised 2018) mandates the Institute to develop curricula and curriculum support materials for basic and tertiary education and training. The curriculum development process involves thorough research, international benchmarking, and robust stakeholder engagement. Through this systematic and consultative process, the KICD conceptualized the Competency Based Curriculum (CBC) in accordance with the Basic Education Curriculum Framework (BECF). The framework responds to the demands of the 21st Century and the aspirations captured in the Constitution of Kenya 2010, Kenya and the Kenya Vision 2030, East African Commission Protocol and the United Nations Sustainable Development Goals.

KICD obtains its funding from the Government of Kenya to achieve the stipulated mandate and implement the Government and Sector (Ministry of Education) plans. The Institute also receives support from development partners targeting specific programmes. The Grade 6 curriculum designs have been developed with the support of the World Bank through the Kenya Secondary Education Quality Improvement Program (SEQIP). The Institute is also grateful to the Government of Kenya through the MoE and the development partners for the policy, resource, and logistical support. Specifically, we appreciate the support of the Cabinet Secretary of the Ministry of Education and the Principal Secretary in charge of the State Department of Early Learning and Basic Education.

We also wish to acknowledge 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 6 curriculum designs. In relation to this, we acknowledge the support of the Secretary, Teachers Service Commission (TSC) and the Chief Executive Officer of the Kenya National Examinations Council (KNEC) for their support in developing these designs.

Finally, we are very grateful to the Chairperson of the KICD Council, Dr. Sara Ruto, and other members of the Council for their consistent guidance during the process. We assure all teachers, parents, and other stakeholders that these curriculum designs will effectively guide the implementation of the CBC at Grade 6 and preparation of learners for Grade 7.

PROF. CHARLES O. ONG’ONDO
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INTRODUCTION

The Braille Skills curriculum design has been developed for learners in Grade 6. The designs are comprehensive enough to guide the teachers to facilitate the implementation of the curriculum effectively. The teacher must understand the learning outcomes and use the suggested learning experiences to achieve them. The teacher can also design own learning experiences as long as learners achieve the desired learning outcomes. A variety of activities will ensure that learners are engaged in learning. Practical experiences will allow learners to retain more in the learning process. The designs allow the teachers to use a variety of assessment methods, but in the end, they must evaluate the achievement of the learning outcomes. Braille for foreign language has been developed. Teachers should guide learners to choose either option 1 (French) or option 2 (German) to enable them to read, write and perform other activities in class related to the foreign language of their choice. The curriculum designs are very critical, and teachers must refer to them consistently.

NATIONAL GOALS OF EDUCATION

1. Foster nationalism, patriotism, and promote national unity

Kenya's people belong to different communities, races, and religions and should live and interact as one people. Education should enable the learner to 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 competencies 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 the necessary competencies for technological and industrial development in tandem with changing global trends.

3. Promote individual development and self-fulfilment

Education should provide opportunities for the learner to develop to the fullest potential. This includes the development of one's interests, talents, and character for a positive contribution to society.

4. Promote sound moral and religious values

Education should promote the acquisition of national values as enshrined in the Constitution. It should be geared towards developing a self-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 the learner 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 and respect 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 an 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 the learner the value of physical and psychological well-being for self and others. It should promote environmental preservation and conservation, including animal welfare, for sustainable development.

SUGGESTED TIME ALLOCATION

#	Subject	Lessons Per Week
	Mathematics	5
	Physical and Health Education	5
	English language	4
	Kiswahili Language KSL for learners who are deaf	4
	Science and Technology	4
	Agriculture	3
	Creative Arts (Art and craft, Music)	3
	Home science	3
	Religious Education (CRE/IRE/ HRE)	3
	Social Studies (Citizenship, Geography, History)	3
	Other Languages (Braille Skills)	2
	Pastoral Programme and Instructions	1
	TOTAL	40

GENERAL LEARNING OUTCOMES FOR MIDDLE SCHOOL EDUCATION

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

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

GENERAL LEARNING OUTCOMES FOR BRAILLE SKILLS

By the end of this learning area, the learner with blindness should be able to;

1. Use braille reading and writing skills in learning and communication.
2. Use braille writing and reading equipment and materials in learning and communication.
3. Use digital devices with assistive technologies to enhance learning.
4. Trace and interpret tactile graphics for learning.
5. Apply English, Kiswahili, Mathematics, Music, French or German braille for learning and communication.

ESSENCE STATEMENT

Braille is the primary medium of reading and writing for learners with blindness. It provides opportunities for the learners to access written information through touch. Braille reading and writing skills are essential for the learning and development of competencies and allow learners to learn the other subjects offered at this level. The use of assistive devices and technologies has been included to enhance learning through braille. Braille skills design for grade 6 comprises of strands and sub-strands. Each of the sub-strands has specific learning outcomes, as well as suggested learning experiences to make the learner acquire requisite skills in braille. This learning area will equip the learner with appropriate skills in readiness for formal instructions. As the learner progresses to grade 6, the learning content grows in complexity. As such, the braille skills to be acquired enables the learner to grasp the new concepts easily. Below is the braille skills grade 6 design.

1.0 BRAILLE WRITING AND DISPLAY DEVICES AND MATERIALS

Strand	Sub-strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Questions
1.0 Braille Writing and Reading Devices and Materials	1.1 Digital Devices with Assistive Technology (4 lessons)	By the end of the sub-strand, the learner should be able to: a) identify digital devices with assistive technology for reading and writing braille. b) state key features of various digital devices with assistive technology for reading and writing braille c) use digital devices with assistive technology to read and write braille,	Learners be guided to:- <ul style="list-style-type: none"> • Identify digital devices with assistive technology such as braille me note-taker, smart beetle, refreshable braille keyboards, e-braille writer through manipulation • Manipulate the key features of the digital devices with assistive technology • Use the digital devices with assistive technology to read and write braille work, take 	1. How do you use digital devices with assistive technology to take notes and collect data? 2. How do you take care of

		<p>take notes and collect data</p> <p>d) use digital devices with assistive technology to store and retrieve information</p> <p>e) care for and store digital devices with assistive technology safely after use</p> <p>f) appreciate the use of digital devices with assistive technology in the learning process</p>	<p>notes and collect data.</p> <ul style="list-style-type: none"> • Store and retrieve information using the digital devices with assistive technology • Practise reading, writing, storing, and retrieving information using the digital devices with assistive technology in groups • Handle with care and store the digital devices with assistive technology safely after use 	<p>digital devices with assistive technology ?</p>
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Core competencies to be developed:

- **Digital literacy:** This could be developed as learners use digital devices with assistive technology to read, write,

<p>take notes, and collect data to develop and organize their own portfolios.</p> <ul style="list-style-type: none"> • Learning to learn: This could be developed as learners use digital devices with assistive technology to research and get more information in other learning areas. 	
<p>Link to Pertinent and Contemporary Issues:</p> <p>Sports and Games: This is developed as learners use digital devices with assistive technology to play audio-visual games.</p>	<p>Values:</p> <ul style="list-style-type: none"> • Responsibility: This is achieved as learners take good care of the digital devices with assistive technology. • Unity: This achieved as learners work together in groups
<p>Link to other Learning Areas:</p> <p>Science and technology, Kiswahili, English and Mathematics.</p> <p>This is achieved as learners use digital devices with assistive technology to take notes and collect data on plant species, read and write passages, count and record tallies of scores of different games.</p>	<p>Suggested non-formal activity to support learning: Using digital devices with assistive technology, learners could note scores of different games being played in the field during games time.</p>

<p>Suggested Community Service Learning:</p> <p>Learners could visit a nearby farm, take notes, collect data of different livestock species in the farm, and present their findings to their classmates.</p>	<p>Suggested modes of assessment:</p> <p>Observation, oral questions, self-assessment, and peer assessment.</p>
<p>Suggested learning resources: Smart braille machine, orbit reader and refreshable braille displays among others.</p>	

Assessment Rubric

Exceeding Expectations	Meeting Expectations	Approaching Expectations	Below Expectations
<p>The learner is able to: Identify various digital devices with assistive technology for reading and writing braille, and can even identify some operational buttons.</p>	<p>The learner is able to: Identify various digital devices with assistive technology for reading and writing braille.</p>	<p>The learner is able to: Identify most of the digital devices with assistive technology for reading and writing braille presented.</p>	<p>The learner is able to: Identify few digital devices with assistive technology for reading and writing braille presented.</p>

State key features, as well as other features of various digital devices with assistive technology for reading and writing braille.	State key features of various digital devices with assistive technology for reading and writing braille.	State most of the key features of various digital devices with assistive technology for reading and writing braille.	State few features of various digital devices with assistive technology for reading and writing braille.
Use digital devices with assistive technology in reading and writing braille, taking notes and collecting data, and even operate other features to more functions.	Use digital devices with assistive technology in reading and writing braille, taking notes and collecting data.	Use most of the digital devices with assistive technology in reading and writing braille, taking notes and collecting data.	Use few digital devices with assistive technology for reading and writing braille, and also has difficulty in taking notes and collecting data.
Use digital devices with assistive technology to store, retrieve information, and even perform other	Use digital devices with assistive technology to store and retrieve information.	Use most of the digital devices with assistive technology to store information.	Use few digital devices with assistive technology to store information but even experiences

technical functions.			difficulty in retrieving it.
Take care of the digital devices with assistive technology and store them well after use by improvising storage materials.	Take care of the digital devices with assistive technology and store them well after use.	Take substantive care of the digital devices with assistive technology and stores them fairly well after use.	Take minimal care of the digital devices with assistive technology and somewhat stores them fairly well after use.

		<p>safely after use</p> <p>d) appreciate the use of tactile materials to enhance learning.</p>	<p>materials</p> <ul style="list-style-type: none"> • Store tactile materials carefully after use. 	
<p>Core Competencies to be developed:</p> <ul style="list-style-type: none"> • Communication and collaboration: This could be developed as learners work in pairs and in groups to trace and interpret the information on tactile graphics. • Critical thinking and problem solving: This could be developed as learners use their critical thinking and problem-solving skills to interpret and analyse information from tactile graphics. 				
<p>Link to Pertinent and Contemporary Issues:</p> <p>Personal hygiene: This could be achieved as learners observe safety measures while tracing and interpreting tactile materials.</p>		<p>Values:</p> <p>Responsibility: This is achieved as learners handle and store tactile graphics with care.</p>		

<p>Link to other learning areas: Mathematics, Social studies, Creative Arts, Music. This could be achieved as learners apply the acquired skills to trace and interpret tactile graphics in the aforementioned learning areas.</p>	<p>Suggested Community Service Learning activities: Learners could visit a nearby regular school during clubs time and interpret maps with their sighted colleagues. Learners with blindness could use tactile maps while their sighted counterparts use print maps.</p>
<p>Suggested non-formal activity to support learning: Learners could visit the school resource room and compete in tracing and interpreting information on tactile graphics.</p>	<p>Suggested assessment: Oral questions, self-assessment, and peer assessment.</p>
<p>Suggested learning resources: Tactile bar graphs, horizontal line, perpendicular lines, angles, shapes, crossword puzzles, tactile charts, maps among others.</p>	

Assessment Rubric

Exceeding Expectations	Meeting Expectations	Approaching Expectations	Below Expectations
The learner is able to: Identify and give further	The learner is able to: Identify tactile graphics.	The learner is able to: Identify most of the tactile	The learner is able to: Identify few tactile

information on the tactile graphics.		graphics presented.	graphics.
Trace and interpret tactile graphics revealing more information.	Trace and interpret tactile graphics presented.	Trace and interpret most of the tactile graphics.	Trace and interpret few tactile graphics.
Handle with care and store tactile materials safely by improvising storage materials.	Handle with care and store tactile materials safely.	Handle with care and store most of the tactile materials safely after use.	Handle a few tactile materials and stores them fairly well after use.

Strand	Sub-strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Question
2.0 Braille Reading Skills	2.2 Typographical features of braille text (5 lessons)	By the end of the sub-strand, the learner should be able to: a) identify the typographical features of braille text on a braille book b) locate the position of the typographical features on	Learners be guided to: <ul style="list-style-type: none"> • Identify the typographical features on braille text (edges of braille book, title page braille, page number, headings, first line, paragraph • Locate the position of the typographical features on braille text on a braille page • Read braille text using appropriate reading styles • Care for and store braille 	<ol style="list-style-type: none"> 1. How do you identify typographical features on a braille text? 2. Why are typographical features important in a braille text?

		braille text in a braille page c) read braille text on a braille book appropriately d) care for and store braille books safely after use e) appreciate the typographical features of the braille text	books safely <ul style="list-style-type: none"> • In pairs to practise identifying and locating typographical features on braille text 	
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Core Competencies to be developed:

- **Communication and collaboration:** This could be developed as learners work in pairs as they practise locating typographical features on braille text.
- **Self-efficacy:** this could be developed as learners apply the acquired knowledge and skills to produce their own

work.	
<p>Link to Pertinent and Contemporary Issues: Life skills - career guidance - This could be achieved as learners apply the skills learned to organize personal work in their daily lives.</p>	<p>Values: Unity: This is achieved as learners work together in harmony while locating typographical features on braille text.</p>
<p>Link to other learning areas: Mathematics, Social studies, Creative Arts, music. This could be achieved as learners apply the acquired skills to improve their reading skills in the aforementioned learning areas.</p>	<p>Suggested Community Service Learning activities: Learners could visit a nearby place of worship and read out to the congregation the brailled programs and other materials with typographical features.</p>
<p>Suggested non-formal activity to support learning: Learners could visit the school library to read braille textbooks with typographical features to improve their reading skills.</p>	<p>Suggested assessment: Oral questions, self-assessment, and peer assessment.</p>
<p>Suggested learning resources: Braille textbooks, brailled magazines, brailled articles, the Kenyan Constitution, and other brailled materials.</p>	

ASSESSMENT RUBRIC

Exceeding Expectations	Meeting Expectations	Approaching Expectations	Below Expectations
The learner is able to: Identify the typographical features of braille text citing the exact position.	The learner is able to: Identify the typographical features of braille text.	The learner is able to: Identify most of the typographical features of braille text.	The learner is able to: Identify a few of the typographical features of braille text.
Locate the position of the typographical features on braille text in a braille page and even explain their role.	Locate the position of the typographical features on braille text in a braille page.	Locate the position of most of the typographical features on braille text in a braille page.	Locate the position of few typographical features on braille text in a braille page.
Read braille text using appropriate reading styles and even improvise more styles that are appropriate.	Read braille text using appropriate reading styles.	Read braille text using appropriate reading styles but with low speed.	Read braille text using appropriate reading styles but with very low speed.

Care for and store braille books safely by improvising storage materials.	Care for and store braille books safely.	Exhibits some care in handling and storing braille books.	Exhibits very little care in handling and storing braille books.
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3.0 BRAILLE WRITING SKILLS

Strand	Sub-strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Question
3.0 Braille Writing Skills	3.1 Braille Work Layout (5 lessons)	By the end of the sub-strand, the learner should be able to: a) state features of an appropriate braille text layout b) write a braille text observing formatting features c) appreciate the use of different features in formatting braille text.	Learners be guided to: <ul style="list-style-type: none"> • State features of an appropriate braille text layout – (setting margins, centering headings, indicating page information, ending braille text, words - division at the end of the line, spacing braille text • Write braille text using features of formatting • In pairs, practise writing braille text using different features of formatting. 	<ol style="list-style-type: none"> 1. How do you format braille text? 2. Why is formatting braille text important?

<p>Core Competencies to be developed:</p> <ul style="list-style-type: none"> • Communication and collaboration: This could be developed as learners work in pairs and practise writing braille text using different features producing a well-formatted braille text. • Self-efficacy: This could be developed as learners apply the acquired knowledge and skills to produce their own work in an appropriate layout. 	
<p>Link to Pertinent and Contemporary Issues:</p> <p>Social - learner support programmes - career guidance - This could be achieved as learners apply the skills learned to organize personal work in their day-to-day life.</p>	<p>Values:</p> <p>Unity: This is achieved as learners work together in harmony, in writing braille text using different formatting features.</p>
<p>Link to other Learning areas: Mathematics, Social studies, Creative Arts, music. This could be achieved as learners apply the acquired skills to improve their reading skills in the aforementioned learning areas.</p>	<p>Suggested Community Service Learning activities:</p> <p>Learners could visit a local worship centre and work with worshippers to write in braille religious materials in conformity with the formatting rules then make a presentation before the congregation.</p>

<p>Suggested non-formal activity to support learning: Learners could assist their colleagues in lower grades to format their work after classes.</p>	<p>Suggested assessment: Oral questions, self-assessment, and peer assessment.</p>
<p>Suggested learning resources: braille textbooks, brailled magazines, brailled articles, the Kenyan Constitution, and other brailled materials</p>	

ASSESSMENT RUBRIC

Exceeding Expectations	Meeting Expectations	Approaching Expectations	Below Expectations
<p>The learner is able to: State features on an appropriate braille text layout.</p>	<p>The learner is able to: State features on an appropriate braille text layout.</p>	<p>The learner is able to: State most of the features on an appropriate braille text layout.</p>	<p>The learner is able to: State few features on an appropriate braille text layout.</p>
<p>Write a braille text observing formatting features, and even include other features not learnt.</p>	<p>Write a braille text observing formatting features.</p>	<p>Write a braille text observing most of the formatting features.</p>	<p>Write a braille text observing few formatting features.</p>

Strand	Sub-strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Question
3.0 Braille Writing Skills	3.2 Vertical Alignment of Numbers (4 lessons)	By the end of the sub-strand, the learner should be able to: a) identify vertically arranged numbers in braille b) read vertically arranged numbers in braille c) write numbers in a vertical arrangement in braille d) appreciate the importance of arranging numbers vertically in braille	Learners be guided to: <ul style="list-style-type: none"> • Identify vertically arranged numbers in braille (in addition, subtraction, multiplication, and division tasks) • Read vertically arranged numbers in braille • Write numbers in a vertical arrangement in braille • In groups, practise reading and writing vertically arranged numbers in braille. 	<ol style="list-style-type: none"> 1. How do you ensure the proper alignment of numbers when writing them in braille? 2. How do you locate an operation sign in vertically arranged numbers while performing an addition task?

<p>Core Competencies to be developed:</p> <ul style="list-style-type: none"> • Critical thinking and problem solving: This is developed as learners ensure that numbers are arranged correctly in vertical order. • Communication and collaboration: This could be developed as learners work together in groups to read and arrange numbers vertically in braille. 	
<p>Link to Pertinent and Contemporary Issues:</p> <p>Learner support programmes - career guidance: This could be developed as learners use the skills learnt to perform tasks involving addition, subtraction, multiplication, and division in day-to-day life.</p>	<p>Values:</p> <p>Unity: This is achieved as learners work together in harmony in arranging numbers vertically in braille.</p>
<p>Link to other learning areas: Mathematics - this could be achieved as learners apply the acquired skills to do sums.</p>	<p>Suggested Community Service Learning activities:</p> <p>Learners could visit a nearby wholesale shop with a shopping list, then inquire the cost of the items, arrange them vertically, add the total cost of items, and compare it with that of the shopkeeper.</p>
<p>Suggested non-formal activity to support learning:</p>	<p>Suggested assessment: Oral questions, self-assessment,</p>

Learners could go to the resource room and play a game of writing different numbers vertically in braille.	and peer assessment.
Suggested learning resources: Braille textbooks, braille machine, slate, and stylus,	

ASSESSMENT RUBRIC

Exceeding Expectations	Meeting Expectations	Approaching Expectations	Below Expectations
Learner is able to: Read vertically arranged numbers, including those with varying digits.	Learner is able to: Identify vertically arranged numbers in braille.	Learner is able to: Identify vertically arranged numbers in braille except for those, which are not evenly arranged.	Learner is able to: Identify only one-digit vertically arranged numbers in braille.
Read vertically arranged numbers in braille, including those with varying digits.	Read vertically arranged numbers in braille.	Read vertically arranged numbers in braille except for those that are not evenly arranged.	Read only one-digit vertically arranged numbers in braille.

Write numbers in a vertical arrangement in braille and come up with other relevant examples.	Write numbers in a vertical arrangement in braille.	Write most of the numbers in a vertical arrangement in braille.	Write few numbers in a vertical arrangement in braille.
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4.0 ENGLISH BRAILLE

Strand	Sub-strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Questions
4.0 English h Braille	4.1 Short-Forms (4 lessons)	By the end of the sub-strand, the learner should be able to: a) identify short forms representing words in braille. b) read words represented by short forms in braille, c) write short forms representing words in braille d) write in full words represented by the	Learners be guided to: <ul style="list-style-type: none"> • Identify short forms representing words in braille in categories of: <ul style="list-style-type: none"> - those beginning with alphabet letters (a-z) - those with group signs - those with word sign • Read words represented by short forms in various categories in braille. • Write short forms representing words in braille in various categories • Write in full words represented by the short forms in braille 	<ol style="list-style-type: none"> 1. Why are words abbreviated when written in braille? 2. How are abbreviated words written in braille in full?

		<p>short forms in braille.</p> <p>e) appreciate the use of short-forms reading and write writing braille.</p>	<ul style="list-style-type: none"> • Use digital devices with assistive technology to read and write words and sentences with short forms in braille • In pairs, participate in reading and writing sentences with short-forms of various categories in braille. 	
<p>Core Competencies to be developed:</p> <ul style="list-style-type: none"> • Digital literacy: This is developed as learners use digital devices with assistive technology to read and write braille text with shorts forms. • Self-efficacy: This is developed as learners apply the knowledge acquired to write their own braille texts with short forms and even spell out the words to master the spelling. 				
<p>Link to Pertinent and Contemporary Issues:</p> <p>Life skills - This is realized as learners use the skills learnt to communicate to others through writing braille text and keeping records.</p>		<p>Values:</p> <p>Responsibility – This is achieved as learner care for digital devices when using them to perform class tasks.</p> <p>Peace - Learners demonstrate peace as they work together harmoniously while reading and writing short-</p>		

	forms in braille.
<p>Links to other learning areas:</p> <p>English language, Mathematics, Science and technology, Creative arts: This could be achieved as learners use the knowledge acquired to perform tasks in the aforementioned learning areas.</p>	<p>Suggested community service learning:</p> <p>Learners could play a game with children in their neighborhood where one would mention a short form of a word, and the first person to mention the correct word is rewarded.</p>
<p>Suggested non-formal activity to support learning:</p> <p>Learners could prepare tactile charts with short forms together with the words in full spelling, and hang them at the far wall of their classroom for reference.</p>	<p>Suggested assessment:</p> <p>Oral questions, peer review, presentations, observation</p>
<p>Suggested learning resources:</p> <p>Braille machines, slate and stylus, braille cards, braille papers, glue, scissors, threads, cardboards.</p>	

ASSESSMENT RUBRIC

Exceeding Expectations	Meeting Expectations	Approaching Expectations	Below Expectations
The learner is able to: Identify short forms representing words in braille, and even spell out the full word.	The learner is able to: Identify short forms representing words in braille.	The learner is able to: Identify most short forms representing words in braille.	The learner is able to: Identify few short forms representing words in braille.
Read words written in short forms in braille with fluency.	Read words written in short forms in braille.	Read most of the short-forms in braille.	Read very few words abbreviated in braille.
Write short forms representing words in braille, and even include suffixes.	Write short forms representing words in braille.	Write most of the short forms representing words in braille.	Write few short forms representing words in braille.
Write in full, words represented by short forms in braille including those	Write in full, words represented by the short forms in braille.	Write in full, most of the words represented by the short forms in braille.	Write in full, few words represented by the short forms in braille.

with group signs, suffixes, and prefixes.			
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Strand	Sub-strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Question
4.0 English Braille	4.2 General Rules for the use of Contractions s (3 lessons)	By the end of the sub-strand, the learner should be able to: a) read and write a braille text, observing rules on braille contractions b) divide words appropriately at the end of a braille line	Learners be guided to: <ul style="list-style-type: none"> • Read and write braille texts, observing rules on braille contractions • Write words that may not be contracted • Divide words appropriately at the end of a braille line • In groups, practise reading and writing sentences and paragraphs while observing the general rules for the use of contractions • Use digital devices with assistive 	<ol style="list-style-type: none"> 1. How do you divide a word at the end of a braille line? 2. Why are some words not contracted in braille?

		c) appreciate the use of rules in reading and writing braille to ensure uniformity.	technology to read and write contracted braille text	
<p>Core Competencies to be developed:</p> <p>Digital literacy: This developed as learners use digital devices with assistive technology to read and write contracted braille text.</p> <p>Self-efficacy: This is developed as learners apply the skills learnt to write a composition, notes, and exercises in class.</p>				
<p>Link to Pertinent and Contemporary Issues:</p> <p>Life skills – career guidance - this is realized as learners use the skills learnt to communicate to each other through writing and keeping records.</p>			<p>Link to values:</p> <p>Respect – this is achieved as learners respect each other as they perform class tasks on word division, and other contractions.</p>	

<p>Links to other learning areas: English language, Mathematics: This could be achieved as learners demonstrate skills learnt to perform class tasks in the learning areas mentioned above.</p>	<p>Suggested community service learning: Learners could prepare tactile charts with braille contractions and short forms alongside print transcription, and present them to parents and visitors during school functions.</p>
<p>Suggested non-formal activity to support learning: Learners could prepare tactile charts with key rules on contractions and hang them at the back of their classroom for reference.</p>	<p>Suggested assessment: Oral questions, peer review, presentations, observation</p>
<p>Suggested learning resources: Braille machines, slate and stylus, braille cards, braille papers, glue, scissors, threads.</p>	

Assessment Rubric

Exceeding Expectations	Meeting Expectations	Approaching Expectations	Below Expectations
The learner is able to: Read and write braille text, observing rules on braille contractions and even state the rules.	The learner is able to: Read and write braille text observing rules on braille contractions.	The learner is able to: Observe most of the rules on braille contractions while reading and writing braille text.	The learner is able to: Observe few rules on braille contractions while reading and writing braille text.
Divide words appropriately at the end of braille line and explain the rules of word division.	Divide words appropriately at the end of braille line.	Divide most of the words appropriately at the end of braille line.	Divide few words appropriately at the end of braille line.

Strand	Sub-strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Questions
4.0 English Braille	4.3 Punctuation Signs and Indicators (2 lessons)	By the end of the sub-strand, the learner should be able to: a) identify punctuation signs and indicators by naming the specific dots that form them b) mention punctuation marks while reading sentences in braille c) write punctuation marks in braille d) write abbreviations	The learner be guided to: <ul style="list-style-type: none"> • Identify punctuation and indicator signs by naming their specific dots oblique stroke, compound quote signs, square bracket signs, ellipsis, long dash, letter sign – used with abbreviations • Read sentences while taking note of punctuation marks • Write punctuation signs in sentences • In pairs, practise writing punctuation signs in sentences in 	1. How do you differentiate between the double quotation mark and single quotation mark in braille? 2. How do you

		<p>using the letter sign in braille</p> <p>e) appreciate the use of punctuation signs and indicators in braille texts for effective communication.</p>	<p>braille</p> <ul style="list-style-type: none"> • Identify the letter sign in abbreviations in braille • In groups, take turns to dictate and write sentences using punctuation signs and abbreviations 	<p>differentiate between words and abbreviations in braille?</p>
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<p>Core Competencies to be developed:</p> <ul style="list-style-type: none"> • Communication and Collaboration: This could be developed through learners working in pairs and groups as they take turns to dictate, read, and write sentences with punctuations signs and abbreviation. • Learning to learn: This is developed as learners look for more abbreviations and write them down using letter sign. 	
<p>Link to Pertinent and Contemporary Issues:</p> <p>Social economic- Social cohesion: This is achieved as learners work together in harmony as they read and write braille text with punctuation marks.</p>	<p>Values:</p> <p>Love- as learners help each other while performing tasks involving punctuation signs and abbreviations.</p>
<p>Link o other learning areas: English language, Social studies, Creative arts, Kiswahili language. This could be achieved as learners use punctuation marks and abbreviations when taking notes and performing other tasks in the above-mentioned learning areas.</p>	<p>Suggested Community Service Learning: Learners could visit a local older person to share a story with them. Learner could then write the story in braille, taking note of the punctuation marks and abbreviations, and then read to their siblings at home.</p>

<p>Suggested non-formal activity to support learning:</p> <p>Learners could go to the resource room, compose and write a well-punctuated poem in braille, then read it to other learners during the entertainment hour.</p>	<p>Suggested assessment:</p> <p>Oral questions, written questions, observation.</p>
<p>Suggested learning resources:</p> <p>Braille machines, braille papers, slate and stylus, braille books</p>	

ASSESSMENT RUBRIC

Exceeding Expectations	Meeting Expectations	Approaching Expectations	Below Expectations
<p>The learner is able to: Identify punctuation signs and indicators explaining how to they are used.</p>	<p>The learner is able to: Identify punctuation signs and indicators in braille.</p>	<p>The learner is able to: Identify most of the punctuation signs in braille.</p>	<p>The learner is able to: Identify few punctuation signs in braille.</p>
<p>Mention punctuation marks while reading</p>	<p>Mention punctuation marks while reading</p>	<p>Mention most of the punctuation marks while</p>	<p>Mention few punctuation marks while reading</p>

sentences in braille, and even include intonation.	sentences in braille.	reading sentences in braille.	sentences in braille.
Write punctuation marks in braille, and even write a well-punctuated braille text. Write abbreviations using the letter sign in braille, citing examples that are more relevant.	Write punctuation marks in braille. Write abbreviations using the letter sign in braille.	Write most of the punctuation marks in braille. Write most of the abbreviations using the letter sign in braille.	Write few punctuation marks in braille. Write few abbreviations using the letter sign in braille.

5.0 BRELI YA KISWAHILI

Mada	Mada Ndogo	Matarajio Maalum	Mapendekezo ya Shughuli za Somo	Maswali Dadisi
5.0 Breli ya Kiswahili	5.1 Vifupisho vya Maneno ya Kiswahili (Vipindi 4)	Kufikia mwisho wa mada ndogo, mwanafunzi aweze: a) kutambua vifupisho vya maneno ya Kiswahili katika breli b) kusoma sentensi zilizo na vifupisho vya maneno ya Kiswahili katika breli c) kuandika sentensi zilizo na vifupisho	Wanafunzi waweze kuelekezwa: <ul style="list-style-type: none"> • kutambua vifupisho vya maneno ya Kiswahili katika breli, katika vikundi vifuatavyo: <ul style="list-style-type: none"> - vifupisho vinavyoanza kwa herufi a - z - vifupisho vinavyohusisha mikato ya herufi • kusoma sentensi zilizo na vifupisho vya maneno ya Kiswahili katika breli • kuandika sentensi zilizo na vifupisho vya maneno ya Kiswahili katika breli • kutumia vifaa vya kidijitali kusoma 	1. Kwanini maneno hufupishwa katika breli ya Kiswahili? 2. Ni vipi utaandika maneno ya vifupisho kwa herufi

		<p>vya maneno katika breli</p> <p>d) Kudhamini matumizi ya vifupisho vya maneno ya Kiswahili katika kusoma na kuandika breli.</p>	<p>na kuandika sentensi zilizo na vifupisho vya maneno ya Kiswahili katika breli</p> <ul style="list-style-type: none"> wanafunzi wawili wawili wanaweza kusoma na kuandika sentensi zilizo na vifupisho vya maneno ya Kiswahili katika breli. 	<p>kamili?</p>
<p>Umilisi wa kimsingi unaokuzwa:</p> <ul style="list-style-type: none"> Mawasiliano na ushirikiano: Hudhihirika wakati wanafunzi wanapojiunga kwa vikundi kusoma na kuandika sentensi zilizo na vifupisho vya maneno ya Kiswahili katika breli. Ufanisi wa kibinafsi: Hukuzwa wakati wanafunzi wanapotumia mbinu walizojifunza katika kusoma na kuandika nakala mbalimbali za Kiswahili. 				
<p>Uhusiano na masuala mtambuko:</p> <p>Utangamano wa kijamii - hukuzwa wakati wanafunzi</p>			<p>Uhusiano wa maadili:</p> <p>Umoja - hudhihirika wakati wanafunzi wanapojifunza</p>	

<p>wanaposoma pamoja kwa vikundi wakifanya kazi pamoja.</p>	<p>pamoja kimakundi au wawili wawili wakiandika sentensi zilizo na vifupisho vya maneno ya Kiswahili.</p>
<p>Uhusiano na masomo mengine: Kiswahili - wakati wanafunzi wanaposoma na kuandika sentensi zilizo na vifupisho vya maneno ya Kiswahili.</p>	<p>Mapendekezo ya shughuli za huduma za kijamii zinazochangia ujifunzaji: Wanafunzi wanaweza kuungana na wenzao mtaani na kucheza mchezo wa kuandika maneno. Mmoja wao ataje kifupisho cha neno kisha wenzao waliseme hilo neno huku wakiliendeleza. Atakayefanya hivyo wa kwanza atatuzwa.</p>
<p>Shughuli za kila siku zisizoratibiwa zinazochangia ujifunzaji: Wanafunzi wanaweza kutembelea maabara ya kompyuta ili watumie vifaa vya kidijitali kuandika hadithi fupi wakitumia maneno yaliofupishwa katika breli.</p>	<p>Mapendekezo ya taathmini: Kujibu maswali kwa sauti, kazi ya kusoma na kuandika.</p>
<p>Nyenzo: Mashine za breli, karatasi za breli, vitabu vya breli, vifaa vya kidijitali.</p>	

KIWANGO CHA TATHMINI

Anazidi Matarajio	Anatimiza Matarajio	Anakaribia Matarajio	Chini ya Matarajio
Mwanafunzi anaweza: Kutambua vifupisho vya maneno ya Kiswahili katika breli na pia kutaja herufi kamili za maneno hayo.	Mwanafunzi anaweza: Kutambua vifupisho vya maneno ya Kiswahili katika breli.	Mwanafunzi anaweza: Kutambua baadhi ya vifupisho vya maneno ya Kiswahili katika breli.	Mwanafunzi anaweza: Kutambua vifupisho vichache vya maneno ya Kiswahili katika breli.
Kusoma sentensi zilizo na vifupisho vya maneno ya Kiswahili katika breli kwa ufasaha.	Kusoma sentensi zilizo na vifupisho vya maneno ya Kiswahili katika breli.	Kusoma baadhi ya sentensi zilizo na vifupisho vya maneno ya Kiswahili katika breli.	Kusoma sentensi chache zilizo na vifupisho vya maneno ya Kiswahili katika breli.
Kuandika sentensi zilizo na vifupisho vya maneno ya Kiswahili katika breli na pia kuyaandika hayo maneno katika	Kuandika sentensi zilizo na vifupisho vya maneno ya Kiswahili katika breli.	Kuandika zaidi ya theluthi mbili ya sentensi zilizo na vifupisho vya maneno ya Kiswahili katika breli.	Kuandika chini ya theluthi moja ya sentensi zilizo na vifupisho vya maneno ya Kiswahili katika breli.

herufi kamili.			
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Mada	Mada Ndogo	Matarajio Maalum	Mapendekezo ya Shughuli za Somo	Maswali Dadisi
<p>5.0 Breli ya Kiswahili</p>	<p>5.2 Sheria Zinazozingatiwa katika Matumizi ya Mikato ya Breli ya Kiswahili (Vipindi 2)</p>	<p>Kufikia mwisho wa mada ndogo, mwanafunzi aweze:</p> <ul style="list-style-type: none"> • kusoma na kuandika nakala akizingatia sheria za mikato ya breli ya Kiswahili • kugawa maneno ya Kiswahili mwishoni mwa laini • kudhamini sheria zinazozingatiwa katika matumizi ya 	<p>Wanafunzi wanaweza kuelekezwa:</p> <ul style="list-style-type: none"> • kusoma na kuandika nakala ya breli wakizingatia sheria za mikato ya breli ya Kiswahili • jinsi ya kugawa maneno ya Kiswahili mwishoni mwa laini • kutumia vifaa vya kidijitali kusoma na kuandika hadithi fupi wakizingatia sheria za mikato ya breli ya Kiswahili 	<ol style="list-style-type: none"> 1. Ni vipi utagawa maneno ya Kiswahili mwishoni mwa laini? 2. Ni kwanini maneno fulani hayastahili kufupishwa katika breli ya

		mikato ya Kiswahili.	<ul style="list-style-type: none"> kwa vikundi wanafunzi wajaadili sheria zinazozingatiwa katika matumizi ya mikato ya Kiswahili. 	Kiswahili?
<p>Umilisi wa kimsingi unaokuzwa:</p> <ul style="list-style-type: none"> Teknolojia ya kidijitali: hukuzwa wakati wanafunzi wanapotumia vifaa vya kidijitali katika kusoma na kuandika makala mbalimbali ya Kiswahili wakizingatia sheria za mikato ya breli ya Kiswahili. Mawasiliano na ushirikiano – hukuzwa wakati wanafunzi wanapojadiliana kwenye vikundi kuhusu sheria zinazozingatiwa katika matumizi ya mikato ya Kiswahili. Ufanisi wa kibinafsi: hukuzwa wakati wanafunzi wanaposoma na kuandika makala ya breli huku wakizingatia sheria za mikato ya breli ya Kiswahili kikamilifu. 				
<p>Uhusiano na masuala mtambuko:</p> <p>Utangamano wa kijamii - hukuzwa wakati wanafunzi wanapojadiliana pamoja kwa vikundi kuhusu maneno yasiofupishwa katika breli ya Kiswahili.</p>		<p>Maadili:</p> <p>Heshima- hudhihirika wakati wanafunzi wanapotoa nafasi kwa wenzao kuchangia mada husika.</p>		

<p>Uhusiano na masomo mengine:</p> <p>Kiswahili - wakati wanafunzi wanaposoma na kuandika sentensi za Kiswahili wakizingatia sheria za mikato husika.</p>	<p>Mapendekezo ya shughuli za huduma za kijamii zinazochangia ujifunzaji:</p> <p>Wanafunzi wanaweza kutembelea chumba cha habari kilichoko katika kaunti yao, kisha waandike habari kwa mukhtasari wakizingatia sheria za mikato ya Kiswahili. Kisha wasome habari hizi.</p>
<p>Shughuli za kila siku zisizoratibiwa zinazochangia ujifunzaji:</p> <p>Wanafunzi wanaweza kutembelea maktaba na kusoma vitabu vya breli ili kujifahamisha zaidi na sheria za mikato ya Kiswahili.</p>	<p>Mapendekezo ya taathmini:</p> <p>Kujibu maswali kwa sauti, kazi ya kusoma na kuandika.</p>
<p>Nyenzo: Mashine za breli, karatasi za breli, vitabu vya breli, vifaa vya kidijitali.</p>	

KIWANGO CHA TATHMINI

Anazidi Matarajio	Anatimiza Matarajio	Anakaribia Matarajio	Chini ya Matarajio
Mwanafunzi anaweza: Kusoma na kuandika nakala akizingatia sheria za mikato ya breli ya Kiswahili na hata kuzieleza sharia hizo.	Mwanafunzi anaweza: Kusoma na kuandika nakala akizingatia sheria za mikato ya breli ya Kiswahili.	Mwanafunzi anaweza: Zingatia baadhi ya sheria za mikato ya breli ya Kiswahili wakati anaposoma na kuandika nakala za breli.	Mwanafunzi anaweza: Zingatia sheria chache za mikato ya breli ya Kiswahili wakati anaposoma na kuandika nakala za breli.
Kugawa maneno ya Kiswahili mwishoni mwa laini kisha kueleza sheria za kugawa maneno.	Kugawa maneno ya Kiswahili mwishoni mwa laini.	Kugawa baadhi ya maneno ya Kiswahili mwishoni mwa laini.	Kugawa maneno machache ya Kiswahili mwishoni mwa laini.

Mada	Mada ndogo	Matarajio Maalum	Mapendekezo ya Shughuli za Somo	Maswali Dadisi
<p>5.0 Breli ya Kiswahili</p>	<p>5.3 Alama Za Kuakifisha (Vipindi 2)</p>	<p>Kufikia mwisho wa mada ndogo, mwanafunzi aweze:</p> <p>a) kutambua alama za kuakifisha katika breli kwa kutaja nukta nundu zinazounda alama hizo</p> <p>b) kutaja alama za kuakifisha wakati anaposoma sentensi kwa breli</p>	<p>Wanafunzi waweze:</p> <ul style="list-style-type: none"> • Kuelekezwa kutambua nukta nundu zinazounda alama za kuakifisha husika katika breli, kistari kirefu, alama ya mshazari, mabano mraba, na alama ya usemi ndani ya usemi. • Kutaja alama za kuakifisha wakati wanaposoma sentensi • Kuelekezwa kuandika alama za kuakifisha katika sentensi • Kwa vikundi wanafunzi wanaweza kutambua na kuandika 	<ol style="list-style-type: none"> 1. Alama za dukuduku huandikwa vipi kwa breli? 2. Alama ya kufungua usemi inatofautia na vipi na alama ya kufungua usemi

		<p>c) kuandika alama za kuakifisha katika sentensi</p> <p>d) kudhamini matumizi ya alama za kuakifisha kusoma na kuandika breli.</p>	<p>alama za kuakifisha katika sentensi ili kupata uzoefu na kasi inayohitajika katika kusoma na kuandika</p>	<p>ndani ya usemi?</p>
<p>Umilisi wa kimsingi unaokuzwa:</p> <ul style="list-style-type: none"> • Mawasiliano na ushirikiano: Hukuzwa wakati wanafunzi wanapofanyakazi pamoja kwa vikundi wakiandika na kusoma kazi mbalimbali zenye alama zakuakifisha husika. • Teknolojia ya kidijitali: Hukuzwa wakati wanafunzi wanapotumia vifaa vya kidijitali kwa kusoma na kuandika nakala mbalimbali za Kiswahili zinazohuzisha alama za kuakifisha. 				
<p>Uhusiano na masuala mtambuko:</p> <p>Utangamano wa kijamii – Hudhihirika wakati wanafunzi wa jamii mbalimbali wanapokaa pamoja na kufanya kazi</p>		<p>Maadili: Upendo - hudhihirika wakati wanafunzi wanaposaidiana wakifanya kazi kwa vikundi.</p>		

pamoja kwa ushirikiano.	
<p>Uhusiano na masomo mengine:</p> <p>Kiswahili, Kingereza: hudhahirika wakati wanafunzi wanaposoma na kuandika sentensi ambazo zinahusisha alama za kuakifisha.</p>	<p>Mapendekezo ya shughuli za huduma za kijamii zinazochangia ujifunzaji:</p> <p>Wanafunzi wanaweza kumtembelea ajuza aliye karibu na wao, kisha awasimulia hadithi huku wakiiandika kwa kuzingatia alama za kuakifisha, halafu wakawasomee wenzao.</p>
<p>Shughuli za kila siku zisizoratibiwa zinazochangia ujifunzaji:</p> <p>Wanafunzi wanaweza kutembelea maktaba ya shule. Kisha wasome vitabu vya breli ili wajifahamishe zaidi kuhusu alama za kuakifisha.</p>	<p>Mapendekezo ya tathmini:</p> <p>Kujibu maswali kwa sauti, kusoma na kuandika.</p>
<p>Nyenzo: Mashine za breli, karatasi za breli, kadi za breli.</p>	

KIWANGO CHA TATHMINI

Anazidi Matarajio	Anatimiza Matarajio	Anakaribia Matarajio	Chini Ya Matarajio
Mwanafunzi anaweza: Kutambua alama za kuakifisha katika breli kwa kutaja nukta nundu zinazounda alama hizo na hata kueleza jinsi zinvyotumika.	Mwanafunzi anaweza: Kutambua alama za kuakifisha katika breli kwa kutaja nukta nundu zinazounda alama hizo.	Mwanafunzi anaweza: Kutambua baadhi ya alama za kuakifisha katika breli kwa kutaja nukta nundu zinazounda alama hizo.	Mwanafunzi anaweza: Kutambua alama chache za kuakifisha katika breli.
Kutaja alama za kuakifisha wakati anaposoma sentensi kwa ufasaha.	Kutaja alama za kuakifisha wakati anaposoma sentensi kwa breli.	Kutaja baadhi ya alama za kuakifisha wakati anaposoma sentensi kwa breli.	Kutaja alama chache za kuakifisha anaposoma sentensi kwa breli.
Kuandika alama za kuakifisha katika sentensi na pia nakala ilioakifishwa kikamilifu.	Kuandika alama za kuakifisha katika sentensi.	Kuandika baadhi ya alama za kuakifisha katika sentensi.	Kuandika alama chache za kuakifisha katika sentensi.

6.0 MATHEMATICS BRAILLE NOTATION

Strand	Sub-strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Questions
6.0 Mathematics Braille Notation	6.1 Numbers in Braille (2 lessons)	By the end of the sub-strand, the learner should be able to: a) identify numbers ranging from 100,001 to 1,000,000 by naming dots that form them b) read numbers ranging from 100,001 to 1,000,000 in braille c) write numbers ranging from 100,001 to 1,000,000 in braille	Learners be guided to: <ul style="list-style-type: none"> • Identify numbers ranging from 100,001 to 1,000,000 • read numbers ranging from 100,001 to 1,000,000 in braille • Write numbers ranging from 100,001 to 1,000,000 in braille • on how to break numbers at the end of braille line • Practise writing mathematics statements using numbers ranging from 100,001 to 1,000,000 in 	<ol style="list-style-type: none"> 1. How do you break numbers at the end of a braille line? 2. How do you write numbers ranging

		<p>d) read and write simple mathematics statements involving numbers ranging from 100,001 to 1,000,000 in braille</p> <p>e) appreciate reading and writing numbers in braille.</p>	<p>braille using braille papers or digital devices with assistive technology</p> <ul style="list-style-type: none"> • In pairs or groups, practise reading and writing numbers and mathematics statements in braille. 	<p>from 100,001 to 1,000,000 in braille?</p>
<p>Core Competencies to be developed:</p> <ul style="list-style-type: none"> • Communication and collaboration: This could be developed as learners share their experiences in class and pairs as they work tasks involving numbers. • Self-efficacy: This is developed as learners acquire self-confidence in tackling issues involving numbers in life situations. 				
<p>Link to Pertinent and Contemporary Issues:</p> <p>Life skills- career guidance: This could be achieved as learners apply skills acquired to perform tasks involving</p>			<p>Values:</p> <p>Respect- Learners demonstrate respect as they exercise patience, tolerance and allow turn taking</p>	

numbers in their day-to-day activities.	while performing tasks involving numbers.
<p>Link to other learning areas:</p> <p>Mathematics, science and technology, social studies, home science: this could be realized as learners apply the learnt skills to solve issues involving numbers.</p>	<p>Suggested community service learning:</p> <p>At home, together with children in your neighborhood, take turns to create an imaginary list of bank customers and the amount in their bank accounts. Write it in braille and present it to your classmates.</p>
<p>Suggested non-formal activity to support learning:</p> <p>At the resource, learners could take turns to play a game of numbers where one team reads the numbers for the other team to write.</p>	<p>Suggested assessment:</p> <p>Oral questions and written questions, self-assessment, observation.</p>
<p>Suggested learning resources: Braille machines, braille number cards, braille papers, slate and stylus.</p>	

ASSESSMENT RUBRIC

Exceeding Expectations	Meeting Expectations	Approaching Expectations	Below Expectations
The learner is able to: Identify numbers ranging from 100,001 to 1,000,000 and beyond.	The learner is able to: Identify numbers ranging from 100,001 to 1,000,000.	The learner is able to: Identify most of the numbers ranging from 100,001 to 1,000,000.	The learner is able to: Identify few numbers ranging from 100,001 to 1,000,000.
Read numbers ranging from 100,001 to 1,000,000 and beyond in braille.	Read numbers ranging from 100,001 to 1,000,000 in braille.	Read more than two thirds of the numbers ranging from 100,001 to 1,000,000 in braille.	Read less than one third of the numbers ranging from 100,001 to 1,000,000 in braille.
Write numbers ranging from 100,001 to 1,000,000 and beyond in braille.	Write numbers ranging from 100,001 to 1,000,000 in braille.	Write more than two thirds of the numbers ranging from 100,001 to 1,000,000 in braille.	Write less than one third of the numbers ranging from 100,001 to 1,000,000 in braille.
Read and write mathematics statements involving numbers	Read and write mathematics statements involving	Read and write most of the mathematics statements involving numbers ranging	Read and write few mathematics statements involving numbers ranging

ranging from 100,001 to 1,000,000 and beyond in braille.	numbers ranging from 100,001 to 1,000,000 in braille.	from 100,001 to 1,000,000 in braille.	from 100,001 to 1,000,000 in braille.
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Strand	Sub-strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Questions
6.0 Mathematics Braille Notation	6.2 Fractions (2 lessons)	By the end of the sub-strand, the learner should be able to: a) identify simple and mixed fractions in braille b) read simple and mixed fractions in braille c) write simple and mixed fractions in braille d) appreciate reading and writing simple and	Learners be guided to: <ul style="list-style-type: none"> • Identify simple and mixed fractions (with denominator up to 100) • Differentiate simple fractions from mixed fractions in braille • Read simple and mixed fractions in braille • Write simple and mixed fractions in braille • In pairs, take turns to read and write simple and mixed fractions in braille 	<ol style="list-style-type: none"> 1. Why do you use a lower sign when writing fractions? 2. How do you write denominators involving two to three digits

		mixed fractions in braille.	<ul style="list-style-type: none"> In groups, practise reading and writing mathematics statements involving simple and mixed fractions in braille. 	in braille?
<p>Core competencies to be developed:</p> <ul style="list-style-type: none"> Self-efficacy: This could be developed as learners use the skills learnt to perform tasks involving numbers. Communication and collaboration: This is developed as the learners present their input in differentiating simple fractions from mixed fractions. 				
<p>Link to Pertinent and Contemporary Issues:</p> <p>Life skills: This could be promoted as learners apply skills acquired to perform tasks involving fractions in real-life situations.</p>		<p>Values:</p> <p>Respect – this is achieved as learners accommodate each other’s views as they perform the task of differentiating simple from mixed fractions.</p>		
<p>Link to other learning areas:</p> <p>Mathematics: as learners apply the skills learnt to perform tasks involving fractions in braille.</p>		<p>Suggested community service learning:</p> <p>Learners could visit a nearby local market, buy fruits, and then cut them into different equal portions. They could then take different numbers of portions and then</p>		

	prepare a list of the participants and the portions they have received in braille.
<p>Suggested non-formal activity to support learning:</p> <p>Learners could go to the school canteen and buy a sliced loaf of bread then share it unequally. They then write in braille their portions in relation to the number of slices in the whole loaf.</p>	<p>Suggested mode of assessment:</p> <p>Oral questions, written questions, and presentations peer assessment.</p>
<p>Suggested learning Resources: Braille machines, slate and stylus, braille cards, fruits.</p>	

ASSESSMENT RUBRIC

Exceeding Expectations	Meeting Expectations	Approaching Expectations	Below Expectations
The learner is able to: Identify simple and mixed fractions with denominators up to 100 and beyond.	The learner is able to: Identify simple and mixed fractions with denominators up to 100.	The learner is able to: Identify most of simple and mixed fractions with denominators up to 100.	The learner is able to: Identify few simple and mixed fractions with denominators up to 100.
Read simple and mixed	Read simple and mixed	Read most of the simple and	Read few simple and

fractions in braille with denominators up to 100 and beyond.	fractions with denominators up to 100 in braille.	mixed fractions with denominators up to 100 in braille.	mixed fractions with denominators up to 100 in braille.
Write simple and mixed fractions in braille with denominators up to 100 and beyond.	Write simple and mixed fractions with denominators up to 100 in braille.	Write most of the simple and mixed fractions with denominators up to 100 in braille.	Write few simple and mixed fractions with denominators up to 100 in braille.

Strand	Sub-strand	Specific Learning Outcomes	Suggested Learning Experiences	Key inquiry questions
6.0 Mathematics Braille Notation	6.3 Decimals (2 lessons)	By the end of the sub-strand, the learner should be able to: a) read decimal numbers in braille b) write decimal numbers in braille c) write numbers with the percentage sign in braille d) appreciate the use of decimals and the percentage sign in	Learners be guided to: <ul style="list-style-type: none"> • Read decimal numbers in braille (up to 4 decimal places) • Write decimal numbers in braille • Identify the percentage sign by naming the dots forming it • Write the percentage sign in braille • Write numbers with the percentage sign in braille • Use digital devices with assistive technology to read and write decimal and percentages in 	<ol style="list-style-type: none"> 1. How do you represent the percentage sign in braille? 2. How do you write numbers with percentages in

		braille.	braille <ul style="list-style-type: none"> In pairs or groups, practise reading and writing mathematical statements involving decimal numbers and percentages in braille. 	braille?
<p>Core competencies to be developed:</p> <p>Digital literacy: This is developed as learners use digital devices with assistive technology to read and write decimal numbers and percentages in braille.</p> <p>Communication and collaboration: This is developed as learners work in pairs to read and write mathematical statements involving decimal numbers and percentage in braille.</p>				
<p>Link to Pertinent and Contemporary Issues:</p> <p>Learner support programmes- games and sports: This is developed as learners use the concept of decimals in situations involving measurements such as recording scores.</p>			<p>Values:</p> <p>Social - this is achieved as learners fairly share the available digital devices with assistive technology as they perform the tasks given.</p>	

<p>Link to other learning areas:</p> <p>Mathematics, science and technology, Social studies: This is realized as learners apply the skills learnt to carry out tasks in the aforementioned learning areas.</p>	<p>Suggested community service learning:</p> <p>Learners could visit a nearby hospital, and then calibrate a weighing machine and stadiometers in braille alongside print using adhesive braille paper.</p>
<p>Suggested non-formal activity to support learning:</p> <p>Learners could go to the field and perform high jump activities as they record the height attained by each participant in braille.</p>	<p>Suggested assessment:</p> <p>Oral questions, written questions, Observations, presentations, peer assessment</p>
<p>Suggested learning resources:</p> <p>Braille machines, slate and stylus, braille number cards, weighing machine and stadiometers.</p>	

ASSESSMENT RUBRIC

Exceeding Expectations	Meeting Expectations	Approaching Expectations	Below Expectations
<p>The learner is able to: Read numbers with up to 4 decimal places and beyond,</p>	<p>The learner is able to: Read numbers with up to 4 decimal places, in braille.</p>	<p>The learner is able to: Read numbers with up to 3 decimal places, in braille.</p>	<p>The learner is able to: Read numbers with up to 1 decimal place, in</p>

in braille.			braille.
Read numbers with up to 4 decimal places and beyond, in braille.	Write numbers with up to 4 decimal places in braille.	Write numbers with up to 3 decimal places in braille.	Write numbers with up to 1 decimal place in braille.
Write numbers with the percentage sign in braille, even in a mathematical statement.	Write numbers with the percentage sign in braille.	Write most of the numbers with the percentage sign in braille.	Write few numbers with the percentage sign in braille.

Strand	Sub-strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Questions
6.0 Mathematics Braille Notation	6.4 Units of Measurement (4 lessons)	By the end of the sub-strand, the learner should be able to: a) identify braille signs for units of measurement b) read units of measurements with numbers in braille c) write units of measurement with numbers in braille d) read and write	Learners be guided to: <ul style="list-style-type: none"> • Identify the signs for units of measurement that is; length – mm, cm, m km, $\frac{1}{2}$ (L + W) and their respective square units cm^2, m^2, km^2 - volume – mm^3, cm^3, m^3 - weight – g, kg, t. - time – hours, minutes, sec a.m., p.m. 24 hour clock - digital & analogue - degree sign 	1. How do you identify units of measurements in braille? 2. How do you write units of measurement with numbers in braille?

		<p>mathematical statements with units of measurement in braille</p> <p>e) appreciate the role of braille signs for units of measurement in reading and writing braille work.</p>	<ul style="list-style-type: none"> • read units of measurement with numbers in braille on a work card • Write units of measurement with numbers in braille • Use digital devices with assistive technology to read and write units of measurement and numbers in braille. • In pairs or groups, learners read and write mathematical statements with units of measurement ranging from 1kg to 1000kg (t). 	
Core Competencies to be developed:				

<p>Digital literacy: This is developed as learners use digital devices with assistive technology in reading and writing units of measurement with numbers in braille.</p> <p>Communication and collaboration: This is developed as learners work in pairs, groups, while reading, and writing units of measurement in braille.</p>	
<p>Link to Pertinent and Contemporary Issues:</p> <p>Life skills: This is achieved as learners apply the acquired skills in their day-to-day activities, which require measuring, labeling, and recording in braille.</p>	<p>Values:</p> <p>Unity: This is developed as learners work together in pairs or groups while performing tasks related to units of measurement.</p>
<p>Link to other learning areas:</p> <p>Mathematics, Social studies: This is realized as learners apply the learnt skills to perform tasks in the aforementioned learning areas.</p>	<p>Suggested Community Service Learning:</p> <p>During athletic competitions, learners could record in braille the different sporting events and include the time of the events, type of event using units of measurement such as 100m races, and write the results in units of measurement such as 1.2 m for high jump in braille.</p>
<p>Non-formal activity to support learning.</p> <p>Learners could visit a school healthy facility to assist in taking their peers' weight, height, temperature, and</p>	<p>Suggested assessment:</p> <p>Oral questions and written questions, self-assessment, peer assessment</p>

pulse rate of then write them in braille.	
<p>Suggested learning resources:</p> <p>Braille machines, braille papers, slate and stylus, weighing machines, braille rulers and tape measures, tactile stopwatch, thermometers, stadiometer, digital devices with assistive technology, heart rate monitor, and measuring cylinders calibrated in braille.</p>	

ASSESSMENT RUBRIC

Exceeding Expectations	Meeting Expectations	Approaching Expectations	Below Expectations
The learner is able to: Identify signs for units of measurement in braille even when they are among numbers.	The learner is able to: Identify signs for units of measurement in braille.	The learner is able to: Identify signs for units of measurement in braille with support.	The learner is able to: Identify few signs for units of measurement in braille with support.
Read units of measurement with numbers in braille even	Read units of measurement with numbers in braille.	Read most of the signs of units of measurement with numbers in braille.	Read few signs of units of measurement with numbers in braille.

when they are combined with large numbers.			
Write signs for units of measurement with numbers and even state the rules binding their use with numbers.	Write units of measurement with numbers in braille.	Write most of the signs of units of measurement with numbers in braille.	Write few signs of units of measurement with numbers in braille.

Strand	Sub-strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Questions
6.0 Mathematics Braille Notation	6.5 Geometrical Signs In Braille (2 lessons)	By the end of the sub-strand, the learner should be able to: a) identify geometrical signs in braille b) read geometrical signs in angles and lines c) write geometrical signs in angles and lines d) appreciate the use	Learners be guided to: <ul style="list-style-type: none"> • Identify geometrical signs in braille (angle sign, degree sign, parallel, perpendicular line sign, lines) • Geometrical signs in angles and lines • Write geometrical signs in mathematical statements • In pairs, practise reading and writing geometrical signs in mathematical statements. 	<ol style="list-style-type: none"> 1. How do you write the angle sign in braille 2. How do you indicate a perpendicular line in braille?

		of geometrical signs in mathematics braille.		
<p>Competencies to be Developed:</p> <ul style="list-style-type: none"> • Self-efficacy: This is developed as learners use geometrical braille signs to perform tasks related to geometrical signs. • Critical thinking and problem solving: This could be developed as learners distinguish the geometrical signs from each other, from the lines, and angles as they perform mathematical tasks. 				
<p>Link to Pertinent and Contemporary Issues:</p> <p>Life skills: This is achieved as learners use the skills learnt in their day-to-day activities.</p>		<p>Values:</p> <p>Unity: This is achieved as learners work together harmoniously.</p>		
<p>Link to other Learning Areas:</p> <p>Mathematics-this is achieved as learners apply the skills learnt in performing tasks involving lines and angles</p>		<p>Suggested Assessment:</p> <p>Observation, peer assessment, self-assessment and oral questions.</p>		

<p>Suggested non-formal Activity that Supports Learning: Learners could go to the library and identify mathematics books with angles and lines and then record the signs in braille.</p>	<p>Suggested Community Service Learning: Learners could prepare a well-labeled tactile chart involving different lines and angles and their signs, visit an art gallery/exhibition in their locality, and then display their work.</p>
<p>Suggested Learning Resources: Braille machines, braille papers, braille cards, cereals, cardboards, glue</p>	

ASSESSMENT RUBRIC

Exceeding Expectations	Meeting Expectations	Approaching Expectations	Below Expectations
<p>Learner is able to: Identify geometrical signs in braille and even locate them from different lines and angles.</p>	<p>Learner is able to: Identify geometrical signs in braille.</p>	<p>Learner is able to: Identify most of the geometrical signs in braille.</p>	<p>Learner is able to: Identify few geometrical signs in braille.</p>

Read geometrical signs in angles and lines even in mathematical statements.	Read geometrical signs in angles and lines.	Read most of the geometrical signs in angles and lines.	Read few geometrical signs in angles and line.
Write geometrical signs in angles and lines, even in mathematical statements.	Write geometrical signs in angles and lines in braille.	Write most of the geometrical signs in angles and lines in braille.	Write few geometrical signs in angles and lines in braille.

Strand	Sub-strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Question
6.0 Mathematics Braille Notation	6.6 Inequalities Greater than and Less than (2 lessons)	By the end of the sub-strand, the learner should be able to: a) identify the braille signs for greater than and less than by naming dots that form them b) read algebraic expressions involving greater than and less than in braille c) write algebraic	Learners be guided to: <ul style="list-style-type: none"> • Identify the braille signs for greater than and less than by naming dots that form them (greater than and less than) • Read algebraic expressions involving greater than and less than in braille • Write algebraic expressions involving greater than and less than in braille • In pairs, to practise reading and writing algebraic 	How do you write greater than and less than in braille?

		<p>expressions involving greater than and less than in braille</p> <p>d) appreciate reading and writing algebraic expressions in braille.</p>	<p>expressions involving greater than and less than in braille for mastery.</p>	
<p>Competencies to be Developed:</p> <ul style="list-style-type: none"> • Communication and collaboration: This is developed as learners work together in reading and writing algebraic expressions with greater than and less than in braille. • Self-efficacy: This is developed as learners perform tasks involving greater than and less than braille signs in algebraic expressions when doing practise. 				
<p>Link to Pertinent and Contemporary Issues:</p> <p>Life skills: This is achieved as learners use the skills learnt in their day-to-day activities as they apply the skills learnt involving algebraic expressions in their tasks.</p>			<p>Values:</p> <p>Peace: This is achieved as learners appreciate each other as they work in pairs.</p>	

<p>Link to other Learning Areas:</p> <p>Mathematics: This is achieved as learners apply the skills learnt in working out algebraic expressions.</p>	<p>Suggested Community Service Learning:</p> <p>Learners could visit a nearby market, look for small-sized objects, and then stick them with glue on a cardboard. Learners shall form patterns of objects and greater than or less than braille signs, and hang the tactile portrait on their mathematics corner.</p>
<p>Suggested non-formal Activity that Supports Learning:</p> <p>Learners could go to the common room and play number game where the two numbers are picked at random, juxtaposed, then the sign of greater than or less than will be put in between depending on the number value.</p>	<p>Suggested Assessment:</p> <p>Observation, peer assessment, self-assessment and oral questions.</p>
<p>Suggested Learning Resources:</p> <p>Braille machines, braille papers, braille cards</p>	

ASSESSMENT RUBRIC

Exceeding Expectations	Meeting Expectations	Approaching Expectations	Below Expectations
The learner is able to: Identify the braille signs for greater than and less than by naming dots that form them, and even explain the rule binding the use of the signs with numbers or other signs.	The learner is able to: Identify the braille signs for greater than and less than by naming dots that form them.	The learner sometimes confuses the braille sign for greater than and less than when identifying them.	The learner, most of the time, confuses the braille sign for greater than and less than when identifying them.
Read algebraic expression involving greater than and less than in braille with fluency.	Read algebraic expressions involving greater than and less than in braille.	Read most of the algebraic expressions involving greater than and less than in braille.	Read a few algebraic expressions involving greater than and less than in braille.
Write algebraic expressions involving greater than and less than	Write algebraic expressions involving greater than and less than	Write most of the algebraic expressions involving greater than and less than in braille.	Write a few algebraic expressions involving greater than and less than

in braille, and explain the rules binding the use of the signs when writing them with numbers.	in braille.		in braille.
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7.0 MUSIC BRAILLE NOTATION

Strand	Sub-strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Questions
7.0 Music Braille Notation	7.1 Music Braille Tonic Sol-fa Notation in Major and Minor Keys (3 lessons)	By the end of the sub-strand, the learner should be able to: <ol style="list-style-type: none"> a) identify sol-fa notations by naming the specific dots b) differentiate sol-fa notations of lower octave from those of higher ones c) read tonic sol-fa notations in braille d) write tonic sol-fa notations in braille 	Learners be guided to: <ul style="list-style-type: none"> • Identify tonic sol-fa notations in braille. They include main bits in simple time signatures i.e. One bit, two bits, three bits four bits ranging from do to the upper do for major keys and la to the upper la for minor keys. • Differentiate tonic sol-fa notations of lower octave from the higher ones (from 	<ol style="list-style-type: none"> 1. How do you write sol-fa notations in braille? 2. How are sol-fa notations of higher octave different from those of lower octaves?

		e) appreciate reading and writing tonic sol-fa notations in braille	<p>lower do to the upper do and vice versa).</p> <ul style="list-style-type: none"> • Read tonic sol-fa notations in braille • Write tonic sol-fa notations in braille • In pairs, practise reading and writing tonic sol-fa notations in braille 	
<p>Competencies to Be Developed:</p> <ul style="list-style-type: none"> • Self-efficacy: This could be developed as learners apply skills learnt to write their own tunes for performance. • Communication and collaboration: This could be developed as learners in pairs practise reading and writing tonic sol-fa notations in braille. 				
<p>Link to Pertinent and Contemporary Issues:</p> <p>Learners support programs; learning to live together: This could be developed as learners work together in</p>			<p>Values:</p> <ul style="list-style-type: none"> • Love: This is achieved as learners work together, helping each other. 	

<p>harmony as they practise reading and writing tonic sol-fa notation in braille.</p>	<ul style="list-style-type: none"> • Respect: This could be developed as learners demonstrate tolerance as they accommodate each other's views while reading and writing sol-fa notations in braille
<p>Link to other Learning Areas: Music: this is achieved as learners use the skills learnt to write sol-fa notations in music.</p>	<p>Suggested Community Service Learning: Learners could visit a music conservatoire, listen to high octave, low octave sol-fa notation, and write them in braille to differentiate them.</p>
<p>Suggested non-Formal Activity that Support Learning: Learners could go to the school music room with their elder peers, let the elder peers play the scale of any major key using the main bit, and write them in music braille sol-fa notations.</p>	<p>Suggested Assessment: Oral Questions, Self-Assessment, Portfolio and peer Assessment.</p>
<p>Suggested Learning Resources: Braille paper, braille machine, braille cards on sol-fa notations</p>	

ASSESSMENT RUBRIC

Exceeding Expectations	Meeting Expectations	Approaching Expectations	Below Expectations
The learner is able to: Identify sol-fa notations in braille and even sing them.	The learner is able to: Identify sol-fa notations in braille.	The learner is able to: Identify most of the tonic sol-fa notation in braille.	The learner is able to: Identify few tonic sol-fa notations in braille.
Read tonic sol-fa notation in braille with confidence and fluency.	Read tonic sol-fa notations in braille.	Read most of tonic sol-fa notations in braille.	Read few tonic sol-fa notations in braille.
Write tonic sol-fa notations in braille and even create his or her own pattern.	Write tonic sol-fa notations in braille.	Write most of tonic sol-fa notations in braille.	Write few tonic sol-fa notations in braille.

Strand	Sub-strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Questions
7.0 Music Braille Notation	7.2 Music Braille Signs (2 lessons)	By the end of the sub-strand, the learner should be able to: <ol style="list-style-type: none"> a) identify music braille signs by naming the specific dots b) read music braille signs correctly c) write music braille signs correctly d) appreciate reading and writing music braille signs. 	Learners be guided to: <ul style="list-style-type: none"> • Identify music braille signs by naming the specific dots. Signs include; pause sign, common time sign, word sign, accent sign, duplet sign, and triplet sign • Read music braille signs correctly • Write music braille signs correctly • In groups or pairs, practise reading and writing music braille signs written together 	<ol style="list-style-type: none"> 1. How do you write a pause sign in braille? 2. How is a duplet different from a triplet?

			with notes.	
<p>Competencies to Be Developed:</p> <ul style="list-style-type: none"> • Self-Efficacy: This could be developed as learners apply the knowledge and skills learnt to perform tasks involving music braille. • Critical thinking and problem solving: This could be developed as learners distinguish music braille signs from notes in braille. 				
<p>Link to Pertinent and Contemporary Issues:</p> <p>Life skills: This could be developed as learners apply the knowledge and skills learnt to read and write their own music in braille.</p>		<p>Values:</p> <p>Love: This is achieved as learners work together in groups appreciating each other’s differences.</p>		
<p>Link to other Learning Areas:</p> <p>Music as learners apply the knowledge learnt to read and write music signs.</p>		<p>Suggested Community Service Learning:</p> <p>Learners could write music braille signs alongside the print and then visit a nearby school to share how braille music signs look.</p>		
<p>Suggested non-formal Activity that Supports Learning:</p>		<p>Suggested Assessment:</p> <p>Questions, self-assessment and peer assessment.</p>		

<p>Learners could prepare music braille signs on charts using grains like maize, green grams or cowpeas, mount the charts on cardboard and hang them on the music room walls for practise.</p>	
<p>Suggested Learning Resources: Braille machines, slate and stylus, braille paper</p>	

ASSESSMENT RUBRIC

Exceeding Expectations	Meeting Expectations	Approaching Expectations	Below Expectations
<p>The learner is able to: Identify music braille signs and even when they are written together with notes.</p>	<p>The learner is able to: Identify music braille signs.</p>	<p>The learner is able to: Identify music braille signs with assistance.</p>	<p>The learner is able to: Make little effort in identifying music braille signs.</p>
<p>Read music braille signs even when they appear</p>	<p>Read music braille signs.</p>	<p>Read music braille signs with assistance.</p>	<p>Makes little effort in reading music braille signs.</p>

among notes.			
Write music braille signs and even assist others.	Write music braille signs correctly.	Write music braille signs with assistance.	Make little effort in writing music braille signs.

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Note: The learner to be guided to choose between option 1 (French Braille) or option 2 (German Braille) depending on their choice of foreign language to enable them to read, write, and perform other activities related to the language.

OPTION 1

8.0 FRENCH BRAILLE

Strand	Sub-strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Question
8.0 French Braille	8.1 French Accent Marks (2 lessons)	By the end of the sub-strand, the learner should be able to: a) identify different accent marks used on the same word in French braille by naming the specific dots b) read out words with more than one accent marks in French braille	Learners be guided to: <ul style="list-style-type: none"> • Identify different accent marks used on the same word in French braille by naming specific dots on braille cards • Read out words with more than one accent marks in French braille 	1. How do you distinguish accent marks from letters of alphabet?

		<p>c) write words with more than one accent marks in French braille</p> <p>d) appreciate the use of accent marks in French braille.</p>	<ul style="list-style-type: none"> • Write words with more than one accent marks in French braille • Read and write words in French with more than one accent marks in braille in groups. 	
<p>Core Competencies to be Developed:</p> <ul style="list-style-type: none"> • Communication and collaboration: This is developed as learners work together in groups while identifying, reading and writing words with more than one accent mark in French braille. • Critical thinking and problem solving: This is developed as learners strive to make out the accent marks from letters of the alphabet and other accent marks occurring in the same word. 				
<p>Link to Pertinent and Contemporary Issues:</p> <ul style="list-style-type: none"> • Career guidance: This is achieved as learners utilize the acquired skills to perfect their pronunciation in the French language for future career opportunities. • Life skills: This could be developed as learners use the acquired skills in their day to day activities like 		<p>Values:</p> <p>Unity: This is developed as learners cooperate in their groups to read and write words with more than one accent mark in French braille.</p>		

keeping diaries and records	
<p>Link to other Learning Areas: French:</p> <p>As learners apply the learned skill in reading and writing French work.</p>	<p>Suggested Community Service Learning:</p> <p>Learners could visit a nearby supermarket to buy households goods. They would then make a list of items in French and use italic signs to show those with more than one accent mark.</p>
<p>Suggested Non-Formal Activity that Supports Learning: Learners could visit the school library and pick out words with more than one accent marks from French textbooks. They could then proceed to write these words down for practise.</p>	<p>Suggested Assessment:</p> <p>Self-assessment, peer assessment and oral assessment.</p>
<p>Suggested Learning Resources:</p> <p>Braille paper, braille machine, slate and stylus, braille cards.</p>	

ASSESSMENT RUBRIC

Exceeding Expectations	Meeting Expectations	Approaching Expectations	Below Expectations
The learner is able to: Identify different accent marks on the same word in French braille and even articulate them orally.	The learner is able to: Identify different accent marks on the same word in French braille.	The learner is able to: Identify most accent marks on the same word.	The learner is able to: Identify a few accent marks among those used in the same word.
Read out words with more than one accent mark in French braille fluently.	Read words with more than one accent mark in French braille.	Read most of words with more than one accent mark in French braille.	Read few words with more than one accent mark in French braille.
Write words with more than one accent mark in French braille and come up with more examples.	Write words with more than one accent mark in French braille.	Write most words with more than one accent mark in French braille.	Write few words with more than one accent mark in French braille.

Strand	Sub-strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Questions
8.0 French Braille e	8.2 Word Signs in French Braille (2 lessons)	By the end of the sub-strand, the learner should be able to: a) identify word signs in French braille by naming the dots correctly b) read the words represented by word signs in French braille c) write word signs in French braille d) appreciate the use of word signs in French braille.	Learners be guided to: <ul style="list-style-type: none"> • Identify word signs in French braille (B for being, C for Ce, D for De...) • Read words represented by word signs in French braille • write word signs in French braille • In groups, practise reading and writing words represented by word signs in French braille. 	1. Why do we use word signs in French braille? 2. How are word signs different from the alphabet in French braille?

<p>Core Competencies to be Developed:</p> <ul style="list-style-type: none"> • Communication and collaboration: This is developed as learners work together in groups to practise reading and writing word signs in French braille. • Self-efficacy: This is developed as learners use word signs to shorten their braille work hence making it less cumbersome 	
<p>Link to Pertinent and Contemporary Issues:</p> <p>Life skills: This could be developed as learners use the learnt skills to improve their writing skills in poetry, diary writing, and record keeping.</p>	<p>Values:</p> <p>Love: this could be achieved as learners assist one another during their group activities.</p>
<p>Link to other Learning Areas:</p> <p>French - as learners use the acquired skills to read and write their braille work in French.</p>	<p>Suggests Community Service Learning:</p> <p>Learners could write and transcribe simple sentences with word signs in French braille, then read to parents and other guests during school functions.</p>
<p>Suggested non-formal Activity that Supports Learning: Learners could visit their school library to</p>	<p>Suggested Assessment:</p> <p>Self-assessment, written question, peer assessment.</p>

read French braille books with word signs to familiarize themselves with word signs in French braille.	
Suggested Learning Resources: Braille machines, slate and stylus, braille paper and French braille books.	

ASSESSMENT RUBRIC

Exceeding Expectations	Meeting Expectations	Approaching Expectations	Below Expectations
Learner is able to: Identify word signs in French braille and even spell out the words they represent.	Learner is able to: Identify word signs in French braille.	Learner is able to: Identify most of the word signs in French braille.	Learner is able to: Identify few word signs in French braille.
Read the words represented by word signs in French braille fluently.	Read words represented by word signs in French braille.	Read most of the words represented by word signs in French braille.	Read few words represented by word signs in French braille.
Write word signs in French	Write word signs in	Write most of word signs in	Write few word signs in

Braille and even write them in simple sentences.	French braille.	French braille.	French braille.
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DRAFT

Strand	Sub-strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Questions
8.0 French Braille	8.3 Punctuations and Indicators (2 lessons)	By the end of the sub-strand, the learner should be able to: <ol style="list-style-type: none"> a) identify punctuation signs in French braille by naming the dots. b) read out punctuation signs in French braille c) write punctuations signs in French braille d) appreciate the use of punctuation signs in French braille 	Learners be guided to: <ul style="list-style-type: none"> • Identify punctuation and indicator signs in French braille (brackets, dash) • Locate punctuation marks on sentences • Write punctuation signs in French braille • Read and write short sentences with punctuation marks in groups. 	<ol style="list-style-type: none"> 1. Why do we use punctuation marks when writing braille work? 2. How do you differentiate punctuation marks from letters of the alphabet?

<p>Competencies to be developed:</p> <ul style="list-style-type: none"> • Self-efficacy: This is achieved as learners apply braille skills learnt to punctuate texts in French. • Communication and collaboration: This is developed as learners work together in groups to read and write punctuation marks in French braille. 	
<p>Link to Pertinent and Contemporary Issues:</p> <p>Life skills: This could be achieved as learners use braille skills to write poems and chorales for contests and entertainment.</p>	<p>Values:</p> <p>Peace: This is achieved as learners, in groups, work together in harmony to read and write sentences with punctuation marks.</p>
<p>Link to other Learning Areas:</p> <p>French: This is achieved as learners use the acquired skills to punctuate sentences in French.</p>	<p>Suggested Community Service Learning:</p> <p>Learners could make cards bearing different punctuations in print and braille, and then challenge their sighted playmates to identify the number and position of dots of the punctuation marks.</p>
<p>Suggested non-formal Activity that Supports Learning: Learners could look for children’s storybooks in French braille in the school library,</p>	<p>Suggested Assessment:</p> <p>Peer assessment, oral assessment and presentations.</p>

locate different punctuation marks, and write them down for practise.	
Suggested Learning Resources: Braille paper, braille machine, cards and manila papers, children readers.	

ASSESSMENT RUBRIC

Exceeding Expectations	Meeting Expectations	Approaching Expectations	Below Expectations
The learner is able to: Identify punctuation signs in French and use them in simple sentences.	The learner is able to: Identify punctuation signs in French braille.	The learner is able to: Identify most punctuation signs in French braille.	The learner is able to: Identify few punctuation signs in French braille.
Read punctuation signs in sentences and bring out their intonation.	Read punctuation signs in sentences.	Read most punctuation signs in sentences.	Read few punctuation signs in French braille.
Write punctuation signs in sentences and can even independently punctuate short texts.	Write punctuation signs in French braille sentences.	Write most punctuation signs in French braille.	Write few punctuation signs in French braille sentences.

OPTION 2

9.0 GERMAN BRAILLE

Strand	Sub-strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Question
9.0 German Braille	9.1 German Accent Marks (2 lessons)	By the end of the sub-strand, the learner should be able to: a) identify accent marks in German braille by naming the dots correctly b) read out words with accent marks in German braille c) write accent marks in German braille d) appreciate the role of accent marks in German braille.	Learners be guided to: <ul style="list-style-type: none">• Identify accent marks in German braille used on the same word in German braille by feeling and naming the dots on braille cards• Read out words with accent marks in braille• Write words with accent marks in braille• Practise reading and writing words and sentences with accent marks in German braille in groups.	1. How do you distinguish accent marks from letters of alphabet?

<p>Core Competencies to be Developed:</p> <ul style="list-style-type: none"> • Communication and collaboration: This is developed as learners work together in groups while practicing reading and writing words and sentences with German accent marks in braille. • Learning to learn: This is developed as learners look for more words with German accent marks to improve their reading skills in German braille. 	
<p>Link to Pertinent and Contemporary Issues:</p> <p>Career guidance: This is achieved as learners utilize the acquired skills to perfect their pronunciation in the German language for future career prospects.</p>	<p>Values:</p> <p>Unity: This is developed as learners cooperate in their groups to read and write words and sentences with accent marks in German braille.</p>
<p>Link to other Learning Areas:</p> <p>German: As learners apply the learned skill in reading and writing German work in braille.</p>	<p>Suggested Community Service Learning:</p> <p>Learners could visit a supermarket in their locality then buy goods as they list them in German braille.</p>
<p>Suggested non-formal Activity that Supports Learning: Learners could visit the school library and pick out words with German accent marks from German textbooks. They could then proceed to write these words</p>	<p>Suggested Assessment:</p> <p>Self-assessment, peer assessment and oral assessment.</p>

down for practise.	
Suggested Learning Resources:	
Braille paper, braille machine, slate and stylus, braille cards, German braille books.	

ASSESSMENT RUBRIC

Exceeding Expectations	Meeting Expectations	Approaching Expectations	Below Expectations
The learner is able to: Identify German accent marks in braille and articulate them orally.	The learner is able to: Identify German accent marks in braille.	The learner is able to: Identify most of the German accent marks.	The learner is able to: Identify a few accent marks in German braille.
Read out words with German accent marks in braille fluently.	Read words with German accent marks in German braille.	Read most of the words with accent marks in German braille.	Read a few words with German accent marks in braille.
Write accent marks in German braille and even include them in words.	Write accent marks in German braille.	Write most of German accent marks in German braille.	Write a few accent marks in German braille.

Strand	Sub-strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Questions
9.0 German Braille	9.2 Word Signs in German Braille (2 lessons)	By the end of the sub-strand, the learner should be able to: a) identify word signs in German braille by naming the dots correctly b) read the words represented by word signs in German braille c) write word signs in German braille d) appreciate the use of word signs in German braille.	<ul style="list-style-type: none"> • Learners be guided to: • Identify word signs in German braille (B for being, C for Ce, D for De...) • Read words represented by word signs in German braille • Write word signs in German braille • Practise reading and writing words represented by word signs in German braille in groups. 	<ol style="list-style-type: none"> 1. Why do we use word signs in German braille? 2. How are word signs different from the alphabet in German braille?

<p>Core Competencies to be Developed:</p> <ul style="list-style-type: none"> • Communication and collaboration: This is developed as learners work together in groups to practise reading and writing word signs in German braille. • Self-efficacy: This is developed as learners use word signs to shorten their braille work, making it less cumbersome. 	
<p>Link to Pertinent and Contemporary Issues:</p> <p>Life skills: This could be developed as learners use the learnt skills to improve their writing skills in areas like poetry, diary writing, and record keeping.</p>	<p>Values:</p> <p>Love: This could be achieved as learners assist one another during their group activities.</p>
<p>Link to other Learning Areas:</p> <p>German - as learners use the acquired skills to read and write their braille work in German.</p>	<p>Suggests Community Service Learning:</p> <p>Learners could write and transcribe simple sentences with word signs in German braille, then read to parents and other guests during school functions.</p>
<p>Suggested Non-Formal Activity that Supports Learning: Learners could visit their school library to read German braille books with word signs to</p>	<p>Suggested Assessment:</p> <p>Self-assessment, oral assessment, peer assessment.</p>

familiarize themselves with word signs in German braille.	
Suggested Learning Resources: Braille machines, slate and stylus, braille paper, and German braille books.	

ASSESSMENT RUBRIC

Exceeding Expectations	Meeting Expectations	Approaching Expectations	Below Expectations
<p>Learner is able to: Identify word signs in German braille and even spell out the words represented by word signs.</p>	<p>Learner is able to: Identify word signs in German braille.</p>	<p>Learner is able to: Identify most of the word signs in German braille.</p>	<p>Learner is able to: Identify few word signs in German braille.</p>
<p>Read the words represented by word signs in German braille</p>	<p>Read words represented by word signs in German</p>	<p>Read most of the words represented by word signs in German braille.</p>	<p>Read few words represented by word signs in German braille.</p>

fluently.	braille.		
Write word signs in German braille and even write them in simple sentences.	Write word signs in German braille.	Write most of word signs in German braille.	Write few word signs in German braille.

Strand	Sub-strand	Specific Learning Outcomes	Suggested Learning Experiences	Key Inquiry Questions
9.0 German Braille	9.3 Punctuation and Indicators (2 lessons)	By the end of the sub-strand, the learner should be able to: a) identify punctuation signs in German braille b) read out punctuation signs in German braille c) write punctuations signs in German braille d) appreciate the use of punctuation signs in German braille.	<ul style="list-style-type: none"> • Learners be guided to: • Identify punctuation and indicator signs in German braille (brackets, dash, letter signs, italic sign) • Locate punctuation marks on sentences • Write punctuations signs in German braille • Read and write short sentences with punctuation marks and indicators in groups. 	<ol style="list-style-type: none"> 1. Why do we use punctuation marks when writing braille work? 2. How do you differentiate punctuation marks from letters of the alphabet?

<p>Competencies to be Developed:</p> <ul style="list-style-type: none"> • Self-efficacy: This is achieved as learners apply braille skills learnt to punctuate texts in German braille. • Communication and collaboration: This is developed as learners work together in groups to read and write punctuation marks in German braille. 	
<p>Link to Pertinent and Contemporary Issues:</p> <p>Life skills: This could be achieved as learners use braille skills to write poems and chorales for contests and entertainment.</p>	<p>Values:</p> <p>Peace: This is achieved as learners work together in harmony in their groups to read and write sentences with punctuation marks.</p>
<p>Link to other Learning Areas:</p> <p>German: This is achieved as learners use the acquired skills to punctuate sentences in German.</p>	<p>Suggested Community Service Learning:</p> <p>Learners could make cards bearing different punctuations in print and braille, and then challenge their sighted playmates to identify the number and position of dots of the punctuation marks.</p>
<p>Suggested Non-Formal Activity that Supports Learning: Learners could look for children’s storybooks in German braille in the school library,</p>	<p>Suggested Assessment:</p> <p>Peer assessment, oral assessment and written assessment.</p>

locate different punctuation marks and write them down for practise.	
Suggested Learning Resources: Braille paper, braille machine, cards and manila papers, children readers.	

ASSESSMENT RUBRIC

Exceeding Expectations	Meeting Expectations	Approaching Expectations	Below Expectations
The learner is able to: Identify punctuation signs and indicators in German braille even when they appear in the midst of words and sentences.	The learner is able to: Identify punctuation signs and indicators in German braille.	The learner is able to: Identify most of punctuation signs and indicators in German braille.	The learner is able to: Identify few punctuation signs and indicators in German braille.
Read sentences with punctuation signs and indicators in sentences and	Read sentences with punctuation signs and indicators in German	Read most of the sentences with punctuation signs and indicators in German braille.	Read few sentences with punctuation signs and indicators in German

bring out their intonation.	braille.		braille.
Write punctuation signs and indicators in sentences and can even independently punctuate short texts.	Write punctuation signs and indicators in German braille.	Write most of the punctuation signs and indicators in German braille.	Write few punctuation signs and indicators in German braille.