



KENYA INSTITUTE OF CURRICULUM DEVELOPMENT

CURRICULUM DESIGNS

BRAILLE LITERACY DESIGN

GRADE 1, 2 & 3

FOREWARD

The Basic Education Curriculum Framework (BECF) outlines the vision and mission for the curriculum reforms. The Vision of the curriculum reforms is to develop “an engaged, an empowered and ethical citizen “while the mission is to “to nurture the potential of every learner”.

The framework adopts a Competency Based Curriculum and has identified seven core competences, namely; communication and collaboration, critical thinking and problem solving, creativity and imagination, citizenship, digital literacy, learning to learn, and self-efficacy. It provides a variety of opportunities for identification and nurturing of learner’s potentials and talents in preparation for life and the world of work. It is geared towards making learning enjoyable.

The curriculum designs are developed to enable implementation of the Basic Education Curriculum Framework. The design contains the National Goals of Education, outlines the Early Years Education (EYE), subject general and specific learning outcomes. It also suggests a variety of learning experiences, assessment, resources and links the topics to values, Pertinent and Contemporary Issues (PCI) and to other subjects.

It is my hope that all educators in Early Years Education level will anchor their delivery of Basic and Teacher education on these Curriculum Designs.

FRED MATIANGI, PhD, EGH
CABINET SECRETARY
MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY

ACKNOWLEDGEMENT

Learners with visual impairment experience limitation in acquiring information through vision. They use other senses to acquire information there by necessitating development of specialist curriculum to enable them access other learning areas . The basic education curriculum frame work provides for development curriculum and intervention programme to suit the needs of the various categories of learners with special needs.

The Kenya institute of curriculum development (KICD) has developed Brailleliteracy curriculum designs for learners at lower primary level to enable them acquire braille reading and writing skills for communication and learning

I wish to express my sincerer gratitude to the special needs education section, panel member's ministry of education and other organizations and practicing teachers who participated in the development of the Braille literacy curriculum design.

National Goals of Education

The Framework will be anchored on the National Goals of Education.

Education in Kenya should:

1. Foster nationalism, patriotism, and promote national unity

Kenya's people belong to different communities, races and religions and should be able to live and interact as one people. Education should enable the learner acquire a sense of nationhood and patriotism. It should also promote peace and 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 the family, community, national, regional and international development.

b) Economic Needs

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

c) Technological and Industrial Needs

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

3. Promote individual development and self-fulfilment

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

4 Promote sound moral and religious values

Education should promote acquisition of national values as enshrined in the Kenya 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 for learners with special educational needs and disabilities. Education should also provide the learner with opportunities to develop and practice shared responsibility and accountability through community 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 the interdependent network of diverse peoples and nations. Education should empower the learner to respect, appreciate and participate in the opportunities within the international community. Education should also enable the learner to operate within the international community with full knowledge of the obligations, responsibilities, rights and benefits that this membership entails.

8. Promote positive attitudes towards good health and environmental protection

Education should inculcate in the learner the value of physical and psycho-social well-being for self and others. It should promote environmental preservation and conservation, including animal welfare, for sustainable development.

Core Competencies for Basic Education

Communication and Collaboration

Communication is the act of transferring information from one place to another, whether vocally, visually, or non-verbally. The discipline of communication focuses on how people use messages to generate meanings within and across various contexts, cultures, channels, and media. The discipline promotes the effective and ethical practice of human communication.

Spitzberg (1988) defines communication competence as the ability to interact well with others in terms of accuracy, clarity, comprehensibility, coherence, expertise, effectiveness and appropriateness. On the other hand Friedrich (1994) suggests that communication competence is best understood as "a situational ability to set realistic and appropriate goals and to maximize their achievement by using knowledge of self, other, context, and communication theory to generate adaptive communication performances."

In this respect, it can be argued that being able to communicate effectively as intended is the most important of all life skills. How well information can be transmitted and received is a measure of how good our communication skills are. Developing communication skills helps in all aspects of an individual's life.

Parks (1985) maintains that communicative competence can effectively be measured by determining if, and to what degree, the goals of interaction are achieved. He emphasizes three interdependent themes: control, responsibility, and foresight; and argues that to be competent, learners must not only 'know' and 'know how,' but rather they must also 'do' and 'know that we did'. He defines communicative competence as the degree to which individuals perceive they have satisfied their goals in a given social context without jeopardizing their ability or opportunity to pursue their other subjectively more important goals.

A useful framework for understanding communication competence was designed by Spitzberg and Cupach (1984). They propose a model that can be used to understand communication referred to as the component model of competence. The model asserts that communication competence is mutually defined by the interdependency of the cognitive component (concerned with knowledge and understanding), the behavioural component (concerned with behavioural skills), and the affective component (concerned with attitudes and feelings about the knowledge and behaviours) by interactions in an interpersonal encounter within a specific context.

This then implies that education at each level should endeavour to enhance the learner's acquisition of effective communication skills through which they can interact and express themselves during the learning process. In this respect, it would be prudent to be cautious when deciding on the language to be used as a medium of instruction at the early year's education level. It is also important to take cognizance of appropriate modes of communication for learners with special educational needs.

Collaboration is the process of two or more people or organizations working together to realize shared goals. Collaboration may require leadership, although this can be social within decentralized or egalitarian groups or teams that work collaboratively in relation to gaining

greater resources, recognition and motivation. Strategies for effective communication enhance the attainment of greater collaboration among groups that ultimately increase the success of teams as they engage in collaborative problem solving. Collaboration is also present in opposing goals exhibiting the notion of adversarial collaboration, though this is not a common case for using the word. Collaborative learning is a system in which two or more people co-operate in a learning experience to share and contribute to each member's understanding of a topic and to complete a given task. Collaborative learning is designed to help learners learn from each other and can be an important aspect of the school curriculum. Lesson plans for collaborative learning may vary greatly. Sometimes teachers will build a lesson designed specifically to teach collaborative learning and teamwork. There are many team building games and activities that can be done in a classroom that force learners to work together to complete a task. Other collaborative learning exercises are designed around a particular school subject. For instance, in a speech class, a teacher might put learners up into teams and have them work together to make a presentation on a subject together. In this scenario, learners can learn just as much as if they were developing a presentation on their own, but they get the added benefit of learning how to collaborate.

Self-efficacy

Self-efficacy is a person's belief about his or her capabilities to perform tasks or assignments that can change and transform his or her life. It determines how the person feels, thinks, behaves and motivates themselves. Self-efficacy has the potential to determine four major processes namely cognitive, motivational, affective and selection processes.

A strong sense of self-efficacy enhances a learner's accomplishment and personal well-being in many ways. Learners with high assurance in their capabilities approach difficult tasks as challenges to be mastered, rather than as threats to be avoided. Self-efficacy fosters intrinsic interest and deep engrossment in activities. Learners set themselves challenging goals and maintain a strong commitment to them.

Self-efficacy as a competence will enable learners to develop and nurture intra-personal skills and values such as self-awareness, self-esteem, confidence and personal integrity. These competencies will enhance the learner's ability to heighten and sustain efforts in the face of failure and effectively manage stressful situations. A learner with a strong sense of self-efficacy will be courageous and bold enough to set and pursue personal educational, family, community, entrepreneurial, professional, and career goals in all forms of employment that will lead to personal accomplishment (British Council, 2016). An efficacious learner will be aware of the resources at their disposal and will take personal responsibility for the use, care, management, protection and preservation of these resources.

A learner with strong self-efficacy will be internally motivated to establish and maintain healthy interpersonal relationships. They will demonstrate interpersonal relationship skills such as assertiveness, empathy, effective communication, negotiation skills, non-violent conflict resolution skills and peer pressure resistance skills. Creative and critical thinking that leads to effective decision making and problem solving is based on a strong sense of self-efficacy (British Council, 2016). Capacity building of teachers and parental

engagement are two crucial factors that would determine acquisition of self-efficacy. The school will be expected to provide opportunities for parents to be empowered and engaged in the affairs and welfare of their children's education.

Critical Thinking and Problem Solving

An important outcome of quality education is teaching learners how to think critically. The British Council (2015) identifies three types of thinking: reasoning, making judgements, and problem solving. It is possible for learners to reason in an uncritical way. When learners are empowered with critical thinking, they avoid being subjective, and use logic and evidence to arrive at conclusions. Critical thinking also facilitates exploring new ways of doing things and learner autonomy. Learners learn that for every issue there are multiple perspectives that they can explore, rather than a rigid recall and regurgitation of information.

Critical thinking is important for lifelong learning. It helps learners to have an open mind and be ready to listen and appreciate information and opinions that may sometimes conflict with their earlier held beliefs and positions. Critical thinking and problem solving are useful for learners of all ages and in all the subjects and disciplines offered in the basic education curriculum. For example, in the sciences learners need to think critically about observations and patterns to develop ideas on how to solve problems. These competencies are also important for solving problems in their lives and communities, and will ultimately help them to fulfil their potential, which is the vision for the basic education curriculum. This will contribute to addressing the unemployment challenge in Kenya.

Critical thinking and problem solving will be developed through age appropriate activities and programmes in the school curriculum. For example, at pre-primary school level learners can be asked to come up with the best ways of using and keeping their books, stationery and other personal items safe. At the other end of the basic education spectrum, learners can be asked to come up with the best ways of addressing the challenge of scarce resources such as water in the school and community.

Creativity and Imagination

Creativity and imagination refers to the ability to form new images and sensations in the mind, and to turn them into reality (British Council, 2016). It is the ability to imagine things that are not real, to form pictures in the mind of things that one has not seen or experienced, and turn those pictures into real things. It also refers to the act or power of forming mental images of things that are not present to the senses, or that are never wholly perceived in reality, and creating physical representations of those images. Imagination only exists or happens in the mind, and it remains in the mind. Creativity and imagination on the other hand, is characterized by the ability to perceive the world in new ways, to find hidden patterns, to make connections between seemingly unrelated phenomena, and to generate solutions. It is a phenomenon whereby something new and valuable is formed.

In educational terms, creativity and imagination refers to the ability of learners and their teachers to form images and ideas in their minds, and turn them into real, visible creations. Learners who are imaginative and creative are able to make life interesting for themselves and others around them. They are able to use the knowledge, skills and values acquired in the learning process to create new ideas that result in products that add value to their lives and to the lives of others around them. The competence based curriculum recognizes this hidden ability in learners. It will therefore, inspire learners' imagination by presenting knowledge in ways that encourage learners to think as individuals. It will create scenarios that help learners to engage in imagination and encourage them to develop creations steered by the imagination. Their ability to imagine will be stretched through exposure to challenging situations that help to expand their thinking and creativity skills. The curriculum will also create room for innovative ways of teaching as well as creating an environment conducive to learning that offers all learners opportunities to explore their full potential in and through creativity and imagination.

Citizenship

Historically, human beings have always formed communities based on a shared identity. Such identities are forged in response to a variety of human needs, which might be economic, political, religious or social. As group identities grow stronger, those who hold them in commonality with others organize themselves into communities, articulate their shared values, and build governance structures to support their beliefs. The individuals in these communities identify themselves as citizens.

Citizenship is the state of being vested with the rights, privileges, and duties of a citizen. It creates a sense of belonging and attachment to one's nation. A sense of citizenship helps to equip young people to deal with situations of conflict and controversy knowledgeably and tolerantly. They are able to understand the consequences of their actions, and those of the adults around them.

Global citizenship is a way of living which recognizes that our world is an increasingly complex web of connections and interdependencies. One in which our choices and actions may have repercussions for people and communities locally, nationally or internationally. It nurtures personal respect and respect for others, wherever they live. It encourages individuals to think deeply and critically about what is equitable and just, and what will minimize harm to our planet.

Digital Literacy

Digital literacy can be described as having the knowledge, skills and behaviours which are necessary to effectively and safely use a wide range of digital content and devices. Such devices include mobile phones, smart phones, tablets, laptops and desktops among others. All these fall within the category of network enabled devices. Digital literacy focuses mainly on network enabled devices and should not be

confused with computer literacy skills. However, traditional forms of literacy and computer literacy are enhancers in the acquisition of digital literacy skills.

Individuals are presumed to be digitally literate if they possess a broad range of digital skills and knowledge, and have a basic understanding of the potential uses of computing devices. Digital literacy skills also include being able to use computer communication networks, being able to engage in online communication and social networks, being aware of and adhering to ethical behaviour protocols, being aware of societal issues raised through digital media, and being able to search, evaluate and use information channelled through digital platforms. Furthermore, the digital literate individual should also have the ability to safely and securely use technology while being able to assess the nature of the information acquired in order to support and enhance the environment (British Council, 2015). Digital literacy as a competence therefore encompasses knowledge and skills concerning the appropriate application of a variety of hardware platforms such as computers, tablets and mobile devices, and their software including but not limited to web search or internet application software. Digital literacy is a dynamic competence due to the fast-changing world of information communication technology and the ongoing development of technological devices as well as their related software. This is an area in which there is constant innovation and development as the industry attempts to keep up with a globally increasing demand for efficient and effective communication technologies.. Currently, digital literacy is considered as one of the main core competencies for learning and life in the 21st century. It challenges existing thinking and practice while leading to a more innovative, creative and often transformational learning.

Learning to Learn

Learning is a continuous process that begins at birth and continues until death; it is the process through which we use our experience to deal with new situations and to develop relationships. As a concept, it involves far more than thinking as it incorporates the whole personality – senses, feelings, intuition, beliefs, values and will. If we do not have the will to learn, we will not learn and if we have learned, we are actually changed in some way. If the learning makes no difference it can have very little significance beyond being random ideas that float through our consciousness.

Learning to learn is the ability to pursue and persist in learning, to organise one's own learning by the effective management of time and information, both individually and in groups. This competence includes awareness of one's learning process and needs, identifying available opportunities, and the ability to overcome obstacles in order to learn successfully. This competence means gaining, processing and assimilating new knowledge and skills as well as seeking and making use of guidance. Learning to learn helps learners to build on prior learning and life experiences in order to use and apply knowledge and skills in a variety of contexts. There are four pillars of learning: Learning to know, learning to do, learning to be and learning

Learning Outcomes for Early Years Education

By the end of early years' education, the learner should be able to:

1. Demonstrate basic literacy and numeracy skills for learning.
2. Communicate appropriately using verbal and/or non-verbal modes in a variety of contexts.
3. Demonstrate appropriate etiquette in social relationships.
4. Apply creativity and critical thinking skills in problem solving.
5. Explore the immediate environment for learning and enjoyment.
6. Practice hygiene, nutrition, sanitation, safety skills to promote health and wellbeing.
7. Demonstrate the acquisition of emotional, physical, spiritual, aesthetic and moral development for balanced living.
8. Demonstrate appreciation of the country's rich and diverse cultural heritage for harmonious co-existence.
9. Apply digital literacy skills for learning and enjoyment.

ESSENCE STATEMENT:

Braille is a system of reading and writing using raised dots to convey meaning. It is a tactile code through which letters and words are represented. Braille is not a separate language. This system was an invention for persons with blindness to use as a medium of learning and communication through touch. For educational purposes Braille is taught to learners who are blind and those with severe low vision.

SUBJECT GENERAL LEARNING OUTCOME

1. Use braille writing equipment and materials in literacy activities
2. Apply braille reading and writing skills in literacy activities
3. Use English, mathematics and Kiswahili braille for learning and communication.

PREAMBLE

Education for learners with visual impairment requires that the learners are provided with opportunities to utilize the remaining senses. This call for the teacher to employ various teaching and learning strategies and resources to meet unique needs of each individual learner.

The teacher as well as the learner is therefore expected to make use of resources such as print and electronic media, assistive devices, technology and braille material, resource person and interaction with realeza in the environment

The vital role of the learner in the learning process has also been recognized, in connection the teacher is strongly advised to employ participatory approaches to learning in order to tap and incorporate the learners experiences

The teacher for learners with visual impairment should

- a) Possess positive attitude towards the learners with visual impairment
- b) Exercise great patience and commitment when teaching.
- c) Be competent in learning areas.

d) Be competent and proficient in English, mathematical and Kiswahili braille.

GRADE 1 (40 minutes per lesson)

STRANDS	SUB STRAND	SPECIFIC LEARNING OUTCOMES	SUGGESTED LEARNING EXPERIENCES	KEY INQUIRY QUESTIONS
<p>1.0 BRAILLE WRITING MATERIALS AND EQUIPMENT</p>	<p>1.1 Slate & Stylus Process <i>(10 lessons)</i></p>	<p>By the end of the sub-strand/theme/topic, the learner should be able to:</p> <ul style="list-style-type: none"> a) Identify the position of beginning work on slate (k) b) Guide the point of the stylus to emboss dots on the braille paper (s) c) Move from the current line to the next starting with the right hand side (s) d) Proof read braille work during writing e) Mark the last point of the writing on a slate f) Appreciate the use of slate and stylus in writing braille 	<ul style="list-style-type: none"> • Learner could be guided to begin work on the slate • Learner could be guided to start working from top row of cell, top of page and extreme right to left of slate using index of dominant hand to guide point of stylus • In pairs learners could practice on how to move from current braille line to the next starting from right hand side • In groups learners could take part in proof reading written braille work by opening the slate , turning the paper, reading text from left to right and fixing the paper back in the right position • Learner would be guided to mark the last point of the writing on a slate by either using pins or existing marks on the slate 	<ol style="list-style-type: none"> 1. Where do you begin braille work on a slate? 2. How can you hold the stylus to emboss dots on the braille paper? 3. What can you use to mark the last point of writing on the slate? 4. Why is it important to mark the last point of the writing on the slate?

Core competences to be developed:			
<ul style="list-style-type: none"> • Communication and collaboration: this could be achieved through learners working in pairs and in groups • Critical thinking and Problem solving: By using different items to mark last point of writing on the slate • Learning to learn: Techniques of moving from current braille line to next 			
Link to pcis: citizenship –social cohesion: learners while working in pairs and groups promote the values of sharing, tolerance and respect.		Link to values: respect, responsibility, unity	
Link to other subjects: English , literacy and Kiswahili		Suggested community service learning: Visit the Educational Assessment and Resource Centre or resource room to interact with braille writing equipment and get guidance from the personnel	
Suggested non formal activity to support learning: sing songs related to braille writing equipment and materials		Suggested assessment : oral questions, observation	
Assessment rubric			
Exceeding expectations	Meeting expectations	Approaching expectations	Below expectations
Learner can move from one line to the next while writing and mark the last point of writing on a slate with ease	Learner can move from one line to the next while writing and mark the last point of writing on a slate	Learner can move from one line to the next while writing however requires support to be able to locate the last point of writing on a slate	Learner has difficulties moving from one line to the next while writing and cannot mark the last point of writing on a slate

STRAND	SUB STRAND	SPECIFIC LEARNING OUTCOMES	SUGGESTED LEARNING EXPERIENCES	KEY INQUIRY QUESTIONS
Braille writing equipment and materials.	1.2 Formatting on the slate (6 lessons)	a) Skip lines when writing using slate and stylus appropriately	<ul style="list-style-type: none"> • Learners could be guided on skipping lines when writing braille using 	<ol style="list-style-type: none"> 1. How do you skip a line when writing using slate and stylus? 2. Why is it important to indent and center braille work?

		<p>b) Indent and center braille work when writing. (s)</p> <p>c) Write braille work sufficiently and accurately using slate and stylus(s)</p> <p>d) Appreciate the use of braille in communication</p>	<p>slate and stylus.</p> <ul style="list-style-type: none"> • In pairs learners could practice indenting and centering braille work. • In groups learners could practice writing short words and short sentences in braille correctly. 	
<p>Core competences to be developed:</p> <ol style="list-style-type: none"> 1. Communication and collaboration: this could be achieved through learners working in pairs and in groups 2. Critical thinking and Problem solving: By using different items to mark last point of writing on the slate. <p>Learning to learn: Techniques of moving from current braille line to next</p>				
<p>Link to pcis: citizenship –social cohesion: learners while working in pairs and groups promote the values of sharing , tolerance and respect</p>		<p>Link to values: respect, responsibility, unity</p>		
<p>Link to other subjects: English , literacy and Kiswahili</p>		<p>Suggested community service learning: Visit the Educational Assessment and Resource Centre or resource room to interact with braille writing equipment and get guidance from the Personnel.</p>		

Suggested non-formal activity to support learning: Sing songs related to braille writing equipment and materials

Suggested assessment: oral questions, observation

Assessment rubric

Exceeding expectations	Meeting expectations	Approaching expectations	Below expectations
Learner is able to indent and center braille work sufficiently and accurately with speed when writing.	Learner is able to indent and center braille work sufficiently and accurately when writing	Learner can indent braille work however requires support to be able to centre the work independently.	The learner cannot indent nor centre braille work while writing on the slate.

STRANDS	SUB STRAND	SPECIFIC LEARNING OUTCOMES	SUGGESTED LEARNING EXPERIENCES	KEY INQUIRY QUESTIONS
Braille writing equipment and materials.	1.3 Braille writing Machines process (12 lessons)	a) Identify main parts of the braille machine. (k) b) Find out the functions of keys of a braille machine. (K) c) Write Braille steadily with both hands (S) d) Proofread braille text when writing using the braille machine.(S) e) Correct error in the current line when writing with a braille machine. (S)	<ul style="list-style-type: none"> • Learners could be guided to identify the main parts of a braille machine such as knob, carriage, and paper release levers. • Learners could be guided to find out the keys and their functions on a braille machine. • Learners could be guided on how to write braille steadily using both hands. • In pairs learners could be guided on how to proofread braille text when writing using the braille machine. • In groups learner could practice correcting errors in the current braille line by backspacing and using eraser. 	<ol style="list-style-type: none"> 1. What are the functions of main parts of a braille machine? 2. How would you correct an error when writing using a braille machine? 3. Why is it important to care for and store braille machine appropriately?
Braille writing equipment and materials.	1.4 Care and storage of braille writing equipment and materials (2 lessons)	a) Practice good care and storage of the braille writing equipment after use (S) b) Appreciate the use of braille writing equipment in learning. (A)	<ul style="list-style-type: none"> • Learner would be guided on how to use the braille machines safely and how to take care of machines to prevent accidents on self and others. • Learner could be guided on how to store the machine to prevent breakage and loss. 	<ol style="list-style-type: none"> 1. How do you take care your braille machine, slate and stylus? 2. Where do you keep your braille writing equipment?

<p>Core competences to be developed: Communication and collaboration: this could be achieved through learners working in pairs and in groups</p>	
<p>Link to pcis: citizenship –social cohesion: learners while working in pairs and groups promote the values of sharing , tolerance and respect.</p> <p>Education for sustainable development: safety and security -learners are guided on how to care for and store braille writing equipment to prevent breakage or loss</p>	<p>Link to values: responsibility,unity,love</p>
<p>Link to other subjects: English and literacy</p>	<p>Suggested community service learning activities: visit the Educational Assessment and Resource Centre or resource room interact with braille writing equipment and get guidance from th officers</p>
<p>Suggested non-formal activities to support learning: learners could visit a nearby store and familiarize themselves with storage of items</p>	<p>Suggested assessment: oral questions , observation</p>

Assessment rubric

Exceeding expectation	Meeting expectation	Approaching expectation	Below expectation
Learner can identify and use main parts of a braille machine and is able to correct mistake using an eraser effectively and independently	Learner can identify main parts of a braille machine and has knowledge of correcting mistakes using an eraser.	Learner can identify main parts of a braille machine has challenges in backspacing and correcting mistakes on a braille machine.	Learner experiences difficulties identifying main parts of a braille machine and cannot backspace as well as use eraser to correct mistal

STRANDS	SUB STRAND	SPECIFIC LEARNING OUTCOMES	SUGGESTED LEARNING EXPERIENCES	KEY INQUIRY QUESTIONS
2.0 Braille Reading Skills	2.1 Braille Book Orientation (10 lessons)	a) Identify pages of a braille book. b) Locate edges of a braille book c) Appreciate the importance of positioning a Braille book in preparation for reading.	<ul style="list-style-type: none"> • Teacher could display the book and guide the learner to locate the first page for reference. • Learner could be guided to identify the title, page, turn to the first page and locate the first line and last line of the first page. • Learners could practice turning through the Braille book to the last page systematically and locate the last line. • Learner could be guided to locate top, bottom, right and left edge using body parts and relate them with the top, bottom, right and left edge of a Braille book. • In groups, learners could practice locating different positions of braille book. • Learner could listen to and recite poems and using songs related to these positions. 	<ol style="list-style-type: none"> 1. How do we locate the edge of a braille book? 2. How do we locate the first page of a braille book? 3. Why is it important to locate the edge of a braille book?

Core competences to be developed:

Communication and collaboration: this could be achieved through learners working in pairs and in groups

Link to pcis: citizenship –social cohesion: learners while working in pairs and groups promote the values of sharing, tolerance and respect.	Link to values: responsibility, unity, love
Link to other subjects: English and literacy	Suggested community service learning activities: visit the library and familiarize themselves with the books
Suggested non-formal activities to support learning: learners could visit a resource person to listen to a story	Suggested assessment: oral questions , observation

Assessment rubric

Exceeding expectation	Meeting expectation	Approaching expectation	Below expectation
Learner can locate edges, first page and turn pages of a braille book with ease.	Learner can locate edges, first page turn pages of braille book.	Learner struggles to locate edges of the braille book but can turn the pages independently.	Learner can locate edges and pages of a Braille book but skips some page when turning the page.

STRAND	SUB- STRAND	SPECIFIC LEARNING OUTCOMES	SUGGESTED LEARNING EXPERIENCES	KEY INQUIRY QUESTIONS
Braille Reading Skills	2.2 Tracing Tactile Lines (8 lessons)	a) Trace tactile lines with both hands. b) Retrace the Braille line to the left side of the page with hands together. c) Drop both fingers to the next line together.	<ul style="list-style-type: none"> Learner could be guided to trace tactile lines with both hands. Learner could be guided to retrace Braille lines from right to left with hands together. In pairs or in groups learners could be guided to practice dropping both fingers to the next line together. 	<ol style="list-style-type: none"> How would you trace tactile lines? How would you begin reading a new line from the current Braille line?

Core competences to be developed:

Imagination and creativity: when learners trace and drop the fingers.

Communication and collaboration: as they work in groups.

Link to PCI's: life skills: self esteem – when learners are able to trace tactile line from left to right and drop both fingers to next line appropriately	Link to value: respect and responsibility
Link to other subjects: English Literacy	Suggested community service: Learners can pay a visit to the resource room to receive guidance from the officers.
Suggested non formal activity to support learning: visit a play centre	Suggested assessment: observation

Assessment rubric			
Exceeding expectation	Meeting expectation	Approaching expectation	Below expectation
Learner is able to retrace the Braille line to the left side of the page with hands together and drop both fingers to the next line together with speed	Learner is able to retrace the Braille line to the left side of the page with hands together and drop both fingers to the next line together.	Learner has challenges tracing the Braille line to the left side of the page with hands together but is able to drop both fingers to the next line together.	Learner has challenges both in tracing the Braille line to the left side of the page with hands together and dropping both fingers to the next line together.

STRAND	SUB STRAND	SPECIFIC LEARNING OUTCOMES	SUGGESTED LEARNING EXPERIENCES	KEY INQUIRY QUESTIONS
3.0 Braille Writing Skills	3.1 Body posture (10 lessons)	a) Positioning the wrists on edge of the table appropriately (S) b) position fingers on braille machine in readiness to press the keys	<ul style="list-style-type: none"> Learner could be shown the appropriate position of wrists on the edge of the table in readiness to write Braille. In pairs learners would practice positioning of the wrists on the edge of the 	<ol style="list-style-type: none"> How do you position your wrists in readiness to write braille? How do you position your fingers on the keys to write Braille?

		<p>c) Place of fingers on the right keys in readiness to write braille(S)</p> <p>d) Press the keys firmly to produce firm dots.</p>	<p>table in readiness to write braille.</p> <ul style="list-style-type: none"> • Learner could be guided on the correct placement of fingers in readiness to press the keys. • Learners could practice correct placement of fingers in readiness to press the keys. • In pairs or small groups would practice appropriate placement and positioning of their bodies, wrists and fingers in readiness to write Braille. 	<p>3. Why is it important to place the correct fingers on appropriate keys?</p>
<p>Core competences to be developed: Imagination and creativity: when placing the finger on the appropriate keys on the braille machine. Communication and collaboration: when learners work in pairs and groups.</p>				
<p>Link to PCI's: Link to pcis: citizenship –social cohesion: learners while working in pairs and groups promote the values of sharing, tolerance and respect.</p>		<p>Link to values: responsibility, respect</p>		
<p>Link to other subjects: English, Numeracy</p>		<p>Suggested to community services: Visit an Education Assessment and Resource Centre and learn more from the personnel.</p>		
<p>Suggested non formal activity: body exercises in the play ground</p>		<p>Suggested assessment: oral questions, observation</p>		
<p>Suggested Assessment</p>				

Exceeding expectation	Meeting expectation	Approaching expectation	Below expectation
Learner is able to locate and place of fingers on the right keys in readiness to write braille with ease	Learner is able to place of fingers on the right keys in readiness to write braille.	Learner is able to position the wrist on the edge of the table but has challenges placing the fingers on the right keys in readiness to write braille.	Learner has challenges both in positioning the wrist on the edge of the table and placing the fingers on the right keys in readiness to write braille

STRAND	SUB -STRAND	SPECIFIC LEARNING OUTCOMES	SUGGESTED LEARNING EXPERIENCES	KEY INQUIRY QUESTIONS
4.0 English Braille Notation	4.1 letters of the alphabet (16 lessons)	<ul style="list-style-type: none"> a) identify letters of the alphabet by feeling and naming the specific dots(S) b) Read letters of the alphabet in Braille. (S) c) Write letters of the alphabet in Braille. (S) 	<ul style="list-style-type: none"> • Learner could say letters of the alphabet in a sequence orally • Learner would be guided to identify letters of the alphabet by feeling and naming specific dots that make each letter of the alphabet in groups of A – J, K- T, U-Z and W. • In groups learners could associate the dots with letters of the alphabet by singing or formulating a letter-dot song. • Learner would be guided to read letters of the alphabet on a card or chart in groups of A – J, K- T, U- Z and W • In pairs learners could practice reading letters of the alphabet by identifying and reading letters that are reverse of each other such as DF, EI, JH, RW. • Learner would be guided to write letters of the alphabet using 	<ol style="list-style-type: none"> 1. Which are the dots that form the following letters of the alphabet A-Z? 2. Which pairs of letters of the alphabet are reverse of each other when reading and writing braille?

			<p>Braille writing equipment in groups of A – J, K- T, U-Z and W.</p> <ul style="list-style-type: none"> In turns learners practice writing pairs of letters of the alphabet that are reverse of each other such as DF, EI, JH, RW. 	
English Braille Notation	4.2 Un-contacted braille (10 lesson)	<p>a) Read simple words in braille. (S)</p> <p>b) Write simple words in Braille. (S)</p> <p>c) Appreciate the use of braille in reading and writing. (A)</p>	<ul style="list-style-type: none"> Learner could be guided to read three – four letter words in braille. In pairs learners would participate in reading three – four letter words for speed, accuracy and enjoyment. Learner could be guided to write three – four letter words in braille In pairs learners could participate in writing three - four letter words for speed, accuracy and enjoyment. 	
<p>Core competence to be developed: Communication and collaboration – This will be achieved by learners working in pairs and in groups in reading and writing braille.</p>				
<p>Link to PCIs: Link to pcis: citizenship –social cohesion: learners while working in pairs and groups promote the values of sharing, tolerance and respect.</p>			<p>Link to value: peace, unity, love</p>	
<p>Link to other subjects: English , Literacy</p>			<p>Suggested Community Service Learning: visit the library to read books and also get guidance from library attendants.</p>	
<p>Suggested non formal activity: sing songs related to alphabet.</p>			<p>Suggested assessment: oral questions</p>	

Assessment rubric:			
Exceeding expectations	Meeting expectations	Approaching expectations	Below expectations
Reads and writes simple words in braille with speed and accuracy.	Reads and writes simple words in braille	Reads and writes simple words in braille with support.	Unable to read and write simple words in braille.

STRAND	SUB- STRAND	SPECIFIC LEARNING OUTCOMES	SUGGESTED LEARNING EXPERIENCES	KEY INQUIRY QUESTIONS
5.0 Mathematic Braille Notations	5.1 Numbers in Braille (14 lessons)	<ul style="list-style-type: none"> a) Say numbers 1-10 orally. (k) b) Identify the number sign in braille. c) Identify numbers 1-10 in braille. d) Write numbers 1-10 in braille. e) Appreciate reading and writing numbers in braille (A) 	<ul style="list-style-type: none"> • Learners could be guided to say numbers 1-10 orally. • Learners would be guided to identify specific dots forming the number sign through touch. • Learners could be guided to practice writing the number sign. • Learners would be guided to identify numbers 1-10 in braille. • Learners could be guided to write numbers 1-10 in braille. • In pairs or groups could count objects in the classroom. • In pairs or groups learners could practice singing number games songs for enjoyment. 	<ol style="list-style-type: none"> 1. How many fingers do you have? 2. Who can sing a number game? 3. Where do you write the numeral sign when writing braille numbers? 4. Which letters of the alphabet are associated with writing numerals 1-10?

<p>Core competences to be developed: Critical thinking and innovations: Associating alphabets & numerals Communication and collaborations: Singing playing numbers game, songs working in groups.</p>	
<p>Link to PCI's and values: life skills – self esteem is boosted as learners are able to read and write numbers in braille</p>	<p>Link to values: peace love and unity</p>
<p>Link to other subjects:</p> <ul style="list-style-type: none"> • Mathematics activities • Language activities 	<p>Suggested community service learning: Visit to a local market to learn more about counting of numbers.</p>
<p>Suggested non formal activity to support learning: Singing playing numbers game, songs working in groups.</p>	<p>Suggested assessment: oral questions, written exercises</p>

Assessment rubric

Exceeding expectations	Meeting expectations	Approaching Expectations	Below Expectations
<p>The learner is able to identify the number sign and write numbers between 1- 10 in braille. In addition the learner is able to identify numbers beyond 10.</p>	<p>The learner is able to identify the number sign and write numbers 1 to 10 in braille.</p>	<p>The learner is able to identify some of the numbers between 1- 10 in braille with assistance.</p>	<p>The learner is unable to identify numbers between 1-10 in braille</p>

STRAND	SUB STRAND	SPECIFIC LEARNING OUTCOMES	SUGGESTED LEARNING EXPERIENCES	KEY INQUIRY QUESTIONS
Mathematic Braille Notations	5.2 Operation Signs (8 lessons)	a) Identify operation signs in mathematics braille.(K) b) Read the basic operation signs in mathematics braille. (S) c) Write the basic operation signs in mathematics braille. (S) d) Appreciate basic operations signs as used in mathematics braille. (A)	<ul style="list-style-type: none"> Learners could be guided to identify the basic operation signs +, - and = in braille. Learners would be guided to read the operation signs +, -, and = in braille. Learners would be guided to write the operation signs +, -, and = in braille. In pairs or groups learners could sing songs related to numbers and basic operation for mastery and enjoyment. 	<ol style="list-style-type: none"> What sign do we use for putting together, taking away and altogether of objects? How do you write the sign putting together, sign for taking away and sign for altogether? What is the importance of using the operation sign in mathematics?
<p>Core competences to be developed: Critical thinking and problem solving: when adding and subtracting objects Communication and collaboration when working in pairs and groups Creativity and innovation: When writing , playing and singing number & game songs</p>				
<p>Link to PCI's and values: social cohesion: learners while working in pairs and groups promote the values of sharing, tolerance and respect.</p>			<p>Link to values: unity, responsibility</p>	
<p>Link to other subjects: Mathematics activities, literacy and English</p>			<p>Suggested community service learning: Visit a market place to learn the concepts of putting together, taking away objects or items.</p>	

Suggested non formal activity to support learning: sing songs related to numbers	Suggested assessment: oral question, written exercises
---	---

Exceeding expectations	Meeting expectations	Approaching Expectations	Below Expectations
The learner is able to identify, read and write addition, subtraction and equal signs with ease.	The learner is able to identify read and write addition, subtraction and equal signs in braille.	The learner is able to identify read and write some of the operation signs in braille and requires support in writing them.	The learner is unable to identify read and write operation signs in braille.

UZI	KIPENGELE CHA UZI	MATARAJIO MAALUM	MAPENDEKEZO YA SHUGHULI ZA SOMO	MASWALI DAHILI
6.0 Brelu Ya Kiswahili	6.1 Abjadi za Kiswahili (14 lessons)	a) Tambua abjadi za Kiswahili kwa kugusa na kutaja nukta nundu husika. (U) b) Soma abjadi za Kiswahili kwa breli. (T) c) Andika abjadi za Kiswahili kwa breli. (T)	<ul style="list-style-type: none"> • Wanafunzi waelekezwe kutaja abjadi za Kiswahili kwa sauti. • Wanafunzi waelekezwe kutambua abjadi kwa kugusa na kutaja nukta nundu husika kwa mpangilio ufuatao: - A – J, K- T ,U-Z na W. • Katika vikundi wanafunzi wanaweza kuhusisha nukta nundu na herufi za abjadi kwa kuimba nyimbo zinazohusisha herufi- na nukta nundu husika. • Wanafunzi waelekezwe kusoma herufi za abjadi zilizoandikwa 	Ni nukta nundu zipi zinazounda herufi za abjadi zifuatazo A-Z?

			<p>kwenye kadi au chati kwa mpangilio ufuatao: - A – J, K- T, U-Z na W.</p> <ul style="list-style-type: none"> • Wanafunzi wawili wawili wanaweza kusoma huku wakitambua herufi zinazokinzana kama vile: DF, EI, JH, and RW. • Wanafunzi waelekezwe kuandika herufi za abjadi kwa mpangilio ufutao - A – J, K- T, U-Z na W. • Kwa zamu wanafunzi waweze kuandika herufi zinazokinzana kama vile: DF, EI, JH, RW 	
Breli ya kiswahili	6.2 Breli isiyo na mikato (8 lesson)	<p>a) soma maneno mafupi kwa breli</p> <p>b) Andika maneno mafupi kwa breli. (T)</p> <p>c) Thamini matumizi ya abjadi za Kiswahili katika kusoma na kuandika. (A)</p>	<ul style="list-style-type: none"> • Wanafunzi waelekezwe kusoma maneno mafupi kwa breli. • Wanafunzi waelekezwe kuandika maneno mafupi kwa breli. • Kwa zamu wanafunzi wanaweza kusoma na kuandika maneno mafupi kwa breli ili kuwapa uzoefu, na kasi inayohitajika katika kusoma na kuandika. 	Ni herufi zipi za abjadi zinazokusoma au kuandika breli?

Umilisi wa kimsingi unaokuzwa:

Mawasiliano na ushirikiano – Wanafunzi kufanya kazi kwa vikundi kuongea, kusoma na kuandika.

Uhusiano na masuala mtambuko: uraia mwema - .	Uhusianowa maadili:
Uhusiano na masomo mengine: Kiswahili, Literacy	Masomo kupitia huduma kwa jamii: Wanafunzi wanaweza kutembelea maktaba na kusoma vitabu au kupata mawaidha kutoka kwa wahudumu wa maktaba.
Shughuli za kila siku zisizoratibiwa zinazochangia ujifunzaji: wanafunzi waimbe nyimbo zinazohusisha somo husika	Mapendekezo ya tathmini: kujibu maswali kwa sauti, kazi kusoma na kuandika

Kiwango cha tathmini

ANAZIDI MATARAJIO	ANATIMIZA MATARAJIO	ANAKARIBIA MATARAJIO	CHINI YA MATARAJIO
Mwanafunzi anaweza kutambua, kusoma na kuandika maneno mafupi kwa breli akitumia abjadi ya Kiswahili na hata kuunganisha na kuanda sentensi.	Mwanafunzi anaweza kutambua kusoma na kuandika maneno mafupi kwa breli akitumia abjadi ya Kiswahili.	Mwanafunzi anaweza kutambua, kusoma na kuandika baadhi ya abjadi ya kiswaihili.	Mwanafunzi anamatatizo katika kutambua abjadi za Kiswahili.

GRADE 2 (40 minutes per lessons)

STRANDS	SUB STRAND	SPECIFIC LEARNING OUTCOMES	SUGGESTED LEARNING EXPERIENCES	KEY INQUIRY QUESTIONS
1.0 Braille Writing Equipment And Materials	1.1 Assistive Devices (5 lessons)	a) Identify assistive devices for reading and writing braille.(K) b) Use assistive devices in reading and writing braille. c) Practice good care and storage of the assistive devices after use (S) d) Appreciate the use assistive devices in learning. (A)	<ul style="list-style-type: none"> • Learner could be guided to identify assistive devices such as, computer with appropriate software, victor reader, smart phones , smart brailleurs. • Learner could be oriented on the use of assistive devices such as computer with appropriate software, victor reader, smart phones and smart brailleurs . • In pairs or groups learners could practice the use of 	<ol style="list-style-type: none"> 1. Which assistive devices are used to enhance learning? 2. What is the importance of using assistive devices in learning? 3. Why is it important to store the assistive technology equipment appropriately?

			assistive devices for reading and writing. <ul style="list-style-type: none"> • Learner would be guided on how to use the assistive devices safely and how to take care of them to prevent accidents on self and others. • Learner could be guided on how to store the assistive devices to prevent breakage and loss. 	
--	--	--	--	--

<p>Core competences to be developed:</p> <p>Communication and collaboration: This could be achieved through learners working in pairs and in groups.</p> <p>Creativity and innovations: By manipulating the devices.</p> <p>Learning to learn: the learners will continue to manipulate their devices in order to improve their learning.</p> <p>Digital literacy: This will be achieved by the learners when using assistive technology.</p>	
<p>Link to PCIs: , education for sustainable development – as they practice good care and storage of assistive devices after use.</p>	<p>Link to values: responsibility, respect, unity</p>
<p>Link to other subjects: English, Literacy, Kiswahili ,Mathematics</p>	<p>Suggested community service learning: Visit Educational Assessment and Resource Centre or resource room to</p>

			interact with assistive technology equipment and get guidance from the personnel-
Suggested non formal activity to support learning: visit the ICT centre to learn more on technology			Suggested assessment: observation, oral questions
Assessment rubric			
Exceeding expectation	Meeting expectation	Approaching expectation	Below expectation
Learner can identify, use and store all assistive devices learnt with ease.	Learner can identify, use and store all assistive devices learnt.	Learner struggles in identifying assistive devices and has limited knowledge in in using and storing.	The learner has limited knowledge in identifying assistive devices and cannot use nor store them appropriately.

STRANDS	SUB STRAND	SPECIFIC LEARNING OUTCOMES	SUGGESTED LEARNING EXPERIENCES	KEY INQUIRY QUESTIONS
2.0 Braille Reading Skills	2.1 Simple tactile lines, maps and diagrams. (5 lessons)	a) Identify simple tactile lines, maps and diagrams in a text.(K) b) Practice safe storage of the simple tactile materials after use.(S)	<ul style="list-style-type: none"> Learners could be guided to identify simple tactile lines, maps and diagrams through tracing. In pairs or groups Learners could practice tracing simple tactile lines, maps and diagrams 	<ol style="list-style-type: none"> Why is it important to identify tactile graphics? What is the use of diagrams in learning? How do you store tactile graphics?

		c) Appreciate the use of tactile materials in reinforcing concepts.(A)	<ul style="list-style-type: none"> Learners could be guided on appropriate storage of simple tactile materials. 	
<p>Core competences to be developed: Communication and collaboration. This could be achieved through learners working in pairs and in groups Creativity and innovations: By manipulating pictures ,models and graphics</p>				
Link to PCIs: citizenship- by the learner manipulating tactile maps diagrams and lines to understand the environment them.		Link to values: responsibility, respect		
Link to other subjects: English, Mathematics		Suggested community service learning: Visit resource room to interact with tactile materials and get guidance from the personnel		
Suggested Non formal activity to support learning: visit to the market place to interact with materials with different textures		Suggested assessment; observation, oral questions		
Suggested Assessment				
Exceeding expectation	Meeting expectation	Approaching expectation	Below expectation	
Learner can identify, trace and store tactile maps and diagrams with ease and practice their safe storage independently	Learner can identify, trace and store tactile maps and diagrams and practice their safe storage.	Learner can practice safe storage of tactile line maps and diagrams but has challenges identifying them.	Learner has challenges identifying tactile lines maps and diagrams as well as storing them.	

STRAND	SUB- STRAND	SPECIFIC LEARNING OUTCOMES	SUGGESTED LEARNING EXPERIENCES	KEY INQUIRY QUESTIONS
--------	-------------	----------------------------	--------------------------------	-----------------------

3.0 English Braille Notation	3.1 Indicators and punctuations (8 lessons)	a) Identify indicators and punctuation signs in English braille. (K) b) Use indicators and punctuation signs in English braille. (S) c) Appreciate the use of Indicators and punctuations signs in English braille.	<ul style="list-style-type: none"> • Learner would be guided to identify indicators and punctuation signs by mastering their specific dots. • Learner would be guided to use indicators and punctuation signs in reading and writing braille sentences. • In pairs learners could participate in identifying indicators and punctuations signs in sentences for speed, accuracy and enjoyment. • In groups learners could practice writing sentences using indicators and punctuation signs. 	<ol style="list-style-type: none"> 1. How do you indicate a capital letter? 2. Which dots form the following punctuation marks <ul style="list-style-type: none"> - Question mark? - Full stop? - Comma?
<p>Core competence to be developed: Communication and Collaboration – this could be achieved through learners working in pairs and groups Critical thinking and problem solving – this can be achieved through learners identifying specific dots for each indicator and punctuation sign and how to place them in the sentences</p>				
<p>Link to PCI's and values: social cohesion: learners while working in pairs and groups promote the values of sharing, tolerance and respect.</p>			<p>Link to values; peace, love and unity</p>	
<p>Link to other subjects: Literacy, English</p>			<p>Suggested Community Service Learning activities visit a library in the neighborhood, read braille books and get guidance by the library attendants</p>	
<p>Suggested formal activity to support learning: listen to a story from a resource person</p>			<p>Suggested assessment: oral questions, reading exercises</p>	

Assessment rubric			
Exceeding expectations	Meeting expectations	Approaching expectations	Below expectations
Identifies and uses indicators and punctuation signs with speed and accuracy in reading and writing.	Identifies and uses indicators and punctuation signs in reading and writing.	Identifies indicators and punctuation signs but requires support to use them appropriately in reading and writing.	Unable to Identify and use indicators and punctuation signs in English braille.

STRAND	SUB STRAND	SPECIFIC LEARNING OUTCOMES	SUGGESTED LEARNING EXPERIENCES	KEY INQUIRY QUESTIONS
English Braille Notation	3.2 Upper word signs (10 lessons)	a) Identify the words represented by the letters of the alphabet orally (K) b) Read words represented by the letters of the alphabet in full spelling. (S) c) Write words represented by the letters of the alphabet in full spelling. (S)	<ul style="list-style-type: none"> Learners would be guided to identify words represented by the letters of the alphabet by associating a letter with the word verbally. Learners would be guided to read the words represented by the letters of the alphabet in full spelling for mastery. Learners would be guided to write the words represented by the letters of the alphabet in full for mastery of spelling. In pairs learners to practice reading upper word signs a text. 	<ol style="list-style-type: none"> Which letters are not used to represent words in braille? Why do letters of the alphabet represent specific words? Why is it important to use the upper word sign?

		<p>d) Read sentences with upper word signs in a text. (S)</p> <p>e) Use upper words signs to write short sentences. (S)</p>	<ul style="list-style-type: none"> Learners could practice writing short sentences using the upper word signs. 	
<p>Core competence to be developed: Communication and collaboration – achieved through learners working in pairs and reading aloud Self-efficacy – achieved through learners using upper word signs instead of using the fully spelt out words</p>				
<p>Link to PCIs: life skills – self esteem – through ability to use upper group signs instead of fully spelt out words</p>			<p>Link to values: respect, unity</p>	
<p>Link to other subjects; Literacy and English</p>			<p>Suggested Community Service Learning activities : attend a religious service and read short verses in braille</p>	
<p>Non Formal Activity To Support Learning: sing songs and play games related to upper word signs.</p>			<p>Suggested assessment: written exercises reading exercises observation</p>	
<p>Assessment rubric</p>				
Exceeding expectations	Meeting expectations	Approaching expectations	Below expectations	
Identify words represented by letters of the alphabet and use the upper word signs to write sentences with speed and accuracy. Has mastered the full spelling of the words	Identify words represented by letters of the alphabet and use the upper word signs to write sentences	Identifies words represented by letters of the alphabet but requires support in using them in reading and writing sentences	Unable to identify words represented by letters of the alphabet and apply them in reading and writing sentences	

represented by the letters of the alphabet.			
---	--	--	--

STRAND	SUB STRAND	SPECIFIC LEARNING OUTCOMES	SUGGESTED LEARNING EXPERIENCES	KEY INQUIRY QUESTIONS
English Braille Notation	3.3 Special word signs (10 lessons)	<ul style="list-style-type: none"> a) Identify the words represented by the special words signs orally. (K) b) Read words represented by the special word sign in full spelling on a work card. (S) c) Write words represented by the special word in full spelling. (S) d) Use special word signs to write short sentences. (S) 	<ul style="list-style-type: none"> • Learners would be guided to identify the words represented by the special word signs verbally. • Learners would be guided to read the words represented by the special word signs in full spelling for mastery. • Learners would be guided to write the words represented by the special word signs in full for mastery of spelling. • In pairs learners could practice reading special word signs in sentences. • Learners could practice writing short sentences using the special word signs. 	<ol style="list-style-type: none"> 1. Which dots are used to form the following special word signs: AND FOR OF THE WITH? 2. Why is it important to use the special word signs?

Core competence to be developed: Communication and collaboration – achieved through learners working in pairs and reading aloud Self efficacy: Achieved through learners using special word signs instead of using the fully spelt out words				
Link to PCIs: life skills effective communication through reading and writing special word signs			Link to values: responsibility, unity, peace	
Link to other subjects: Literacy and English			Suggested Community Service Learning activities- Attend a religious service and read short verses in braille	
Non Formal Activity To Support Learning: sing songs related to special word signs			Suggested assessment: written exercises, oral questions	
Assessment rubric				
Exceeding expectations	Meeting expectations	Approaching expectations	Below expectations	
Identify words represented by special word signs and use them to write sentences with speed and accuracy. Has mastered the full spelling of the words represented by the special word signs.	Identify, read and write words represented by special word signs and use them to read and write sentences.	Identifies words represented by special word signs but requires support in using them in reading and writing sentences.	Unable to identify words represented by special word signs and apply them in reading and writing sentences.	

STRAND	SUB STRAND	SPECIFIC LEARNING OUTCOMES	SUGGESTED LEARNING EXPERIENCES	KEY INQUIRY QUESTIONS
4.0 Mathematics braille Notations	4.1 Numbers in braille (10 lessons)	a) Say numbers 11- 100 orally b) Read numbers 11-100 in braille	<ul style="list-style-type: none"> Learners could be guided to say the numbers 11-100 orally. 	1. How would you write numbers 11-100 in braille?

		<p>c) Write numbers 11-100 in braille appropriately.</p> <p>d) Read and write simple mathematics statements in braille.</p> <p>e) Appreciate reading and writing numbers in braille (A)</p>	<ul style="list-style-type: none"> • Learners could be guided to read the numbers 11-100 in braille. • Learners could be guided to write the numbers 11-100 in braille. • Learners could use numbers to practice writing simple mathematical statements. • In pairs and in groups learners would practice reading and writing numbers and simple mathematical statements in braille. 	<p>2. How would you write a simple mathematics statement in braille?</p>
<p>Core competences and value: Imagination and creativity: Learners engage critical thinking in reading and writing numbers as well as simple mathematical statements. Communication and collaborations: By working in pairs and groups</p>				
<p>Link to PCI's: social cohesion: learners while working in pairs and groups promote the values of sharing, tolerance and respect.</p>		<p>Link to values: love, respect and unity</p>		
<p>Link to other subjects: English, mathematics activities</p>		<p>Suggested community service learning activities: Visit to a local market to familiarize them with counting different objects and items.</p>		

Suggested non formal activity to support learning: go to the school play ground and identify and count various objects and items	Suggested assessment: oral questions and written exercises

Assessment rubrics

Exceeding expectations	Meeting expectations	Approaching Expectations	Below Expectations
The learner is able to identify read and write numbers 11-100 and to read and write simple mathematic statements in braille with ease.	The learner is able to identify read and write numbers 11-100 and to read and write simple mathematic statements in braille.	The learner is able to identify read and write some numbers between 11-100 in braille with assistance.	The learner is unable to identify read or write numbers between 11-100 in braille.

STRAND	SUB STRAND	SPECIFIC LEARNING OUTCOMES	SUGGESTED LEARNING EXPERIENCES	KEY INQUIRY QUESTIONS
Mathematics braille Notation	4.2 Units of measurements (8 lessons)	a) Identify units of money, Length, Weight and Time as used in mathematics braille.	<ul style="list-style-type: none"> Learners could be guided identify the dots forming the units of money, Length, Weight and Time orally Learners could be guided to read units of money, Length, Weight and Time in braille on a work card. 	<ol style="list-style-type: none"> How would you write shillings and cents in braille? How would you write grams,

		<p>b) Read units of money, Length, Weight and Time as used in braille.</p> <p>c) Write units of money, Length, Weight and Time as used in braille.</p> <p>d) Appreciate the use units of measurement mathematics braille</p>	<ul style="list-style-type: none"> Learners could be guided to write units of money, Length, Weight and Time in braille. In pairs or groups learners could practice reading and writing units of measurement for mastery and enjoyment. 	<p>centimeters, metres, kilograms in braille?</p>
<p>Core competences to be developed: Imagination and creativity as they measure and weigh objects Communication and collaboration as they work in groups</p>				
<p>Link to PCI's and values: social cohesion: learners while working in pairs and groups promote the values of sharing , tolerance and respect.</p>			<ul style="list-style-type: none"> Link to values: peace , love and unity 	
<p>Link to other subjects: mathematics activities , language activites</p>			<p>Suggested Community Service Learning: visit the local market to observe and interact with activities related to weight and measures.</p>	
<p>Non formal activity to support learning. Role play</p>			<p>Suggested assessment: written exercises</p>	

Assessment rubrics			
Exceeding expectations	Meeting expectations	Approaching Expectations	Below Expectations
The learner is able to identify, read and write units of measurement in braille with ease.	The learner is able to identify, read and write units of measurement in braille.	The learner can identify, read and write some units of measurement in braille with support.	The learner is unable to identify, read and write some units of measurement in braille

UZI	KIPENGELE CHA UZI	MATARAJIO MAALUM	MAPENDEKEZO YA SHUGHULI ZA SOMO	MASWALI DAHILI
5.0 Brelu Ya Kiswahili	5.1 Alama za kuakifisha (8 lessons)	a) kutambua alama za kuakifisha katika breli (U) b) kusoma alama za kuakifisha katika katika sentensi. (T) c) kuandika alama za kuakifisha katika katika sentensi	<ul style="list-style-type: none"> • Wanafunzi waelekezwe kutambua alama za kuakifisha wakizingatia nukta nundu husika. • Wanafunzi waelekezwe kusoma alama za kuakifisha katika sentensi • Wanafunzi waelekezwe kuandika alama za kuakifisha katika sentensi • Kwa vikundi wanafunzi wanaweza kutambua alama za kuakifisha katika sentensi ili kuwapa uzoefu na kasi inayohitajika katika kusoma na kuandika. 	1. Ni vipi utaandika herufi kubwa katika breli? 2. Ni nukta nundu zipi zinazotumika kuandika alama za kuakifisha zifuatazo: - Alama ya kiulizio? - kituo? - koma?

Umilisi wa kimsingi unaokuzwa:

Mawasiliano na ushirikiano – Wanafunzi kufanya kazi kwa vikundi kuongea, kusoma na kuandika.

Uhusiano na masuala mtambuko: uraia mwema -	Uhusianowa maadili:
Uhusiano na masomo mengine: Kiswahili, Literacy	Masomo kupitia huduma kwa jamii: Wanafunzi wanaweza kutembelea maktaba na kusoma vitabu au kupata mawaidha kutoka kwa wahudumu wa maktaba.
Shughuli za kila siku zisizoratibiwa zinazochangia ujifunzaji: wanafunzi waimbe nyimbo zinazohusisha somo husika	Mapendekezo ya tathmini: kujibu maswali kwa sauti, kazi kusoma na kuandika

Kiwango cha tathmini

ANAZIDI MATARAJIO	ANATIMIZA	ANAKARIBIA MATARAJIO	CHINI YA MATARAJIO
Mwanafunzi anatambua alama za kuakifisha pia kuzitumia katika kusoma na kuandika sentensi sentensi akizingatia alama hizo.	Mwanafunzi anatambua alama za kuakifisha na kuzitumia katika kusoma na kuandika sentensi.	Mwanafunzi anatambua baadhi za alama za kuakifisha na kuzitumia kuandika sentensi kwa usaidizi.	Mwanafunzi ana matatizo ya kutambua alama za kuakifisha na pia kuandika sentensi.

UZI	KIPENGELE CHA UZI	MATARAJIO MAALUM	MAPENDEKEZO YA SHUGHULI ZA SOMO	MASWALI DAHILI
Kiswahili breli	5.2 Mikato ya Kiswahili (12 lessons)	a) tambua maneno yanayosimamiwa na herufi za abjadi kwa sauti.(T) b) Soma maneno yanayosimamiwa na herufi za	<ul style="list-style-type: none"> Wanafunzi waelekezwe kutambua maneno yanayosimamiwa na herufi za abjadi kwa kuambatanisha neno na herufi kwa sauti. Wanafunzi waongozwe kutambua herufi Q na X ambazo ziko katika abjadi ya kiingereza lakini 	<ol style="list-style-type: none"> Ni herufi gani ambazo hazimo katika abjadi ya Kiswahili lakini husimamia maneno katika breli ya Kiswahili? Ni kwa sababu gani herufi za abjadi

		<p>abjadi yaliyoandikwa kikamilifu.(T)</p> <p>c) Andika maneno yanayosimamiwa na herufi za abjadi kikamilifu (T)</p> <p>d) Soma sentensi zilizoandikwa kwa kutumia herufi zinazosimama badala ya maneno. (T)</p> <p>e) Tumia herufi zinazosimama badala ya maneno kuandika sentensi. (T)</p>	<p>huwakilisha maneno katika abjadi za Kiswahili.</p> <ul style="list-style-type: none"> • Wanafunzi waelekezwe kusoma maneno yanayowakilishwa na herufi za abjadi ili watambue namna yanavyoendelezwa kikamilifu. • Wanafunzi waelekezwe kuandika maneno yanayowakilishwa na herufi za abjadi ili watambue namna yanavyoendelezwa kikamilifu. • Kwa vikundi wanafunzi wanaweza kusoma sentensi fupi wakitumia maneno yanayo simamiwa na herufi za abjadi ili kuwapa uzoefu na kasi inayohitajika katika kusoma. • Kwa vikundi wanafunzi wanaweza kuandika sentensi fupi wakitumia maneno yanayo simamiwa na herufi za abjadi ili kuwapa uzoefu na kasi inayohitajika katika kuandika. 	<p>zinatumika kuwakilisha maneno fulani katika breli ya Kiswahili?</p> <p>3. Kuna umuhimu gani kutumia herufi za abjadi kuwakilisha maneno fulani katika breli?</p>
--	--	--	--	---

Umilisi wa kimsingi unaokuzwa:

Mawasiliano na ushirikiano – Wanafunzi kufanya kazi kwa vikundi kuongea, kusoma na kuandika.

Uhusiano na masuala mtambuko: uraia mwema -

Uhusianowa maadili:

Uhusiano na masomo mengine: Kiswahili, Literacy	Masomo kupitia huduma kwa jamii: Wanafunzi wanaweza kutembelea maktaba na kusoma vitabu au kupata mawaidha kutoka kwa wahudumu wa maktaba.
Shughuli za kila siku zisizoratibiwa zinazochangia ujifunzaji: wanafunzi waimbe nyimbo zinazohusisha somo husika	Mapendekezo ya tathmini: kujibu maswali kwa sauti, kazi kusoma na kuandika

Kiwango cha tathmini			
ANAZIDI MATARAJIO	ANATIMIZO MATARAJIO	ANAKARIBIA MATARAJIO	CHINI YA MATARAJIO
Mwanafunzi anatambua, kusoma na kuandika maneno yanayosimamiwa na herufi za abjadi na kuandika sentensi kwa kutumia herufi husika kwa kasi na ukamilifu.	Mwanafunzi anatambua, kusoma na kuandika maneno yanayosimamiwa na herufi za abjadi na kuandika sentensi kwa kutumia herufi husika.	Mwanafunzi anatambua kusoma na kuandika maneno na sentensi akitumia baadhi ya herufi zinazosimama badala ya neno.	Mwanafunzi ana matatizo katika kutambua maneno yanayosimama na herufi za abjadi.

GRADE 3 (40 minutes per lesson)

STRANDS	SUB STRAND	SPECIFIC LEARNING OUTCOMES	SUGGESTED LEARNING EXPERIENCES	KEY INQUIRY QUESTIONS
1.0 Braille Writing Equipment and Materials	1.1 Assistive devices (5 lessons)	e) Identify assistive devices for reading and writing braille.(K) f) Use assistive devices in reading and writing braille.. g) Practice good care and storage of the assistive devices after use (S)	<ul style="list-style-type: none"> • Learner could be guided to identify assistive devices such as, computer with appropriate software, victor reader, note taker, talking calculator, smart phones and smart brailers. • Learner could be oriented on the use of assistive devices such as computer with appropriate software, victor reader, note taker, talking calculator smart phones and smart brailers. 	<ol style="list-style-type: none"> 1. What are some of the assistive technology equipment? 2. What are the uses of the assistive technology devices learnt?

		a) Appreciate the use of assistive devices in learning. (A)	<ul style="list-style-type: none"> • In pairs or groups learners could practice the use of assistive devices for reading and writing. • Learner would be guided on how to use the assistive devices safely and how to take care of them to prevent accidents on self and others. • Learner could be guided on how to store the assistive devices to prevent breakage and loss. 	
--	--	---	---	--

Core competences to be developed:

Communication and collaboration. This could be achieved through learners working in pairs and in groups

Creativity and innovations: By manipulating the devices

Learning to learn: The learners would continue to manipulate their devices in order to improve learning

Link to PCIs: Education for Sustainable Development – as they use their devices and store after use	Link values: responsibility, respect
Link to other subjects: English, Literacy, Kiswahili, and Mathematics	Suggested community service learning: Visit the Educational Assessment and Resource Centre or resource room to interact with braille writing equipment and get guidance from the personnel.
Suggested non formal activity to support learning: visit an ICT centre to learn more about assistive technology	Suggested assessment: oral questions, observation

Suggested Assessment

Exceeding expectation	Meeting expectation	Approaching expectation	Below expectation
------------------------------	----------------------------	--------------------------------	--------------------------

Learner can identify all assistive devices learnt and store appropriately	Learner can identify all assistive devices learnt and store them	Learner can identify some assistive devices learnt but requires support to store appropriately.	The learner has limited knowledge in identifying assistive technology devices and cannot store them independently
---	--	---	---

STRANDS	SUB STRAND	SPECIFIC LEARNING OUTCOMES	SUGGESTED EXPERIENCES	KEY INQUIRY QUESTIONS
2.0 Braille Reading Skills	2.1 Simple tactile maps and diagrams (5 lessons)	a) Read and interpret tactile maps and diagrams. b) Practice good care and storage of simple tactile maps and diagrams after use (S) c) Appreciate the use simple tactile diagrams in learning. (A)	<ul style="list-style-type: none"> Learners could be guided to read simple tactile lines, maps and diagrams In pairs or groups Learners could be guided to interpret, simple tactile lines, maps, and diagrams Learners could be guided on appropriate care and storage of simple tactile lines, maps and diagrams 	<ol style="list-style-type: none"> Why is it important to interpret simple tactile lines, maps and diagrams? What is the importance of models? How do you store tactile graphics? Why are tactile maps important?

Core competences to be developed:

Communication and collaboration. This could be achieved when learners are working in pairs and in groups
 Creativity and innovations: By manipulating the devices

Link to pcis: Education for Sustainable Development – as they use their tactile line and diagrams and store after use

Link to values: responsibility, respect

Link to other subjects: English, mathematics

Suggested community service learning: A visit to Educational Assessment and Resource Centre or resource room to interact with, tactile maps and diagrams and simple tactile lines

Non formal activity to support learning: visit the market to familiarize themselves with materials of different surfaces	Suggested assessment: oral questions, observation
---	--

Assessment rubrics			
Exceeding expectation	Meeting expectation	Approaching expectation	Below expectation
Learner can read and interpret , simple tactile lines , maps and diagrams appropriately and with ease	Learner can read and interpret, simple tactile lines, maps and diagrams appropriately.	Learner can read but cannot interpret simple tactile lines , maps and diagrams independently	Learner can neither read nor interpret simple tactile lines maps and diagrams

STRAND	SUB STRAND	SPECIFIC LEARNING OUTCOMES	SUGGESTED EXPERIENCES	KEY INQUIRY QUESTIONS
Braille reading skills	2.2 Tracing patterns (4 lessons)	a) Identify different tactile patterns by touch. b) Interpret and match simple lines and shapes to form correct tactile patterns c) Appreciate the role of tactile patterns in learning.	<ul style="list-style-type: none"> Learners could be guided to identify tactile patterns by touching surfaces Learners could be guided to interpret and match simple lines and shapes to form correct tactile patterns In pairs or groups learners could practice matching different lines and shapes to form different patterns using cotton twines. In pairs or groups learners could participate in tracing 	<ol style="list-style-type: none"> Why is it important to identify tactile graphics? What is the importance of tracing patterns? What material can be used making different patterns? How do we make tactile patterns using cotton twine

			different patterns for mastery and enjoyment..		
<p>Core competences to be developed: Communication and collaboration: This could be achieved through learners working in pairs and in groups. Creativity and innovations: By learners making patterns. Citizenship: When working in groups whose members are of different diversities they practice citizenship.</p>					
<p>Link to PCIs: social cohesion: When working in groups whose members are of different diversities they practice citizenship.</p>			<p>Link to values: responsibility, respect</p>		
<p>Link to other subjects: English, Environmental studies, Mathematics</p>			<p>Suggested community service learning: visit the Educational Assessment and Resource Centre or resour room to interact with tactile maps and diagrams and sir tactile lines</p>		
<p>Suggested non formal activities: visit the market to familiarize themselves with materials of different surfaces</p>			<p>Suggested assessment: oral questions, observation</p>		
<p>Suggested Assessment</p>					
Exceeding expectation		Meeting expectation		Approaching expectation	Below expectation
Learner can identify read and trace different tactile patterns with ease		Learner identify read and trace different tactile patterns.		Learner can identify, read but cannot trace simple tactile lines , maps and diagrams independently	The learner can neither identify nor trace simple tactile lines , maps and diagrams independently

STRAND	SUB STRAND	SPECIFIC LEARNING OUTCOMES	SUGGESTED LEARNING EXPERIENCES	KEY INQUIRY QUESTIONS
---------------	-------------------	-----------------------------------	---------------------------------------	------------------------------

3.0 Braille Writing Skills	3.1 Braille formatting (3 lessons)	a) Identify first line of a Braille paragraph. b) Centre heading in a Braille text. c) Appreciate the importance of indenting and centering a Braille text.	<ul style="list-style-type: none"> • Learners could be guided in activities to identify the indented first line of a Braille paragraph. • Learners could be guided on how to center Braille heading in a text. • In groups learners practice centering heading and indenting first line of a paragraph for mastery of formatting braille work 	<ol style="list-style-type: none"> 1. How do you indent a Braille line? 2. How do you center a Braille heading 3. How do you center a braille text 4. What is the importance of centering?
<p>Core competences to be developed: Communication and collaboration: This could be achieved through learners working in pairs and in groups. Self efficacy by reading indenting and centering of braille text.</p>				
Link to PCIs: : life skills – self esteem – through ability to indent and center braille text		Link to values: responsibility, respect		
Link to other subjects: English, Environmental studies ,mathematics		Suggested community service learning: visit the Educational Assessment and Resource Centre or resource room to interact with pictures , tactile maps and diagrams and simple tactile lines		
Suggested non formal activities: role play		Suggested assessment: oral questions, observation		

Assessment rubric

Exceeding expectation	Meeting expectation	Approaching expectation	Below expectation
Learner can centre the heading and indent a paragraph accurately and with speed	Learner can centre the heading and indent a paragraph accurately	Learner can only centre the heading but cannot indent a paragraph accurately	The learner cannot center heading and cannot indent paragraph

STRAND	SUB STRAND	SPECIFIC LEARNING OUTCOMES	SUGGESTED LEARNING EXPERIENCES	KEY INQUIRY QUESTIONS
4.0 English Braille Notation	4.2 Upper group signs and word signs (22 lessons)	a) Identify the dots forming the upper group signs and word signs orally.(K) b) Read upper group signs and word signs in sentences. (S) c) Write upper group signs and word signs in sentences. d) Appreciate use of upper group signs in reading and writing Braille.(A)	<ul style="list-style-type: none"> • Learners would be guided to identify the dots forming the upper group signs and word signs with H, O and E orally • Learners would be guided to read sentences involving upper group signs and word signs with H, O and E • Learners would be guided to write sentences involving upper group signs and word signs with H, O and E • In pairs learners could participate in reading and writing sentences involving the upper group signs and word signs for mastery 	<ol style="list-style-type: none"> 1. which dots form the following upper group signs CH, TH, ING, ST, ED 2. Why do use contracted braille?

			<ul style="list-style-type: none"> • Learner would be guided to identify upper group signs and word sign with (ST,AR,ING,BLE) • Learners would be guided to read upper group signs and word sign with (ST,AR,ING,BLE) • Learner would be guided to write upper group signs and word sign with (ST,AR,ING,BLE) • In groups learners could participate in reading and writing sentences involving the upper group signs and word sign for mastery. • Learners could listen and sing songs related to dots that form the upper group signs and word signs for mastery and enjoyment. 	
--	--	--	--	--

Core competence to be developed :

Communication and collaboration: As they work in pairs and groups to read and write the upper group signs and word signs.

Critical thinking and problem solving: In identifying the dots that combine to form the upper group signs and word signs.

Learning to learn: Learner develops the desire to continuously seek more knowledge and skills through experience.

Link to PCI's: education for sustainable development -Safety and care - while handling Braille writing equipment and materials,		Link to values: love , peace unity		
Links to other Subjects: English, literacy		Suggested community Learning activities: Visit a nearby national library read Braille books		
Suggested non formal activity to support learning: sing songs related to upper group signs		Suggested assessment: oral questions and written exercises		
Assessment rubric				
Exceeding expectations		Meeting expectations		Approaching expectations
Identify upper group signs and words signs and use them to read and write sentences with ease.		Identify upper group signs and words signs and use them to read and write sentences.		Can Identify upper group signs and word signs but struggles to use them to read and write sentences.
				Unable to identify upper group and words signs and use them to read and write sentences.
STRAND	SUB STRAND	SPECIFIC LEARNING OUTCOMES	SUGGESTED LEARNING EXPERIENCES	KEY INQUIRY QUESTIONS
English Braille Notation	4.3 Lower group signs. (8 lessons)	<p>a) Identify the dots forming lower group signs orally (K).</p> <p>b) Read lower group signs in sentences. (S)</p>	<ul style="list-style-type: none"> Learners would be guided to identify dots forming the lower group signs orally in categories of: <ul style="list-style-type: none"> Those which are used at the beginning of a word. Those which are used in the middle of a word Those that are used at any part of a word. Learners would be guided to read sentences involving lower group signs in categories of : 	<ol style="list-style-type: none"> Which dots form the following lower group signs? DIS, COM , BB, GG What is the difference between lower group signs and upper group signs?

		<p>c) Write lower group signs in sentences. (S)</p>	<ul style="list-style-type: none"> - Those which are used at the beginning of a word. - Those which are used in the middle of a word - Those that are used at any part of a word. <ul style="list-style-type: none"> • Learners would be guided to write sentences involving lower group signs in categories of : <ul style="list-style-type: none"> - Those which are used at the beginning of a word. - Those which are used in the middle of a word - Those that are used at any part of a word. • In pairs or groups learners could participate in reading and writing sentences involving lower groups signs in various categories for mastery. 	
English Braille Notation	4.4 Lower word signs. (12 lessons)	<p>a) Identify dots forming lower word signs orally (K)</p> <p>b) Read lower word signs in sentences. (S)</p> <p>c) Write lower word signs and in sentences. (S)</p>	<ul style="list-style-type: none"> • Learners could be guided to identify dots forming lower word signs orally in categories of : <ul style="list-style-type: none"> - Those that must be spaced from other words but may in some cases be attached to punctuation marks - Those that must written spaced from all other signs 	

		<p>d) Appreciate use of lower group signs in reading and writing Braille.(A)</p>	<ul style="list-style-type: none"> - Those that must written attached to the next word. • In pairs or groups learners could practice identifying dots forming lower word signs orally • Learners could be guided to read lower word signs in sentences in categories of : <ul style="list-style-type: none"> - Those that must be spaced from other words but may in some cases be attached to punctuation marks - Those that must written spaced from all other signs - Those that must be written attached to the next word. • In pairs or groups learners could participate in reading sentences involving lower word signs in various categories for mastery and enjoyment. • Learners could be guided to write sentences involving lower word signs in categories of : <ul style="list-style-type: none"> - Those that must be spaced from other words but may in some cases be attached to punctuation marks - Those that must written spaced from all other signs 	
--	--	--	--	--

			<ul style="list-style-type: none"> - Those that must be written attached to the next word. • In pairs or groups learners could participate in reading and writing sentences involving lower word signs in various categories for mastery and enjoyment. 	
<p>Core competence to be developed :</p> <p>Communication and collaboration: As they work in pairs and groups to read and write the upper group signs and word signs.</p> <p>Critical thinking and problem solving: In identifying the dots that combine to form the upper group signs and word signs.</p> <p>Learning to learn: Learner develops the desire to continuously seek more knowledge and skills through experience.</p>				
<p>Link to PCI's education for sustainable development -Safety and care - while handling Braille writing equipment and materials.</p>			<p>Link to values : peace love and unity</p>	
<p>Links to other Subjects: English, literacy</p>			<p>Suggested community Learningactivities: Visit a nearby national library read Braille books</p>	
<p>Suggested non formal activity to support learning: sing songs related to lower group signs and word signs</p>			<p>Suggested assessment: oral questions and written exercises</p>	
<p>Assessment rubric</p>				
<p>Exceeding expectations</p>	<p>Meeting expectations</p>	<p>Approaching expectations</p>	<p>Below expectations</p>	
<p>Learner can identify lower group signs and words signs and use them to read and write sentences with ease and accuracy.</p>	<p>Learner can identify lower group signs and words signs and use them to read and write sentences.</p>	<p>Learner can identify lower group signs but struggles to use them as word signs to read and write sentences.</p>	<p>Learner cannot identify lower group signs nor use them to read or write sentences.</p>	

STRAND	SUB STRAND	SPECIFIC LEARNING OUTCOMES	SUGGESTED LEARNING EXPERIENCES	KEY INQUIRY QUESTIONS
5.0 Mathematics braille notations	5.1 Numbers in braille (6 lessons)	a) Say numbers 101 - 1000 orally b) Read numbers 101 – 1000 in braille correctly c) Write numbers 101 – 1000 in braille correctly d) Write simple mathematical statements in braille e) Appreciate reading and writing numbers in braille (A)	<ul style="list-style-type: none"> Learners could be guided to say numbers 101 – 1000 orally Learners would be guided to write numbers from 101-1000 in braille Learners could be guided to write simple mathematic statements in braille In pairs and groups learners could practice reading and writing numbers from 101-1000 in braille 	<ol style="list-style-type: none"> How would you write numbers 101-1000 in braille? How would you write a simple mathematics statement in braille?
Core competences to be developed: Imagination and creativity as learners read and write numbers as well as simple mathematical statements in braille				
Communication and collaborations: By working in pairs and groups				
Link to PCI's: Citizenship: social cohesion-as the learners sing songs and recite poems related to numbers			Link to values: love, peace and respect	
Link to other subjects: mathematics activities, English, literacy			Suggested community service learning: Visit to a local market to learn more about counting of numbers	
Suggested non formal activity to support learning: share items and count the number that each learner has.			Suggested assessment ; oral question and written exercises	

Assessment Rubric

Exceeding expectations	Meeting expectations	Approaching Expectations	Below Expectations
------------------------	----------------------	--------------------------	--------------------

The learner is able to identify, read and write numbers 101-1000 in Braille as well as write simple mathematics statements with ease and accuracy.	The learner is able to identify, read and write numbers 101-1000 in Braille as well as write simple mathematics statements.	The learner is able to identify, read and write numbers 101-1000 in Braille but requires assistance in writing simple mathematics statements.	The learner is unable to identify read or write the numbers 101-1000 in braille.
--	---	---	--

STRAND	SUB STRAND	SPECIFIC LEARNING OUTCOMES	SUGGESTED LEARNING EXPERIENCES	KEY INQUIRY QUESTIONS
Mathematic Braille Notations	5.2 Operation Signs (8 lessons)	e) Identify operation signs in mathematics braille. (K) f) Read the basic operation signs in mathematics braille. (S) g) Write the basic operation signs in mathematics braille. (S) h) Appreciate basic operations signs as used in mathematics braille. (A)	<ul style="list-style-type: none"> Learners could be guided to identify the basic operation signs \times and \div in braille. Learners would be guided to read the operation signs \times and \div in braille. Learners would be guided to write the operation signs \times and \div in braille. In pairs or groups learners could sing songs related to numbers and basic operation for mastery and enjoyment. 	<ol style="list-style-type: none"> What sign do we use for repeated addition, subtraction of objects? How do you write the signs for multiplication and division, What is the importance of using the operation signs in mathematics?

Core competences to be developed:

Critical thinking and problem solving: when carrying out multiplication and division.

Communication and collaboration when working in pairs and groups

Creativity and innovation: When writing , playing and singing number & game songs

Link to PCI's and values: social cohesion: learners while working in pairs and groups promote the values of sharing, tolerance and respect.	Link to values: unity, responsibility
Link to other subjects: Mathematics activities, literacy and English	Suggested community service learning: Visit a market place to learn the concepts of multiplication and division of objects or items.
Suggested non formal activity to support learning: sing songs related to numbers	Suggested assessment: oral question, written exercises

Exceeding expectations	Meeting expectations	Approaching Expectations	Below Expectations
The learner is able to identify, read and write multiplication and division with ease and use them in correctly in short mathematical statements.	The learner is able to identify, read and write multiplication and division signs in braille.	The learner is able to identify read and write some of the operation signs in braille and requires support in writing them.	The learner is unable to identify read write operation signs in braille.

STRANDS	SUB-STRAND	SPECIFIC LEARNING OUTCOMES	SUGGESTED EXPERIENCES	KEY INQUIRY QUESTIONS
Mathematics Braille Notation	5.3 Simple fractions (7 lessons)	a) Identify simple fractions of a whole. b) Say simple fractions orally c) Read simple fractions in braille d) Write simple fractions in braille e) Appreciate the act of sharing parts of	<ul style="list-style-type: none"> Learners could be guided to identify simple fractions ($\frac{1}{2}$, $\frac{1}{4}$ through sharing a whole object . Learners could be guided to say simple fractions ($\frac{1}{2}$, $\frac{1}{4}$) orally 	<ol style="list-style-type: none"> What do you get when you share an orange between 2 boys? What do you get when you share an orange

		whole objects or item.	f) Learners could be guided read simple fractions ($\frac{1}{2}$, $\frac{1}{4}$ in braille <ul style="list-style-type: none"> In pairs learners could write simple fractions ($\frac{1}{2}$, $\frac{1}{4}$) in braille In pairs or groups learners could practice sharing whole objects. 	among four girls? 3. How do you write ($\frac{1}{2}$, $\frac{1}{4}$) in braille? 4. What is the importance of sharing an object equally?
Core competences to be developed: Communication and collaboration when sharing items. Critical thinking and innovations: When dividing a whole object among many people				
Link to PCI's and values: Citizenship: social cohesion-as the learners share objects and items equally			Link to values: peace love and unity	
Link to other subjects: Religious activities and Environmental.			Suggested community service learning: Visit to a market place and practice the concept of sharing	
Suggested non formal activity to support learning: share items and say the fraction that each learner has.			Suggested assessment : oral question and written exercises	

Assessment rubric			
Exceeding expectation	Meeting expectations	Approaching expectations	Below expectation
The learners is able to identify say and write simple fractions ($\frac{1}{2}$, $\frac{1}{4}$) with ease and speed.	The learners is able to identify say and write simple fractions ($\frac{1}{2}$, $\frac{1}{4}$).	The learner is able to identify say and write some simple fractions with assistance.	The learner is unable to identify, say or write simple fractions.

UZI	KIPENGELE CHA UZI	MATARAJIO MAALUM	MAPENDEKEZO YA SHUGHULI ZA SOMO	MASWALI DAHI
6.0 Breli ya Kiswahili	6.1 maneno yanayosimami wa na mikato ya seli moja (10 lessons)	a) Tambua mikato ya seli moja katika breli ya kiswahili b) Tambua maneno yanayosimamiwa na mikato ya seli moja katika sentensi. (U) c) Soma maneno yanayosimamiwa na mikato ya seli moja katika sentensi. (T)	<ul style="list-style-type: none"> • Wanafunzi waelekezwe kutambua mikato ya seli moja wa sauti. • Wanafunzi waweze kusoma na kuandika mikato ya seli moja’ • Wanafunzi waelekezwe kutambua maneno yanayosimamiwa na mikato ya seli moja kwa sauti. • Wanafunzi waweze kuhuzisha mikato ya seli moja na maneno husika. • Wanafunzi wawili wawili wenaweza kusoma maneno wakitumia mikato ya seli moja. 	1. Ni maneno yanayowaki a na mikato seli moja ifuatayo: CH, NY, NG, 2. Kuna umuh gani kutumi maneno ya

		<p>d) Andika maneno yanayosimiwa na mikato ya seli moja katika sentensi. (T)</p> <p>e) Soma sentensi zilizoandikwa kwa kutumia maneno yanayohusisha mikato ya seli moja. (T)</p> <p>f) Tumia mikato ya seli moja kuwakilisha neno nzima katika sentensi. (T)</p>	<ul style="list-style-type: none"> • Wanafunzi wawili wawili wenaweza kuandika maneno wakitumia mikato ya seli moja. • Kwa vikundi wanafunzi wanaweza kusoma na kuandika sentensi wakizingatia maneno yanayowakilishwa na mikato ya seli moja. 	mikato ya seli moja katika sentensi?
--	--	--	--	--------------------------------------

Umilisi wa kimsingi unaokuzwa:

Mawasiliano na ushirikiano – Wanafunzi kufanya kazi kwa vikundi kuongea, kusoma na kuandika.

Uhusiano na masuala mtambuko: uraia mwema -	Uhusianowa maadili:
Uhusiano na masomo mengine: Kiswahili, Literacy	Masomo kupitia huduma kwa jamii: Wanafunzi wanaweza kutembelea maktaba na kusoma vitabu au kupata mawaidha kutoka kwa wahudumu wa maktaba.
Shughuli za kila siku zisizoratibiwa zinazochangia ujifunzaji: wanafunzi waimbe nyimbo zinazohusisha somo husika	Mapendekezo ya tathmini: kujibu maswali kwa sauti, kazi kusoma na kuandika

Kiwango cha tathmini			
ANAZIDI MATARAJIO	ANATIMIZA MATARAJIO	ANAKARIBIA MATARAJIO	CHINI YA MATARAJIO
Mwanafunzi anatambua, kusoma na kuandika maneno na sentensi akitumia maneno yanayosimamiwa na mikato ya seli moja katika Breli kwa urahisi.	Mwanafunzi anatambua, kusoma na kuandika maneno na sentensi akitumia maneno yanayosimamiwa na mikato ya seli moja katika Breli.	Mwanafunzi anatambua kusoma na kuandika maneno na sentensi akitumia maneno yanayosimamiwa na mikato ya seli moja katika Breli kwa usaidizi.	Mwanafunzi ana matatizo ya kutambua maneno yanayohusisha mikato ya seli moja.