REPUBLIC OF KENYA
MINISTRY OF EDUCATION

UPPER PRIMARY SCHOOL CURRICULUM DESIGN

MATHEMATICS

GRADE 5

FOR LEARNERS WITH VISUAL IMPAIRMENT

KENYA INSTITUTE OF CURRICULUM DEVELOPMENT
A Skilled and Ethical Society

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FOREWORD

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

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

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

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

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

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

PREFACE

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

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

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

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

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ACKNOWLEDGEMENT

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

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

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

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

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NATIONAL GOALS OF EDUCATION

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

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

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

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

   a) **Social Needs**

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

   b) **Economic Needs**

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

   c) **Technological and Industrial Needs**

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

3. **Promote individual development and self-fulfilment**

   Education should provide opportunities for the learner to develop to the fullest potential. This includes 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 Constitution. It should be geared towards developing a self- disciplined and ethical citizen with sound moral and religious values.

5. **Promote social equity and responsibility**

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

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

   Education should instill 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 therefore enable the learner to respect, appreciate and participate in the opportunities within the international community. Education should also facilitate the learner to operate within the international community with full knowledge of the obligations, responsibilities, rights and benefits that this membership entails.

8. **Good health and environmental protection**

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

LESSON ALLOCATION AT UPPER PRIMARY

S/No	Learning Area	Number of Lessons
1.	English for learners with visual impairment	5
2.	Kiswahili for learners with visual impairment	4
3.	Mathematics for learners with visual impairment	5
4.	Religious Education	3
5.	Science & Technology for learners with visual impairment	4
6.	Agriculture and Nutrition for learners with visual impairment	4
7.	Social Studies for learners with visual impairment	3
8.	Creative Arts for learners with visual impairment	6
	Pastoral/Religious Instruction Programme	1
Total		**35**

NOTE: Braille skills for learners with blindness be implemented as Non-formal (co- curricular) programmes

GENERAL LEARNING OUTCOMES FOR PRIMARY EDUCATION

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

a) communicate appropriately using verbal and or non-verbal modes in a variety of contexts,
b) Apply acquired knowledge, skills, values and attitudes in everyday life
c) Demonstrate social skills, moral and religious values for positive contribution to society,
d) Exploit one's talents for individual development and self-fulfilment
e) Explore, manipulate, manage and conserve the environment effectively for learning and sustainable development,
f) Use digital literacy skills for learning and enjoyment.
g) Value Kenya's rich and diverse cultural heritage for harmonious living.
h) Appreciate the need for, and importance of interdependence of people and nations

ESSENCE STATEMENT

Mathematics is a vehicle of development and improvement of a country's economic development. By learning mathematics, learners with visual impairment develop an understanding of numbers, logical thinking skills and problem solving skills. Mathematics is applied in business, social and political worlds. At this level mathematics will build on the competencies acquired by the learner in the early years of education. Learning mathematics will also enhance the learner's competencies in numeracy as a foundation of STEM at the higher levels of Education cycle. Mathematics is also a subject of enjoyment and excitement as it gives learners opportunities for creative work and fun.

SUBJECT GENERAL LEARNING OUTCOMES

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

a) Demonstrate mastery of number concepts by working out problems in day-to-day life.
b) Apply measurement skills to find solutions to problems in a variety of contexts.
c) Apply properties of geometrical shapes and spatial relationships in real life experiences.
d) Apply data handling skills to solve problems in day-to-day life.
e) Analyze information using algebraic expressions in real life situations.
f) Apply mathematical ideas and concepts to other learning areas or subjects and in real life contexts.
g) Develop confidence and interest in mathematics for further learning and enjoyment.
h) Develop values and competencies for a cohesive harmonious living in the society.
i) Manage pertinent and contemporary issues for enhanced inter-personal relationships.

SUMMARY OF STRANDS AND SUB STRANDS

S/ No	STRAND	SUB STRAND	Suggested Number of Lessons
1	1.0 NUMBERS	1.1 Whole Numbers	20
		1.2 Addition	6
		1.3 Subtraction	6
		1.4 Multiplication	6
		1.5 Division	6
		1.6 Fractions	8
		1.7 Decimals	6
		1.8 Simple Equations	6
2	2.0 MEASUREMENT	2.1 Length	12
		2.2 Area	6
		2.3 Volume	6
		2.4 Capacity	12
		2.5 Mass	12
		2.6 Time	8
		2.7 Money	8
3	3.0: GEOMETRY	3.1 Lines	4
		3.2 Angles	6
		3.3 Three Dimension (3-D) Objects	6
4	4.0 DATA HANDLING	4.1 Data Representation	6
	Total number of lessons		**150**
Note: The suggested number of lessons per sub strand may be less or more depending on the context.			

STRAND 1.0 NUMBERS

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
1.0 NUMBERS	**1.0 Whole Numbers** (20 Lessons)	By the end of the Sub Strand, the learner should be able to; a) use place value and total value of digits up to hundreds of thousands in real life, b) use numbers up to hundreds of thousands in symbols in real life, c) read, write and relate numbers up to tens of thousands in words for learning, d) order numbers up to tens of thousands in real life, e) round off numbers up to tens of thousands to the nearest hundred and thousand in different situations, f) apply divisibility tests of 2, 5 and 10 in real life, g) determine highest Common Factor (HCF) and Greatest Common Divisor (GCD) in different situations, h) determine Least Common Multiple (LCM) in real life situations, i) appreciate use of whole numbers in real life situations.	● Learners with low vision are guided to identify place value of digits up to hundreds of thousands using place value apparatus with appropriate font and colour while learners with blindness be guided to use abacus or cubes and cubarithm boards or Taylor frames with plastic types to identify place value of digits up to hundreds of thousands. ● Learners with low vision to be guided to identify total value of digits up to hundreds of thousands using place value apparatus such as place value pockets or charts with appropriate colour contrast and font size. Learners with blindness are guided to identify total values of digits up to hundreds of thousands using abacus, cubes and cubarithm boards, Taylor frames with plastic types. ● Learners are guided to solve mathematical questions using the knowledge of place value and total value of digits up to hundreds of thousands. ● Learners with low vision are guided to read numbers up to hundreds of thousands in symbols from number charts with appropriate colour contrast and font size while learners with blindness be guided to read numbers up to hundreds in symbols from Braille number cards. ● Learners with low vision are guided to read and write numbers up to tens of thousands in words from number charts with appropriate colour	1. How do you read and write numbers in words? 2. Why do we order numbers? 3. How do you find out whether a number can be divided by another number? 4. How do we get factors or multiples of a number?

			contrast and font size while learners with blindness to read and write numbers up to tens of thousands in words from Braille number cards. ● Learners with low vision be guided to arrange numbers up to 10,000 in increasing and decreasing order using number cards with appropriate colour contrast and font size while learners with blindness be guided to arrange numbers up to 10,000 in increasing and decreasing order using Braille number cards and share with other groups. ● In groups, learners are guided to discuss and round off numbers up to tens of thousands to the nearest hundred and thousand using appropriate number cards in print and braille and share with others. Learners to be guided to carry out the divisibility test for 2, 5 and 10 and come up with divisibility rules. ● Learners are guided to express different numbers in terms of their factors then identify the common factors. ● Learners are guided to express the multiples of numbers and identify multiples of the common multiples as well as the least common multiples ● In groups, learners are guided to use digital devices with assistive technology such as screen magnifiers and adapted keyboard to browse mathematical sites and play digital games involving whole numbers.	

Core Competencies to be developed:

- Critical thinking and problem solving: A learner develops explanation and reasoning skills when ordering and rounding off numbers.
- Learning to learn: A learner learns independently when organising their own learning and shares knowledge learnt when reading, writing numbers

and computing HCF and GCD.

- Digital literacy: A learner interacts with digital devices with assistive technology to browse mathematical sites and play digital games involving whole numbers.

Values:

- Respect: A learner displays patience and appreciates diverse opinions as they carry out various activities in groups involving whole numbers.
- Unity: A learner cooperates with others when working in pairs or groups to carry out various activities involving whole numbers.
- Responsibility**:** A learner takes care of the learning resources used when finding the place value and total value of digits up to hundreds of thousands.

Pertinent and Contemporary Issues (PCIs):

- Learner Support Programme: A learner enhances peer education and mentorship when supporting one another in rounding off numbers up to tens of thousands to the nearest hundred and thousand and also in identifying factors and divisors of given numbers.
- Safety and security: A learner observes internet safety and security when browsing mathematical sites and playing digital games.

Links to other learning areas:

- Languages: A learner reinforces speaking skills as they work in pairs or groups when carrying out various activities involving whole numbers.

Suggested Learning Resources:

Abacus, cubes and cubarithm boards, Taylor frames with plastic types, digital devices with assistive technology such as screen readers and adapted keyboard, screen readers, magnifiers, Braille number cards, Braille number charts, number charts with appropriate colour contrast and font size, number board,

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
1.0 NUMBERS	**1.2 Addition** **(6 Lessons)**	By the end of the Sub Strand, the learner should be able to; a) add up to three 6 -digit numbers without regrouping up to a sum of 1,000,000 in different situations, b) add up to two 6 -digit numbers with double regrouping up to a sum of 1,000,000 in different situations, c) estimate sum by rounding off the addends to the nearest hundred and thousand in different situations, d) create patterns involving addition of numbers up to a sum of 1,000,000 in real life situations, e) appreciate use of addition of whole numbers in real life situations.	• In pairs, learners with low vision add up to three 6-digit numbers without regrouping up to a sum of 1,000,000 in different situations by first guiding them to align the digits in their square exercise books with bold rule lines vertically. Learners with blindness be guided to align the digits according to place values using a Braille machine. Learners with blindness are guided to add up to three 6-digit numbers without regrouping up to a sum of 1,000,000 by setting and clearing beads on the abacus, aligning and working out using Taylor frames with plastic types, cubes and cubarithm boards. • In pairs, learners with low vision add up to two 6-digit numbers with double regrouping up to a sum of 1,000,000 while learners with blindness be guided to align the digits in Braille and to add up to two 6-digit numbers with double regrouping up to a sum of 1,000,000. • In groups, learners with low vision to be guided to estimate sums by rounding off the addends to the nearest	1. How do you estimate the sum of given numbers? 2. How do you create number patterns in addition?

			hundred using a number line with appropriate colour contrast and font while learners with blindness be guided to estimate sums by rounding off addends to the nearest hundreds using an embossed number line. ● In groups, learners with low vision are guided to create patterns involving addition of numbers up to a sum of 1,000,000 using number cards with appropriate colour contrast and font size, while learners with blindness to be guided to create patterns involving addition of numbers to a sum of 1,000,000 using Braille work cards. ● Learners to be guided to use digital devices with assistive technology such as adapted keyboard, screen readers and magnifiers to play digital games involving addition of whole numbers.	

Core Competencies to be developed:

- Critical thinking and problem solving: A learner develops explanation and reasoning skills as they add, estimate and round off numbers to the nearest hundred and thousand and in making patterns.
- Creativity and imagination: A learner develops connecting skills as they create patterns involving addition of numbers up to a sum of 1,000,000.
- Digital literacy: A learner interacts with digital devices with assistive technology to browse mathematical sites and play digital games involving addition of whole numbers.

Values:

- Responsibility: A learner takes care of the learning resources used when adding digits up to a sum of 1,000,000.
- Unity: A learner cooperates with others when working in groups to solve mathematical problems and create patterns involving addition of whole numbers.

Respect: A learner displays patience and appreciates diverse opinions when working in groups to carry out various activities involving addition of whole numbers.

Pertinent and Contemporary Issues (PCIs):

- Learner Support Programme: A learner enhances peer education and mentorship when supporting one another in rounding off addends to the nearest hundred and thousand and also in creating patterns involving addition of numbers up to a sum of 1,000,000.
- Safety and security: A learner observes internet safety and security when browsing mathematical sites and playing digital games involving addition of whole numbers.

Links to other learning areas:

- English and other Languages: A learner enhances speaking skills when discussing in pairs or groups on how to add and round off numbers.
- Creative Arts: A learner reinforces creativity when making patterns involving addition of numbers up to a sum of 1,000,000.

Suggested Learning resources:

Abacus, cubes and cubarithm boards, Taylor frames with plastic types, Braille charts and cards, embossed number line, number charts with appropriate font and colour contrast, number boards, talking calculators, digital technology with assistive technology.

Strand	Sub strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
1.0 NUMBERS	**1.3 Subtraction** **(6 Lessons)**	By the end of the Sub Strand, the learner should be able to: a) subtract up to two 6-digit numbers without regrouping in real life situations, b) subtract of up to two 6-digit numbers with regrouping in different situations, c) estimate difference by rounding off the minuend and subtrahend to the nearest hundred and thousand in different situations, d) perform combined operations involving addition and subtraction in different situations, e) create patterns involving subtraction from up to 1,000,000 in different situations, g) appreciate subtraction of numbers in real life situations.	• In pairs learners with low vision to work with peers and be guided to subtract numbers up to two 6-digit numbers without regrouping in different situations by first guiding them to align the digits in their square exercise books with bold ruled lines vertically. Learners with blindness to align the digits according to place value using a Braille machine and be guided to subtract up to two 6-digit numbers without regrouping by setting and clearing beads on the abacus, aligning numbers and working out using Taylor frames with plastic types, cubes and cubarithm boards. • In groups, learners with low vision discuss and work out subtraction of up to two 6-digit numbers with regrouping by first guiding them to align the digits in their square exercise books with bold ruled lines vertically while learners with blindness be guided to align the digits in Braille and be guided to subtract numbers up to 6-digit numbers with regrouping. • In pairs, learners with low vision be to team up with peers and be guided to estimate difference by rounding off the minuend and subtrahend to the nearest hundred using a number line with appropriate font and colour contrast while learners with blindness be guided to estimate difference by rounding off the minuend and subtrahend to the nearest hundreds using an embossed number line. • Learners are guided to work out questions involving	1. How do you estimate the difference of given numbers to the nearest hundred? 2. How can you create number patterns involving subtraction?

			addition and subtraction ● In pairs or groups, learners with low vision be guided to generate patterns involving subtraction of whole numbers up to 1,000,000 using number charts with appropriate font and colour contrast while learners with blindness be guided to use braille charts or braille cards to create patterns involving subtraction of whole numbers up to 1,000,000. ● In pairs or groups, learners are guided to use digital devices with assistive technology such as screen readers, magnifiers and adapted keyboard to browse mathematical sites and play digital games involving subtraction.	

Core Competencies to be developed:

- Critical thinking and problem solving: A learner develops explanation and reasoning skills when subtracting numbers, estimate and round off numbers to the nearest hundred and thousand and in making patterns.
- Creativity and imagination: A learner develops connecting skills as they create patterns involving subtraction numbers.
- Digital literacy: A learner interacts with digital devices with assistive technology to browse mathematical sites and play digital games involving subtraction of numbers for learning and enjoyment.

Values:

- Responsibility: A learner takes care of the digital devices and other learning resources used when subtracting numbers.
- Unity Learners cooperate with others when working in groups to solve mathematical problems and create patterns involving subtraction of numbers.
- Respect: A learner displays patience and appreciates diverse opinions when working in pairs or groups to carry out various activities involving subtraction of numbers.

Pertinent and Contemporary Issues (PCIs):

- Citizenship: A learner enhances social cohesion when working in groups to accomplish tasks involving subtraction of numbers.
- Learner Support Programme: A learner enhances peer education and mentorship when supporting one another in rounding off minuends and subtrahends to the nearest hundred and thousand and in making patterns.
- Safety and security: A learner observes internet safety and security when browsing mathematical sites and playing digital games involving subtraction of numbers.

Links to other learning areas:

- English and other Languages: A learner reinforces speaking skills when discussing in groups on how to subtract and round off numbers.
- Creative Arts**:** A learner reinforces creativity when making patterns involving subtraction from up to 1,000,000.

Suggested Learning Resources

Abacus, cubes and cubarithm boards, Taylor frames with plastic types, braille charts and cards, embossed number line, number charts with appropriate font and colour contrast, number boards, talking calculators, reference materials in braille and appropriate print

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
1.0 NUMBERS	1.4 **Multiplication (6 Lessons)**	By the end of the Sub Strand, the learner should be able to; a) multiply up to a 3-digit number by up to a 2-digit number in real life situations, b) estimate product by rounding off numbers to the nearest ten in different situations, c) make patterns involving multiplication of numbers with product not exceeding 1000 in in different situations, d) appreciate the use of multiplication in real life.	● In pairs, learners with low vision are guided to multiply up to 3- digit numbers by up to a 2- digit number using different methods by first guiding them to align the digits in their square exercise books with bold ruled lines vertically and horizontally, while learners with blindness to align the digits in braille and be guided to multiply up to a 3-digit number by up to a 2-digit number ● Learners be guided to round off numbers to the nearest tens then get their product using compatibility of numbers or own strategies. ● In groups or pairs, learners to team up with peers to create patterns involving multiplication with products not exceeding 1000. ● Learners to be guided to use digital devices with assistive technology such as adapted keyboard, screen readers and magnifiers to browse mathematical sites and play digital games involving multiplication of whole numbers.	1. How do you estimate products of given numbers? 2. How do you form patterns involving multiplication? 3. How do you estimate products by rounding off numbers to the nearest 10?

Core Competencies to be developed:

- Communication and collaboration: A learner develops teamwork skills when multiplying up to 3- digit number by up to a 2- digit number in groups.
- Critical thinking and problem solving: A learner develops explanation and reasoning skills when estimating products of numbers.
- Creativity and imagination: A learner develops connecting skills as they make patterns involving multiplication of numbers.
- Digital literacy**:** A learner interacts with digital devices with assistive technology to browse mathematical sites and play games involving multiplication of whole numbers.

Values:

- Unity: A learner cooperates with others when working in groups to make patterns involving multiplication of numbers.
- Responsibility: A learner shows determination when undertaking assigned tasks.

Pertinent and Contemporary Issues (PCIs):

- Citizenship: A learner enhances social cohesion when working in pairs or groups to carry out activities involving multiplication of whole numbers.
- Learner Support Programme: A learner enhances peer education and mentorship when supporting one another in exploring other methods of working out products of numbers.

Links to other learning areas:

- Languages: A learner reinforces speaking skills as they discuss in pairs or groups on other methods of working out products of numbers.
- Agriculture and Nutrition; A learner works out the number of rows and number of seedlings in each row in the school garden.

Suggested Learning Resources:

Cubes and cubarithm boards, abacus, Taylor frames with plastic types, number board, talking calculator, Braille charts, number charts and cards with appropriate font and colour contrast, bottle tops of varied colours, maize seeds, bean seeds

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
1.0 NUMBERS	**1.5 Division** **(6 Lessons)**	By the end of the Sub Strand, the learner should be able to: a) divide up to a 3-digit number by up to a 2-digit number where the dividend is greater than the divisor in real life, b) apply the relationship between multiplication and division in different situations, c) estimate quotients by rounding off the dividend and divisor to the nearest ten in real life situations, d) perform combined operations involving addition, subtraction, multiplication and division of whole numbers in different situations, e) appreciate use of division of whole numbers in real life situations.	• In groups, learners with low vision are first guided to align the digits in their square exercise books with bold ruled lines vertically and horizontally then divide up to a 3-digit number by up to a 2-digit number where the dividend is greater than the divisor using long and short form. Learners with blindness are guided to divide by setting and clearing beads on the abacus, aligning the numbers and working out using plastics types and Taylor frames, cubes and cubarithm boards. • In groups, learners with low vision are first guided to use charts with appropriate font and colour while learners with blindness use Braille cards to demonstrate that multiplication is the opposite of division. • Learners are guided to estimate quotients by rounding off the dividend and divisor to the nearest ten. • Learners are guided to work out questions involving addition, subtraction, multiplication and division. • Learners are guided to create number games and puzzles involving division. • Learners are guided to use digital devices with assistive technology such as screen readers and adapted keyboard to browse mathematical sites and play digital games involving division of whole numbers.	1) How do you divide numbers? 2) How do you estimate quotients by rounding off dividend and divisor?

Core Competencies to be developed:

- Critical thinking and problem solving: A learner develops explanation skills when dividing numbers and estimate quotients by rounding off the dividend and divisor to the nearest ten
- Communication and collaboration: A learner develops speaking and listening skills when discussing and working in groups to work out division of numbers.
- Creativity and Imagination: A learners enhance their connecting skills as they create number games and puzzles involving division
- Digital Literacy**:** A learner uses digital devices to browse mathematical sites and play digital games involving division of whole numbers.

Values:

- Social justice: A learner ensures equal sharing of resources equitably among themselves and the wider society.
- Responsibility: A learner takes care of the resources used during learning.

Pertinent and Contemporary Issues (PCIs):

- Safety and security: A learner observes internet safety and security when browsing mathematical sites and playing digital games.
- Learner Support Programme: A learner enhances peer education and mentorship when supporting one another in dividing numbers and estimating quotients by rounding off the dividend and divisor to the nearest ten.

Links to other learning areas:

- English and other Languages: A learner uses speaking and listening skills when discussing in groups hence reinforce their communication skills.

Suggested Learning Resources:

Counters, Braille charts, multiplication tables with appropriate font and colour contrast, Taylor frames with plastic types, cubes and cubarithm boards, Braille multiplication table, digital devices with assistive technology

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
1.0 NUMBERS	**1.6 Fractions** **(8 Lessons)**	By the end of the sub strand, the learner should be able to: a) simplify fractions in different situations, b) compare fractions in different situations, c) order fractions with denominators not exceeding 12 in different situations, d) add two fractions with same denominator in different situations, e) subtract two fractions with same denominator in different situations, f) add two fractions with one renaming in different situations, g) subtract two fractions with one renaming in different situations, h) appreciate use of fractions in real life.	• Learners with low vision are guided to identify equivalent fractions using a fraction board or chart with appropriate font and colour contrast. Learners with blindness are guided to identify equivalent fractions using tactile fraction board with different textures and Braille work cards. • Learners with low vision are guided to represent equivalent fractions using real objects. Learners with blindness are given one on one support alongside clear verbal descriptions of each step as they are guided to represent equivalent fractions using real objects of different textures. • Learners with low vision are guided to simplify given fractions using a fraction chart with appropriate font and colour contrast while learners with blindness are guided to simplify given fractions using Braille work cards. • In groups, learners with low vision are guided to order given fractions in increasing and decreasing order using a number line and paper cut outs with appropriate font and colour contrast, real objects with different textures. Learners with blindness are given one on one support to order given fractions in increasing and decreasing order using embossed number lines, paper cut outs and real objects of different textures.	1. How do we use fractions in real life? 2. How can you represent fractions? 3. Why do we order fractions in real life?

			• Learners with low vision are guided to add two fractions with the same denominator using paper cut outs and number lines with appropriate font and colour contrast, real objects with different textures. Learners with blindness are guided to add two fractions with the same denominator using plastic types and Taylor frames, cubes and cubarithm boards and the abacus. • In groups, learners with low vision are guided to subtract two fractions with the same denominator using paper cut outs and number line with appropriate font and colour contrast, and real objects while learners with blindness subtract two fractions with same denominator using Taylor frames with plastic types, cubes and cubarithm boards and the abacus. • Learners with low vision are guided to carry out addition of two fractions by remaining one fraction using equivalent fractions. Learners with blindness are guided to add two fractions by renaming one fraction using types and Taylor frame, cubes and cubarithm boards and the abacus. • Learners with low vision are guided to carry out subtraction of two fractions by remaining one fraction using equivalent fractions. Learners with blindness be guided to subtract two fractions by renaming one fraction using Taylor frame with plastic types, cubes and cubarithm boards and the abacus. • In pairs or as individuals learners use digital devices with assistive technology to play digital	

			games involving fractions.	

Core Competencies to be developed:

- Learning to learn: A learner shares learnt knowledge when ordering, comparing and simplifying fractions.
- Digital Literacy**:** A learner interacts with digital devices with assistive technology to play digital games.

Values:

- Integrity: A learner utilises the learning resources prudently during group work.

Pertinent and Contemporary Issues (PCIs):

- Safety and security: A learner observes personal safety and security of their learning resources when working in pairs or groups

Links to other learning areas:

- English and other languages: A learner uses new terms involving fractions during discussions enhancing their communication skills.

Suggested Learning Resources:

Paper cut outs, equivalent fraction board, abacus, Taylor frames with plastic types, cubes and cubarithm boards, glue, scissors, appropriate digital devices, talking calculators

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
1.0 NUMBERS	**1.7 Decimals** **(6 Lessons)**	By the end of the Sub Strand, the learner should be able to: a) identify place value of decimals up to thousandths in different situations, b) order decimals up to thousandths in different situations, c) add decimals up to thousandths in real life situations, d) subtract decimals up to thousandths in real life situations, e) appreciate use of decimals in real life situations.	• Learners with low vision are guided to identify place value of decimals up to thousandths using a place value chart with appropriate font and colour contrast. Learners with blindness to be guided to identify decimals using place value setters with tactile marks, Braille symbol for decimal notation on Braille cards, abacus, Taylor frames with plastic types, cubes and cubarithm boards. • Learners with low vision are guided to order decimals up to thousandths from smallest to largest and from largest to smallest using number cards or number line with appropriate font and colour contrast. Learners with blindness are guided to order decimals up to thousandths from smallest to largest and from largest to smallest using embossed number lines, Braille work cards, abacus, plastic types and Taylor frames, cubes and cubarithm boards. • Learners with low vision are guided to add decimals up to thousandths using place value apparatus with appropriate font and colour contrast. Learners with blindness could be guided to align the digits in Braille vertically and horizontally and to add decimals up to thousandths.	How do you order decimals up to thousands life situations?

			• Learners with low vision are guided to subtract decimals situations up to thousandths using place value apparatus with appropriate font and colour contrast. Learners with blindness could be guided to align the digits in Braille according to place values and to subtract decimals up to thousandths • In groups, learners are guided to use digital devices with assistive technology such as screen readers and adapted keyboard to find information on application of decimals in real life situation.	

Core Competencies to be developed

- Creativity and Imagination: A learner develops making connections as they order decimals.
- Self-efficacy**:** A learner develops self-drive as they explore further operations involving decimals.

Values:

- Unity: A learner enhances co-operation as they take turns in making contributions in the groups during group discussion on ordering decimals.

Pertinent and Contemporary Issues (PCIs):

- Citizenship: A learner enhances social cohesion as they display positive and inclusive group dynamics where learners collaborate, respect diversity, and contribute to share their findings as they work in groups.

Links to other learning areas:

- English and other languages: A learner displays speaking skills and listening skills when discussing in pairs or in groups on addition and subtraction of decimals.

Suggested Learning Resources:

Paper cut outs, a hundred square grid with appropriated font and colour contrast Braille chart with decimal notations, abacus, cubes and cubarithm boards, number board, talking calculator, appropriate digital devices, place value setters,

Suggested Assessment Rubrics

Level / Indicator	Exceeds Expectations	Meets Expectations	Approaches Expectations	Below Expectations
Ability to: • round off numbers up to tens of thousands to the nearest hundred and thousand in different situations, • add up to two 6 -digit numbers with double regrouping up to a sum of 1,000,000 in different situations, • perform combined operations involving addition and subtraction in different situations, • multiply up to a 3-digit number by up to a 2-digit number in real life situations, • perform combined operations involving addition, subtraction, multiplication and division of whole numbers in different situations, • simplify fractions in different situations, • order decimals up to thousandths in different situations,	The learner demonstrates the seven skills.	The learner demonstrates five to six skills.	The learner demonstrates three to four skills.	The learner demonstrates at most two skills.

STRAND 2.O MEASUREMENT

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
2.0 MEASUREMENT	**2.1 Length** **(12 Lessons)**	By the end of the Sub Strand, the learner should be able to: a) use the kilometre (km) as a unit of measuring length in real life, b) estimate distance in kilometres in real life situations, c) identify the relationship between the kilometre (km) and the metre (m) in different situations, d) convert kilometres to metres and metres to kilometres in real life situations, e) add metres and kilometres in real life situations, f) subtract metres and kilometres in real life situations, g) multiply metres and kilometres by whole	• In groups, learners are guided to discuss the kilometre as a unit of measuring length in real life by being given verbal descriptions or being taken for a ride or walk through a one-kilometre distance. • In groups, learners are guided to estimate distance in kilometres and share their estimates. Learners with blindness to be guided to measure length in kilometres and metres by being guided to place the metre rule on one kilometre rope in order to establish the relationship between the units practically. • Learners are guided to express the distance from kilometres to metres and metres to kilometres. Learners with blindness write the symbols in Braille and be provided with Braille conversion tables. Learners with low vision use conversion tables in appropriate font and colour contrast. • Learners are guided to carry out addition involving distance in kilometres and metres. Learners with low vision are guided to align the values for kilometres and metres appropriately before adding. Learners with blindness are guided to align values for kilometres and metres	1. How do you measure distance? 2. How do you estimate distance in kilometres?

		numbers in real life situations, h) divide metres and kilometres by whole numbers in real life situations, i) appreciate the use of kilometres and metres in measuring length in real life.	vertically in braille using braille machine before adding. • Learners are guided to carry out subtraction involving distance in kilometres and metres. Learners with low vision are guided to align the values for kilometres and metres appropriately before subtracting. Learners with blindness are guided to align values for kilometres and metres vertically in braille using braille machine before subtracting. • Learners with low vision are guided to carry out multiplication involving distance in kilometres and metres. Learners with low vision are guided to align the values for kilometres and metres appropriately before multiplying. Learners with blindness are guided to align values for kilometres and metres vertically in braille using braille machine before multiplying. • Learners with low vision are guided to carry out division involving distance in kilometres and metres. Learners with low vision use long division method while leaners with blindness be guided to use abacus to undertake division. • In pairs learners use digital devices with assistive technology such as screen readers and adapted keyboard to play digital games involving length in kilometres and metres.	

Core Competencies to be developed:

- Creativity and Imagination: A learner develops experimenting skills as learners measure or estimate distance.
- Critical thinking and problem solving: A learner develops active listening and communication skills when estimating distance.

Values:

- Integrity: A learner applies laid down procedures when recording measurements.
- Respect: A learner appreciates diverse opinions of others when taking turns in group activities.

Pertinent and Contemporary Issues (PCIs):

- Safety and Security: A learner works in pairs or groups or as individuals when using or handling measuring instruments.

Links to other learning areas:

- Languages: A learner uses new terms in length during group work and sharing estimates.

Suggested Learning Resources:

Metre ruler, metre rule with tactile calibration, tactile tape measure, tape measure, rope, metre stick, digital devices with assistive technology such as screen readers and adapted keyboard.

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
2.0 **MEASUREMENT**	**2.2 Area** (6 Lessons)	By the end of the Sub Strand, the learner should be able to: a) identify the square centimetre (cm^2) as a unit of measuring area in braille or print in real life, b) work out area of rectangles and squares in square centimetres (cm^2) in different situations, c) appreciate the use of cm^2 in working out area in real life.	• In groups, learners with low vision are guided to measure, trace and cut out 1 cm by 1cm units, and refer the area of each as one square centimetre ($1cm^2$). Learners with blindness are given one on one demonstration on the procedures of measuring, trailing and cutting out 1cm by 1cm units. • Learners with low vision are guided to write properly the square centimetre symbol (cm^2) while learners with blindness to be guided to write the symbol of square centimetre (cm^2) in Braille. • Learners with low vision are guided to cover a given surface using 1- centimetre square cut outs and count the number of cut outs to get the area in	How can you determine the area of different surfaces?

			cm^2. Learners with blindness are guided to align the 1cm cut outs appropriately on a given surface with tactile outline and count the number of cut outs to get the area in cm^2. • Learners are guided to establish the area of rectangles and squares in cm^2 as the product of the number $1cm^2$ units in the row by the number of units in the column, Area of rectangle or square = Length x Width. • In pairs, learners use digital devices with assistive technology such as screen readers, magnifiers and adapted keyboard to play digital games involving area.	

Core Competencies to be developed:

- Creativity and imagination: A learner develops experimenting skills when using paper cut outs in covering plane surfaces to get area in cm^2.
- Learning to learn: A learner develops learning independently when exploring how to determine areas of different surfaces in the environment.

Values:

- Unity: A learner appreciates efforts of others when performing an activity in pairs or groups.

Pertinent and Contemporary Issues (PCIs):

- Safety and security**:** A learner observes safety when cutting out 1 cm squares using sharp objects from the environment.

Links to other learning areas:

- Languages: A learner develops speaking and writing skills when using new terms in discussion.

Suggested Learning Resources:

Square cut outs, square tactile cut outs, metre rule, tape measures, strings, glue, digital devices with appropriate technology such as magnifiers, spur wheel, rubber mat.

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
2.0 **MEASUREMENT**	**2.3 Volume (6 Lessons)**	By the end of the Sub Strand, the learner should be able to: a) identify the cubic centimetre (cm^3) in print and in braille as a unit of measuring volume in different situations, b) derive the formula for the volume of cuboid as V= l x w x h practically, c) work out volume of cuboids in cubic centimetres ($cm^{3)}$ using the formula, d) derive the formula for the volume of cube as V= s x s x s practically, e) work out volume of cubes in cubic centimetres ($cm^{3)}$ using the formula, f) appreciate use of cubic centimetres in measuring volume in real life.	• Learners are guided to manipulate and explore cubes to identify different faces of the cubes. Learners with low vision are guided to measure the sides of a 1cm cube and identify it as a unit of measuring volume using a ruler with appropriate font size and colour contrast. Learners with blindness are guided to appropriately align a tactile ruler against the side to be measured. • Learners with low vision are guided to arrange a number of cubes along the length, width and vary the number of layers while learners with blindness pile cubes of different textures along the length, width and vary the number of layers. • In groups, learners are guided through a one-on-one demonstration to count the number of cubes used in the activity above and record. Learners with blindness are guided to identify the number of cubes along the length, width and height, count them and record. • Learners are guided to establish that the total number of cubes represents the volume of the cube or cuboid formed. • Learners are guided to count the number of cubes on the length and multiply by the number in the width and the number of layers. Learners	1. How are the volume of cubes and cuboids applicable in real life? 2. How do you derive the formula of a cube?

			establish the formula for volume (V) of cuboid as V = l x w x h. ● Learners be guided to discuss the formula for volume of a cube V= S x S x S where, S is the side of a cube. ● Learners are guided to manipulate cubes and cuboids by flipping around using digital devices or other resources. Learners with low vision to be guided to write the symbol of cubic centimetres (cm^3) in print while learners with blindness to be guided to write the symbol of cubic centimetres (cm^3) in braille. ● In groups, learners are guided to work out the volume of cubes and cuboids in cubic centimetres. ● In pairs, learners use digital devices with assistive technology to play digital games involving volumes.	

Core Competencies to be developed:

- Learning to learn: A learner organise own learning as they play digital games involving volumes.
- Digital literacy: A learner interacts with digital devices with assistive technology to play digital games involving volumes.

Creativity and imagination: **A l**earner develops connecting skills as they use cubes to make cuboids and calculate volume.

Values:

- Respect: A learner displays patience as they take turns in placing and counting square cut outs in pairs or groups.
- Responsibility**:** A learner takes care of learning materials used.

Pertinent and Contemporary Issues (PCIs):

- Safety and security: A learner observes safety as they safely handle various objects in the environment to determine their volume.

Links to other learning areas:

- Languages: A learner develops communication skills as they use new terms related to volume in discussions.

Suggested Learning Resources:

Cubes, cuboids, digital devices with appropriate technology such as screen magnifiers, , rulers, rulers with tactile calibrations.

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
2.0 MEASUREMENT	**2.4 Capacity** **(12 Lessons)**	By the end of the Sub Strand, the learner should be able to: a) identify the millilitre as a unit of measuring capacity in real life, b) measure capacity in millilitres in real life situations, c) estimate and measure capacity in multiples of 5 millilitres in different situations, d) identify the relationship between litres and millilitres in real life, e) convert litres to millilitres and millilitres to litres in real life situations, f) add litres and millilitres in real life situations, g) subtract litres and in real life situations, h) multiply litres and millilitres by whole numbers in real life	• Learners to be guided to collect safe and explore small containers and read the units of measurements indicated in them. Learners with blindness be paired with their sighted peers when collecting the containers and be guided to read the units of measurement indicated. • Learners with low vision identify the symbol of the millilitre (ml) as a unit of measuring capacity by first guiding them to write the symbol in their square exercise books with bold rule lines then be guided to use smaller containers with capacity in millilitres to fill bigger containers. Learners with blindness are guided to write the symbol in Braille then be guided to use smaller containers with capacity in millilitres to fill bigger containers. • In groups, learners with low vision to be guided to fill a teaspoon or cylinder graduated in millilitres with coloured water and identify that the spoon or cylinder holds 5 millilitres. Learners with blindness to be given one on one support to fill a teaspoon or cylinder with coloured water and identify that the spoon holds 5 millilitres by being given verbal cues and touching. • In pairs, learners with low vision are guided to	How can you measure capacity in millilitres?

		situations, i) divide litres and millilitres by whole numbers in different situations, j) appreciate use of litres and millilitres in measuring capacity in real life.	divide the coloured water in the spoon or cylinder into 5 equal parts and identify each part as 1 millilitre. Learners with blindness to be given one on one support alongside clear verbal descriptions of each step and be guided to touch and feel the water portions to identify the millilitre. ● In groups, learners with low vision are guided to fill small containers with coloured water and measure the capacity in millilitres using a container graduated in millilitres. Learners with blindness to be given one on one support alongside clear verbal descriptions to carry out the activity using containers calibrated with tactile marks. ● Learners are guided to use digital devices with assistive technology such as screen readers and magnifiers or other resources to find the relationship between millilitres and litres. ● In groups, learners to be guided to count the number of 100 millilitre containers used to fill the 1- litre container and conclude that ten 100-millilitres containers fill 1 litre. (10x 100 millilitres =1000 millilitres = 1 litre) ● Learners with low vision could be guided to relate litres to millilitres using conversion tables in appropriate colour contrast and font while learners with blindness to do so by using Braille work cards. ● Learners are guided to work out capacity of liquids in litres and millilitres by whole numbers using addition, subtraction,	

			multiplication and division	

Core Competencies to be developed:

- Critical thinking and problem solving: A learner develops explanation skills when converting units of capacity, relate units of capacity and work questions involving capacity.
- Learning to learn: A learner explores objects of different volumes at home, school or environment.
- Digital literacy: A learner interacts with digital devices with assistive technology to play digital games involving capacity.

Values:

- Responsibility: A learner carries out assigned tasks when working in pairs or groups.

Pertinent and Contemporary Issues (PCIs):

- Citizenship: A learner enhances social cohesion when working in pairs or groups to measure capacity.
- Safety and security: A learner observes safety of self and others as they use containers and water during measuring activities.

Links to other learning areas:

- English and other languages: A learner uses English language during group discussions hence reinforce communication skills.

Suggested Learning Resources:

Transparent 1 litre, ½ litres and ¼litres and 1 millilitre containers, teaspoon, containers of different capacity, coloured water, graduated cylinder, digital devices with assistive technology such as adapted keyboards

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
2.0 MEASUREMENT	**2.5 Mass (12 Lessons)**	By the end of the Sub Strand, the learner should be able to: a) identify the gram as a unit of measuring mass in real life, b) measure mass in grams in different situations, c) estimate and measure mass in grams in different situations,	• Learners with low vision are guided to scoop sand or soil using a teaspoon. Explain to the learners the amount scooped is about 5 grams. Learners with blindness are given one on one support to scoop sand or soil using a teaspoon, guided to touch, feel and explain to them that the soil is 5 grams. • Learners with low vision are guided to divide	Why do you measure the mass of substances?

		d) identify the relationship between the kilogram and the gram in real life situations, e) convert kilograms to grams and grams to kilograms in real life situations, f) add grams and kilograms in real life situations, g) subtract grams and kilograms in real life situations, h) multiply grams and kilogram by whole numbers in real life situations, i) divide grams and kilograms by whole numbers in real life situations, j) appreciate the use of kilograms and grams in measuring mass in real life.	the amount scooped into 5 equal portions and identify each of these small portions as an approximate 1 gram. Learners with blindness are given one on one support to divide the amount scooped into 5 equal portions, guided to touch and feel each of the portions that is an approximate 1 gram in mass. ● In groups, learners with low vision are guided to use an electronic or a manual weighing machine to measure mass of sand or soil in grams. Learners with blindness are given one on one support to use electronic weighing machines with voice output and manual weighing machines that are well labelled in Braille to measure. ● Learners with low vision watch an audio-visual clip-on measuring mass in grams while learners with blindness listen to the audio-visual clip and be given clear verbal descriptions of the visual elements in the clip. ● Learners with low vision are guided to use an electronic or a manual weighing machine to estimate and measure mass of items in grams using a beam balance or electronic weighing machine. Learners with blindness are given one on one support to use electronic weighing machines with voice output and manual weighing machines that are well labelled in Braille to measure. ● Learners establish the relationship between the kilogram and the gram using a beam balance or electronic weighing machine.	

			• Learners establish the relationship between the kilogram and the gram using a beam balance or electronic weighing machine. Learners with blindness could use electronic weighing machines with voice output and manual weighing machines that are well labelled in Braille to relate kilograms to grams. (1kg = 1000g). • Learners with low vision to convert grams to kilograms and kilograms into gram by using conversion tables with appropriate font and colour contrast while learners with blindness to convert grams to kilograms and kilograms into grams. • Learners determine mass of items in grams and kilograms using different operations in real life situations. • Learners use digital devices with assistive technology such as screen readers and magnifiers to play digital games involving mass.	

Core Competencies to be developed:

- Communication and collaboration: A learner develops speaking and listening skills as they work in groups to measure mass in grams.
- Digital literacy: A learner interacts with digital devices with assistive technology to play digital games involving mass.
- Critical thinking and problem solving: A learner develops explanation skills when working out mathematical problems involving addition, subtraction, multiplication and division of grams and kilograms.

Values:

- Respect: A learner displays open mindedness as they come up with different ways of measuring mass when working in groups.
- Integrity: A learner displays honesty as they give their correct values of objects measured.
- Responsibility: Learners take care of learning materials such as beam balance and electronic balance and keep them safely after use.

Pertinent and Contemporary Issues (PCIs):

- Citizenship: A learner displays social cohesion when working in pairs or groups to measure mass.

- Safety and security: A learner observes safety of self and of others as they use beam balances to weigh different masses.

Links to other learning areas:

- Science and Technology: A learner learns on the S.I units of measuring mass.
- Agriculture and Nutrition: A learner applies knowledge of measurement of mass to measure livestock feeds and ingredients for cooking.

Suggested Learning Resources:

Beam balance, different masses, electronic balance with voice output, beam balance with calibrated labels, soil, sand, teaspoons

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
2.0 MEASUREMENTS	**2.6 Time** **(8 Lessons)**	By the end of the Sub Strand, the learners should be able to: a) identify the second as a unit of measuring time, b) identify the relationship between the minute and the second in real life situations, c) convert minutes to seconds and seconds to minutes in real life, d) add minutes and seconds with conversion in real life situations, e) subtract minutes and seconds with conversion in real life situations, f) multiply minutes and seconds by whole numbers in real life situations, g) divide minutes and seconds by whole numbers in real life situations, h) use clocks devices and other resources to read	• Learners with low vision to be guided to identify the symbol of the second (s) as a unit of measuring time by first guiding them to write the symbol in their square exercise books with bold ruled lines while learners with blindness be guided to write the symbol in Braille. • Learners with low vision to be guided to start, stop and reset a stopwatch and observe the changes on the minute slot when the second slot records time. Learners with blindness to be guided to manipulate a digital talking stopwatch to identify the start, stop and reset buttons and listen to the change on minutes as the seconds count. • In groups, learners to be guided to carry out activities taking 10 seconds. Let learners relate the activities to what can be done in one tenth of the time taken to do the activity. The time taken is 1 second. • Learners measure time taken to do various activities in seconds. • Learners with low vision to be guided to establish the relationship between seconds and minute using a clock/ stopwatch, while learners with blindness could use tactile analogue clock faces and talking digital stopwatches to establish the relationship	How can you multiply minutes and seconds by whole numbers?

		time in seconds from a clock, i) appreciate use of minutes and seconds as units of measuring time in real life situations.	between seconds and minute. ● Learners with low vision could be guided to relate seconds to minutes using conversion tables with appropriate font and colour while learners with blindness to do so by using Braille work cards. ● In groups, learners work out addition involving seconds and minutes with conversion by guiding them to align sums correctly. ● Learners work out subtraction involving seconds and minutes with conversion by guiding them to align sums correctly. ● Learners with low vision are guided to align minute, seconds and the whole number correctly then multiplying in their bold ruled exercise book while learners with blindness to be guided to align minute, seconds and the whole number appropriately in braille. ● Learners with low vision are guided to align minute, seconds and the whole number correctly before dividing in their bold ruled exercise book while learners with blindness be guided to align minute, seconds and the whole number appropriately in braille. ● In pairs, learners use digital devices with assistive technology such as screen readers and adapted keyboard to play games involving time for learning and enjoyment.	

Core Competencies to be developed:

- Creativity and imagination: A learner develops experimenting skills as they observe the movement of minute and second hand on a real clock face involving time in real life situations.

- Learning to learn: A learner develops learning independently as they learn ways of converting time from one unit to another.
- Digital literacy: A learner interacts with digital devices with assistive technology to play digital games involving time

Values:

- Responsibility: A learner takes care of the resources used when working in pairs or groups to learn about time.

Pertinent and Contemporary Issues (PCIs):

- Life skills and values education: A learner acquires essential life skills in time management as they learn about time in seconds and minutes.
- Citizenship**:** A learner enhances social cohesion as they estimate seasons of community planting, weeding.

Links to other learning areas:

- Languages: A learner discusses and shares in pairs or groups reinforcing their communication skills.
- Creative arts: A learner times various field activities during games and sports.
- Science and Technology: A learner states time in relation to rays of light from the sun and changes in the direction of the shadow.

Suggested Learning Resources:

Analogue and digital clocks, digital watches, stop watches, talking stop watches, taking digital watch, tactile clock faces

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
2.0 MEASUREMENT	**2.7 Money** **(8 Lessons)**	By the end of the Sub Strand, the learners should be able to: a) explain the term budget in real life situations, b) identify the importance of a budget in real life, c) explain meaning of tax in real life, d) identify importance of tax to the governments, e) identify services provided by banks in real life situations f) identify factors to consider in order to save wisely, g) appreciate use of budgeting, bank services and payment of taxes in real life.	• In groups, learners discuss the meaning of a budget and importance of a budget, prepare a budget of about 5 items that can be found in the classroom model shop. • In groups, learners are guided to discuss the meaning and importance of taxes to the government, study recipients from sales to identify amount of taxes paid. • Learners discuss provision of loans, safe custody of items, money deposits and withdrawals, savings as services provided by banks. • Learners discuss factors to consider when saving money and share with others. • Learners use digital devices with assistive technology to learn more about, taxes budgeting and bank services.	1. How do you manage your money? 2. How can you save money?

Competences to be developed:

- Communication and collaboration: A learner develops speaking and listening skills as they discuss in groups and share their experiences.
- Learning to learn: A learner uses digital devices to learn more about budgeting, savings, taxes and electronic banking.
- Digital literacy: A learner interacts with digital devices with assistive technology connected to the internet to learn more about taxes budgeting and bank services.

Values:

- Unity: A learner cooperates and respects other learners' opinions when conducting group discussions on various matters such as budgeting, taxes, savings among others.
- Responsibility: A learner enhances their accountability skills when discussing factors to consider in order to save wisely.

Pertinent and Contemporary Issues (PCIs):

- Safety and security: A learner observes internet safety and security as they use safe and secure online sites to learn more on taxes, budgeting and bank services.
- Socio-economic Issues: A learner enhances their financial literacy skills when carrying out discussions on budgeting, savings, taxes and banking.

Links to other learning areas:

- Languages and other languages: A learner expresses their opinions in English during discussions, reinforcing communication skills.

Suggested Learning Resources:

Imitations of money, real money, price list with appropriate font and colour contrast and in Braille, saving box electronic money tariffs chart with appropriate font and colour contrast and in Braille, digital devices with assistive technology

Suggested Assessment Rubric

Level / **Indicator**	**Exceeds Expectations**	**Meets Expectations**	**Approaches Expectations**	**Below Expectations**
Ability to: • convert kilometres to metres and metres to kilometres in real life situations, • work out area of rectangles and squares in square centimetres (cm^2) in different situations, • work out volume of cubes in cubic centimetres ($cm^{3)}$ using the formula, • convert litres to millilitres and millilitres to litres in real life situations, • convert kilograms to grams and grams to kilograms in real life situations, • convert minutes to seconds and seconds to minutes in real life, • identify the importance of a budget in real life,	The learner demonstrates the seven skills.	The learner demonstrates five to six skills.	The learner demonstrates three to four skills.	The learner demonstrates at most two skills.

STRAND 3.0 GEOMETRY

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
3.0 GEOMETRY	**3.1 Lines** **(4 Lessons)**	By the end of the Sub Strand, the learner should be able to: a) identify horizontal and vertical lines in different situations, b) draw horizontal and vertical lines in different salutations, c) identify perpendicular lines in different situations, d) draw perpendicular lines in different situations, e) identify parallel lines in different situations, f) draw parallel lines in different situations, g) appreciate use of various types of lines in real life.	• Learners with low vision are guided to identify lines in the classroom and within the environment. Learners with blindness to be guided to identify lines in the classroom and within the environment by tactually manipulating and exploring the various lines in the environment. • Learners to be guided to describe lines in the environment and identify them as horizontal and vertical lines, parallel and perpendicular lines. • Learners draw horizontal and vertical lines, parallel and perpendicular lines to represent real life situations. Learners with low vision to draw horizontal and vertical lines, parallel and perpendicular lines using geometrical instruments such as ruler and a pair of compasses with appropriate colour contrast. Learners with blindness to be guided to tactually manipulate horizontal, vertical, parallel and perpendicular lines. • Learners use digital devices with assistive technology such as screen readers and adapted keyboard to learn more about lines.	How do you draw perpendicular lines?
Core Competences to be developed:				

- Learning to learn: As learners develop self-discipline as they work collaboratively when identifying different lines in the environment.
- Digital literacy**:** A learner interacts with digital devices with assistive technology as the learners play digital games involving various types of lines.

Values:

- Unity: A learner cooperates with others while working in groups to identify lines in the environment.

Pertinent and Contemporary Issues (PCIs):

- Safety and security: A learner observes safety as they identify uses of different lines in the classroom and within the environment.

Links to other learning areas:

- English and other languages: A learner enhances their writing and speaking skills when discussing and sharing with others in class.
- Pre technical skill: A learner safely handles digital devices when playing digital games.

Suggested Learning Resources:

Digital devices with assistive technology such as screen readers and magnifiers, braille geometrical instruments, geometrical instruments with appropriate tools for learners with low vision

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
3.0 GEOMETRY	**3.2 Angles** **(6 Lessons)**	By the end of the Sub Strand, the learner should be able to: a) relate a turn to angles in real life, b) read a protractor as a tool for measuring angles in print *(for learners with low vision),* c) read a tactile protractor as a tool for measuring angles in braille *(for learners with blindness),* d) use protractor to angles in different situations, e) identify the degree as a unit of measuring angle, f) Measure angles in degrees in different situations, g) identify the use of angles in the environment, h) appreciate the use of angles in our day-to-day life.	• In pairs, learners are guided to make clockwise, quarter and half turn, and relate them to angles in the environment. • Learners discuss the use of angles in the environment. • In pairs, learners with low vision to make a unit angles and use it to measure angles in the environment on a contrasting surface. Learners with blindness tactually manipulate embossed angles on an embossed line and use tactile cut outs to measure the angle while being guided on correct positioning of the tactile cut outs and identification of start and end points of measurement. • Learners with blindness be guided to read a tactile protractor as a tool for measuring angles, be guided to write the braille sign of angles and practice writing it. • Learners with low vision be guided to divide a 10^o angle into 10 equal parts and identify each part as equal to 1 degree. Learners with blindness to be provided with a tactile diagram made by dividing a 10^o angle into 10 equal parts and be guided to identify each part as equal to 1 degree. • Learners with low vision to measure angles in degrees using a protractor on a bold straight line drawn on a contrasting surface. Learners with blindness to manipulate an embossed angle on an embossed line and use tactile cut outs protractors	1. How are angles measured? 2. Why is it important to use angles in the environment?

			to measure the angle while being guided on correct positioning of the tactile protractor and identification of start and end points of measurement. ● Learners with low vision to be guided to measure angles in degrees using a protractor and share the results with others. Learners with blindness to manipulate an embossed angle on an embossed line and use tactile protractors to measure the angle while being guided on correct positioning of the tactile protractor and identification of start and end points of measurement and share the results with others. ● Learners use digital devices with assistive technology such as adapted keyboard, screen readers and magnifiers to create and learn more about angles.	

Core Competences to be developed:

- Communication and collaboration: A learner develops speaking skills as they speak clearly, effectively and ordering their points logically.
- Learning to learn: A learner organise own learning while identifying the degree as a unit of measuring angles.

Values:

- Responsibility: A learner shows self-drive when sharing tasks or roles in their groups.

Pertinent and Contemporary Issues (PCIs):

- Safety and Security: A learner works with others in pairs or groups when handling a pair of scissors, razor blades and keeping them safe after use.

Links to other learning areas:

- English and other languages: A learner enhances writing and speaking skills when discussing and sharing findings with others in class.

Suggested Learning Resources:

Digital devices with assistive technology such as refreshable braille displays, braille geometrical set, geometrical set with appropriate tools for learners with low vision, rulers, tactile rulers, tactile cut outs protractors, embossed angles

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
3.0 GEOMETRY	**3.3 3-D Objects** **(6 Lessons)**	By the end of the Sub Strand, the learner should be able to: a) describe 3-D objects in the environment, b) describe 2-D shapes in 3-D objects in the environment, c) appreciate the use of 3-D objects in the environment.	• Learners with low vision are guided to identify 3-D objects, collect objects and discuss cubes, cuboids, cylinders, spheres and pyramids as 3-D objects in the environment and share with other groups. Learners with blindness to manipulate concrete objects of different textures, shape and size to and be given verbal description of the 3-D shapes, collect objects of different shapes and texture and discuss cubes, cuboids, cylinders, spheres and pyramids as 3-D objects in the environment and share with others. • Learners with low vision to watch a video on 3-D objects. Learners with blindness to listen to audio clips and be given description of aspects that require the use of sight. • Learners with low vision are guided to describe 2- D shapes found in 3-D objects and share with others. Learners with blindness be guided to manipulate and explore 2-D shapes found in the model of 3-D objects and share with others. • Learners to be guided to use digital devices with assistive technology such as adapted keyboard to learn more about 3-D objects.	Why do we use 3-D objects in the environment?

Core Competences to be developed: ● Learning to learn: A learner develops self-discipline as they are motivated to learn when exploring 2-D shapes found in the 3-D objects.
Values: ● Responsibility: A learner enhances self-drive when handling objects in pairs or groups.
Pertinent and Contemporary Issues (PCIs): ● Safety and security: A learner works with others in pairs or groups or as individuals when handling different objects.
Links to other Learning areas: ● English and other languages**:** A learner enhances their speaking skills when discussing in groups as they identify different 3-D objects in the environment. ● Creative Arts: A learner draws, sketches or makes and explores 3-D objects.
Suggested Learning Resources: Digital devices with assistive technology such as adapted keyboard, objects of different textures, shape and size, Video clips with verbal descriptions, cubes, cuboids, cylinders, spheres and pyramids, 3-D shapes and 2-Dshapes

Suggested Assessment Rubrics

CRITERIA	**Exceeds Expectations**	**Meets Expectations**	**Approaches Expectations**	**Below Expectations**
Ability to: • identify horizontal and vertical lines in different situations, • read a protractor as a tool for measuring angles in print *(for learners with low vision),* or read a tactile protractor as a tool for measuring angles in braille *(for learners with blindness),* • use protractor to angles in different situations, • describe 2-D shapes in 3-D objects in the environment,	The learner demonstrates the four skills.	The learner demonstrates three skills.	The learner demonstrates two skills.	The learner demonstrates one or no skill.

STRAND 4.0 DATA HANDLING

Strand	Sub Strand	Specific Learning Outcomes	Suggested Learning Experiences	Suggested Key Inquiry Question(s)
4.0 DATA HANDLING	**4.1 Data Representation** **(6 Lessons)**	By the end of the Sub Strand, the learners should be able to: a) collect data of about 30 items relating to real experiences, b) draw a table to record data from real life, c) draw tally marks of the collected and analysed data, d) prepare a frequency table to represent data, e) interpret data represented by frequency tables, f) appreciate the use frequency tables in real life.	• In pairs, learners be guided to collect data involving day to day experiences such as marks, shoe number and age of learners in a class. • Learners with low vision to prepare data collection and recording tools and record data on books or charts in appropriate colour contrast and font while learners with blindness be guided to prepare data collection and recording tools and record data. • In groups learners with low vision to discuss and draw tally marks for the data. Learners with blindness to be guided to write tally marks in braille and be given time to practice writing them for the data. • Learners with low vision to organize data in a table from real life situations. Learners with blindness to be guided to align and organize data in rows and columns appropriately using braille machine. • Learners discuss information represented by objects piled vertically. • Learners are guided to use digital devices with assistive technology such as screen readers, magnifiers and adapted keyboard to learn more on representing data in tables.	1. Why is representation of data in tables important? 2. How can we interpret data represented by frequency tables?

Core Competences to be developed:

- Learning to learn: A learner organises their own learning when practising piling different items vertically.
- Digital literacy: A learner develops connecting with technology as they use digital devices with assistive technology to learn more about frequency tables.

Values:

- Unity: A learner enhances Equity and displays team spirit when working in groups.

Pertinent and Contemporary Issues (PCIs):

- Safety and security: A learner works with others in pairs or groups when representing data through piling objects.

Links to other learning areas:

- Science and technology: A learner classifies plants and animals into living and non-living things.
- English and other languages: A learner enhances speaking and writing skills when discussing and sharing in pairs or groups.

Suggested Learning Resources:

Digital devices with assistive technology such as adapted keyboards, magnifiers and screen readers, braille paper, braille machines

Suggested Assessment Rubrics

Level / Indictor	Exceeds Expectations	Meets Expectations	Approaches Expectations	Below Expectations
Ability to: • collect data of about 30 items relating to real experiences, • draw a table to record data from real life, • draw tally marks of the collected and analysed data, • prepare a frequency table to represent data, • interpret data represented by frequency tables,	The learner demonstrates the five skills.	The learner demonstrates four skills.	The learner demonstrates two to three skills.	The learner demonstrates one or no skill.

APPENDIX 1:

List of Learning Resources

Strand	Sub strand	Suggested assessment methods	Suggested learning resources	Suggested non-formal activities
1.0 NUMBERS	Whole Numbers	a) Written exercises in print and braille b) Oral questioning c) Observation d) Group discussion	• Place Value Apparatus • Number Charts • Number Cards • Multiplication Table	1. Learners to play number games e.g. competing forming largest number from given digits. 2. Learners to play number games using IT devices.
	Addition	a) Written exercises in print and braille b) Oral questioning c) Observation d) Group discussion	• Place Value Chart • Abacus	1. Learners to play games involving number patterns. 2. Learners to play number games using IT devices.
	Subtraction	a) Written exercises in print and braille b) Oral questioning c) Observation d) Group discussion	• Place Value Chart • Abacus	1. Learners to work out the difference in scores for various teams during play.
				2. Learners to work out the difference of any two numbers during play.
	Multiplication	**a)** Written exercises in print and braille **b)** Oral questioning **c)** Observation	Multiplication Tables	1. Learners to work out the number of seedlings in a seedbed by considering the number of rows and columns.

		d) Group discussion		2. Learners to work out the total number of learners in a class by counting rows and columns.
	Division	a. Written exercises in print and braille b. Oral questioning c. Observation d. Group discussion	Multiplication Tables	1. Learners to create number games during play activities e.g. what is 15 divided by 4? 2. Learners to divide numbers during play.
	Fractions	a) Written exercises in print and braille b) Oral questioning c) Observation Group discussion	• Equivalent Fraction Board • Circular Cut outs Rectangular Cut outs Counters	1. Learners to play games on creating equivalent fractions. 2. Learners to represent equivalent fractions

				using circular cut outs during play.
	Decimals	a) Written exercises in print and braille b) Oral questioning c) Observation d) Group discussion	• Place Value Charts • Number Cards	1. Learners to represent decimals using paper cut outs during play. 2. Learners to represent decimals on place value charts during play.
2. 0 MEASUREMENT	Length	a) Written exercises in print and braille b) Oral questioning c) Observation d) Group discussion e) Project	• Metre Rule • 1metre Sticks • Tape Measure	1. Learners to mark distances of 400m, 200m during play. 2. Learners to compete running 100 metres during play.
	Area	a) Written exercises in print and braille b) Oral questioning c) Observation d) Group discussion e) Project	• Square Cut Outs • 1cm Squares • 1m Squares	1. Learners to determine area of playing fields e.g. netball pitch, football 2. Learners to determine area of their desks during play.
	Volume	a) Written exercises in print and braille b) Oral questioning c) Observation	• Cubes • Cuboids • Videos	1. Learners to stack up same items during play.

		d) Group discussion e) Project		2. Learners to stack up cubes and cuboids during play.
	Capacity	a) Written exercises in print and braille b) Oral questioning c) Observation d) Group discussion e) Project	• Tea Spoons • Videos • Containers of different sizes • Water, Sand ,Soil	1. Learners to fill big containers using small containers during play. 2. Learners to empty big containers using small containers during play.
	Mass	a) Written exercises in print and braille b) Oral questioning c) Observation d) Group discussion e) Project	• Tea Spoons • Soil Or Sand • Manual/Electronic Weighing Machine • Videos • Beam Balance	1. Learners to play games using a sea saw. 2. Learners to play games using a beam balance.
	Time	a) Written exercise in print and braille b) Oral questioning c) Observation d) Group discussion	• Analogue • Digital Clocks • Digital Watches • Stop Watch	1. Learners to observe shadows and relate them to different times of the day. 2. Learners to discuss activities done at different times of the day during play.

	Money	a) Written exercises in print and braille b) Oral questioning c) Observation d) Group discussion e) Project	• Price List • Classroom shop • Electronic Money Tariffs Chart	1. Learners to role play shopping activities. 2. Learners to role play banking activities e.g. depositing money.
3.0 GEOMETRY	Lines	a) Written exercises in print and braille b) Oral questioning c) Observation d) Group discussion	• Chalk Board Ruler • 30cm Ruler • Straight Edges	1. Learners to make lines using items like strings, number them and skip on them during play. 2. Learners to identify different lines during play.
	Angles	a) Written exercises in print and braille b) Oral questioning c) Observation d) Group discussion e) Project	• Unit Angles • Protractor • Rulers	1. Learners to demonstrate angles during play. 2. Learners to identify angles in the environment during play.
	3-D Objects	a) Written exercises in print and braille b) Oral questioning c) Observation d) Group discussion e) Project	• Cubes • Cuboids • Cylinders, Spheres • Rectangles • Circle and Triangle Cut outs of different sizes	1. Learners to model toys of cars or dolls during play. 2. Learners to model cubes, cuboids, cylinders during play.

4.0 DATA HANDLING	Data Representation	a) Written exercises in print and braille b) Oral questioning c) Observation d) Group discussion e) Project	• Data from different sources	1. Learners to represent different number of items using sticks as tallies practically. 2. Learners to represent different numbers on the ground using tally marks.
5.0 ALGEBRA	Simple Equations	a) Written exercises in print and braille b) Oral questioning c) Observation d) Group discussion	• Information from different sources	1. Learners to play balancing games using a sea saw. 2. Learners to play weighing games using a beam balance.

NOTE

The following ICT devices may be used in the teaching/learning of mathematics at this level;
Learner digital devices (LDD),Teacher digital devices(TDD),Mobile phones, Digital clocks, Television sets, Videos, Cameras, Projectors, Radios, DVD players, CD's, Scanners, Internet among others.

APPENDIX II:

SUGGESTED ASSESSMENT METHODS AND TOOLS

1. Written tests and quizzes in print or braille
2. Rating scales
3. Projects
4. Observation Schedules
5. Portfolio
6. Assessment Rubric

APPENDIX III:

CSL GUIDELINES FOR UPPER PRIMARY (GRADE 4-6)

At this level, the goal of the CSL activity is to provide linkages between concepts learnt in the various Learning Activities and the real life experiences. Learners begin to make connections between what they learn and the relevance to their daily life. CSL is hosted in the Social studies learning area. The implementation of the CSL activity is a collaborative effort where the class teacher coordinates and works with other subject teachers to design and implement the integrated CSL activity. Though they are teacher-guided, the learners should progressively be given more autonomy to identify problems and come up with solutions. The safety of the learners should also be taken into account when selecting the CSL activity. The following steps for the integrated CSL activity should be staggered across the school terms:

Steps in carrying out the integrated CSL activity
1) Preparation ● Map out the targeted core competencies, values and specific learning areas skills for the CSL activity ● Identify resources required for the activity (locally available materials) ● Stagger the activities across the term (Set dates and time for the activities) ● Communicate to learners, parents/caregivers/guardians, school administration, teachers and other relevant stakeholders in the school community ● Identify and develop assessment tools
2) Implementation CSL Activity ● Assigning roles to learners. ● Ensure every learner actively participates in the activity ● Observe learners as they carry out the CSL activity and record feedback**.** ● Use an appropriate assessment tool to assess both the process and the product (Assess learner's work from the beginning to the end product) ● Assess the targeted core competencies, values and subject skills.

3) Reflection on the CSL Activity

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

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

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

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

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

ASSESSMENT OF THE CSL ACTIVITY

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