Republic of Namibia

MINISTRY OF EDUCATION

JUNIOR PRIMARY PHASE: SYLLABUSES

SECTION 3

ENGLISH SECOND LANGUAGE
MATHEMATICS

GRADES 1 - 3

ENGLISH VERSION

FOR IMPLEMENTATION 2015

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1. Introduction

This syllabus describes the intended learning and assessment for English Second Language in Grades 1 to 3 of the Junior Primary Phase. As a subject, English Second Language is within the 'linguistic and literary' area of learning in the curriculum, but has thematic links to other subjects across the curriculum.

The aims, learning objectives, and competencies which overlap between subjects are amongst the essential learning within the curriculum as a whole. Under optimal circumstances, this subject would need 5 (Grades 1 and 2) and 9 (Grade 3) number of periods per week.

2. Rationale

English is the official language of Namibia and its acquisition is an essential life skill and unifying force in the multi-lingual and multi-cultural society of Namibia. It therefore has a special place and function in education. English Second Language is taught as a subject from Grade 1 to Grade 3 and, during upper primary, English becomes the medium of instruction and learning. It is therefore essential for all learners who are not home language speakers of English, to learn the language to enable them to cope with the demands of education and real life in Namibia.

The particular features of English Second Language at this phase are the four language skills of listening and responding, speaking and communicating, reading and viewing, and writing. A fifth area of language structure, grammar and language use is integrated into the four skills in order to develop the learners' abilities to use English correctly. The emphasis at this stage is on language learning for communication, reading with understanding, and creative writing.

Introducing learners to English Second Language as a subject in Grade 1 should be done in an informal and gradual way and should be based on informal approaches, such as carefully structured play-like activities, games rhymes and song which focus on specific language functions, notions, structures, sounds or skills. As learners progress through Grades 2 and 3, the subject will focus closely on developing what they need to use in English as a medium of instruction in future grades but in an engaging and motivational way.

3. Aims

The aims of English Second Language are to:

- enable learners to function adequately in English as a medium of instruction in later grades;
- give learners the skills to consolidate and extend basic English for further progression in education;
- start developing learners' competence in English as the official language in public life.

4. Inclusive Education

Inclusive Education is the right of every learner and promotes participation in, or access to, the full range of educational programs and services offered by the education system in mainstream schools. It is based on the principle of supporting and celebrating the diversity found among ALL learners and removing ALL barriers to learning.

Basic Education prepares the society, as envisaged in Namibia's Vision 2030, by promoting inclusivity. Learners experiencing barriers to learning and other individual needs will be included in a mainstream school and their needs will be attended to through differentiation of teaching methods and materials as required. Learners, who are so severely impaired that they cannot benefit from attending inclusive schools, will be provided for according to their needs in learning support units, resource units or resource schools until such time that they can join the inclusive school where applicable. The curriculum, teaching methods and materials are adapted for learners in these institutions.

The learner-centred approach to teaching is highly suitable for learners with special learning needs since it capitalises on what learners already know and can do, and then assists them to acquire new knowledge and skills. The curriculum framework for Inclusive Education specifies the competencies which learners with special learning needs should master. Individual Learning Support Plans (ILSP) should be in place to guide and evaluate the individual learning process for learners with special learning needs.

Further guidelines on planning for learning and teaching in an inclusive classroom can be found in the Curriculum Framework for Inclusive Education: A Supplement to the National Curriculum for Basic Education 2014. These guidelines will help to equip ALL learners with knowledge, skills and attitudes to help them succeed in the world that is increasingly complex, rapidly changing and rich in information and communication technology.

The Junior Primary Phase promotes equal opportunity for males and females, enabling both to participate equally. Teachers should know and understand how to treat learners equally, and all materials should support gender fairness.

Girls tend to be more proficient in language than boys in Junior Primary and female and males have differences in the way they apply language. These differences can be used as a resource by grouping girls and boys together during language lessons. Value issues such identity, feelings, choices and conflicts are often discussed during language sessions. The different attitudes about values that shape male and female thinking can be used to enrich classroom discussion.

5. Links to Other Subjects and Cross-curricular Issues

The cross-curricular issues including Environmental Learning; HIV and AIDS; Population Education; Education for Human Rights and Democracy (EHRD), Information and Communication Technology (ICT) and Road Safety have been introduced to the formal curriculum to be dealt with in each subject and across all phases because each of the issues deals with particular risks and challenges in our Namibian society. All of our learners need to:

- understand the nature of these risks and challenges
- know how they will impact on our society and on the quality of life of our people now and in the future
- understand how these risks and challenges can be addressed on a national and global level
- understand how each learner can play a part in addressing these risks and challenges in their own school and local community

The main risks and challenges have been identified as:

- the challenges and risks we face if we do not care for and manage our natural resources
- the challenges and risks caused by HIV and AIDS
- the challenges and risks to health caused by pollution, poor sanitation and waste
- the challenges and risks to democracy and social stability caused by inequity and governance that ignores rights and responsibilities
- the challenges and risks we face if we do not adhere to Road Safety measures
- the challenges and risks we face from globalisation

Since some subjects are more suitable to address specific cross-curricular issues, those issues will receive more emphasis in those particular syllabuses. In this syllabus there are more examples of other links to cross-curricular issues, but only one example for each cross- curricular issue is provided below:

Environmental Learning	**HIV and AIDS**	**EHRD**	**ICT**	**Road Safety**
Grade 1: Listening and Responding: Listen to and learn a poem about the weather	Grade 2: Listening and Responding: Listen to a story about caring for a sick person. Answer simple questions	Grade 3: Writing: Write a story about a family custom	Grade 3: Reading: Use the Internet to find information	Grade 1: Speaking and Communicating: Use a picture to answer yes/no questions, e.g. Can he cross the road? No, he can't

6. Approach to Teaching and Learning

The approach to teaching and learning is based on a paradigm of learner-centred education (LCE) described in ministerial policy documents and the LCE conceptual framework. This approach ensures optimal quality of learning when the principles are put into practice. Furthermore, the thematic/integrated approach remains a focal point of Junior Primary teaching and learning.

The aim is to develop learning with understanding, and the knowledge, skills and attitudes to contribute to the development of society. The starting point for teaching and learning is the fact that the learner brings to the school a wealth of knowledge and social experience gained continually from the family, the community, and through interaction with the environment. Learning in school must involve, build on, extend and challenge the learner's prior knowledge and experience.

Learners learn best when they are actively involved in the learning process through a high degree of participation, contribution and production. At the same time, each learner is an individual with his/her own needs, pace of learning, experiences and abilities. The teacher must be able to sense the needs of the learners, the nature of the learning to be done, and how to shape learning experiences accordingly. Teaching strategies must therefore be varied but flexible within well-structured sequences of lessons. Although the language skills have been separated within this syllabus, teachers should be aware that these skills are to be taught in an integrated manner.

The communicative approach is the ideal method to use when teaching English Second Language. Emphasis is on creating situations where learners practise listening to and using functional, conversational English. Short, structured dialogues and role-plays can be used frequently to transform passive language into active vocabulary. Listening and responding, and speaking and communicating activities are an important foundation for the other language skills. Guessing what might be said, or what is missing, and anticipating what might come next in a story or dialogue, are among the techniques that stimulate language development. Many of the language skills developed in First Language can be transferred to English Second Language, but within a more restricted range of vocabulary and grammar.

The contrast between the home languages of each learner and English is an important factor when deciding on a teaching/learning approach. Sounds, rhythms, intonations, structures and language concepts in mother tongue are often very different from English. The choice of which sounds and grammatical structures to practise more frequently in the English Second Language classroom will

depend on what is most difficult for the learners according to their language background and teachers must consider this before deciding on an appropriate approach.

English is the language of globalisation, and is present in the everyday life of most Namibian learners. To some extent it has become part of the learners' culture even in the remotest areas of the country. Therefore, teachers should capitalise on learners' existing English from the local context and link this to the English they need for school. However, this should not oppose or threaten the learners' home culture. By balancing local context and content, and identifying with aspects of the English language that appeal to them, learners can discover how to 'be themselves' when using English.

Following are specific approaches to consider when teaching the skills of English Second Language:

Listening and Responding

Of all areas of language learning, listening develops first. Young learners are generally good listeners and they apply this skill equally well in a second language. It is therefore crucial that opportunities for listening and responding are maximised in English Second Language. Most of this subject time in Grade 1 should be devoted to listening activities including emphasis on phonological awareness. Listening should also be a large part of Grade 2 and Grade 3 activities.

Speaking and Communicating

Speaking is a productive skill and develops more slowly than the skills of listening. Learners need to be encouraged to experiment, mimic and play with English. Their attempts may not always be grammatically correct and teachers should be careful not to inhibit spontaneity by over-correcting errors. Learners usually know and understand more than they can say in a second language so speaking should not play too dominate a role in making decisions about the ability of the learner to make meaning of English. This is particularly true in the early stages of learning the language. However, speaking is an important skill and learners should be encouraged to try new English vocabulary, engage in greetings, courtesies and everyday language, play language games and learn songs, rhymes and poems.

Reading and Viewing

The process of teaching reading in English Second Language is similar to the process used for teaching reading in First Language. However, reading in a second language tends to develop more slowly. The classroom should be an English print-rich environment and learners should be able to consult this material as it is an important source of information to support the reading process. There should be a wide variety of reading texts at the appropriate level in the classroom so that learners can develop a culture of reading English as well as in mother tongue, and access to technology, particularly computers and the Internet should be used if available. Learners should develop reading strategies such as visual cues to help them make meaning.

Reading awareness becomes evident when they begin to recognise sound-symbol relationships (phonics). The teaching of phonics is a vital aspect of reading and should be taught systematically, sequentially and in context. However, teaching reading should not start until learners have a good grasp of the sounds of English and how they can be manipulated (phonological awareness).

Writing

Like speaking and communicating, writing is a productive skill and develops more slowly than other skills. When young learners start to learn to write creatively they construct short and simple texts which may not be grammatically or syntactically correct. They should be encouraged to use the knowledge they have gained from lessons targeting language structure, grammar and language use. Writing activities should centre on familiar experiences including writing labels, the date, the weather, captions, descriptions and stories. In Grades 2 and 3 learners need to maintain a list of new vocabulary to use when writing. Formal handwriting in English is also important but in most cases the skills can be practised in First Language.

Language Structure, Grammar and Language Use
It is important that the concepts of English language structure, grammar and correct usage are taught in an integrated manner within the skills of listening and responding, speaking and communicating, reading and viewing, and writing. In order for learners to use English effectively it is vital that they continue to build up a bank of vocabulary words.

7. End of phase competencies

On entry to Grade 1 in the Junior Primary Phase, nearly all learners will have acquired some English from their home and local environment but the majority will have a mother tongue other than English. Therefore, most learners will be exposed to English in a more 'formal' manner for the first time when they enter Grade 1.

On completing Grade 3 English in the Junior Primary Phase, learners are expected to be able to demonstrate the following competencies:

Listening and Responding
Learners listen attentively and actively and respond in various ways to show understanding and appreciation of spoken texts and media. They distinguish between different sounds and tones in English when presented with similar words and they respond appropriately to informal and formal social greetings, questions and instructions. They show comprehension of spoken texts by correctly answering questions.

Speaking and Communicating
Learners communicate clearly and coherently using varied vocabulary, correct grammar and sentence structure, and accurate pronunciation. They show sufficient command of spoken English when retelling stories, talking about everyday occurrences, reciting rhymes and poems, answering questions, engaging in conversations and discussing in groups.

Reading and Viewing
Learners read simple texts for information and personal pleasure. They demonstrate good reading habits and show eagerness to read in English. They apply knowledge of phonics and word study skills to decode words in context. They read aloud with correct pronunciation and sufficient accuracy, fluency and vocabulary knowledge to support comprehension.

They retell, in sequence, the main ideas in texts, and identify the main idea of a story in order to show comprehension. They locate literal information, and make some higher-order inferences about ideas in texts. They view a range of visual material such as books, picture books, newspapers, magazines, diagrams, tables, maps, DVDs , television, films and Internet (where available) with purpose and understanding.

Writing
Learners print letters and numbers correctly using uniform size and spacing, demonstrating rhythm, good speed, correct posture and pencil grip. They write creative texts on familiar topics using appropriate vocabulary, and they generally use correct grammar, tenses and spelling. They sequence ideas, use simple and compound sentences, and correct punctuation.

Language Structure, Grammar and Language Use
Learners correctly use capitals, full stops and question marks when writing. They name, identify and use common and proper nouns, pronouns, verbs, prepositions and adjectives. They apply the simple present, present continuous, simple past and future tenses correctly and they use statements, questions and exclamations.

They construct compound sentences using some conjunctions, and use subject-related vocabulary appropriately and with correct pronunciation. They apply their knowledge of phonics, word study skills, and a few basic spelling rules and strategies.

8. Learning Content

Grade 1 learners should be exposed to at least five weeks of readiness activities in Term 1 before formal learning starts. Refer to the document, *A School Readiness/Preparatory Programme (5 weeks)*, published by NIED in 2011.

LISTENING AND RESPONDING			
TOPICS/SKILLS	**GRADE 1**	**GRADE 2**	**GRADE 3**
Stories, rhymes and songs	Within a passive vocabulary range of at least 500 words:	Within a passive vocabulary range of at least 1000 words:	Within a passive vocabulary range of at least 1 500 words:
	Learning Objective Learners will develop listening skills to distinguish English from other languages		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
	• distinguish English phonemes and tones, e.g. listening exercises: simple stories, rhymes and songs presented by the teacher or from tape, radio, TV or video	• distinguish English phonemes and tones, e.g. learn rhymes and songs: use known songs; listen to and retell parts of stories • role-play; sing songs/rhymes; make simple stories and presentations	• distinguish English phonemes and tones, e.g. listen to and retell stories/sing songs, recite rhymes • role-play; songs/rhymes/stories and present topics
Instructions, courtesies and greetings	**Learning Objective** Learners will listen and respond/act appropriately to courtesies, greetings, questions and instructions		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**

TOPICS/SKILLS	GRADE 1	GRADE 2	GRADE 3
	• answer simple questions • perform various tasks in groups from oral instructions • respond appropriately to courtesies and greetings	• ask/answer questions • follow/give instructions • respond appropriately to courtesies and greetings	• ask/answers questions • follow/give instructions • respond appropriately to courtesies and greetings
Vocabulary in context	**Learning Objective** Learners will use basic and new words in context		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
	• distinguish objects shown or mentioned, e.g. learn new vocabulary • repeat short prepared sentences of 3 to 4 words on everyday classroom situations	• present 6 to 10-word prepared sentences on everyday classroom issues • retell parts of stories and tell own stories in 5 to 10 simple sentences	• use new words in activities and assignments and practise them in a variety of ways • retell/explain parts of stories and tell own stories in 10 to 15 short sentences (about 50 words) – where errors do not hinder comprehension or clarity

SPEAKING AND COMMUNICATING			
TOPICS/SKILLS	**GRADE 1**	**GRADE 2**	**GRADE 3**
Pronunciation and expression	**Learning Objective** Learners will use correct pronunciation and vocabulary		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
	• pronounce words and phrases accurately and appropriately, e.g. *tongue twisters; imitate sounds (animals, machines, insects)* - use and pronounce the indefinite articles 'a' and 'an' correctly, e.g. *'a' before a consonant sound (a book) and 'an' before a vowel (*an *apple)* - use and pronounce the definite article 'the' correctly, e.g. *'the' before a consonant sound (the book) and 'the' (pronounced 'thee') before a vowel sound (the apple)* - pronounce contractions correctly in informal speech, *e.g. I'm. he's, she's, etc*	• pronounce words and phrases accurately and appropriately, e.g. *rhymes and songs, ask/answer questions, follow/give instructions, retell and tell stories, make simple presentations* - use and pronounce the indefinite articles 'a' and 'an' correctly, e.g. *'a' before a consonant sound (a pencil) and 'an' before a vowel (*an *egg)* - use and pronounce the definite article 'the' correctly, e.g. *'the' before a consonant sound (the pencil) and 'the' (pronounced 'thee') before a vowel sound (the egg)* - pronounce contractions correctly in informal speech, *e.g.* don't, *doesn't, isn't, wasn't, etc*	• pronounce words and phrases accurately and appropriately, e.g. *recite rhymes, retell stories, ask and answer question, follow and give instructions, discuss in groups and make simple presentations* - use and pronounce the indefinite articles 'a' and 'an' correctly, e.g. *'a' before a consonant sound (a desk) and 'an' before a vowel (*an *orange)* - use and pronounce the definite article 'the' correctly, e.g. *'the' before a consonant sound (the desk) and 'the' (pronounced 'thee') before a vowel sound (the orange)* - pronounce contractions correctly in informal speech, *e.g. aren't, can't, won't, etc*

TOPICS/SKILLS	GRADE 1	GRADE 2	GRADE 3
	• repeat rhymes and songs • role-play greetings, instructions and commands • participate in free discussion • use new words in context	• repeat rhymes and songs • role-play greetings, instructions and commands • participate in free discussion • use new words in context	• repeat rhymes and songs • role-play greetings, instructions and commands • participate in free discussion • use new words in context

READING AND VIEWING			
TOPICS/SKILLS	**GRADE 1**	**GRADE 2**	**GRADE 3**
Preparatory exercises **Incidental reading**	**Learning Objective** Learners will be aware of the need to read in English and develop good reading habits		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
	• show respect for books and handle them with care • demonstrate good 'reading' habits through eagerness to 'read', e.g. 'read' frequently in the reading corner of the classroom or library	• show respect for books and handle them with care • demonstrate good reading habits through eagerness to read, e.g. read frequently in the reading corner of the classroom or library	• show respect for books and handle them with care • demonstrate good reading habits through eagerness to read, e.g. read frequently in the reading corner of the classroom or library
Phonological awareness and articulation	**Learning Objective** Learners will demonstrate phonological awareness		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
	• identify number of words in sentences, and omit or replace words within sentences • clap and count syllables in words • identify rhyming words in rhymes and songs • identify short and long vowel sounds in single-syllable words	• clap and count syllables in words • delete and replace syllables in words to make new or nonsense words • identify rhyming words in rhymes and songs • distinguish between short and long vowel sounds in single-syllable words	• clap and count syllables in words • delete and replace syllables in words to make new or nonsense words • identify and substitute rhyming words in rhymes and songs • distinguish between short and long vowel sounds in multi-syllabic words

TOPICS/SKILLS	GRADE 1	GRADE 2	GRADE 3
	• identify beginning sounds (phonemes) in single-syllable words and replace phonemes to form new words • recognise and create repetitions of initial sounds in words • blend and split onsets and rimes	• identify beginning and end sounds (phonemes) in simple single-syllable words, and replace phonemes to form new words • recognise and create repetitions of initial sounds in words • blend and split onsets and rimes, including two-letter blends	• identify beginning, middle and end sounds (phonemes) in single-syllable words, and replace and delete phonemes • recognise and create repetitions of initial sounds in sentences • blend and split onsets and rimes, including three-letter blends
Phonics	**Learning Objective** Learners will demonstrate and use correct phonic patterns		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
	• read/repeat all single sounds and give the symbol for each letter of the alphabet • incidentally combine letters to make two-letter sight words, e.g. *as, on, at, if, it, etc* • incidentally combine letters to make three-letter cvc (consonant-vowel-consonant) words, e.g. *bat, ten, did, dog, sun*	• read/repeat all single sounds and give the symbol for each letter of the alphabet • construct and read two-letter sight words in isolation and in simple sentences, e.g. as, on, at, if, it, etc • construct and read three-letter cvc (consonant-vowel-consonant) words, in isolation and in simple sentences e.g. *bat, ten, did, dog, sun* - construct nonsense words	• Construct and read higher frequency sight words in isolation and in simple sentences, e.g. the, there, she, were • construct and read three-letter cvc (consonant-vowel-consonant) words, in isolation and in simple sentences construct nonsense words

TOPICS/SKILLS	GRADE 1	GRADE 2	GRADE 3
		• read words with familiar blends, in isolation and in simple sentences, e.g. bl, pl, sn, -nk - find word families • read words with familiar digraphs, in isolation and in simple sentences, e.g. /ee/, /ch/, /-ll/, /-ck/ - find word families • read words with familiar basic diphthongs, in isolation and in simple sentences, e.g. /oa/, /ay/ - find word families • use phonic patterns and blends to read unfamiliar words	• read words with familiar blends, in isolation and in simple sentences, e.g. gr, -mp, spl - find word families • read words with familiar digraphs, in isolation and in simple sentences, e.g. /ew/, /ur/, /aw/ - find word families • read words with familiar basic diphthongs, in isolation and in simple sentences, e.g. /ou/, /o-e/, /oy/ - find word families • use phonic patterns and blends to read unfamiliar words
Reading for Understanding/ Comprehension **Reading for enjoyment**	**Learning Objective** Learners will read words and phrases aloud with understanding		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
	• informally read words and phrases, e.g. word and card games, reading games/exercises from picture books • recognise a variety of vocabulary, e.g. label posters, match words to words/pictures • read sentences of 4 to 5 words from various types of texts	• read short prepared texts of about 3 to 5 sentences and unprepared texts of 2 sentences	• read prepared and unprepared texts of about 50 words from fictional and factual texts

TOPICS/SKILLS	GRADE 1	GRADE 2	GRADE 3
	• show understanding of texts by correctly answering simple comprehension questions	• show understanding of texts by correctly answering simple and higher-order questions	• show understanding of text by correctly answer simple and higher-order questions from texts
Reading for information	**Learning Objective** Learners will find basic information from factual texts		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
	• look at pictures • look at title and find information	• look at the chapters • look at table of contents	• find and extract information in classroom books/library using tables of content, page references, chapters and text

WRITING			
TOPICS/SKILLS	**GRADE 1**	**GRADE 2**	**GRADE 3**
Handwriting	**Learning Objective** Learners will print script accurately showing correct body posture, and using correct letter formation, spacing and adequate speed		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
	• demonstrate fine motor control, e.g. handle tiny objects, scissors and brushes, draw lines and patterns, scribble and colour pictures correctly • demonstrate use of dominant hand, e.g. hold writing tools correctly • trace and copy patterns and words in print script showing correct spacing and letter formation • write familiar words, phrases and sentences of 4 to 5 words (e.g. write on posters and drawings) using correct spacing and formation of letters	• copy 3 lines of words showing correct pattern, formation, spacing and rhythm • write familiar words, phrases and sentences of 7 or more words (e.g. write on posters and drawings) using correct spacing, rhythm and formation of letters	• copy 5 lines of words showing correct pattern, formation, spacing and rhythm • demonstrate correct formation, size of letters, rhythm and spacing by writing 10 sentences (about 50 words)

TOPICS/SKILLS	GRADE 1	GRADE 2	GRADE 3
Creative writing	**Learning Objective** Learners will write creatively		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
	• write a story of about 2 simple sentences using full stops and capital letters	• write a story containing 6- to 10-word sentences legibly with correct spelling and punctuation	• write prepared and unprepared paragraphs of about 100 words in length on familiar topics (e.g. my family) using correct language structure
		• present a collection of own stories in a booklet for others to read	• write stories, cartoons and articles on given topics and present in a booklet for others to read
		• write and keep an up-to-date list of new vocabulary to use when writing	• write and keep an up-to-date list of new vocabulary to use when writing

LANGUAGE STRUCTURE, GRAMMAR AND LANGUAGE USE			
TOPICS/SKILLS	**GRADE 1**	**GRADE 2**	**GRADE 3**
Capitals and punctuation	**Learning Objective** Learners will use capitals and basic punctuation when writing		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
	• use a capital letter for the beginning of a sentence • use a full stop at the end of a sentence	• use a capital for the beginning of a sentence, the pronoun 'I' and for proper nouns • use a full stop at the end of a sentence and a question mark at the end of a question	• use a capital for the beginning of a sentence, for the pronoun 'I' and for proper nouns • use a full stop to finish a sentence, a question mark at the end of a question, or an exclamation mark to show emotion
Parts of speech	**Learning Objective** Learners will use different parts of speech correctly		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
Nouns	• incidentally use common and proper nouns (speaking) - common nouns: chair, table, desk - proper nouns: Mrs Liinda, Namibia, Karibib, Windhoek	• use common and proper nouns (speaking, reading and writing), e.g. - common nouns: chair, table, desk - proper nouns: Mrs Liinda, Namibia, Karibib, Windhoek	• name and use common and proper nouns (speaking, reading and writing) example
Pronouns	• use pronouns I, you, he, she, it, we, they, them (speaking)	• use pronouns I, you, he, she, it, we, they, them (speaking and writing)	• use pronouns I, you, he, she, it, we, they, them (speaking and writing)

TOPICS/SKILLS	GRADE 1	GRADE 2	GRADE 3
	- avoid repetition by using an appropriate pronoun for a previously stated noun, e.g. *My dad is a man. He is tall.*	- avoid repetition by using an appropriate pronoun for a previously stated noun, e.g. *My sister went to the shop. She bought some meat.*	- avoid repetition by using an appropriate pronoun for a previously stated noun, e.g. *The bear growled because it was hungry.*
	• use possessive pronouns my/mine, your/yours, his, her/hers (speaking) *That is his pen. That is his. It is her dress. It is hers.*	• use possessive pronouns my/mine, your/yours, his, her/hers (speaking) *That is my shirt. That is mine. That is your house. That is yours.*	• use possessive pronouns our/ours, their/theirs and its (speaking) *It is our car. It is ours. It is their dog. It is theirs. The cat scratched with its claws.*
Verbs	• incidentally use and demonstrate common verbs as action words (speaking), e.g. *run, jump, draw, sing, etc*	• use and demonstrate common verbs as action words (speaking), e.g. *laugh, chew, dance, swim, cook, etc*	• name and use common verbs as action words (speaking and writing), e.g. *read, write, cycle, drive, etc*
Prepositions	• incidentally use and demonstrate simple prepositions (speaking), e.g. *in, under, on, behind, between, etc*	• use and demonstrate prepositions (speaking), e.g. *in, under, on, behind, between, in front, above, etc*	• use and demonstrate prepositions (speaking and writing), e.g. *in, under, on, behind, between, in front, above, down, near, against, etc*
Adjectives		• use comparison of regular adjectives (speaking), e.g. *fast/faster/fastest, long/longer/longest, big/bigger/biggest*	• use adjectives as words that describe nouns (speaking and writing), e.g. *the hungry dog; the yellow flower*

TOPICS/SKILLS	GRADE 1	GRADE 2	GRADE 3
Tenses	**Learning Objective** Learners will correctly use the simple present, present continuous, simple past and simple future tenses		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
Simple present	• use common regular verbs (speaking), e.g. *I run, you run, she/he/it runs, we run, they run* • use simple irregular verbs (speaking), e.g. to 'have', to 'be' *I am cold, you are cold, he/she/it is cold, they are cold*	• use common regular verbs (speaking and writing), e.g. *I swim, you swim, she/he/it swims, we swim, they swim* • use simple irregular verbs (speaking and writing), e.g. to 'be', to 'have' *I have a dog, he/she has a dog*	• use common regular verbs (speaking and writing), e.g. *I learn, you learn, she/he/it learns, we learn, they learn* • use simple irregular verbs (speaking and writing), e.g. to 'do' *I do the washing, he/she does the washing*
Present continuous	• use to describe actions that are happening now (speaking), e.g. *I am drawing.* *He's cooking meat.*	• use to describe actions that are happening now (speaking), e.g. *I'm playing a game.* *She's sleeping in the house.*	• use to describe actions that are (are not) happening now (speaking), e.g. *We're helping light the fire.* *It isn't raining today.*
Simple past	• use familiar regular verbs (speaking), e.g. *helped, showed, cooked, washed* • use irregular verbs (speaking), e.g. *went, took, made, drank, wrote, kept, ate, told, etc*	• use regular verbs (speaking and writing), e.g. *jumped, climbed, opened* • use irregular verbs (speaking and writing), e.g. *went, took, made, drank, wrote, kept, ate, told, etc*	• use regular verbs (speaking and writing), e.g. *dressed, talked, enjoyed* • use irregular verbs (speaking and writing), e.g. *swam, stood, caught, heard, rode, etc*

TOPICS/SKILLS	GRADE 1	GRADE 2	GRADE 3
Simple future	• use familiar verbs (speaking), e.g. We *will see my dad next week.*	• use familiar verbs (speaking and writing), e.g. We *will see (will not see) my dad next week.*	• use familiar verbs (speaking and writing), e.g. *The animals will drink (will not drink) at the waterhole in the afternoon.*
Sentence construction	**Learning Objective** Learners will construct sentences correctly		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
Statements and questions	• use a variety of sentence types (speaking): statements: I like my doll. questions: Do you have a sister?	• use a variety of sentence types (speaking and writing): statements: We go to church on Sundays. questions: What do you do after school?	• use a variety of sentence types (speaking and writing): statements: It is raining. questions: Where did you put my book? exclamations: It's hot! - change sentences into questions and vice versa
Yes/No questions	• construct Yes/No questions, answers and negative statements (speaking), e.g. *Do you like sweets?* *Yes, I like sweets.* *No, I don't like sweets.*	• construct Yes/No questions, answers and negative statements (speaking), e.g. *Did you run home?* *Yes, I ran home.* *No, I didn't run home.*	• construct Yes/No questions, answers and negative statements in simple present and simple past tense (speaking and writing)
Question words	• construct and use questions with the question words what and where, e.g. *What is your name? Where do you live?*	• construct and use questions with the question words who, what, when and where (speaking), e.g. *Who is that? When do you play with your friends?*	• construct and use questions with the question words who, what, when, where, why and how (speaking and writing), e.g. *How did you come to school? Why were you late?*

TOPICS/SKILLS	GRADE 1	GRADE 2	GRADE 3
Conjunctions	• construct simple sentences and use conjunction 'and' (speaking), e.g. *My name is Patrick and I am a boy.*	• construct sentences using conjunctions 'and' and 'but' (speaking and writing), e.g. *I like apples and my sister likes bananas.* *I want to play but I have to help Dad.*	• construct simple and compound sentences (speaking and writing) by joining sentences using conjunctions that express time/sequence (firstly, next, then, while, before, after), e.g. *Mary and Martin wash their hands after using the toilet.*
Subject-verb agreement	• apply rules for subject-verb agreement (speaking), e.g. *The girl plays.* *The girls play.*	• apply rules for subject-verb agreement (speaking and writing), e.g. *The dog sleeps on the floor. The dogs sleep on the floor.*	• apply rules for subject-verb agreement (speaking and writing), e.g. *I/you/we/they teach; he/she/it teaches* *The elephant waves its trunk. The elephants wave their trunks.*
Modals	• use modals 'can' and 'may' (speaking), e.g. I can play football. May I have a sweet, please?	• use modals 'can', 'may' and 'must' (speaking), e.g. *Can I help you?* *May I leave the room, please?* *I must do my homework.* *I mustn't be late for school.*	• use modals 'could', 'should' and 'would' (speaking), e.g. *It could rain today.* *You shouldn't play on the busy road.* *I would like to go to the market with my cousins.*
Determiners	• use determiners 'this' and 'that' (speaking) This is my pencil That is her pencil	• use determiners 'this', 'these', 'that', 'those' (speaking) - use 'this and 'these' for things that are near: I like this car	• use determiners 'this', 'these', 'that', 'those' (speaking) - use 'this' and 'these' for things that are near: I like this car.

TOPICS/SKILLS	GRADE 1	GRADE 2	GRADE 3
		I like these shoes. - use 'that' and 'those' for things that are not near Do you see that elephant? Those animals are asleep.	I like these shoes. - use 'that' and 'those' for things that are not near Do you see that elephant? Those animals are asleep.
Quantifiers			• use quantifiers (speaking): a few, a little, many, much, a lot of, lots of, some, any, no, all, each, every, both
Cause		• use the word 'because' to show 'cause', e.g. *I stayed home because I was sick.*	• use the word 'because' to show 'cause', e.g. *He is happy because it's his birthday.*
Word study	**Learning Objective** Learners will speak, read and write grade-level words correctly using knowledge of word study skills		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
	• make and incidentally recognise two-letter words to form sight words, e.g. in, at, it	• make and recognise two-letter words to form sight words, e.g. in, at, an, up, it	• recognise higher frequency sight word
	• make and incidentally recognise three-letter cvc (consonant-vowel-consonant) words, e.g. *bag, bed, sit, cup, bug*	• make and recognise three-letter cvc (consonant-vowel-consonant) words, e.g. *bag, bed, sit, cup, bug*	• make and recognise three-letter cvc (consonant-vowel-consonant) words, e.g. *bag, bed, sit, cup, bug*

TOPICS/SKILLS	GRADE 1	GRADE 2	GRADE 3
		• segment familiar words into syllables, e.g. *beach (1 syllable)* *pen/cil (2 syllables)*	• segment familiar words into syllables, e.g. dam (1 syllable) wa/ter (2 syllables
	• sort and categorise words to identify relationships, e.g. *sort words:* - by same initial letter (bad, bin, baby, bit)	• sort and categorise words to identify relationships, e.g*. sort words:* - by same initial letter (table, tub, television, tell) - by same blend (dress, drive, drip, drop) - by same sound, same spelling (ship, shop, shade)	• sort and categorise words to identify relationships, e.g. *sort words:* - by same blend (splash, split, splosh) - by same sound, same spelling (fur, church, burn)
		• add the suffix 'ed' where spelling of basic word is unchanged, e.g. *walked, jumped*	• add the suffix 'ed' where spelling of basic word is unchanged, e.g. *walked, jumped*
	• add 's' to make familiar nouns plural, e.g. *girl, girls; book, books*	• add 's' to make familiar nouns plural and use the irregular plural of some nouns, e.g. *men, women, children, feet, teeth*	• add 's' to make familiar nouns plural, use the irregular plural of some nouns and use nouns that are the same in singular/plural form, e.g. *sheep, deer, scissors* • use some simple irregular plurals, e.g. *ladies, dishes, watches, glasses, boxes, tomatoes*

TOPICS/SKILLS	GRADE 1	GRADE 2	GRADE 3
Spelling	**Learning Objective** Learners will spell grade-level words correctly using spelling strategies		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
	• informally trace, copy and make (with clay etc) single letters, vocabulary words and simple high frequency sight words, e.g. *as, on, if, and, the, it, is, me, he* • attempt to 'spell' words using knowledge of initial sounds - only the obvious sounds/letters might be written, e.g. *hs for 'house'*	• trace, copy and make (with clay etc) new vocabulary and level-appropriate high frequency sight words, e.g. *have, saw, soon, came* • spell words by 'sounding out': use knowledge of single sounds, blends and digraphs/diphthongs - only the most obvious sounds might be written, e.g. *frend (friend), hed (head)* • spell words by using 'visual memory' to visualise what a word looks like: use visual patterns, length of words and word shapes • Correctly spell words in isolation using a method such as 'look, say, cover, visualise, write, check' - write correctly spelled words in 'self-made' dictionary or 'have-a-go' pad for use when writing	• tracing, copying, playing memory games and making (with clay etc) to spell new words and level-appropriate high frequency sight words, e.g. *were, does* • apply the strategy of sounding out: use knowledge of single sounds, blends and simple digraphs/diphthongs • apply the strategy of using visual memory to visualise what a word looks like: use visual patterns, length of words, word shapes and • features in words, e.g. *little words in big words (giant)* • Correctly spell words in isolation using a method such as 'look, say, cover, visualise, write, check' - write correctly spelled words in 'self-made' dictionary or 'have-a-go' pad for use when writing • apply spelling rule: 'e' goes away when 'ing' comes to stay, e.g. *have (having), make (making), come (coming*) • apply spelling rule: A silent 'e' at

			the end of a word makes a long vowel sound, e.g. *m<u>a</u>de, pi<u>p</u>e, h<u>o</u>pe, t<u>u</u>be*

9. Assessment

In order to capture the full range and levels of competence, a variety of continuous assessment situations is needed in Junior Primary to give a complete picture of the learner's progress and achievements. Continuous assessment (CA) must be clear, simple and manageable, and explicitly anchored in learner-centred principles and practice.

The competencies in the syllabus state the understanding and skills a learner must demonstrate, and which will be assessed. However, it is intended that the syllabus be learning-driven, not assessment-driven.

9.1 Purpose of assessment

The purpose of CA is to elicit reliable and valid information of the learner's performance in the competencies. This information should be used to give feedback to the learners about their strengths and weaknesses, where they are doing well, and where and how they need to improve. Parents should be regularly informed about the progress of their children via a formal school report. They should be encouraged to reward achievements and support the learners' education.

Continuous assessment also helps teachers improve their teaching and provide a better learning experience for learners. The focus should be seen as assessment *for* learning rather than assessment *of* learning. We assess to get a reliable profile of each learner's achievement of the competencies in order to inform further teaching/learning, conduct learning support and evaluate our own teaching processes.

9.2 Types of assessment

Informal assessment methods: The teacher must assess how well each learner has mastered the competencies described in the mathematics syllabus and from this gain a picture of the learner's progress. To a large extent, this can be done in an informal way, through observation of each learner's progress in learning and practice situations while they are investigating, interpreting phenomena and data, applying knowledge, communicating, and making value judgements, and in their participation in general.

This means that we observe a learner's performance for assessment purposes as we teach, and record what we see. The teachers observe all the learners during the course of mathematics lessons. They notice who is paying attention and who is not, who is able to work independently, and who struggles when working on their own. By asking questions, they determine who has understood mathematical concepts and who has not. By monitoring activities, they can note who can complete the task and apply mathematical knowledge, and who cannot. The learners' participation, involvement and contributions to group work are also observed.

Formal assessment methods: This involves setting up assessment situations such quizzes, short tests, oral tests and worksheets. Worksheets are very useful and can be presented either on the chalkboard or on paper. It is very important that teachers organise and plan in order to assess the learners and give marks which is then converted to ten (10).

The use of formal written and oral tests can only assess a limited range of competencies and therefore should not take up a great deal of time. Short tests in mathematics should be conducted within a part of a mathematics period and should be viewed as a usual mathematics activity.

9.3 Grade descriptors

The learner's level of achievement in relation to the competencies in the mathematics syllabus is shown in letter grades. When letter grades are awarded, it is essential that they reflect the learner's

actual level of achievement in relation to the competencies. In Grades 1 to 3, letter grades are related to percentages. The relation between the grades awarded and competencies is shown below.

Grade	% Range	Competency descriptions
A	80%+	**Achieved competencies exceptionally well.** The learner is outstanding in all areas of competency.
B	70-79%	**Achieved competencies very well.** The learner's achievement lies substantially above average requirements and the learner is highly proficient in most areas of competency.
C	60-69%	**Achieved competencies well.** The learner has mastered the competencies satisfactorily in unknown situations and contexts.
D	50-59%	**Achieved competencies satisfactorily.** The learner's achievement corresponds to average requirements. The learner may be in need of learning support in some areas.
E	40-49%	**Achieved the minimum number of competencies to be considered competent.** The learner may not have achieved all the competencies, but the learner's achievement is sufficient to exceed the minimum competency level. The learner is in need of learning support in most areas.
U	0-39%	**Ungraded.** The learner has not been able to reach a minimum level of competency, even with extensive help from the teacher. The learner is seriously in need of learning support.

9.4 Detailed guidelines for continuous assessment *(Details can be found in the Junior Primary National Policy Guide)*

Assessment must be part of the lesson planning and clear assessment criteria must be set. During lessons, and while learners are carrying out normal classroom activities, the teacher conducts informal and formal continuous assessments for all the various competencies and skills in all the subjects. In the Lower Primary phase, assessment is criterion-referenced. This means that when marks or letter grades are awarded, it is essential that they reflect the learner's actual level of achievement in relation to the competencies.

9.4.1 Informal continuous assessment

Informal continuous assessment is conducted through careful observation and written notes. This means that while learners are engaged in lesson activities, the teacher records on class lists observations about achievements or difficulties. These notes or comments will guide future lesson planning, learning support requirements, and how to allocate marks for formal continuous assessment. It is not necessary to write a comment or note for every competency - a tick may be all that is needed to show that a learner has acquired a skill. However, written evidence is required when a learner is struggling and needs further support.

9.4.2 Formal continuous assessment

Formal continuous assessment is normally done after the conclusion of a theme or when a particular concept requires assessing before a new concept is introduced. Teachers may give several short written or oral tests or quizzes spread over the term. For these the teacher allocates marks.

During term teachers should record the continuous assessment marks on the formal continuous assessment class list. This assessment is to be done during normal classes. This means that NO Junior Primary learners in Grades 1 to 3 classes will have a "test week" or a "test timetable" during which learners study for tests.

At the end of the term the marks for each subject are added in the “Total” column. The “Average” is the sum of the “Total” marks divided by the number of formal assessments given, and the decimal fraction must be rounded off. For example, instead of writing 3.2 it should be 3. The mark averages should be transferred to the formal Continuous Assessment record form in appropriate columns. In this form, the teacher should calculate the total marks and indicate the percentages. The percentages should then be converted into letter grades as indicated in 10.3.

Details on calculations can be found in the Junior Primary Continuous Assessment Record Forms)

10. Glossary

NB The meanings given here apply to the word in the context of this syllabus only and not necessarily to any other context

Blends – combinations of two or more letters usually at the beginning or ends of words, e.g. /st/ in star; /nd/ in bend; /str/ in strip; /spr/ in spread

Communicative approach – teaching and learning by creating as an authentic communication situation as possible where the language itself is used rather than knowing 'about' the language, e.g. setting up a role-play conversation between two learners introducing themselves to each other

Competencies - measurable skills that are regarded as essential in order to perform a task or meet a standard

Continuous assessment - measurement of students' progress based on work they do within the classroom or tests/quizzes they take throughout the term or year, rather than on a single examination

Cross-curricular issues – matters concerning knowledge, skills, concepts and values that can be applied to more than one subject or area of learning

Digraph – a pair of letters representing a single speech sound, such as the /sh/ in ship, the /ee/ in tree, the /ck/ in luck or the /ll/ in ball.

Diphthong - a speech sound that glides from one vowel to another vowel within the same syllable, e.g. /ay/ in day, /i-e/ in kite, /oy/ in boy, /ear/ in hear, /air/ in pair, /our/ in tour, /oa/ in road and /ou/ in house. The tongue, lips or jaw usually move as the diphthong is formed

Diversity - ethnic variety, as well as socioeconomic and gender variety, in a group, society, or institution

Explicitly - by explaining concepts in an extremely clear way

Globalisation – worldwide integration and development as a result of improved technology and communication; sometimes results in loss of individual cultural identities

Inclusivity – the act of including everybody

Integrated – a combination of parts or objects that work together well

Language structure – the grammar and syntax of the language

Learning standards - written statements of what learners should know and be able to do as a result of their education at the end of a period of time, e.g. at the end of Lower Primary. They are also called "Content Standards". Learning standards describe what teachers are supposed to teach and what learners are supposed to learn

Mainstream schools - schools that principally meet the needs of learners who do not have special educational needs. Any school which is not a special school

Onset and rime - the division of sounds in a one-syllable word, e.g. in 'cat' the onset is /c/ and the rime is /at/; in 'shop' the onset is /sh/ and the rime is /op/; in 'string' the onset is /str/ and the rime is /ing/. Word families can be constructed using common onsets such as /t/ in 'top', 'town', 'tar', 'tap', or common rimes such as /at/ in 'cat', 'pat', 'sat', 'rat'

Phoneme - the smallest sound in a language that is capable of conveying a meaning, e.g. the /m/ of mat, the /ch/ in chair and the /ai/ in rain.

Phonics – a method of teaching reading by recognising the sounds that letters or combinations of letter represent; the relationship between sounds and symbols

Phonological awareness - an individual's understanding of the sound structure of spoken words. It involves the detection and manipulation of sounds and involves activities such as rhyming, syllabification, onsets and rimes and recognising phonemes. Phonological awareness relates only to speech sounds, not to written alphabet letters or phonics and is an important and reliable predictor of later reading success

Retell – tell a story again after listening to or reading the story

School Readiness/Preparatory Programme – a programme devised for Grade 1 Namibian learners in recognition that many learners have not acquired school readiness before they start school. It is designed to help learners grasp those concepts and skills that are necessary for more formal learning

Syntax – how words are arranged and connected to construct phrases and sentences

Thematic links - connections to similar ideas or topics in other subject areas

Republic of Namibia

MINISTRY OF EDUCATION

JUNIOR PRIMARY PHASE

MATHEMATICS SYLLABUS

GRADES 1 – 3

ENGLISH VERSION

FOR IMPLEMENTATION

2015

Table of contents

1. Introduction

This syllabus describes the intended learning and assessment for mathematics in Grades 1 to 3. In the mathematical area of learning, learners understand and master a variety of mathematical skills, knowledge, concepts and processes, in order to investigate and interpret numerical and spatial relationships and patterns that exist in the world. It helps learners develop conciseness and logical and analytical thinking, and to apply these to other areas of learning and real life.

As a subject, mathematics is within the 'mathematical' area of learning in the curriculum, but has thematic links to other subjects across the curriculum. The aims, learning objectives and competencies which overlap between subjects are all part of essential learning within the curriculum as a whole.

Under optimal circumstances, this subject would need 8 (Grades 1 and 2) and 9 (Grade 3) periods per week.

NIED has agreed on a fixed curriculum review cycle. The expected year for the implementation of the next review of the Junior Primary phase is 2021.

2. Rationale

Mathematics is a necessary tool within technology and science and other areas of life in society. It contributes to the development of logical and scientific thinking. Knowledge of mathematics is also part of our culture and can be used to convey precise information. We need mathematical knowledge and skills in order to do many everyday tasks and to solve problems. It provides pleasure and satisfaction when learners solve problems and enjoy number games. In the Junior Primary phase it is particularly important that learners grasp the basics of mathematics, since the understanding of higher mathematical concepts is dependent on this foundation phase.

Numeracy is a core feature of primary education, and thus is very important at the Junior Primary phase. The syllabus is built around the competencies in computation, measurement, time and money related to learners' everyday situations. Geometry is the mathematical understanding of space and in this phase consists of understanding basic shapes in the learners' environment. The themes of problem solving, number patterns and data handling give opportunities to understand daily mathematical situations. The learners' mastery of mathematics will grow as they begin to see the patterns of mathematics and learn to handle data.

3. Aims

The aims of mathematics are to:

- develop functional numeracy and mathematical thinking
- develop positive attitudes toward mathematics
- enable learners to acquire basic number concepts and numerical notation
- enable learners to understand and master mathematical concepts and operations
- enable learners to apply mathematics in everyday life

4. Inclusive education

Inclusive Education is the right of every learner and promotes participation in, or access to, the full range of educational programmes and services offered by the education system in mainstream schools. It is based on the principle of supporting and celebrating the diversity found among ALL learners and removing ALL barriers to learning.

Basic Education prepares the society for the goals envisaged in Namibia's Vision 2030 by promoting inclusivity. Learners experiencing barriers to learning and other individual needs will be included in a mainstream school and their needs will be attended to through differentiation of teaching methods and materials as required. Learners who are so severely impaired that they cannot benefit from attending

inclusive schools will be provided for according to their needs in learning support units, resource units or resource schools, until such a time when they can join the inclusive school, if possible. The curriculum, teaching methods and materials are adapted for learners in these institutions.

The learner-centred approach to teaching is highly suitable for learners with special learning needs, since it capitalises on what learners already know and can do, and then assists them to acquire new knowledge and skills. The curriculum framework for Inclusive Education specifies the competencies which learners with special learning needs should master. Individual Learning Support Plans (ILSP) should be in place to guide and evaluate the individual learning process for learners with special learning needs.

Further guidelines on planning for learning and teaching in an inclusive classroom can be found in the Curriculum Framework for Inclusive Education: A Supplement to the National Curriculum for Basic Education 2014. These guidelines will help to equip ALL learners with knowledge, skills and attitudes to help them succeed in a world that is increasingly complex, rapidly changing, and rich in information and communication technology.

The Junior Primary phase provides equal opportunities to learn for both males and females. Teachers should know and understand how to treat learners equally, and all materials should support gender fairness. Teachers must avoid having 'favourites' in the classroom and ensure that their teaching promotes gender equity. Research showed that both girls and boys have the potential to excel in mathematics, and therefore teachers should encourage both boys and girls to do well. It is essential that the Lower Primary phase creates motivation and mathematical confidence in both boys and girls.

5. Links to other subjects and cross-curricular issues

Cross-curricular topics include Environmental Learning; HIV and AIDS, Population Education, Education for Human Rights and Democracy (EHRD), Information and Communication Technology (ICT), and Road Safety. These have been introduced to the formal curriculum because each of the topics deals with particular risks and challenges in our Namibian society. All of our learners need to:

- understand the nature of these risks and challenges
- understand the impact of these issues on our society
- understand how these risks and challenges can be addressed in their local settings

The main risks and challenges have been identified as:

- caring for and managing our natural resources
- dealing with the consequences of HIV and AIDS
- health problems associated with pollution, poor sanitation and waste
- social instability caused by inequity and governance that ignores rights and responsibilities
- poor compliance to road safety measures
- dealing with globalisation issues

Some subjects are more suitable to deal with specific cross-curricular issues. In this syllabus there are more examples of other links to cross-curricular issues, but only one example for each cross-curricular issue is provided below:

Environmental Learning	**HIV and AIDS**	**Population Education**	**Road Safety**
Grades 1-3 Data handling: Pictograph showing water consumption per	Grade 2 Time	Grade 3 Data handling: Pictograph of boys and girls in class	Grade 1 Counting: Number of cars on road Grades 1 and 2

week			Shapes of road signs

6. Approach to teaching and learning

The approach to teaching and learning is based on a paradigm of learner-centred education (LCE) described in ministerial policy documents and the LCE conceptual framework. This approach ensures optimal quality of learning when the principles are put into practice. Furthermore, the thematic/integrated approach remains a focal point of Lower Primary teaching and learning.

The aims are to develop learning with understanding, and to develop the knowledge, skills and attitudes that contribute to the development of society. Each learner brings to school a wealth of knowledge and social experience gained from the family and the community and through interaction with the environment. Learning in school must involve, build on, extend and challenge the learner's prior knowledge and experience.

Learners learn best when they are actively involved in the learning process through a high degree of participation, contribution and production. Each learner is an individual with his/her own needs, pace of learning, experiences and abilities. The teacher must be able to cater for the needs of the learners and shape learning experiences accordingly. Teaching strategies must be varied but flexible within well-structured sequences of lessons.

The teacher must decide, in relation to the learning objectives and competencies to be achieved, when it is best to teach mathematics content explicitly, when it is appropriate to let learners discover or explore information for themselves, when they need reinforcement or enrichment learning, when there is a particular progression of skills or information that needs to be followed, or when the learners should be encouraged to find their own way through a topic or area of content.

Working individually, in groups, in pairs, or as a whole class during mathematics must therefore be organised and focussed. Co-operative and collaborative mathematics learning should be encouraged wherever possible. For example, in mathematics there may be many strategies to solve a problem, and learners working in groups will learn from each other. It is also important that tasks must be meaningful, so that learners can see the relevance of each task. As learners develop personal, social and communication skills, they can, under the teacher's guidance, gradually be given responsibility to participate in planning and evaluating their work.

Mathematics will be most relevant and meaningful for the learners if it is related to their lives. For example, two- and three-dimensional shapes/figures can be found in the immediate environment. Although mathematics is a universal language, it is only by local contextualization and application that younger learners will understand and appreciate the uses of mathematics. Where textbooks can only generalize, it is the teacher's responsibility to use local examples such as concrete materials found in the environment, e.g. stones, sticks, bottle tops, etc.

7. End-of-year competencies

On entry to Grade 1 in the Junior Primary phase, all learners are expected to be socially, emotionally, cognitively and physically ready to begin formal mathematics learning. The first five weeks of Grade 1 should be dedicated to school readiness activities.

On completing Grade 3 mathematics in the Junior Primary phase, learners are expected to be able to demonstrate the following competencies:

Number concept development
Learners will recognise, describe and represent numbers and their relationships, express their understanding of number concept orally and in writing, and use numbers within the required number range to solve simple problems in everyday life.

Problem solving
Learners will apply their understanding of number concept to solve simple problems in everyday context by computing, estimating and measuring, using their own methods and strategies, and using numbers within the required number range.

Computation
Learners will correctly apply the four basic operations, i.e. addition, subtraction, multiplication and division, using their own methods and strategies, and using numbers within the required number range.

Measurement
Learners will identify, recognise and understand appropriate units of measurement and instruments (length, mass, capacity, area, time and money) and use these units in everyday life.

Money
Learners will recognise Namibian coins and notes, express their understanding of money orally and in writing, and use money to solve simple problems in everyday context.

Geometry
Learners will recognise and describe geometrical shapes and represent characteristics and relationships between 2D shapes and 3D figures in real life.

Data handling
Learners will collect, summarise, display, interpret and analyse data using pictographs and bar graphs in order to draw conclusions and make reasonable predictions.

8. Learning content

Grade 1 learners should be exposed to at least five weeks of readiness activities in Term 1 before formal learning starts. Refer to the document, *A School Readiness/Preparatory Programme (5 weeks)*, published by NIED in 2011.

NUMBER CONCEPT DEVELOPMENT			
TOPIC	**GRADE 1**	**GRADE 2**	**GRADE 3**
	Number range 0 - 100	Number range 0 - 500	Number range 0 - 1000
Counting	**Learning objective** Learners will count with and without using concrete objects and understand the need and convenience of counting in everyday life		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
	• count concrete objects up to 20 and backwards from 20 - 0 • count mechanically up to 100, in 2s up to 30, in 5s and 10s up to 100	• count concrete objects up to 50 and in 2s to 50, 3s to 30, 4s to 40, 5s and 10s to 100 • re-arrange a collection of objects to make them easier to count, e.g. groups of 2, 3, 5 • count mechanically up to 500 and in 2s to 100, 3s to 30, 4s to 40, 5s and 10s to 500; • count mechanically backwards from 20 to 0, 30 to 0, in 2s from 20 to 0	• count concrete objects up to 100 and in 2s to 100, 3s to 60, 4s to 80, 5s and 10s to 150 • re-arrange a collection of objects to make them easier to count, e.g. groups of 2, 5, 10 • count mechanically up to 1000 and backwards and forwards from any number: 1s up to 1000, 2s to 500, 3s to 60, 4s to 80, 5s and 10s to 1000, 20s to 500, 30s to 180, 50s and 100s to 1000

TOPIC	GRADE 1	GRADE 2	GRADE 3
Subitising/estimating (identifying the number of given objects without counting)	**Learning objective** Learners will subitise, estimate and apply re-arranging skills to handle spatial relationship and patterns		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
	• identify a number of objects up to 6 without counting, then check by counting • identify the number of objects up to 10 which are grouped appropriately, then check by counting • recognise that different arrangements/patterns of objects can represent the same number, e.g. □□□ □□ □ □ □□□ □□ □ □ □□ □ □ *2 threes or 3 twos or 5 + 1*	• estimate the number of objects up to 20 by appropriate grouping, then check by counting • recognise that different arrangements/patterns of objects can represent the same number	• estimate the number of objects up to 30 by appropriate grouping, then check by counting • recognise that the same number in different arrangements of objects can represent the same number
Ordering and comparing	**Learning objective** Learners will use mathematical vocabulary for ordering and comparing numbers logically and analytically		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
	• order and compare objects and numbers (number range 1 - 20) using appropriate vocabulary: greater than, smaller than and equal to (the symbol '>' for 'more than' and '<' for 'less than' are not included)	• order and compare numbers from 1-100 using appropriate vocabulary: more/less than, equal to, how many, more/less, greater/smaller than (introduce the symbol '>' for 'more than' and '<' for 'less than')	• order and compare numbers up to 500 using appropriate vocabulary: more/less; greater than/smaller than; equal to (emphasise the symbol '>' for 'more than' and '<' for 'less than')

TOPIC	GRADE 1	GRADE 2	GRADE 3
	• order numbers from 1 - 20 in ascending order (from smallest to greatest) and descending order (from greatest to smallest), e.g. *Write these numbers from the smallest to the greatest and from the greatest to the smallest : 11, 5,12 and 3* • identify the position of objects from 1st to 10th or 1st to last • name, read and work with ordinal numbers from 1st - 10th, in ascending and descending order, e.g. ascending: *1st , 2nd , 3rd*, etc.; descending: *10th, 9th*, etc.	• order numbers from 1 - 100 in ascending and descending order, e.g. *Write these numbers into ascending and descending order: 48, 16, 92 and 61* • identify position from 1st - 20th , and name and read ordinal numbers in ascending and descending order, e.g. ascending: *11th, 12th, 13th*, etc.; descending: *20th, 19th, 18th*, etc.	• order numbers from 1 - 500 in ascending and descending order, e.g. *Write these numbers into ascending and descending order: 402, 284, 361 and 68* • identify position from 1st - 30th and name and order ordinal numbers in ascending and descending order, e.g. *20th, 21st, 22nd*, etc.; *27th, 26th, 25th*, etc.
Representing numbers	**Learning objective** Learners will recognise, read and write numbers		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
	• read, pronounce and identify numbers up to 100, on a number chart and number line • trace, copy and write numbers 0 - 20	• read, pronounce and identify numbers on the number chart and number line up to 500 and explain reasons for the position of the number • write numbers 0 - 100	• read, pronounce and identify numbers up to 1000 on a number chart and number line and explain reason for the position of the number • write numbers 0 - 500

TOPIC	GRADE 1	GRADE 2	GRADE 3
	• read the number names up to 10 in words, e.g. *one, two* ...	• read and write the number names up to 10 in words, e.g. ... *eight, nine, ten*	• read and write the number names up to 20 in words, e.g. ... *nineteen, twenty*
	• observe, discover and identify numerals in their environment, e.g. car number plates, house numbers	• observe, discover and identify numerals in their environment, e.g. speed limit, car number plates, house numbers, age of learners	• observe, discover and identify numerals in their environment, e.g. distances, price tags, weights of objects, capacity of bottles
Doubling and halving	**Learning objective** Learners will understand the principle of doubling and halving numbers		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
	• double numbers 1, 2, 3,4, 5, and 10 with and without using objects	• double numbers up to 50 without carrying, e.g. *23 +23 = 46*; with carrying, e.g. *9 + 9 = 18*	• double numbers up to100 with and without carrying, e.g. *double 24 = 40 + 8 = 48* (without carrying) *double 36 = 60 + 12 = 72* (with carrying)
	• halve numbers 2, 4, 6, 8, 10, 20 with and without using objects	• halve even numbers up to 50 and odd numbers up to 19 with and without using objects, e.g. *half of 44 is 22* and *half of 19 is 9 r 1*	• halve numbers up to 100 with and without a remainder, e.g. *half of 36 = 15+3 = 18* (without remainder) *half of 87 = 40 + 3 r 1 = 43 r 1* (with remainder)

TOPIC	GRADE 1	GRADE 2	GRADE 3
Decomposition	**Learning objective** Learners will understand how to break down and build up numbers and recall the number bonds to 20		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
	• start to recall number bonds to 10, e.g. *9 = 1 + 8; 9 = 8 + 1; 9 – 8 = 1; 9 – 1 = 8; 9 = 2 + 7;* etc.	• recall the number bonds to 10 quickly and correctly • start to recall the number bonds to 20 • break down and build up two-digit numbers up to 99, with or without concrete objects, e.g. *25 = 20 + 5 or 15 + 10,* etc. *20+ 17= 37; 30 +7= 37*	• recall number bonds to 20 quickly and correctly • break down and build up two- and three-digit numbers in different ways up to 500, with and without concrete objects, e.g. *154 = 100 + 50 + 4* *154 = 150 + 4* *154 = 100 + 54*
Place value	**Learning objective** Learners will recognise digit position and place value		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
	• recognise, in two-digit numbers up to 99, that the position of the digit makes a difference to the quantity of the number, e.g. *12 is different from 21; Given the digits 3 and 4, form the biggest two-digit and the smallest number (34 and 43)*	• recognise, in three-digit numbers up to 500, that the digit positions in numbers show the quantity, e.g. *Given the digits 3, 2 and 4, form the biggest and the smallest three-digit number (234 and 432)*	• recognise, in three-digit numbers up to 1000, that the digit positions in numbers show the quantity, e.g. *Given the digits 1, 8, and 4, form the biggest and the smallest three-digit number (841 and 148)*

TOPIC	GRADE 1	GRADE 2	GRADE 3
		• identify the place value of hundreds, tens and units in three-digit numbers, e.g. *In the number 347 the value of the 3 is 300, the value of the 4 is 40 and the value of the 7 is 7*	• identify the place value of hundreds, tens and units in three-digit numbers, e.g. *In the number 958 the value of the 9 is 900, the value of the 5 is 50 and the value of the 8 is 80*
Rounding off		• select or identify the nearest multiple of 10 for a given number, up to 100, using the number line or number chart, e.g. $33 \rightarrow 30; 38 \rightarrow 40$	• round off to the nearest 10: round down numbers ending in 1, 2, 3, 4, and round up numbers ending in 5, 6, 7, 8, 9, e.g. 62 is rounded off to 60; 75 is rounded off to 80
Number patterns	**Learning objective** Learners will recognise odd and even numbers and extend and describe number sequences		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
	• identify numbers that can be split into two equal sets and numbers that cannot be split into two equal sets in the range 1 - 20 • extend simple number sequences in the range 1 - 20, e.g. *Complete: 1; 3; 5; …; …*	• complete simple number sequences in the range 1 - 50, e.g. *Fill in the missing numbers:* *20; …; … 23; ...; ...; 26*	• complete and describe number sequences in the range 1 - 100, e.g. *Write down the missing numbers:* *3; 6; 9; 12, …; …; …* • complete number sequences in the range 1 - 100, e.g. *Fill in the missing numbers:* *50; …; ...; ....; 58 ...; ...; ....; 66*

TOPIC	GRADE 1	GRADE 2	GRADE 3
	• describe the sequence, e.g. *3; 6; 9; 12; 15* *Description: start at 3 and go up in jumps of 3*	• describe the sequence, e.g. *21; 23; 25; 27; 29; 31* *Description: add numbers from 21 to 31 or start at 21 and go up in 2s stop at 31* • generalise number patterns arising from addition and subtraction number bonds, e.g. *8 + 9 = 17; 28 + 9 = 37; 80 + 90 = 170*	• describe the sequence of, e.g. 3; 6; 9; 12; 15; 18; 21; ... *Description: multiples of 3 or counting in 3s* • generalise number patterns arising from addition and subtraction number bonds
Odd and even numbers	**Learning objective** Learners will recognise odd and even numbers		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
	• demonstrate one-to-one correspondence with numbers 1 to 10 to understand equal groupings (even numbers make equal sets and odd numbers make unequal sets)	• identify odd and even numbers up to 99 • recognise that odd numbers end in 1, 3, 5, 7, 9 (e.g. 5<u>7</u>) and even numbers end in 0, 2, 4, 6, 8 (e.g. 3<u>8</u>)	• identify odd and even numbers from 0 - 500 • recognise that odd numbers end in 1, 3, 5, 7,or 9 (e.g. 85<u>7</u>) and even numbers end in 0, 2, 4, 6, 8 (e.g. 63<u>8</u>)

TOPIC	GRADE 1	GRADE 2	GRADE 3
	Examples of activities: - *complete flow diagrams with missing numbers* - *fill in missing numbers in open number sentences up to 20 e.g. 5 +☐ = 12* - *number snakes* - *number pyramids*	*Examples of apparatus and activities* - *part-whole diagrams* - *number lines* - *empty number line* - *number charts* - *fill in missing numbers in open number sentences up to 100,* e.g.*75 - ☐ = 68*	*Examples of apparatus and activities* - *part-whole diagrams* - *number lines* - *empty number line* - *fill in missing numbers in open number sentences up to 200,* e.g.*130 +☐ = 167*

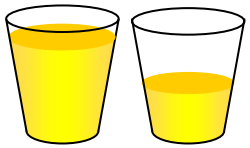
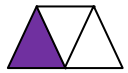
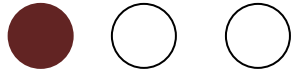
TOPIC	GRADE 1	GRADE 2	GRADE 3
Subtraction	**Learning objective** Learners will understand basic mathematical concepts to master subtraction and numerical notation		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
	• subtract one number from another number in the range 1 - 20 using the following strategies: - physically take away and count the rest by using concrete apparatus or drawings - count back - count up, e.g. *for 19 − 17, count up 2 from 17 to 19* - apply a known number fact, e.g. *3 − 1 = 2* - break down and build up numbers *Examples of apparatus and activities:* - *number lines* - *number charts* - *complete flow diagrams with missing numbers* - *filling in missing numbers in open number sentences up to 20,* e.g. *16 − . = 12* - *number snakes* - *number pyramids* • relate subtraction to addition, e.g. *18 − 2 = 16 and 16 + 2 = 18*	• subtract decade numbers up to 100, e.g. *60 − 50* • subtract one number from another number in the range 0 - 99 using the following strategies: - count back - count up for numbers with a small difference, e.g. *72 − 68* - apply a known number fact - break down and build up numbers - do stepwise subtraction, e.g. *62 − 48 = 62 – 40 – 8 = 22 – 8 = 14* *Examples of apparatus and activities:* - *complete flow diagrams with missing numbers* - *number charts* - *number lines* - *empty number lines* - *number snakes* - *number pyramids* • subtract a single digit number from a two-digit number mentally • relate subtraction to addition	• subtract any two- or three-digit number from a three-digit number between 100 and 500 using the following strategies: - subtract decade numbers up to 500, e.g. *260 – 50* - *count back* - *count up where appropriate, e.g. 410- 296* - *break down and build up numbers* - *stepwise subtraction* - *use place value* • subtract a single-digit number from a three digit number mentally • explore number patterns, e.g. *100 − 37 = 63* *200 − 37 = 163*

COMPUTATION			
TOPIC	**GRADE 1**	**GRADE 2**	**GRADE 3**
Addition	**Learning objective** Learners will understand basic mathematical concepts to master addition and numerical notation		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
		• add decade numbers up to 100, e.g. *20 + 30* • add a single digit number to a two-digit number mentally (no writing)	• add decade numbers up to 500, e.g. *120 + 30* • add two numbers up to 100 mentally (no writing)
	• add up two or more numbers with a sum between 0 - 20, using the following strategies: - using drawings or concrete apparatus - counting all - counting on using the number chart or number line or any other technique, e.g. *Put the first number in your head, then use your fingers to count on* - putting the larger number first - doubling and halving - building up and breaking down numbers	• add two or more numbers between 0 and 100 mentally or with jottings by using the following strategies: - counting on (for suitable sums only, e.g. *28 + 3*) - doubling and halving, e.g. *30 + 40 = 30 + 30 + 10* - applying known number facts - doing stepwise addition, e.g. *58 + 23 = 58 + 20 + 3 = 78 + 3 = 81* - breaking down numbers and building up numbers, e.g. *58 + 23 = (50 + 20) + (8 + 3) = 70 + 11 = 81*	• add two or more different numbers with a sum between 0 to 500 by: - counting on(for suitable sums only, e.g. *328 + 3*) - doubling and halving - applying known number facts - doing stepwise addition - breaking down and building up of numbers - using place value, e.g. *342 + 185 = (300 + 100) + (40 + 80) + (2 + 5)*

TOPIC	GRADE 1	GRADE 2	GRADE 3
Multiplication	**Learning objective** Learners will understand basic mathematical concepts to master multiplication and numerical notation		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
	• count in 2s up to 20, in 5s up to 50, and in 10s up to 100	• count in 2s up to 20, in 3s up to 30, in 4s up to 40, in 5s up to 50, and 10s up to 100	• multiply any two-digit number by 2, 3, 4, 5 and 10 with a product between 100 and 500 using decomposition, e.g. *73 × 4 = (70 × 4) + (3 × 4)* or $\begin{array}{r} 73 \\ \times \quad 4 \\ \hline 280 \\ 12 \\ \hline 292 \end{array}$
	• count concrete objects in groups of 2, 5 and 10 and say, for example, "5 + 5 + 5 is 3 lots of 5 and is equal to 15"	• demonstrate that multiplication is repeated addition of 2s, 3s, 4s, 5s and 10s, e.g. *Maria gets N$5.00 each week. How much does she have after 6 weeks? (N$5 + N$5 + N$5 + N$5 + N$5 + N$5 = N$30*	
		• Multiply *any two digit numbers up to 20 by any number between 1 and 10 through repeated addition or doubling*	• multiply any two-digit number up to 50 by any number between 1 and 10 through repeated addition or doubling, e.g. *43 × 6 = 43 + 43 + 43 + 43 + 43 + 43* • recall quickly and correctly the multiplication tables of 1, 2, 5 and 10
	• draw groups of objects and determine the total by repeated addition (the multiplication sign is not used at this stage - rather use 'lots of*',* e.g. *3 lots of 2)*	• start to recall and apply the 1×, 2×, 5× and 10× multiplication tables using the symbol ×	• start to recall and apply the multiplication tables of 3 and 4

TOPIC	GRADE 1	GRADE 2	GRADE 3
Division	**Learning objective** Learners will understand basic mathematical concepts to master division and numerical notation		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
	• arrange objects in equal groups using concrete materials, and count the number of groups		• use the symbol ÷ and work out division of numbers between 10 and 100 by any number between 1 and 10 and with and without remainders by repeated subtraction or other methods
	• find own methods to share objects equally between members of a group: - act out the situation - use concrete materials - use drawings (the division sign is not used at this stage), - use story problems, e.g. *Martin has 9 apples and shares them equally among 3 friends. How many apples does each friend get?*	• find own methods to divide objects into groups of 2, 3, 4, 5 and 10 or share objects equally between 2, 3, 4, 5 and 10 members by acting out a problem, using concrete materials, drawing and combining numbers (the division sign is not used at this stage), e.g. *16 marbles can be arranged into: 8 rows of 2, 2 rows of 8, 1 row of 16, 16 rows of 1 and 4 rows of 4*	• identify remainders to be ignored or divided up further according to the problem, using grouping techniques
	• demonstrate that division is repeated subtraction, e.g. *6 divided by 2 is 3 because 2 can be subtracted three times.* (Use concrete objects)	• relate division to multiplication for the 1, 2, 5 and 10 times multiplication tables	• recall and apply simple division facts related to multiplication facts of 2, 3, 5 and 10, e.g. *20 ÷ 2 = 10* → *2 ×10 = 20*

TOPIC	GRADE 1	GRADE 2	GRADE 3
	• arrange or group up to 10 objects in 2s, 3s, 4s and 5s with and without remainders	• arrange or group up to 50 objects in 2s, 3s, 4s, 5s and 10s with and without remainders that cannot be divided up further (stones, marbles, etc.) and remainders that can be divided up further (chocolate, cake, etc.) according to the context of the problem.	
Multi-step problems	**Learning objective** Learners will solve multi-step problems using different methods, strategies, concepts and processes		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
	• solve chain sums in the range of 0 -10 with addition and subtraction, e.g. *7 + 3 – 4 =* ☐	• solve chain sums in the range of 0 -100 using addition and subtraction, e.g. *23 + 45 – 31 =* ☐	• solve chain sums in the range of 0 -500 using addition and subtraction, e.g. *123 + 245 – 131 =* ☐

TOPIC	GRADE 1	GRADE 2	GRADE 3
Fractions	**Learning objective** Learners will understand mathematical concepts to identify fractions		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
	• share objects into equal parts, e.g. *cut an apple into two equal parts.* Use examples such as*:*  *full glass* *half glass*	• name the fractional parts of a whole (half and quarter only), e. g.  *whole* *half* *quarter* • identify halves and quarters orally and in mathematical symbols: ½, ¼ ,	• name the fractional part of a whole or group (half, quarter, three quarters and a third only), e.g.  $\frac{1}{3}$  $\frac{1}{3}$ • write the mathematical symbols for the common fractions of halves, quarters, and thirds as partial quantities of a whole: ½, ¼, ¾, ⅓, and indicate the equal parts the whole is divided into.

PROBLEM SOLVING			
TOPIC	**GRADE 1**	**GRADE 2**	**GRADE 3**
Problem solving	**Learning objective** Learners will solve story problems about everyday contexts using addition, subtraction, grouping or sharing and using any logical strategies		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
	• solve and interpret story problems about everyday events in the number range 1 - 10 • record appropriate ways to find solutions by using concrete objects, discussing/sharing ideas, finding patterns, acting out a play and combining drawings, diagrams and numbers • apply efficient methods and strategies to solve problems in the range 1 - 10 by using addition, subtraction, grouping or sharing, e.g. *I had some strawberries and ate three. Then there were five left. How many strawberries were there to start with?*	• solve and interpret story problems about every day events in the number range 1 - 50 • record appropriate ways to find solutions by using concrete objects, discussing/sharing ideas, finding patterns, acting out a play and combining drawings, diagrams and numbers • use different strategies to solve problems in the range 1 - 50 by applying the four operations, e.g. *There were thirty children at a party and sixteen were girls. How many were boys?*	• solve, interpret and write story problems about every day events in the number range 1 - 100 • record appropriate ways to find solutions by using concrete objects, discussing/sharing ideas, finding patterns, acting out a play and combining drawings, diagrams and numbers • use different strategies to solve problems and write story problems using number sentences in the number range 1 - 100 by applying the four operations, e.g. *Write a story problem to match the given number sentence:*

TOPIC	GRADE 1	GRADE 2	GRADE 3
	• explain the method they used and listen to other learners' explanations	• explain the method they used and listen to other learners' explanations • discuss different methods for the same problem • identify and correct errors	18 – ☐ = 15 *Answer: Maria invited 18 friends to her party and 15 came. How many did not come?* • explain the strategies used • discuss different methods for the same problem • identify and correct errors

MEASUREMENT			
TOPIC	**GRADE 1**	**GRADE 2**	**GRADE 3**
Length	**Learning objectives** Learners will • understand the importance of measuring length and its application to everyday life • discover opportunities for reasoning, interpreting and applying measurements • discover a logical sense of comparison • develop the concept and everyday application of measuring objects		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
	• compare objects of different lengths using appropriate vocabulary: long/short; longer/shorter than; longest/shortest; the same length/as long as	• order and compare objects; use correct vocabulary: the same, longer/shorter, long/-er/-est, short/-er/-est;	• compare and order objects; use correct vocabulary: the same as; longer/shorter than;long/-er/-est; short/-er/-est; distance between
	• measure lengths using non-standard units, e.g. with hand spans, palms, footprints, paces, etc., with measurements differing from learner to learner	• use non-standard units, e.g. string or paperclips, to measure length and width of a rectangle	• use standard units of centimetre and metre to measure length (rulers for more accurate measurement, tape for curved lines, etc.) and write down measurement using the correct abbreviations: m, cm
		• use standard unit of centimetre and write down measurement using the correct abbreviation: cm (use improvised rulers with marks 1 cm apart, no numbers)	• do simple addition and subtraction of lengths

TOPIC	GRADE 1	GRADE 2	GRADE 3
		• measure with reasonable accuracy lengths of books and tables, and record (centimetres only) • estimate with reasonable accuracy lengths of books and tables, and record (centimetres only) • draw a straight line in given centimetre lengths	• measure with reasonable accuracy lengths, widths and heights in and around the classroom, and record (centimetres and meters only) • estimate with reasonable accuracy lengths widths and heights in and around the classroom, and record (centimetres and meters only) • draw a straight line in given centimetre and meter lengths

TOPIC	GRADE 1	GRADE 2	GRADE 3
Mass	**Learning objectives** Learners will: understand the importance of measuring mass and its application to everyday life discover opportunities for reasoning, interpreting and applying measurements discover a logical sense of comparison develop the concept and everyday application of measuring objects		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
	• physically compare the mass of objects by hefting (holding one object in each hand to determine which is heavier) or using improvised balances such as a 'hanger balance' • use correct vocabulary when ordering and comparing, e.g. *lighter/heavier, lightest/heaviest, the same mass/as heavy as*	• physically compare the mass of objects of ½ kg and 1kg by hefting or using an improvised device, e.g. balance • use correct vocabulary when ordering and comparing objects, e.g. *the same; heavy/light. heavier/lighter, heaviest/lightest* • order and compare 3 objects according to increasing/decreasing mass using improvised devices, e.g. a balance hanger • use standard unit (kg) to measure mass and write down • measurement using the correct abbreviation	• measure everyday objects with reasonable accuracy using grams • estimate everyday objects with reasonable accuracy using grams • use the appropriate language of mass when ordering and comparing, e.g. *heavy/light, heavier/lighter than, heaviest/lightest* • order and compare 5 objects according to increasing/decreasing mass • use standard units to measure mass (grams and kilograms) and write down measurements using the correct abbreviations: g/kg

TOPIC	GRADE 1	GRADE 2	GRADE 3
Capacity	**Learning objectives** Learners will: understand the importance of measuring capacity and its application to everyday life; discover opportunities for reasoning, interpreting and applying measurements; discover a logical sense of comparison; develop the concept and everyday application of measuring objects		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
	• order and compare different containers (bottles, boxes, tins, etc.) according to increasing/decreasing capacity	• order and compare everyday objects according to their capacity	• order and compare everyday objects according to their capacity
	• use correct vocabulary, e.g. *full/empty, half full/half empty, the same amount/as much as, more/less than*	• use correct vocabulary, e.g. *more/less, as much as*	• use correct vocabulary, e.g. *more/less, as much as, twice as much as, three times as much as, half of*
		• measure with reasonable accuracy the capacity of everyday objects using standard units to measure (litres)	• measure with reasonable accuracy the capacity of everyday objects using standard units to measure (litres, millilitres)
	• compare the capacity of various containers with different shapes and sizes and record	• estimate with reasonable accuracy the capacity of everyday objects using standard units to measure (litres)	• estimate with reasonable accuracy the capacity of everyday objects using standard units to measure (litres, millilitres)
	• measure and compare capacity with sets of non-standard units	• measure and record the capacity using the correct abbreviation (ℓ)	• measure and record the capacity using the correct abbreviations (mℓ / ℓ)

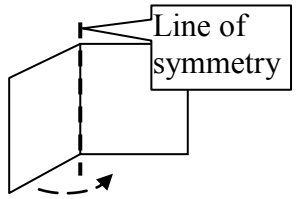
TOPIC	GRADE 1	GRADE 2	GRADE 3
Area	**Learning objectives** Learners will: understand the concept of area and its application to everyday life discover opportunities for reasoning, interpreting and applying measurements discover a logical sense of comparison develop the concept and everyday application of measuring objects		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
		• relate area to the surface inside a border by informally measuring shapes using non-standard units, e.g. *give the number of bottle tops that fit inside a shape* • informally compare areas of different shapes using non-standard units, e.g. *hand prints, footprints, cutting up papers*	• relate area to the surface inside a border by informally measuring shapes using non-standard units, e.g. *measure the top of the desk with A4 sheets by counting the number of sheets* • compare areas of different shapes using squares, and count the number of squares to find the area

TOPIC	GRADE 1	GRADE 2	GRADE 3
Time The passage of time	**Learning objective** Learners will: understand and use time correctly; understand how long daily events take in real life		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
	• discuss daily home and community activities in relation to the time of day, match events to day-time, night-time, morning, afternoon and evening	• relate everyday occurrences and events in the home and the community to times, days, weeks and months	• relate everyday occurrences and events in the home and the community to times, days, weeks and months
	• name the days of the week and the months of the year in the correct order	• name the days of the week and the months of the year in the correct order	• name the days of the week and the months of the year in the correct order
	• compare 'long' and 'short' periods of time, e.g. *it takes a long time to build a house; break time is short*	• use a calendar to identify specific information about days and dates, e.g. *find the day of the week of someone's birthday*	• use a calendar to identify specific information about days and dates, e.g. *find today's date on a calendar; notation of dates*
	• use vocabulary correctly, e.g. *a long/short time, day/night, yesterday/today/tomorrow, morning/afternoon/evening*	• identify the duration of well-known events, e.g. *we spend 4 hours at school every day; a week lasts 7 days*	• determine the duration of events in hours, days and years using a time line
		• tell time accurately in hours and half hours on the traditional clock	• tell time accurately in hours, half hours, quarter of an hour (quarter past, quarter to) and minutes on the traditional clock, e.g. *draw hands on clock to show 4.15*

TOPIC	GRADE 1	GRADE 2	GRADE 3
Money Namibian currency	**Learning objective** Learners will understand how to use Namibian currency		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
	• name and identify different values of coins by recognising 5c, 10c, 50c, N$1 and N$5, and discuss their properties, e.g. size, markings, colour and value • select a set of coins equal in value to another coin, up to 50c, e.g. *10c = 5c + 5c*	• name and identify all the coins and N$10 and N$20 notes and discuss their value and relevant properties • express cents in dollars and vice versa, e.g. *200 c = N$2* (multiples of 100c only) • select various sets of coins up to N$10 which add up to a stated cost, e.g. *N$1.10 = 50 c + 50c +10 c or N$1.10 =N$1 + 10c*	• name and identify all the coins and N$10, N$20 and N$50 notes and discuss their value and relevant properties • express cents in dollars and vice versa, e.g. *265 c = N$2.65* • select various sets of coins and notes up to N$50 which add up to a stated cost, e.g. *N$23.50 = N$10+N$10+ N$1+ N$1+ N$1+50c*

TOPIC	GRADE 1	GRADE 2	GRADE 3
	• demonstrate buying and selling articles with play money, counting money and giving change from N$5 (change in either cents or dollars, not both)	• demonstrate buying and selling articles up to N$20 with play money, and count the money and the change correctly • work out change in coins up to N$10, e.g. *It costs Esther N$11.50 to buy fruit. She pays with a N$20 note. She works out the change by adding onto N$11.50 until she reaches N$20:* *N$11.50 + N$5 + N$2 + N$1 + 50c = N$20* • draw up a shopping list indicating estimated cost for articles, and check the price in shops	• demonstrate buying and selling articles up to N$50 with play money and count the money and the change correctly • work out change in notes and coins up to N$20, *e.g.* *Paulus buys food for N$37 and pays with a N$50 note. He works out the amount of change by adding onto N$37 until he reaches N$50:* *N$37 + N$10 + N$2 + N$1 = N$50* • draw up a shopping list indicating estimated cost for articles, and check the price in shops • roughly estimate the total cost of two items, e.g. *estimated amount for N$6.90 + N$4.20:* *N$7.00 + N$4.00 = N$11.00*

GEOMETRY			
TOPIC	**GRADE 1**	**GRADE 2**	**GRADE 3**
Geometrical figures	**Learning objective** Learners will identify, name and explore the attributes of two-dimensional (2D) shapes and three-dimensional (3D) figures		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
	• identify and name common 2D shapes: square, circle, rectangle and triangle • find and identify objects in the environment • sort and classify common shapes (as above) according to attributes: colour, size, shape and number of sides	• identify and name 2D shapes: square, circle, rectangle, triangle, equilateral triangle and oval • find and identify objects in the environment • sort and classify a variety of shapes (squares, circles, triangles, quadrilaterals, pentagons, hexagons, octagons) according to geometrical properties: number of sides, number of corners (vertices) (learners do not need to know the terms 'pentagon', 'hexagon' and 'octagon')	• identify and name 2D shapes: square, circle, rectangle, triangle, equilateral triangle, oval and pentagon • sort and classify a variety of shapes (quadrilaterals, pentagons, hexagons octagons) according to geometrical properties: number of sides, side lengths, number of vertices, number of angles, number of right angles (learners do not need to know the terms hexagon' and 'octagon')

TOPIC	GRADE 1	GRADE 2	GRADE 3
	• draw/make shapes and their attributes using words such as round, sides, corners, straight, e.g. *draw/make a rectangle with two short straight sides and two long straight sides that join to make four corners*	• draw/make shapes showing essential spatial features, e.g. *draw a recognisable oval that resembles an egg-shape; draw/make a recognisable equilateral triangle with three straight lines about the same length and similar-sized corners/angles*	• draw/make shapes showing essential spatial features, e.g. *join five sticks/straws of equal length to form a recognisable pentagon* • identify right angles, and use a reference tool (paper corner, pattern block) to identify angles in shapes as greater than, equal to or smaller than a right angle • explore basic 2D shapes like squares and rectangles through their <u>symmetrical</u> properties (by folding the shapes) e.g. *opposite sides of a rectangle are equal* 
	• create pictures and patterns with shapes	• create pictures and patterns with shapes	• create pictures and patterns with shapes including tessellation properties of basic 2D shapes

TOPIC	GRADE 1	GRADE 2	GRADE 3
	• identify and name common 3D figures: sphere, rectangular prism, cube and cone	• identify and name common 3D figures: sphere, cube, cone, cylinder and cuboid (rectangular prism)	• identify and name common 3D figures: sphere, cube, cylinder, cone, rectangular prism, pyramid and triangular prism, and investigate their properties, e.g. *the faces on the brick are rectangular; a sphere can roll*
	• sort and classify common 3D objects (as above) according to attributes, e.g. ones that can roll or slide down a ramp, ones that can be stacked without or with leaving spaces in between	• sort and classify common 3D objects (as above) according to geometric properties such as curved or flat faces, the shape of faces, and in case of flat faces, the number of faces	• sort and classify common 3D objects (as above) according to geometric properties such as edges, vertices, curved or flat faces, and in the case of flat faces, the number of faces
	• describe common objects using words such as edges, corners, faces, straight, curved and flat	• describe common objects using words such as edges, corners, faces, straight, curved, flat, round, rectangular, triangular and circular	• describe common objects using words such as edges, corners, faces, straight, curved, flat, rectangular, triangular and circular

TOPIC	GRADE 1	GRADE 2	GRADE 3
	• create own models	• create recognisable 3D figures from paper and recycled material	• create models from paper and recycled material such as boxes, wood and plastic • recognise angles in everyday objects, e.g. *corners of a box; opening and closing a book or door*
Location, position and movement of objects	**Learning objective** Learners will identify location, position and movement of objects		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
	• describe the relative location of objects and people using positional and directional language, e.g. *over, under, above, below, in front, behind, outside, inside, next to, between*	• describe the position of objects drawn on informal maps, e.g. *On a map of the classroom, my desk is on the left*	• locate and describe from various directions the relative position of objects drawn on maps of familiar settings, e.g. *On a map of the playground, the big tree is behind the water fountain; the classroom is at the left from the tree*

DATA HANDLING			
TOPIC	**GRADE 1**	**GRADE 2**	**GRADE 3**
Pictographs, tables and bar graphs	**Learning objective** Learners will collect, organise, display and interpret data		
	Competencies **Learners should be able to:**	**Competencies** **Learners should be able to:**	**Competencies** **Learners should be able to:**
	• classify objects into categories and name each group, e.g. *cars, trucks,* etc. • collect data appropriate to a theme, e.g. number and types of learners' hobbies, and organise and display on a pictograph • interpret data to gain information, and discuss findings, e.g. *Looking at the pictograph, how many learners like to play soccer?* • use non-standard units, e.g. bottle tops, to measure objects, and record results on a pictograph	• collect, organise and display data appropriate to a theme, e.g. types of fruits/vegetables, on a pictograph • interpret and analyse data to gain intended information, and discuss findings, e.g. L*ooking at the pictograph, how many learners ate apples this week?*	• collect, organise and display data appropriate to a theme, e.g. number and types of birds found in the environment, using tables, pictographs and bar graphs, • interpret and analyse data to gain intended information and discuss findings, e.g. *Looking at our bar graph, how many types of birds did we find?* • use appropriate statistical vocabulary when analysing graphs, e.g. *few, many, often appearing, common, increasing; decreasing, constant*

9. Assessment

In order to capture the full range and levels of competence, a variety of continuous assessment situations is needed in Junior Primary to give a complete picture of the learner's progress and achievements. Continuous assessment (CA) must be clear, simple and manageable, and explicitly anchored in learner-centred principles and practice.

The competencies in the syllabus state the understanding and skills a learner must demonstrate, and which will be assessed. However, it is intended that the syllabus be learning-driven, not assessment-driven.

9.1 Purpose of assessment

The purpose of CA is to elicit reliable and valid information of the learner's performance in the competencies. This information should be used to give feedback to the learners about their strengths and weaknesses, where they are doing well, and where and how they need to improve. Parents should be regularly informed about the progress of their children via a formal school report. They should be encouraged to reward achievements and support the learners' education.

Continuous assessment also helps teachers improve their teaching and provide a better learning experience for learners. The focus should be seen as assessment *for* learning rather than assessment *of* learning. We assess to get a reliable profile of each learner's achievement of the competencies in order to inform further teaching/learning, conduct learning support and evaluate our own teaching processes.

9.2 Types of assessment

Informal assessment methods: The teacher must assess how well each learner has mastered the competencies described in the mathematics syllabus and from this gain a picture of the learner's progress. To a large extent, this can be done in an informal way, through observation of each learner's progress in learning and practice situations while they are investigating, interpreting phenomena and data, applying knowledge, communicating, and making value judgements, and in their participation in general.

This means that we observe a learner's performance for assessment purposes as we teach, and record what we see. The teachers observe all the learners during the course of mathematics lessons. They notice who is paying attention and who is not, who is able to work independently, and who struggles when working on their own. By asking questions, they determine who has understood mathematical concepts and who has not. By monitoring activities, they can note who can complete the task and apply mathematical knowledge, and who cannot. The learners' participation, involvement and contributions to group work are also observed.

Formal assessment methods: This involves setting up assessment situations such quizzes, short tests, oral tests and worksheets. Worksheets are very useful and can be presented either on the chalkboard or on paper. It is very important that teachers organise and plan in order to assess the learners and give marks which is then converted to ten (10).

The use of formal written and oral tests can only assess a limited range of competencies and therefore should not take up a great deal of time. Short tests in mathematics should be conducted within a part of a mathematics period and should be viewed as a usual mathematics activity.

9.3 Grade descriptors

The learner's level of achievement in relation to the competencies in the mathematics syllabus is shown in letter grades. When letter grades are awarded, it is essential that they reflect the learner's actual level of achievement in relation to the competencies. In Grades 1 to 3, letter grades are related to percentages. The relation between the grades awarded and competencies is shown below.

Grade	% Range	Competency descriptions
A	80%+	**Achieved competencies exceptionally well.** The learner is outstanding in all areas of competency.
B	70-79%	**Achieved competencies very well.** The learner's achievement lies substantially above average requirements and the learner is highly proficient in most areas of competency.
C	60-69%	**Achieved competencies well.** The learner has mastered the competencies satisfactorily in unknown situations and contexts.
D	50-59%	**Achieved competencies satisfactorily.** The learner's achievement corresponds to average requirements. The learner may be in need of learning support in some areas.
E	40-49%	**Achieved the minimum number of competencies to be considered competent.** The learner may not have achieved all the competencies, but the learner's achievement is sufficient to exceed the minimum competency level. The learner is in need of learning support in most areas.
U	0-39%	**Ungraded.** The learner has not been able to reach a minimum level of competency, even with extensive help from the teacher. The learner is seriously in need of learning support.

9.4 Detailed guidelines for continuous assessment *(Details can be found in the Junior Primary National Policy Guide)*

Assessment must be part of the lesson planning and clear assessment criteria must be set. During lessons, and while learners are carrying out normal classroom activities, the teacher conducts informal and formal continuous assessments for all the various competencies and skills in all the subjects. In the Lower Primary phase, assessment is criterion-referenced. This means that when marks or letter grades are awarded, it is essential that they reflect the learner's actual level of achievement in relation to the competencies.

9.4.1 Informal continuous assessment

Informal continuous assessment is conducted through careful observation and written notes. This means that while learners are engaged in lesson activities, the teacher records on class lists observations about achievements or difficulties. These notes or comments will guide future lesson planning, learning support requirements, and how to allocate marks for formal continuous assessment. It is not necessary to write a comment or note for every competency - a tick may be all that is needed to show that a learner has acquired a skill. However, written evidence is required when a learner is struggling and needs further support.

9.4.2 Formal continuous assessment

Formal continuous assessment is normally done after the conclusion of a theme or when a particular concept requires assessing before a new concept is introduced. Teachers may give several short written or oral tests or quizzes spread over the term. For these the teacher allocates marks.

During term teachers should record the continuous assessment marks on the formal continuous assessment class list. This assessment is to be done during normal classes. This means that NO Junior Primary learners in Grades 1 to 3 classes will have a "test week" or a "test timetable" during which learners study for tests.

At the end of the term the marks for each subject are added in the “Total” column. The “Average” is the sum of the “Total” marks divided by the number of formal assessments given, and the decimal fraction must be rounded off. For example, instead of writing 3.2 it should be 3. The mark averages should be transferred to the formal Continuous Assessment record form in appropriate columns. In this form, the teacher should calculate the total marks and indicate the percentages. The percentages should then be converted into letter grades as indicated in 10.3.

Details on recording and calculations can be found in the Junior Primary Continuous Assessment Record Forms)

10. Glossary

NB The meanings given here apply to the word in the context of this syllabus only and not necessarily to any other context

Analytical	understanding something by separating it into parts
Angle	the shape that is made when two straight lines join or cross each other; measured in degrees
Area	the amount of space that a surface of a place or shape covers
Cognitive	to do with the intellect
Competencies	measurable skills that are regarded as essential in order to perform a task or meet a standard

Concept	a general idea of something that exists
Concise	as brief as possible
Continuous assessment	measurement of learners' progress based on work they do within the classroom or tests/quizzes they take throughout the term or year, rather than on a single examination
Convenience	a condition that makes it easier to do something
Cross-curricular issues	matters concerning knowledge, skills, concepts and values that can be applied to more than one subject or area of learning
Diversity	ethnic variety, as well as socioeconomic and gender variety, in a group, society, or institution
Equilateral triangle	a triangle whose sides are all the same length
Estimate	a considered guess or rough calculation of a quantity
Globalisation	worldwide integration and development as a result of improved technology and communication; sometimes results in loss of individual cultural identities
Hexagon	(regular hexagon) a shape with six sides that are equal in length
Inclusivity	the act of including everybody
Learning standards	written statements of what learners should know and be able to do as a result of their education at the end of a period of time, e.g. at the end of Lower Primary. They are also called “Content Standards”. Learning standards describe what teachers are supposed to teach and what learners are supposed to learn
Mainstream schools	schools that principally meet the needs of learners who do not have special educational needs; any school which is not a special school
Multi-step problems	problems where there are several steps needed to solve the problem
One-to-one correspondence	the matching of one and only one number word to each item in a collection
Octagon (regular octagon)	a shape with eight sides that are equal in length.
Ordinal numbers	a number such as ‘first’ or ‘second’ that shows the position of a number in a series
Place value	the value of a digit determined by its position in a number, e.g. in the number 567, the 7 denotes 5 ones, the 6 denotes 6 tens and the 5 denotes 5 hundreds
Pentagon (regular pentagon)	a shape with five sides that are equal in length

Rectangle	a quadrilateral in which all the angles are right angles
Reinforcement	the process of strengthening learning
Right angle	an angle of 90 degrees
School Readiness/Preparatory Programme	a programme devised for Grade 1 Namibian learners in recognition of the fact that many learners have not acquired school readiness before they start school. It is designed to help learners grasp those concepts and skills that are necessary for more formal learning
Sequence	following after each other in a connected way
Spatial	in relation to space
Sphere	a 3D object that is shaped like a ball (NB 'sphere' rhymes with 'here')
Subitise	to recognise the number of objects in a collection without consciously counting
Thematic links	connections to similar ideas or topics in other subject areas
Three-dimensional (3D) figure	an object that has height, width and depth, like any object in the real world
Traditional clock	a clock with numbers and hands
Two-dimensional (2D) shape	a shape that only has two dimensions (such as width and height) and no thickness
Vertices	points where two lines join to form an angle

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