Grade

3

Foundation Phase Work Schedules

Numeracy

WESTERN CAPE
Education Department
Provincial Government of the Western Cape

FOREWORD

Policy implementation is not an uncomplicated event. It is a process of interpretation and engagement that spans a period of time. We learn from this process and we try to modify interventions so that they become appropriate and relevant to diverse contexts. Our learning over the last decade and more has taught us that we all need to talk, listen and find solutions to the challenges we face. The work schedules are the result of such a policy and learning process.

Literacy and Numeracy, together with other areas of work in the Foundation and Intermediate Phases, are important focuses of the Western Cape Education Department. We want to strengthen primary schools and create possibilities for a solid foundation so that we improve the chances of learners in their scholastic careers. We believe that this foundation can improve literacy and numeracy results, pass-rates in general and the throughput rate.

South Africa is a developing country and we have heard, in this age of globalisation, that countries involved in the catch-up must produce the necessary skills. So countries such as ours are capable of being competitive and stable. What is more important is to have a community of scholars who are able to read, write and enjoy schooling. The social value of school can be improved if the scholastic effort is enhanced.

The work schedules will be regarded as a component of the package that is concerned with the Foundations for Learning Campaign. It is regarded as a tool to bolster and give meaning to the campaign. In view of the perception that campaigns are merely rhetoric, the work schedules will act as support mechanism to give meaning to the building of foundations for literacy and numeracy. It is an attempt to provide guidelines to teachers on how to teach each school day.

The work schedules will be sent out with a view to eliciting feedback. They will also be field-tested in selected schools. The documents will be circulated as guidelines in January 2009 and comments requested by July 2009. The work schedules will also be field-tested in July 2009. All comments will inform the further development of work schedules.

The Western Cape Education Department is a learning organisation and attempts to understand its environment at all times. This learning process is a continuous one, since we have such a dynamic and rapidly changing context. Bearing this in mind, the invitation for comments and field-testing is an attempt to embrace the notion of a learning organisation through developing insights based on views of teachers, as well as those in other diverse contexts within our province. We know that a one-size-fits-all approach is not a recipe for success. We also know that we all need to listen, talk and find solutions to our challenges. Field-testing and an invitation to comment will give us the space to talk, listen and find solutions as we move forward to a quality education system for all our learners.

Dr. S. Naicker, Chief Director: Curriculum Development

WORK SCHEDULE

NUMERACY

GRADE 3

PLEASE NOTE:

The work schedule for Numeracy has been developed to assist and guide teachers in the Foundation phase in the fundamentals of the curriculum that must be taught on a daily basis.

Careful planning went into the development of the work schedule to make the application of the NCS and thus the Learning Outcomes and Assessment Standards in Numeracy more practicable for the teacher to teach.

This work schedule can therefore be used with confidence as it covers all the Learning Outcomes and Assessment Standards that the learner needs to know for the acquisition of basic numeracy concepts and skills at the end of a grade and a phase.

The work schedule therefore explains WHAT is to be taught and is complemented by a teacher guide that suggests HOW the work may be done.

It is important that the following documents be studied together to facilitate greater understanding of Numeracy i.e.

- The NCS Policy Statement
- Assessment Policy 2007
- The Numeracy Work schedule
- The Numeracy Teacher Guide

The work schedule is furthermore divided into daily activities that cover the four terms evenly.

The time allocation for Numeracy is:

Grades 1 and 2:	1hr 30 min per day
Grade 3:	1hr 45 min per day

For guidance on how to use this time please refer to the Teacher's Guide that encapsulates structured learning and teaching activities to support the work schedule.

During the first two weeks of term 1 baseline assessment must be administered parallel to the teaching of new concepts as indicated in this work schedule.

WORK SCHEDULE NUMERACY

GRADE 3

TERM 1

WK	LEARNING OUTCOMES	ASSESSSMENT STANDARDS & CORE TEACHING	TEACHER'S GUIDE
1- 2	**LO 1 Numbers Operations and Relationships**	⇒ Baseline Assessment is completed parallel to teaching in week 1 and 2 ⇒ **Daily Counting** o Count from 1 to 200 on number chart o count out objects to 100 o in multiples two's, three's, four's, five's, tens from any number to 250 o use the number line (can be calendar, vertical number line), number chart, abacus ⇒ **Mental calculations** o perform mental calculations +, -, ×, ÷ to 50 ⇒ **Number Concept and Value** o **Revise** • number symbols and number names from 1 – 100 and explore their relationship • bonds to 20 o **Introduce** • numerals 101-150 and write the words. • order, describe and compare the above numbers • place values of the 3 digit numbers in Hundreds Tens Units (HTU) • numeral, symbol and word One and Two in the First Additional Language (FAL) o *Sets, Addition and Subtraction* • addition and subtraction of one and two digit numbers to 20 i) use structural apparatus ii) number line iii) word problems • decomposing 2 digit numbers as expanded notation i.e. 87 = 80 + 7, use flard cards • identify sets of value to make open sentence sums true, e.g. □ + Δ = 47 • write word problems o *Fractions:* a) making halves and quarters by folding and cutting paper shapes b) write the fractions ½; ¼ on the relative sections c) halves even and odd numbers to 10.	Chapter 2 Chapter 3

		o *Multiplication and Division* a) revise multiplication as shortened addition e.g. 3 + 3 + 3 = (3 × 3 = 9) and b) revise division with a remainder to 10 concrete and oral c) write word problems	
	LO 2 Patterns, Functions and Algebra	⇒ **Problem Solving Techniques** *Introduce Problem sums;* o addition and subtraction of one and 2 – digit numbers to 100 e.g. 35 + 4, 67 – 43, o order, describe and compare 2 digit numbers o multiplication as repeated addition of the same number o division as repeated subtraction of the same number o multiplication and division of two and one digit numbers e.g. 4 × 5 = 20 20 ÷ 5 = 4 o identify the numerosity of numbers to 34 *Use Techniques;* • estimation • use the number line, number chart, count out objects • building up and breaking down of numbers: building up the 10 • doubling and halving which leads to grouping and sharing with and without remainders • verbalise strategies applied and illustrate on the chalkboard • check peers solutions to problems	Chapter 4
		⇒ **Patterns** o copy and extend simple numbers using multiples of 10, 5, 2, to 200 o copy and extend patterns using objects in the environment or patterns observed in magazines	Chapter 5
	LO 3 Space and Shape (Geometry)	⇒ **Space and Shape** o recognise and identify 2 – D, 3 – D, objects in the environment and in pictures e.g. boxes, balls, and cylinders; circles, triangles, squares, rectangles; cones, pyramids o describe the features of the above shapes and objects	Chapter 6
	LO 4 Measurement	⇒ **Money** o Find the equivalent values of coins up to R5 e.g. R1 = 10c+10c+10c+10c+10c+10c+10c+10c+10c+10c) it is also (50c+50c) o Introduce word problems with money o Do shopping activities with change o Introduce simple book keeping of purchase.	Chapter 7

	LO 5 Data Handling	⇒ **Time** o read and write analogue and digital time in hours, half –hours o make reference to the length of the lessons, school day, days and months ⇒ **Mass** o estimate, measure and compare by using a scale and compare learners weight in kilograms o vocabulary: more than, less than; heavier, lighter ⇒ **Data** o collect data in the classroom about the mass of the learners measured the previous week o collect according to how many learners weigh more than 30 kilograms, less than 30 kg,	
3- 4	**LO 1 Numbers Operations and Relationships**	***FORMAL ASSESSMENT TASK 1*** ⇒ **Daily Counting** o Count from 1to 200 on number chart o Count from 200 to 400 o Count out objects to 100 o count in 2,4,5,10s from any number e.g. 25, 35, 45, 55 etc to 100 o count in 2's forwards and backwards to 20 o count in 3's forwards and backwards to 30 ⇒ **Mental calculations** o perform mental calculations, +, -, ×, ÷ to 50 ⇒ **Number Concept and Value** o **Revise** • number symbols and number names from 1 – 100 • order, describe and compare 2 digit numbers to 99 • multiplication as repeated addition of the same number • Division as repeated subtraction of the same number • Addition and subtraction of 2 digit numbers to 20 o **Introduce** • numerals 151-200 and write the words. • order, describe and compare the numbers • place values of the above numbers in HTU include '0' as a place holder e.g. in 100 -200 and 200... • numeral, symbol and word Three and Four in the First Additional Language (FAL)	Chapter 2 Chapter 3

		o *Sets, Addition and Subtraction* • addition and subtraction of one and two digit numbers to 20 i) use structural apparatus ii) number line iii) word problems • addition and subtraction of tens e.g. 20+60; 80+20; 90-50 • extension of the basic components using + and - e.g. 7+3, 17+3, 27+3 etc; 7-3, 17-3, 27-3 etc • Write word sums using money o *Fractions:* a) making halves and quarters by folding and cutting paper shapes b) write the fractions ½; ¼ on the relative sections c) write written sums e.g. one half of 13=7½ and one quarter of 8=2 o *Multiplication and Division* a) introduce 'x' sign as multiplication and read as 'multiply by' and the '÷' sign as division read as 'divide by' b) multiplication and division to 20 as inverse operations e.g. 4x5 = (20÷5=4) c) division with a remainder to 10 concrete and oral d) write word problems e) doubling and halving in table format with commutative properties and the inverse e.g. Table of 2 to 20: Doubling Halving/inverse 1x2 2÷2 2x2 4÷2 3x2 6÷2 4x2 8÷2	
	LO 2 Patterns, Functions and Algebra	⇒ **Problem Solving Techniques** o Introduce problem sums and use own techniques to solve sums e.g. • estimation • the number line, number chart, count out objects • building up and breaking down of numbers: building up the 10 • doubling and halving which leads to grouping and sharing with and without remainders • verbalise strategies applied and illustrate on the chalkboard • check peers *solutions to problems*	Chapter 4

		⇒ **Patterns** o identify, describe and copy patterns observed in the classroom o create and extend simple geometric patterns	Chapter 5
	LO 3 Space and Shape (Geometry)	⇒ **Space and Shape** o compare 2 - D shapes and 3 - D objects in pictures and environment. o sort variety of 2 - D shapes and 3 - D objects	Chapter 6
	LO 4 Measurement	⇒ **Money** o Explore equivalent values of coins up to R5 o shopping activities: change for not more than R2, larger amounts to be made up of more than one coin e.g. R5 =R2,+R2+R1 o write story sums ⇒ **Time** o revise analogue and digital time in half- hours, minutes o reference to the length of school day, length of interval, days, weeks and months ⇒ **Length** o measure of distance around 2-D shapes with string o estimate for which shape we use most / least string	Chapter 7
	LO 5 Data Handling	⇒ **Data** o collects data pertaining to the measurement of 2-D shapes o draw pictograph to represent data of 2-D shapes measuring the most/ least string	
5- 6		***FORMAL ASSESSMENT TASK 2***	
	LO 1 Numbers Operations and Relationships	⇒ **Daily Counting** o Count from 1to 200 on number chart o Extend counting from 200 to 400 o Count out objects to 100 o count in 2,4,5,10s from any number e.g. 25, 30, 35, 40 etc to 100 o count in 2's forwards and backwards to 20 o count in 3's forwards and backwards to 30 ⇒ **Mental calculations** o perform mental calculations +, -, ×, ÷ to 50	Chapter 2

		⇒ **Number Concept and Value** o **Revise** • number symbols and number names from 1 – 100 and explore their relationship • bonds to 20 • decomposing 2 digit numbers as expanded notation i.e. 87 = 80 + 7, use flard cards • identify sets of value to make open sentence sums true, e.g. □ + Δ = 56 • write word problems o **Introduce** • numerals 201-250 and write the words. • Orders, describes and compares the above numbers. • place values of the above numbers in HTU include '0' as a place holder e.g. in 100 -200 and 200... • numeral, symbol and word Five and Six in the First Additional Language (FAL) o *Sets, Addition and Subtraction* • addition and subtraction in tens and units to 30 no decomposition or carrying of numbers) • create word problems also involving money problems • rounding off to nearest 10 e.g. 76 →80; 43→40 o *Fractions:* a) revise fractions ½; ¼ and write in sums. b) introduce the concept of three quarters ¾ by dividing one whole into 4 pieces/quarters and colouring 3 of the quarters. c) write ¼ in the 3 coloured pieces to indicate ¾ of a whole number. o *Multiplication and Division* a) oral and written revision to 20 focusing on inverse sums e.g. 6x3 =18 therefore 18÷3=6 b) memorise the table of 2 to 24 c) write word problems d) introduce doubling and halving in table format with commutative properties and the inverse e.g. Table of 3 to 36: Doubling Halving/inverse sums 1x3 3÷3 2x3 6÷3 3x3 9÷3 4x3 12÷3 e) division with a remainder up to 20 concrete and oral f) word problems	Chapter 3

	LO 2 Patterns, Functions and Algebra	⇒ **Problem Solving Techniques** *Introduce Problem sums;* o addition and subtraction of one - digit numbers and 2 – digit numbers to 40 e.g. 35 + 4, 28 – 7, o recompose and decompose numbers o multiplication as repeated addition of the same number o division as repeated subtraction of the same number o multiplication and division of two and one digit numbers e.g. 4 × 5 = 20 20 ÷ 5 = 4 o identify the numerosity of numbers to 40 *Use Techniques;* • estimation • use the number line, number chart, count out objects • building up and breaking down of numbers: building up the 10 • doubling and halving which leads to grouping and sharing with and without remainders • verbalise strategies applied and illustrate on the chalkboard • check peers solutions to problems	Chapter 4
		⇒ **Patterns** o extend simple number patterns to 300 o recognise simple number patterns in counting activities of above and explore further from any number in the multiples of 10, 5, 2 to 500	Chapter 5
	LO 3 Space and Shape (Geometry)	⇒ **Space and Shape** o use paper folding and reflection to determine lines of symmetry in 2 – D shapes	Chapter 6
	LO 4 Measurement	⇒ **Money** o Explore equivalent values of coins up to R5 o shopping activities: change for not more than R2, larger amounts to be made up of more than one coin e.g. R5 =R2,+R2+R1 o write story sums ⇒ **Time** o revise analogue and digital time o reference to the length of school day, length of interval, days and months o plot religious festivals for the term on the calendar ⇒ **Length** o compare length of learners in centimetres and metres o measure learners' length in cm and metres	Chapter 7

	LO 5 Data Handling	⇒ **Capacity** o estimate, measure capacity/ volume using non – standard and standard measures o measure the difference in volume between different containers ⇒ **Data** o collect above data according to length – tallest, shortest	
7- 8	**LO 1 Numbers Operations and Relationships**	***FORMAL ASSESSMENT TASK 3*** ⇒ **Daily Counting** o Count from 1to 200 on number chart o Extend counting from 200 to 400 o Count out objects to 100 o count in 2,4,5,10s from any number e.g. 25, 30, 35, 40 etc to 100 o count in 2's forwards and backwards to 20 o count in 3's forwards and backwards to 30 ⇒ **Mental calculations** o perform mental calculations +, -, ×, ÷ to 50 ⇒ **Number Concept and Value** o **Revise** • number symbols and number names from 1 – 100 and explore their relationship • bonds to 30 • decomposing 2 digit numbers as expanded notation i.e. 37 = 30 + 7, use flard cards • identify sets of value to make open sentence sums true, e.g. □ + Δ = 56 • write word problems o **Introduce** • numerals 251-300 and write the words. • Orders, describes and compares the above numbers. • place values of the above numbers in HTU include '0' as a place holder e.g. in 100 -200 and 200... • numeral, symbol and word Seven and Eight in the First Additional Language (FAL) o *Sets, Addition and Subtraction* • addition and subtraction of one and two digit numbers to 20 i) use structural apparatus ii) number line iii) word problems • decomposing 2 digit numbers as expanded notation i.e. 87 = 80 + 7, use flard cards	Chapter 2 Chapter 3

		• identify sets of value to make open sentence sums true, e.g. □ + Δ = 47 • write word problems o *Fractions:* • colour three quarters of a whole and write the unitary fraction '¾' o *Multiplication and Division* • oral and written revision to 20 focusing on • inverse sums e.g. 6x3 =18 therefore • 8÷3=6 • memorise the table of 2 to 24 • write word problems • introduce doubling and halving in table • format with commutative properties and the inverse e.g. Table of 3 to 36: Doubling Halving/inverse sums 1x3 3÷3 2x3 6÷3 3x3 9÷3 4x3 12÷3 division with a remainder up to 20 concrete and oral word problems	
	LO 2 Patterns, Functions and Algebra	⇒ **Problem Solving Techniques** *Introduce Problem sums;* o addition and subtraction of one and two digit numbers to 100 e.g. 35 + 4, 67 – 43, o order, describe and compare 2 digit numbers o multiplication as repeated addition of the same number o division as repeated subtraction of the same number o multiplication and division of two and one digit numbers e.g. 4 × 5 = 20, 20 ÷ 5 = 4 o identify the numerosity of numbers to 50 *Use Techniques;* • estimation • use the number line, number chart, count out objects • building up and breaking down of numbers: building up the 10 • doubling and halving which leads to grouping and sharing with and without remainders • verbalise strategies applied and illustrate on the chalkboard • check peers solutions to problems ⇒ **Patterns** o copy and extend simple number patterns to 500 o multiples of 2, 4 between 0 and 40 o odd and even numbers from A and □	Chapter 4 Chapter 5

	LO 3 Space and Shape (Geometry) **LO 4 Measurement** **LO 5 Data Handling**	⇒ **Space and Shape** o use paper folding and reflection to determine lines of symmetry in 2 – D shapes ⇒ **Money** o Repeat weeks 5-6 ⇒ **Time** o solving problems involving calculations and conversions between: • minutes and hours • days and weeks • days and months ⇒ **Capacity** o repeat activities of weeks 5-6. ⇒ **Data** o summarise and analyse data collected in weeks 5-6	Chapter 6 Chapter 7
9-10	**LO 1 Numbers Operations and Relationships**	⇒ **Daily Counting** o Count from 1to 200 on number chart o Extend counting from 200 to 400 o Count out objects to 100 o count in 2,4,5,10s from any number e.g. 25, 30, 35, 40 etc to 100 o count in 2's forwards and backwards to 20 o count in 3's forwards and backwards to 30 ⇒ **Mental calculations** o perform mental calculations +, -, ×, ÷ to 50 ⇒ **Number Concept and Value** o **Revise** • number symbols and number names from 1 – 100 and explore their relationship • bonds to 30 • decomposing 2 digit numbers as expanded notation i.e. 87 = 80 + 7, use flard cards • identify sets of value to make open sentence sums true, e.g. □ + Δ = 56 • write word problems o **Introduce** • numerals 301-350 and write the words. • Orders, describes and compares the above numbers. • place values of the above numbers in HTU include '0' as a place holder e.g. in 100 -200 and 200... • numeral, symbol and word Nine and Ten in the First Additional Language (FAL) • write word problems	Chapter 2 Chapter 3

		o *Sets, Addition and Subtraction* **Revise:** • addition and subtraction of one and two digit numbers to 20 • decomposing 2 digit numbers as expanded notation i.e. 87 = 80 + 7, use flard cards o *Fractions:* • revise colour three quarters of a whole and write the unitary fraction '¾' o *Multiplication and Division* • revise oral and written revision to 20 focusing on inverse sums e.g. 6x3 =18 therefore 8÷3=6 • table of 3 to 36 • division with a remainder up to 20 concrete and oral word problems o **Fractions***:* Repeat weeks 7-8 o **Multiplication and Division** Repeat weeks 7-8	
	LO 2 Patterns, Functions and Algebra	⇒ **Problem Solving Techniques** *Introduce Problem sums;* ⇒ **Patterns** o repeat weeks 7-8	Chapter 4 Chapter 5
	LO 3 Space and Shape (Geometry)	⇒ **Space and Shape** o recognise and describe 3 – D objects from different positions	Chapter 6
	LO 4 Measurement	⇒ **Time** o repeat calculations and conversions between**:** • minutes and hours • days and weeks • days and months ⇒ **Length** o estimate, measure and compare the lengths of objects in metres ⇒ **Mass** o estimate, measure and compare the mass of objects in kilograms and grams.	Chapter 7
	LO 5 Data Handling	⇒ **Data** o draw the pictures and construct a pictograph of the objects measured in kilograms and grams above**.**	

WORK SCHEDULE NUMERACY

GRADE 3

TERM 2

WK	LEARNING OUTCOMES	ASSESSSMENT STANDARDS & CORE TEACHING	TEACHER'S GUIDE
11-12	**LO 1 Numbers Operations and Relationships**	⇒ **Daily Counting** o Count from 1 to 200 on number chart o Extend counting from 200 to 400 o Extend counting further from 400 to 600 o Count out objects to 100 o count in 2, 5,10s from any number e.g. 25, 30, 35, 40 etc to 200 o count in 2's forwards and backwards to 20 o count in 3's forwards and backwards to 30 o count in 4's forwards and backwards to 40 ⇒ **Mental calculations** o perform mental calculations +, -, ×, ÷ to 50 ⇒ **Number Concept and Value** o **Revise** • number symbols and number names from 1 – 100 and explore their relationship • numerals 301-350 and write the words. • Orders, describes and compares the above numbers. • bonds to 39 • Ordinal value of numbers first to thirty-ninth o **Introduce** • numerals 351-400 and write the words. • Orders, describes and compares the above numbers. • place values of the above numbers in HTU include '0' as a place holder e.g. in 100 - 200 and 200... • numeral, symbol and words One to Ten in the First Additional Language (FAL) • write word problems • Bonds of 40 • Ordinal value of numbers first to fortieth o *Sets, Addition and Subtraction* • addition and subtraction in tens with carrying and decomposition of the 10 • introduce vertical application of sums using extension of the basic components e.g. 5 15 25 +6 +6 +6 — — — • write word problems	Chapter 2 Chapter 3

		• rounding off to nearest 10 e.g. 76 →80; 43→40; 94→90 etc o *Fractions:* a) write the ½ and ¼ of numbers 4,8,12,16 and 20 b) introduce the concept of one third by dividing a strip of paper 9cm long into 3 equal parts. c) Write the unitary fraction ⅓ on the strips. o *Multiplication and Division* • explain commutative property in multiplication e.g. 8x2=2x8 • explain division as sharing and grouping e.g. divide (share) 12 sweets among 4 children. Divide (cluster/group) 12 sweets into 4 groups. • memorise the table of 2 to 24 • memorise the table of 3 to 36 • write word problems	
LO 2 Patterns, Functions and Algebra	⇒ **Problem Solving Techniques** *Introduce Problem sums;* o addition and subtraction of one and two digit numbers to 100 e.g. 88 + 4, 27 – 43, o find solutions using doubles and near doubles e.g. 13 + 16 = (13 +13) + 3 +140 + 154 = (140 + 140) + 14 o repeated addition and subtraction of 3, digit numbers to 500 e.g. 150 + 50 + 50 + 50 + 50 = o multiplication as repeated addition of the same number o division as repeated subtraction of the same number o multiplication and division of two and one digit numbers e.g. 4 × 5 = 20, 20 ÷ 5 = 4 *Use Techniques;* • estimation • use the number line, number chart, count out objects • building up and breaking down of numbers: building up the 10 • doubling and halving which leads to grouping and sharing with and without remainders • verbalise strategies applied and illustrate on the chalkboard • check peers solutions to problems	Chapter 4

		⇒ **Patterns** o identify number patterns using +, - to 500 o create and extend basic number pattern facts e.g. 6 + 2 = 8, 60 + 20 = 80, 600 + 200 = 800	Chapter 5
	LO 3 Space and Shape (Geometry)	⇒ **Space and Shape** o determine lines of symmetry in 2 – D shapes using paper folding and reflection	Chapter 6
	LO 4 Measurement	⇒ **Money** o Repeat previous terms work ⇒ **Time** o revise analogue and digital time in hours, half hours and quarter of an hour o conversion of minutes and hours, days and hours, days and months o names of the months of year ⇒ **Mass** o estimate, measure, compare and order objects, in order to determine which is heaviest, lightest o do likewise with 3 - D shapes	Chapter 7
	LO 5 Data Handling	⇒ **Data** o collect and summarise the data of the measured items and lists in a table form	
13-14		***FORMAL ASSESSMENT TASK 1***	
	LO 1 Numbers Operations and Relationships	⇒ **Daily Counting** o Count from 1 to 200 on number chart o Extend counting from 200 to 400 o Extend counting further from 400 to 600 o Count out objects to 200 o count in 2, 5,10s from any number e.g. 25, 30, 35, 40 etc to 200 o count in 2's forwards and backwards to 20 o count in 3's forwards and backwards to 30 o count in 4's forwards and backwards to 40 ⇒ **Mental calculations** o perform mental calculations +, -, ×, ÷ to 50 ⇒ **Number Concept and Value** o **Revise** • Orally, written words of numerals 300-400 • Orders, describes and compares the above numbers. • place values of the above numbers in HTU include '0' as a place holder e.g. in 100 - 200 and 200...	Chapter 2 Chapter 3

		• numeral, symbol and words One to Ten in the First Additional Language (FAL) write word problems • Bonds of 40 • Ordinal value of numbers first to fortieth o **Introduce** • numerals 401-450 and write the words. • Bonds of 41 • Ordinal value of numbers first to forty-first o *Sets, Addition and Subtraction* • addition and subtraction in tens with carrying and decomposition of the 10 up to '99' • introduce vertical application of sums using extension of the basic components e.g. 5 15 25 +6 +6 +6 — — — • write word problems o *Fractions:* • Find ⅓ of numbers 3, 6, 9, 12, 15 • Correlate problem solving with division of 3x table o *Multiplication and Division* Introduce and explain division with a remainder in the following format e.g. Basic number | How many three's? | remainder 20 | 6 | 2 34 | 11 | o Extend to division of four and five with a remainder o Write word problems	
LO 2 Patterns, Functions and Algebra		⇒ **Problem Solving Techniques** *Introduce Problem sums;* o addition and subtraction of one - digit numbers and 2 – digit numbers to 100 e.g. 35 + 4, 67 – 43, o order, describe and compare 2 digit numbers o multiplication as repeated addition of the same number o division as repeated subtraction of the same number	Chapter 4

		o multiplication and division of two and one digit numbers e.g. 4 × 5 = 20 20 ÷ 5 = 4 o identify the numerosity of numbers to 34 o Use own techniques and share with peers ⇒ **Patterns** o Write the doubles of odd numbers to 49 o write number patterns using addition and subtraction 2 and 3 digit numbers	Chapter 5
	LO 3 Space and Shape (Geometry)	⇒ **Space and Shape** o recognise and identify distinct features of 2 - D shapes (triangles, squares, rectangles, circles) and 3 - D objects (boxes, prisms, pyramids, spheres, cones)	Chapter 6
	LO 4 Measurement	⇒ **Money** o Identify equivalent values of coins up to R5 e.g. 5c = 1c+1c+1c+1c+1c or 2c+2c+1 o Do shopping activities with change no more than R2 o Write word problems and the written application of the above. ⇒ **Time** o solve problems involving calculations with and conversions between: minutes and hours, days and hours, days and months ⇒ **Length** o estimate the length of objects and measure it in metres and centimetres o record findings	Chapter 7
	LO 5 Data Handling	⇒ **Data** o repeat weeks 11 and 12, collect data for the calendar month: learners present, learners who present homework every day o data is recorded on a checklist, display and compare data	
15-16		***FORMAL ASSESSMENT TASK 2***	Chapter 2
	LO 1 Numbers Operations and Relationships	⇒ **Daily Counting** o Count from 1 to 200 on number chart o Extend counting from 200 to 400 o Extend counting further from 400 to 600 o Count out objects to 200 o count in 2, 5,10s from any number e.g. 25, 30, 35, 40 etc to 200 o count in 2's forwards and backwards to 20 o count in 3's forwards and backwards to 30	

		o count in 4's forwards and backwards to 40 o in multiples of 100 to 500 ⇒ **Mental calculations** o perform mental calculations +, -, ×, ÷ to 50 ⇒ **Number Concept and Value** o **Revise** • numerals 401-450 and write the words. • Bonds of 41 • Ordinal numbers first to forty- first o **Introduce** • numerals 451-500 and write the words. • place values of the above numbers in HTU • Bonds of 42 • Ordinal numbers first to forty-second o *Sets, Addition and Subtraction* • addition and subtraction in tens with carrying and decomposition of the 10 up to '99' • introduce vertical application of sums using extension of the basic components e.g. 29 39 49 +7 +7 +7 — — — • write word problems o *Fractions:* • Repeat weeks 13-14 • The written form: ½ of 30 = ¼ of 40 = ⅓ of 33 = etc. o *Multiplication and Division* a) revise multiplication as shortened addition e.g. 3 + 3 + 3 = (3 × 3 = 9) and b) revise division with a remainder to 10 concrete and oral c) write word problems	Chapter 3
	LO 2 **Patterns, Functions and Algebra**	⇒ **Problem Solving Techniques** *Introduce Problem sums;* o show different strategies that can be used o subtraction of two, 3 digit numbers e.g. 344 - 122 (break up the number that is subtracted) 344 – 122 = (344 – 100 = 244 – 20 = 224 – 2 = 222 o or adding 2/ 3 digit numbers,	Chapter 4

		Use Techniques; • estimation • use the number line, number chart, count out objects • building up and breaking down of numbers: building up the 10 • doubling and halving which leads to grouping and sharing with and without remainders • verbalise strategies applied and illustrate on the chalkboard • check peers solutions to problems	
		⇒ **Patterns** o Write the doubles of odd numbers to 49 o write number patterns using addition and subtraction of 2 and 3 digit numbers	Chapter 5
	LO 3 Space and Shape (Geometry)	⇒ **Space and Shape** o repeat weeks 15 -16	Chapter 6
	LO 4 Measurement	⇒ **Money** o Identify equivalent values of coins up to R5 e.g. 5c = 1c+1c+1c+1c+1c or 2c+2c+1 o Do shopping activities with change no more than R2 o Write word problems and the written application of the above. ⇒ **Time** o solving problems involving calculations with and conversions between: minutes and hours, days and hours, days and months ⇒ **Mass** o estimate the mass o measure in kg and g o record list of items weighed	Chapter 7
	LO 5 Data Handling	⇒ **Data** o repeat weeks 11 and 12 o discuss and compare data recorded for the calendar month	
17-18		***FORMAL ASSESSMENT TASK 3***	
	LO 1 Numbers Operations and Relationships	⇒ **Daily Counting** o Count from 1 to 200 on number chart o Extend counting from 200 to 400 o Extend counting further from 400 to 600 o Count out objects to 200	Chapter 2

		o count in 2, 5,10s from any number e.g. 25, 30, 35, 40 etc to 200 o count in 2's forwards and backwards to 20 o count in 3's forwards and backwards to 30 o count in 4's forwards and backwards to 40 o in multiples of 100 to 500 ⇒ **Mental calculations** o perform mental calculations +, -, ×, ÷ to 50 ⇒ **Number Concept and Value** o **Revise** • numerals 451-500 and write the words. • Bonds of 42 • Ordinal number first to forty - second o **Introduce** • numerals 501-550 and write the words. • place values of the above numbers in HTU • Bonds of 43 • Ordinal number first to forty - third o *Sets, Addition and Subtraction* addition and subtraction in tens with carrying and decomposition of the 10 up to '99' • introduce vertical application of sums using extension of the basic components e.g. 59 69 79 +3 +3 +3 — — — • write word problems o Complete open sentence sums and determine the signs e.g. 13+□+6=30 and 20*7=13 36-□- 6 =20 and 48*2= 50 o *Fractions:* • revise halves of even and odd numbers to 20 • revise thirds of numbers to 30 • revise quarters of numbers to 40 o *Multiplication and Division* • revise all previous work • introduce the table of 5 (with commutative properties and inversion) e.g. Table of 5 to 50: • Doubling Halving/inverse sums 1x5 5÷5 2x5 10÷5 3x5 15÷5 4x5 20÷5 • write word problems	Chapter 3

	LO 2 Patterns, Functions and Algebra	⇒ **Problem Solving Techniques** o *Introduce Problem sums;* • show different strategies that can be used for; • subtraction of two, 3 digit numbers e.g. 344 - 122 (break up the number that is subtracted) 344 – 122 = (344 – 100 = 244 – 20 = 224 – 2 = 222 • adding 2/ 3 digit numbers, • Use own techniques and check peers solutions to problems	Chapter 4
		⇒ **Patterns** o identify number patterns using addition, subtraction and multiplication to 500	Chapter 5
	LO 3 Space and Shape (Geometry)	⇒ **Space and Shape** o observe, create 2 – D shapes and 3 - D objects using concrete materials e.g. building blocks, construction sets, clay, drinking straws etc.	Chapter 6
	LO 4 Measurement	⇒ **Money** o repeat weeks 15-16 ⇒ **Time** o repeat weeks 15-6 ⇒ **Length** o estimate the length, measure in metres and cm	Chapter 7
	LO 5 Data Handling	⇒ **Data** o collect data in the class to answer questions posed by teacher: e.g. How many learners enjoy Maths? How many learners enjoy Reading? How many learners enjoy Sport?	
19-20	**LO 1 Numbers Operations and Relationships**	⇒ **Daily Counting** o Count from 1 to 200 on number chart o Extend counting from 200 to 400 o Extend counting further from 400 to 600 o Count out objects to 200 o count in 2, 5,10s from any number e.g. 25, 30, 35, 40 etc to 200 o count in 2's forwards and backwards to 20 o count in 3's forwards and backwards to 30 o count in 4's forwards and backwards to 40 o in multiples of 100 to 500 ⇒ **Mental calculations** o perform mental calculations +, -, ×, ÷ to 50	Chapter 2

		⇒ **Number Concept and Value** o **Revise** • numerals 501-550 and write the words. • Bonds of 43 • Ordinal number first to forty - third o **Introduce** • numerals 551-600 and write the words. • place values of the above numbers in HTU • Bonds of 44 • Ordinal number first to forty - fourth o *Sets, Addition and Subtraction* • repeat weeks 17-18 o *Fractions:* • repeat weeks 17-18 o *Multiplication and Division* • repeat weeks 17-18	Chapter 3
	LO 2 Patterns, Functions and Algebra	⇒ **Problem Solving Techniques** o *Introduce Problem sums;* • show different strategies that can be used for; • subtraction of two, 3 digit numbers e.g. 344 - 122 (break up the number that is subtracted) 344 – 122 = (344 – 100 = 244 – 20 = 224 – 2 = 222 • adding 2, 3 digit numbers • use own techniques and share with peers	Chapter 4
		⇒ **Patterns** o all the whole and fractions (halves) on the number line: between 1 and a half and 10 and a half o describe and copy patterns observed in magazines	Chapter 5
	LO 3 Space and Shape (Geometry)	⇒ **Space and Shape** o repeat weeks 17-18	Chapter 6
	LO 4 Measurement	⇒ **Money** o Identify equivalent values of coins up to R5 e.g. 5c = 1c+1c+1c+1c+1c or 2c+2c+1 o shopping activities with change no more than R2 o write word problems and the written application of the above. ⇒ **Time** o identify important dates on the calendar: historic and religious festival dates	Chapter 7

	LO 5 Data Handling	⇒ **Length** o estimate the length and measure in metres and cm o record list of items and their measurements ⇒ **Data** o collect data in classroom to answer questions posed by teacher: How many learners have lunch boxes? How many learners bring fruit to school? etc.	

WORK SCHEDULE NUMERACY

GRADE 3

TERM 3

WK	LEARNING OUTCOMES	ASSESSSMENT STANDARDS & CORE TEACHING	TEACHER'S GUIDE
21-22	**LO 1 Numbers Operations and Relationships**	⇒ **Daily Counting** o Count from 1 to 200 on number chart o Extend counting from 200 to 400 o Extend counting further from 400 to 600 o Continue to extend counting from 600 to 800 o Count out objects to 200 o count in 2, 5,10s from any number e.g. 25, 30, 35, 40 etc to 200 o count in 2's forwards and backwards to 20 o count in 3's forwards and backwards to 30 o count in 4's forwards and backwards to 40 o in multiples of 100 to 500 o in multiples of 50 to 500 ⇒ **Mental calculations** o perform mental calculations +, -, ×, ÷ to 50 ⇒ **Number Concept and Value** o **Revise** • numerals 551-600 and write the words. • place vales of the above numbers in HTU • Bonds of 44 • Ordinal number first to forty-fourth o **Introduce** • numerals 601-650 and write the words. • place values of the above numbers in HTU • Bonds of 45 • Ordinal number first to forty - fifth o *Sets, Addition and Subtraction* • Revise weeks 17-18 o *Fractions:* • revise halves of even and odd numbers to 20 • revise thirds of numbers to 30 • revise quarters of numbers to 40 o *Multiplication and Division* • revise all previous work • introduce the table of 5 (with commutative properties and inversion) e.g. table of 5 to 50 • write word problems • revise division with a remainder within the range of tables 2,3,4 and 5	Chapter 2 Chapter 3

	LO 2 Patterns, Functions and Algebra	⇒ **Problem Solving Techniques** *Introduce Problem sums;* o addition and subtraction of one - digit numbers and 2 – digit numbers to 100 e.g. 35 + 4, 67 – 43, o order, describe and compare 2 digit numbers o multiplication as repeated addition of the same number o division as repeated subtraction of the same number o multiplication and division of two and one digit numbers e.g. 4 × 5 = 20 20 ÷ 5 = 4 o identify the numerosity of numbers to 34 o check peers solutions to problems ⇒ **Patterns** o all the whole numbers and fractions (halves) on the number line: between 3 and a half and 10 and a half o copy and extend number sequences to at least 750	Chapter 4 Chapter 5
	LO 3 Space and Shape (Geometry)	⇒ **Space and Shape** o observe and create 2 - d shapes and 3 – d objects in the environment and pictures	Chapter 6
	LO 4 Measurement	⇒ **Time** o recognise and describe different calendars used in different cultures o identify important dates on the calendar: historic and religious festival dates	Chapter 7
	LO 5 Data Handling	⇒ **Data** o read and interpret data presented in simple tables and lists	
23-24		***FORMAL ASSESSMENT TASK 1***	
	LO 1 Numbers Operations and Relationships	⇒ **Daily Counting** o Count from 1 to 200 on number chart o Extend counting from 200 to 400 o Extend counting further from 400 to 600 o Continue to extend counting from 600 to 800 o Count out objects to 200 o count in 2, 5,10s from any number e.g. 25, 30, 35, 40 etc to 200 o count in 2's forwards and backwards to 20 o count in 3's forwards and backwards to 30 o count in 4's forwards and backwards to 40 o in multiples of 100 to 500 o in multiples of 50 to 500	Chapter 2

		⇒ **Mental calculations** o perform mental calculations +, -, ×, ÷ to 50 ⇒ **Number Concept and Value** o **Revise** • numerals 601-650 and write the words. • place vales of the above numbers in HTU • Bonds of 45 • Ordinal number first to forty-fifth o **Introduce** • numerals 651-700 and write the words. • place values of the above numbers in HTU • Bonds of 46 • Ordinal number first to forty - sixth o *Sets, Addition and Subtraction* • revise previous work • Introduce vocabulary: plus, minus, difference, sum of, add to, loose, win, are short of, how many is…more/fewer than etc o *Fractions:* • revise weeks 21-22 • introduce the concept of one fifth by dividing a strip of paper 15cm long, into five equal parts. • Explain the written term 1⁄5 (one fifth) o *Multiplication and Division* • revise all previous work • introduce the table of 5 (with commutative properties and inversion) e.g. table of 5 to 50 • write word problems • revise division with a remainder within the range of tables 2,3,4 and 5	Chapter 3
	LO 2 Patterns, Functions and Algebra	⇒ **Problem Solving Techniques** o show different strategies that can be used o subtraction of two, 3 digit numbers e.g. 344 - 122 (break up the number that is subtracted) 344 – 122 = (344 – 100 = 244 – 20 = 224 – 2 = 222 adding 2/ 3 digit numbers, o complete open sentence sums and determine the operational signs e.g. 8x□ =24 15*7=8 12÷□=2 24*26=50 o check peers solutions to problems	Chapter 4

		⇒ **Patterns** o copy wholes and fractions (halves) on the number line: between 3 ½ and 10 ½ o copy and extend number sequences to at least 750	Chapter 5
	LO 3 Space and Shape (Geometry)	⇒ **Space and Shape** o observe and create 2 - d shapes and 3 – d objects in the environment and pictures	Chapter 6
	LO 4 Measurement	⇒ **Money** • introduce equivalent values of coins to R5 using + and x e.g. R1 =50c+50c or 10cx10c • shopping activities; change given for no more than R2 • word problems in terms of multiplication and division by 2,3 and 4 ⇒ **Time** o repeat weeks 21 and 22 ⇒ **Mass** o estimate, measure, compare and order 3- D objects using non standard and standard measures (e.g. packets, kg)	Chapter 7
	LO 5 Data Handling	⇒ **Data** o read and interpret data presented in simple tables and lists	
25- 26		***FORMAL ASSESSMENT TASK 2***	
	LO 1 Numbers Operations and Relationships	⇒ **Daily Counting** o Count from 1 to 200 on number chart o Extend counting from 200 to 400 o Extend counting further from 400 to 600 o Continue to extend counting from 600 to 800 o Count out objects to 200 o count in 2, 5,10s from any number e.g. 25, 30, 35, 40 etc to 200 o count in 2's forwards and backwards to 20 o count in 3's forwards and backwards to 30 o count in 4's forwards and backwards to 40 o in multiples of 100 to 500 o in multiples of 50 to 500 ⇒ **Mental calculations** o perform mental calculations +, -, ×, ÷ to 50	Chapter 2

		⇒ **Number Concept and Value** o **Revise** • numerals 651-700 and write the words. • place vales of the above numbers in HTU • Bonds of 46 • Ordinal number first to forty-sixth o **Introduce** • numerals 701-750 and write the words. • place values of the above numbers in HTU • Bonds of 47 • Ordinal number first to forty - seven o *Sets, Addition and Subtraction* • revise vocabulary: plus, minus, difference, sum of; add to, loose, win, are short of, how many is…more /fewer than… • reinforce <u>place values</u> of numbers to <u>999</u> with special emphasis on the fact that the value of a digit in a number is ten times that of the same digit immediately to its right. o *Fractions:* • revise weeks 21-22 • introduce the concept of one fifth by dividing a strip of paper 15cm long, into five equal parts. • Explain the written term 1/5 (one fifth) o *Multiplication and Division* • revise all previous work • introduce the table of 5 (with commutative properties and inversion) e.g. table of 5 to 50 • write word problems • revise division with a remainder within the range of tables 2,3,4 and 5	Chapter 3
	LO 2 Patterns, Functions and Algebra	⇒ **Problem Solving Techniques** *Introduce Problem sums;* o show different strategies that can be used o subtraction of two, 3 digit numbers e.g. 344 - 122 (break up the number that is subtracted) 344 – 122 = (344 – 100 = 244 – 20 = 224 – 2 = 222 o or adding 2/ 3 digit numbers, o complete open sentence sums and determine the operational signs e.g. 8x□ =24 15*7=8 12÷□=2 24*26=50 o check peers solutions to problems	Chapter 4

		⇒ **Patterns** o the whole and fractions (halves) on the number line: between 3 ½ and 10 ½ o copy and extend number sequences to at least 750	Chapter 5
	LO 3 Space and Shape (Geometry)	⇒ **Space and Shape** o observe and create 2 - D shapes and 3 – D objects in the environment and pictures	Chapter 6
	LO 4 Measurement	⇒ **Money** • reinforce equivalent values of coins to R5 using + and x e.g. R1 =50c+50c or 10cx10c • shopping activities; change given for no more than R2 • word problems in terms of multiplication and division by 2,3 and 4 ⇒ **Time** o repeat weeks 21-22 ⇒ **Mass** o estimate, measure, compare and order 3- D objects using non standard and standard measures (e.g. packets, kg)	Chapter 7
	LO 5 Data Handling	⇒ **Data** o read and interpret data presented in simple tables and lists	
27- 28		***FORMAL ASSESSMENT TASK 3***	
	LO 1 Numbers Operations and Relationships	⇒ **Daily Counting** o Count from 1 to 200 on number chart o Extend counting from 200 to 400 o Extend counting further from 400 to 600 o Continue to extend counting from 600 to 800 o Count out objects to 200 o count in 2, 5,10s from any number e.g. 25, 30, 35, 40 etc to 200 o count in 2's forwards and backwards to 20 o count in 3's forwards and backwards to 30 o count in 4's forwards and backwards to 40 o in multiples of 100 to 500 o in multiples of 50 to 500 ⇒ **Mental calculations** o perform mental calculations +, -, ×, ÷ to 50	Chapter 2

		⇒ **Number Concept and Value** o **Revise** • numerals 701-750 and write the words. • place vales of the above numbers in HTU • Bonds of 47 • Ordinal number first to forty-seventh o **Introduce** • numerals 751-800 and write the words. • place values of the above numbers in HTU • Bonds of 48 • Ordinal number first to forty – eighth o *Sets, Addition and Subtraction* • revise vocabulary: plus, minus, difference, sum of; add to, loose, win, are short of, how many is…more /fewer than… • reinforce <u>place values</u> of numbers to 99 with special emphasis on the fact that the value of a digit in a number is ten times that of the same digit immediately to its right. o *Fractions:* • revise weeks 23-24 • revise the concept of one fifth by dividing a strip of paper 15cm long, into five equal parts. • Explain the written term 1/5 (one fifth) o *Multiplication and Division* • repeat activities of weeks 23-24 • extend multiplication of sums to larger numbers e.g. 34x2 WITHOUT CARRYING	Chapter 3
	LO 2 Patterns, Functions and Algebra	⇒ **Problem Solving Techniques** *Introduce Problem sums;* o show different strategies that can be used o subtraction of two, 3 digit numbers e.g. 344 - 122 (break up the number that is subtracted) 344 – 122 = (344 – 100 = 244 – 20 = 224 – 2 = 222 o or adding 2/ 3 digit numbers, o complete open sentence sums and determine the operational signs e.g. 8x□ =24 15*7=8 12÷□=2 24*26=50 o check peers solutions to problems	Chapter 4

		⇒ **Patterns** o identify the whole and fractions (halves) on the number line: between 3 ½ and 10 ½ o copy and extend sequences of multiples of 3, 4 to at least 1000	Chapter 5
	LO 3 Space and Shape (Geometry)	⇒ **Space and Shape** o recognise and describe 3 – D objects from different positions	Chapter 6
	LO 4 Measurement	⇒ **Money** • introduce equivalent values of coins to R5 using + and x e.g. R1 =50c+50c or 10cx10c • shopping activities; change given for no more than R2 • word problems in terms of multiplication and division by 2,3 and 4 ⇒ **Time** o plot festivals and historical events for second half of the year on class calendar ⇒ **Capacity** o estimate, measure, compare and order 3-D objects using non standard and standard measures (e.g. bottles and litres)	Chapter 7
	LO 5 Data Handling	⇒ **Data** o read and interpret data presented in simple tables and lists o sort and organise data according to attributes presented for particular reasons	
29-30	**LO 1 Numbers Operations and Relationships**	⇒ **Daily Counting** o Count from 1 to 200 on number chart o Extend counting from 200 to 400 o Extend counting further from 400 to 600 o Continue to extend counting from 600 to 800 o Count out objects to 200 o count in 2, 5,10s from any number e.g. 25, 30, 35, 40 etc to 200 o count in 2's forwards and backwards to 20 o count in 3's forwards and backwards to 30 o count in 4's forwards and backwards to 40 o in multiples of 100 to 500 o in multiples of 50 to 500 ⇒ **Mental calculations** o perform mental calculations +, -, ×, ÷ to 50	Chapter 2

		⇒ **Number Concept and Value** o **Revise** • numerals 751-800 and write the words. • place vales of the above numbers in HTU • Bonds of 48 • Ordinal number first to forty-eighth o **Introduce** • numerals 801-850 and write the words. • place values of the above numbers in HTU • Bonds of 49 • Ordinal number first to forty - ninth o *Sets, Addition and Subtraction* • revise vocabulary: plus, minus, difference, sum of, add to, loose, win, are short of, how many is…more/fewer • reinforce <u>place values</u> of numbers to 99 with special emphasis on the fact that the value of a digit in a number is ten times that of the same digit immediately to its right. o *Fractions:* • revise weeks 27-28 • revise the concept of one fifth by dividing a strip of paper 15cm long, into five equal parts. • Explain the written term 1/5 (one fifth) o *Multiplication and Division* • repeat activities of weeks 27-28 • extend multiplication of sums to larger numbers e.g. 34x2 WITHOUT CARRYING	Chapter 3
	LO 2 Patterns, Functions and Algebra	⇒ **Problem Solving Techniques** *Introduce Problem sums;* o show different strategies that can be used for; o subtraction of two, 3 digit numbers e.g. 344 - 122 (break up the number that is subtracted) 344 – 122 = (344 – 100 = 244 – 20 = 224 – 2 = 222 o or adding 2/ 3 digit numbers, o complete open sentence sums and determine the operational signs e.g. 8x□ =24 15*7=8 12÷□=2 24*26=50 o check peers solutions to problems	Chapter 4 Chapter 5

	LO 3 Space and Shape (Geometry)	⇒ **Space and Shape** o read, interpret and draw informal maps of the school environment an locate objects on the map	Chapter 6
	LO 4 Measurement	⇒ **Money** • introduce equivalent values of coins to R5 using + and x e.g. R1 =50c+50c or 10cx10c • shopping activities; change given for no more than R2 • word problems in terms of multiplication and division by 2,3 and 4 ⇒ **Time** o solve problems involving calculations involving minutes and hours , days and weeks ⇒ **Length** o estimate, measure, compare and order 3- D objects using non standard and standard measures (e.g. ruler lengths and metres)	Chapter 7
	LO 5 Data Handling	⇒ **Data** o read and interpret data presented in simple tables and lists	

WORK SCHEDULE NUMERACY

GRADE 3

TERM 4

WK	LEARNING OUTCOMES	ASSESSSMENT STANDARDS & CORE TEACHING	TEACHER'S GUIDE
31-32	**LO 1 Numbers Operations and Relationships**	⇒ **Daily Counting** o Count from any number on number chart to 1000 o Count out objects to 200 o count in 2, 5,10s from any number e.g. 25, 30, 35, 40 etc to 200 o count in 2's forwards and backwards to 20 o count in 3's forwards and backwards to 30 o count in 4's forwards and backwards to 40 o in multiples of 100 to 500 o in multiples of 50 to 500 o in odd and even numbers to 300 ⇒ **Mental calculations** o perform mental calculations +, -, ×, ÷ to 50 ⇒ **Number Concept and Value** o **Revise** • numerals 801-850 and write the words. • place values of the above numbers in HTU • Bonds of 49 • ordinals: first to forty-ninth o **Introduce** • numerals 851-900 and write the words. • place values of the above numbers in HTU • Bonds of 50 • Ordinal number first to fiftieth o *Sets, Addition and Subtraction* • revise vocabulary more than less, less than , larger than and smaller than - the signs • reinforce <u>place values</u> of numbers to 99 with special emphasis on the fact that the value of a digit in a number is ten times that of the same digit immediately to its right. o *Fractions:* • Find fifths of numbers to 50, i.e. correlate with division by 5 o *Multiplication and Division* • extend multiplication of sums to larger numbers e.g. 34x2 WITHOUT CARRYING	Chapter 2 Chapter 3

	LO 2 Patterns, Functions and Algebra	⇒ **Problem Solving Techniques** *Introduce Problem sums;* • +, - of two, 3 - digit numbers 1000 • × of at least 2- digit numbers by 1- digit numbers to at least 100 • ÷ of at least 2 – digit numbers by 1- digit numbers to at least 100 • decompose 3- digit numbers, expanded notation to 1000 use flard cards • arrange numbers from smallest to biggest and vise versa • recognise the value of digits in a whole number to at least a 3 – digit number e.g. 734: the value of the 7 and the 3 ask the same of the 4; what is the value of the same digits in 473 • build up multiplication tables of 2, 3, 4, 5, 7, 9, 10, 11 to 100 • extend number sequences to 1000 o *Use Techniques;* • building up and breaking down numbers • doubling and halving • estimation • rounding off numbers to nearest ten • counting out counters • number line, number chart • explain solutions to problems	Chapter 4
		⇒ **Patterns** o whole numbers and fractions (halves) on the number line: between 1 and a half and 10 and a half o copy and extend number sequences to at least 1000	Chapter 5
	LO 3 Space and Shape (Geometry)	⇒ **Space and Shape** o draw informal maps of school environment or of arrangement of 3- dimensional objects and locates objects on a map	Chapter 6
	LO 4 Measurement	⇒ **Money** o revise previous work o introduce the R10 note practically ⇒ **Time** o recognise and describe different calendars used in different cultures o identify important dates on the calendar: historic and religious festival dates ⇒ **Length** o investigate the area of a surface e.g. the mat, using tiling	Chapter 7

	LO 5 Data Handling	⇒ **Capacity** o estimate and measure in litres and millitres ⇒ **Data** o collect data in school playground according attributes given by teacher o plot data on bar graph o report on collections plotted	
33- 34	**LO 1 Numbers Operations and Relationships**	***FORMAL ASSESSMENT TASK 1*** ⇒ **Daily Counting** o Count from any number on number chart to 1000 o Count out objects to 200 o count in 2, 5,10s from any number e.g. 25, 30, 35, 40 etc to 200 o count in 2's forwards and backwards to 20 o count in 3's forwards and backwards to 30 o count in 4's forwards and backwards to 40 o in multiples of 100 to 500 o in multiples of 50 to 500 o in odd and even numbers to 300 ⇒ **Mental calculations** o perform mental calculations +, -, ×, ÷ to 50 ⇒ **Number Concept and Value** o **Revise** • numerals 851-900 and write the words. • place values of the above numbers in HTU • Bonds of 50 • Ordinal number first to fiftieth o **Introduce** • numerals 901-950 and write the words. • place values of the above numbers in HTU • Bonds of 50 • Ordinal number fifty first - sixtieth o *Sets, Addition and Subtraction* • revise vocabulary smaller than and bigger than with the signs • identify elements that belong together e.g. bed, cupboard, shoe, dress and 2, 13,4,15,6,17 etc. • explain the relationship between addition and multiplication in sums e.g. 45x3 = 45+45+45 o *Fractions:* • find fifths of numbers to 50 i.e. correlate with division.	Chapter 2 Chapter 3

		o *Multiplication and Division* • revise tables 2,3,4 and 5 with inverse operations • introduce the table of 10 with commutative properties and inversion (see weeks 7-8)	
	LO 2 Patterns, Functions and Algebra	⇒ **Problem Solving Techniques** *Introduce Problem sums;* • +, - of two, 3 - digit numbers 1000 • × of at least 2- digit numbers by 1- digit numbers to at least 100 • ÷ of at least 2 – digit numbers by 1- digit numbers to at least 100 • decompose 3- digit numbers, expanded notation to 1000 use flard cards • arrange numbers from smallest to biggest and vise versa • recognise the value of digits in a whole number to at least a 3 – digit number e.g. 734: the value of the 7 and the 3 ask the same of the 4; what is the value of the same digits in 473 • build up multiplication tables of 2, 3, 4, 5, 7, 9, 10, 11 to 100 • extend number sequences to 1000 *Use own techniques* • verbalise strategies applied and illustrate on the chalkboard • check peers solutions to problems	Chapter 4
		⇒ **Patterns** o the whole and fractions (halves) on the number line: between 3 ½ and 10 ½ o copy and extend number sequences to at least 1000	Chapter 5
	LO 3 Space and Shape (Geometry)	⇒ **Space and Shape** o repeat weeks 31 and 32	Chapter 6
	LO 4 Measurement	⇒ **Money** o revise previous work o introduce the R10 note practically ⇒ **Time** o repeat weeks 31and 32 ⇒ **Mass** o estimate, measure, compare and order 3- D objects using non standard and standard measures (e.g. packets, kg)	Chapter 7

	LO 5 Data Handling	⇒ **Data** o repeat weeks 31 and 32	
35- 36	**LO 1 Numbers Operations and Relationships**	***FORMAL ASSESSMENT TASK 2*** ⇒ **Daily Counting** o Count from any number on number chart to 1000 o Count out objects to 200 o count in 2, 5,10s from any number e.g. 25, 30, 35, 40 etc to 200 o count in 2's forwards and backwards to 20 o count in 3's forwards and backwards to 30 o count in 4's forwards and backwards to 40 o in multiples of 100 to 500 o in multiples of 50 to 500 o in odd and even numbers to 300 ⇒ **Mental calculations** o perform mental calculations +, -, ×, ÷ to 50 ⇒ **Number Concept and Value** o **Revise** • numerals 901-950 and write the words. • place values of the above numbers in HTU • Bonds of 50 • Ordinal number first to fiftieth o **Introduce** • numerals 951-1000 and write the words. • place values of the above numbers in HTU • Bonds of 50 • Ordinal number sixty first to seventieth o *Sets, Addition and Subtraction* • revise place values to 99 • identification of sets and missing elements in a given set e.g. {12, 14, 16,-;-;-;-26, 28, 30} etc and name the set e.g. set of even numbers etc. • repeat and explain the relationship between addition and multiplication in sums e.g. 45x3 = 45+45+45 • addition to four numbers with a total of not more than 99 e.g. 13+10+60+7= o *Fractions:* • revise fifths of numbers to 50 i.e. correlate with division. • introduce tenths by dividing a strip of paper of 20cm in length into 10 equal parts • write the term 1⁄10 one tenth	Chapter 2 Chapter 3

		o *Multiplication and Division* • revise tables 2,3,4 and 5 with inverse operations • revise the table of 10 with commutative properties and inversion (see weeks 7-8) • multiplication of 2 digit numbers by 2,3,4,5, with carrying e.g. 25x3	
	LO 2 Patterns, Functions and Algebra	⇒ **Problem Solving Techniques** *Introduce Problem sums;* • +, - of two, 3 - digit numbers 1000 • × of at least 2- digit numbers by 1- digit numbers to at least 100 • ÷ of at least 2 – digit numbers by 1- digit numbers to at least 100 • decompose 3- digit numbers, expanded notation to 1000 use flard cards • arrange numbers from smallest to biggest and vise versa • recognise the value of digits in a whole number to at least a 3 – digit number e.g. 734: the value of the 7 and the 3 ask the same of the 4; what is the value of the same digits in 473 • build up multiplication tables of 2, 3, 4, 5, 7, 9, 10, 11 to 100 • extend number sequences to 1000 o *Use own techniques* • verbalise strategies applied and illustrate on the chalkboard • check peers solutions to problems	Chapter 4
		⇒ **Patterns** o repeat weeks 31 and 32 o describe observed patterns	Chapter 5
	LO 3 Space and Shape (Geometry)	⇒ **Space and Shape** o draw informal maps of school environment or of arrangement of 3- dimensional objects and locate objects on a map	Chapter 6
	LO 4 Measurement	⇒ **Money** o revise previous work o introduce the R20 note practically ⇒ **Time** o solve problems involving calculations with an conversions between: minutes and hours; hours and days; days and months	Chapter 7

	LO 5 Data Handling	⇒ **Length** o investigate the area of a surface e.g. the mat, desk using tiling ⇒ **Data** o collect data in school playground according attributes given by teacher o plot data on bar graph o report on collections plotted	
37- 38	**LO 1 Numbers Operations and Relationships**	***FORMAL ASSESSMENT TASK 3*** ⇒ **Daily Counting** o Count from any number on number chart to 1000 o Count out objects to 200 o count in 2, 5,10s from any number e.g. 25, 30, 35, 40 etc to 200 o count in 2's forwards and backwards to 20 o count in 3's forwards and backwards to 30 o count in 4's forwards and backwards to 40 o in multiples of 100 to 500 o in multiples of 50 to 500 o in odd and even numbers to 300 ⇒ **Mental calculations** o perform mental calculations +, -, ×, ÷ to 50 ⇒ **Number Concept and Value** o **Revise** • numerals 901-950 and write the words. • place values of the above numbers in HTU • Bonds of 50 • Ordinal number first to fiftieth o **Introduce** • numerals 951-1000 and write the words. • place values of the above numbers in HTU • Bonds of 50 • Ordinal number seventy first to one hundredth o *Sets, Addition and Subtraction* • revise place values to 99 • identification of sets and missing elements in a given set e.g. {12, 14, 16,;-;-;-;-26,28, 30} etc and name the set e.g. set of even numbers etc. • repeat and explain the relationship between addition and multiplication in sums e.g. 45x3 = 45+45+45	Chapter 2 Chapter 3

		• explain the relationship between subtraction and division e.g. 55÷11= (55-11-11-11-11-11) • addition to four numbers with a total of not more than 99 e.g. 13+10+60+7= o *Fractions:* • revise fifths of numbers to 50 i.e. correlate with division. • introduce tenths by dividing a strip of paper of 20cm in length into 10 equal parts • write the term 1⁄10 one tenth o *Multiplication and Division* • revise tables 2,3,4 and 5 with inverse operations • revise the table of 10 with commutative properties and inversion (see weeks 7-8) • multiplication of 2 digit numbers by 2,3,4,5, with carrying e.g. 25x3 • Division of 2-digit numbers with or without decomposition and with or without a remainder, e.g. 67÷3; 54÷5	
LO 2 Patterns, Functions and Algebra		⇒ **Problem Solving Techniques** *Introduce Problem sums;* • +, - of two, 3 - digit numbers 1000 • × of at least 2- digit numbers by 1- digit numbers to at least 100 • ÷ of at least 2 – digit numbers by 1- digit numbers to at least 100 • decompose 3- digit numbers, expanded notation to 1000 use flard cards • arrange numbers from smallest to biggest and vise versa • recognise the value of digits in a whole number to at least a 3 – digit number e.g. 734: the value of the 7 and the 3 ask the same of the 4; what is the value of the same digits in 473 • build up multiplication tables of 2, 3, 4, 5, 7, 9, 10, 11 to 100 • extend number sequences to 1000 o *Use own techniques* • verbalise strategies applied and illustrate on the chalkboard • check peers solutions to problems	Chapter 4 Chapter 5
LO 3 Space and Shape (Geometry)		⇒ **Space and Shape** o revision	Chapter 6

	LO 4 Measurement **LO 5 Data Handling**	⇒ **Money** o revise previous work o introduce the R50 note practically ⇒ **Time** o solve problems involving calculations with an conversions between: minutes and hours; hours and days; days and months ⇒ **Length** o investigate the area of a surface e.g. the mat, desk using tiling ⇒ **Data** o collect data in school playground according attributes given by teacher o plot data on bar graph o report on collections plotted	Chapter 7
39- 40	**LO 1 Numbers Operations and Relationships**	⇒ **Daily Counting** o Count from any number on number chart to 1000 o Count out objects to 200 o count in 2, 5,10s from any number e.g. 25, 30, 35, 40 etc to 200 o count in 2's forwards and backwards to 20 o count in 3's forwards and backwards to 30 o count in 4's forwards and backwards to 40 o in multiples of 100 to 500 o in multiples of 50 to 500 o in odd and even numbers to 300 ⇒ **Mental calculations** o perform mental calculations +, -, ×, ÷ to 50 ⇒ **Number Concept and Value** o **Revise** • numerals 901-950 and write the words. • place values of the above numbers in HTU • Bonds of 50 • Ordinal number first to fiftieth o **Introduce** • numerals 951-1000 and write the words. • place values of the above numbers in HTU • Bonds of 50 • Ordinal number seventy first to one hundredth o *Sets, Addition and Subtraction* revise previous work	Chapter 2 Chapter 3

		o *Fractions:* revise previous work o *Multiplication and Division* revise previous work	
	LO 2 Patterns, Functions and Algebra	⇒ **Problem Solving Techniques** o introduce own problem sums and use own techniques to find solutions; o check peers solutions to problems	Chapter 4 Chapter 5
	LO 3 Space and Shape (Geometry)	⇒ **Space and Shape** o revision	Chapter 6
	LO 4 Measurement	⇒ **Money** o revision ⇒ **Time** o revision ⇒ **Mass** o revision ⇒ **Length** o revision	Chapter 7
	LO 5 Data Handling	⇒ **Data** o revision	