



Examinations Council
of Eswatini

EPC

ESWATINI PRIMARY CERTIFICATE

Syllabus

For Examination In 2025 - 2027

Mathematics

Subject Code: 212

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1. INTRODUCTION

The Eswatini Primary Certificate (EPC) syllabus is designed as a seven-year course for examination in Grade 7. The syllabus assumes that learners have acquired knowledge, understanding and skills in their everyday life activities at home and in the community. This syllabus addresses the characteristics of the Competency Based Curriculum followed at the primary school level. The curriculum content of the syllabus is arranged into topics covering five areas: Number, Measurement; Shape and Space; Data Handling and Problem Solving which is treated throughout in a holistic way. Embedded in the topics are core skills, values and attitudes which form part of the learning process. It is intended to promote imaginative and innovative styles of teaching and learning so that the course is enjoyable for all learners, and is designed to assess what learners know, understand, and can do. As such, it forms the basis for the development of fundamental tools for learners to progress to higher-level courses of mathematical studies.

Learners will follow **one basic curriculum**. The curriculum is examined by two written papers and continuous assessment done during normal classroom activities which are critical for better performance in the written papers. The papers are described in the Scheme of Assessment.

The syllabus will act as an instrument that will direct instruction and assessment in the classroom, as well as guide examinations. It is structured such that it dovetails with the Junior Secondary school syllabus.

The main sections of the syllabus are:

- Aims
- Assessment objectives
- Approaches
- Scheme of Assessment
- Curriculum Content
- Grade Descriptions

2. AIMS

The aims set out below describe the National Curriculum Educational Goals for a course in Mathematics for Primary school level. The aims are the same for all learners at this level. The purpose of the aims is mainly to develop core skills, relevant values and attitudes whilst acquiring mathematical concepts which will then be applied in other learning areas and real life situations. They are not written in order of priority.

The aims are to enable students to:

1. develop their mathematical knowledge and oral, written and practical skills in a way which encourages confidence and provides satisfaction and enjoyment;
2. read mathematics and write and talk about the subject in a variety of ways;
3. develop a feel for number, carry out calculations and understand the significance of the results obtained;
4. apply mathematics in everyday situations and develop an understanding of the part which mathematics plays in the world around them;
5. solve problems, present the solution clearly, check and interpret the results;
6. recognize when and how a situation may be represented mathematically, identify and interpret relevant factors and, where necessary, select an appropriate mathematical method to solve the problem;
7. use mathematics as a means of communication with emphasis on the use of clear expression;
8. develop the ability to apply mathematics in other subjects;
9. develop the abilities to reason logically;
10. appreciate patterns and relationships in mathematics;
11. produce and appreciate imaginative and creative work arising from mathematical ideas;
12. develop their mathematical abilities by considering problems and conducting individual and cooperative enquiry and experiment, including extended pieces of work of a practical and investigative kind;
13. acquire a foundation appropriate to their further study.

3. ASSESSMENT OBJECTIVES

There is a single Assessment Objective in Mathematics

TECHNIQUE WITH APPLICATION

A description of the assessment objective follows.

Learners can:

1. organise, interpret and present information accurately in written, tabular, graphical and diagrammatic forms;
2. perform calculations by suitable methods;
3. understand systems of measurement in everyday use and make use of them in the solution of problems;
4. estimate, approximate and work to degrees of accuracy appropriate to the context;
5. use mathematical and other instruments to measure and to draw to an acceptable degree of accuracy;
6. interpret, transform and make appropriate use of mathematical statements expressed in words or symbols;
7. recognise and use spatial relationships in two and three dimensions;
8. recall, apply and interpret mathematical knowledge in the context of everyday situations;
9. make logical deductions from given mathematical data;
10. recognise patterns and structures in a variety of situations, and form simple generalisations;
11. respond to a problem relating to a relatively unstructured situation by translating it into an appropriately structured form;
12. analyse a problem, select a suitable strategy and apply an appropriate technique to obtain its solution;
13. apply combinations of mathematical skills and techniques in problem solving;
14. set out mathematical work, including the solution of problems, in a logical and clear form using appropriate symbols and terminology.

4. APPROACHES

The curriculum content of the syllabus is arranged into topics covering five areas: Number; Measurement, Shape and Space; Data Handling and Problem Solving but it is treated throughout in a holistic way.

Number

Number is the foundation of mathematics. Number enables us to interpret and represent the world in which we live. In Number, learners develop their understanding of the concept of number and competence in using mental and written strategies for solving problems.

Mathematics has been defined as the study of patterns. Learning to recognise, analyse, describe and represent patterns and number relationships connects math to the world and helps us to appreciate fully the value of such pleasures as art, science etc. Mathematics concepts formerly taught only in basic algebra courses are increasingly part of the culture and vocabulary of modern life.

Being able to see and use patterns has been identified as a fundamental skill needed for developing mathematical understanding. Algebra serves as a bridge between arithmetic and more broadly generalise mathematical situations. These generalisations can be expressed in words, tables and charts. In later years, learners will use the notation of formulas and graphs to represent these generalisations.

Measurement

Measurement result in an unbiased and accurate understanding of reality. emphasis on the accurate of measurement can improve the decision-making process and can help detect change over time’.

Hands-on, interactive investigations, using non-standard and standard units, help learners develop an understanding of the many measurable attributes of physical objects. Measurement including length, time, capacity and volume, mass, area and perimeter will benefit from this approach. This approach helps build an accessible measurement vocabulary and a meaningful comprehension of what it means to measure.

Shape and Space

Mathematically, the areas of shape and space are about developing visualising skills and understanding relationships, such as the effects of movement and combining shapes together, rather than just knowing vocabulary.

This area helps us represent in an orderly fashion what we see in our world. Whether we are shopping or designing, we continually bump up against these mathematical organisers.

Data Handling

Numeracy and literacy learning is linked by Statistics and Probability. Numbers, logical reasoning and texts interweave to describe phenomena visually, numerically and verbally in what is termed data.

Reading and recording data is very important in our daily lives. We learn about the power of evidence as we develop the skills to make statements and evaluate arguments based on data. We learn the power of the question and the framer of the question when we collect and represent data, and we learn that sometimes true, sometimes false, pictures are created when we express data into statistics. Data is a powerful descriptive tool.

Problem Solving

Word problems which reflect the social life and related to the environment of the child are of particular importance. It is the primary goal of all mathematics instruction and an integral part of all mathematical activity.

In problem solving, learners learn to solve routine and non-routine problems using the problem-solving model steps. Problem solving is not a distinct topic but a process that should permeate the entire program and provide the context in which concepts and skills can be learned.

5. SPECIFICATION GRID

Objective Number	Short-answer questions	Structured/longer answer questions	Paper 1	Paper 2
1 and 2	✓	✓	✓	✓
3 to 7	✓	✓	✓	✓
8	✓	✓	✓	✓
9	✓	✓	✓	✓
10	✓	✓	✓	✓
11		✓		✓
12		✓		✓
13		✓		✓
14		✓		✓

The grid above is for general guidance only and illustrates where particular objectives might receive more emphasis. Ticks are placed in the grid only where there is likely to be emphasis although the objective may also be met in other areas. There is no rigid emphasis between particular assessment objectives and individual examination components; the objectives may be assessed in any question. The components of the scheme will differ in emphasis placed on various objectives .

The short-answer questions fulfil a particularly important function in ensuring Paper 1 coverage and allowing the testing of knowledge, understanding and manipulative skills, while greater emphasis is placed on applications to the processes of problem solving in the structured/longer answer questions.

The purpose of assessment in Mathematics is two-fold:

- (i) it is to provide feedback to both the teacher and the learner as part of the teaching/learning process
- (ii) it is to evaluate the effectiveness of the mathematics programme at the secondary school level.

6. SCHEME OF ASSESSMENT

All candidates must enter for two papers and are eligible for the award of Grades A to F. These will be Paper 1 and Paper 2. These Papers combined will contribute 80% and the CA 20% towards the final mark.

Paper 1 (1 hours and 30 minutes)

Compulsory short-answer paper consisting of 100 marks. The paper is divided into multiple choice and short answer questions.

This paper will be weighted at 40% of the total external assessment marks.

Paper 2 (2 hours)

Compulsory structured/longer answer paper consisting of 100 marks.

This paper will be weighted at 60% of the total external assessment marks.

Weighting of papers

Paper	Weighting Papers 1 and 2 only
1	40%
2	60%

7. CURRICULUM CONTENT

Learners will follow the Eswatini Primary Certificate Mathematics curriculum. The curriculum content is divided into topics covering five areas: Number, Measurement; Shape & Space (Geometry), Data; Handling and Problem Solving. The table shows the approximate weighting of these areas in each of the components of the examination.

Paper	Number	Measurement	Shape & Space (Geometry)	Data Handling	Problem Solving
1	45%	15%	20%	10%	10%
2	35%	10%	35%	10%	10%

As well as demonstrating skill in the following techniques, candidates will be expected to apply them in the solution of problems.

Appropriate teaching time for the Mathematics syllabus should be equivalent to *ten (10)* periods of thirty (30) minutes each over a period of seven years.

CONTENT

STRAND	SUB-STRAND	INDICATOR OF SUCCESS All learners can:
NUMBER	1. COUNTING	1.1 count backwards/ forwards from a given number in steps of powers of 10 up to 1 000 000 1.2 extend the number line to millions and beyond by using the knowledge of place value and multiplication by 10 1.3 define odd, even, prime numbers, squares of numbers, factors and multiples of 1.4 classify or list odd, even, multiples, factors, prime numbers and square numbers up to 100 1.5 find factors of given numbers 1.6 find common factors of given numbers 1.7 find the highest common factor of 2 or 3 given numbers 1.8 find multiples of given numbers 1.9 find the common multiples of given numbers 1.10 find the lowest common multiples of given numbers
	2. PLACE VALUE AND ORDERING	2.1 read and write numbers up to 10 000 000 (Ten million): 2.1.1 in words

STRAND	SUB-STRAND	INDICATOR OF SUCCESS All learners can:
NUMBER		2.1.2 in numerals 2.2 identify and use place value up to millions 2.3 arrange up to 7-digit numbers in order of size 2.4 use symbols $<$, $>$ or $=$ to compare numbers of up to 7-digits 2.5 round off whole numbers less than 10 000 000 to the nearest 10, 100 or 1 000 2.6 partition up to 7- digit numbers into Millions, Hundred- thousands, ... and Ones 2.7 write numbers up to 7 digits in expanded form 2.8 multiply and divide any number up to 10 000 by 10, 100 and 1 000 to demonstrate understanding of the effect of these operations on the place value of each digit 2.9 identify the place value of each digit in a decimal number with up to 3 decimal places 2.10 locate decimals on a number line 2.11 count backwards/ forwards from a given decimal number in steps of 0.1, 0.2, 0.25 and 0.5 2.12 round off decimal numbers 2.12.1 from 1 decimal place to the nearest whole number 2.12.2 from 2 decimal places to 1 decimal place (tenths) 2.12.3 from 3 decimal places to 2 decimal places (hundredths)
	3.OPERATIONS	3.1 add up to 6 - digit numbers with a sum up to 1 000 000 with and without regrouping 3.2 subtract any 2 numbers involving up to 7-digits numbers; 3.2.1 without regrouping 3.2.2 with regrouping 3.3 multiply any number up to 100 000 by up to a 3-digit number

STRAND	SUB-STRAND	INDICATOR OF SUCCESS All learners can:
NUMBER		3.4 divide any number up to 100 000 by up to a 2-digit number; 3.4.1 without a remainder 3.4.2 with a remainder 3.5 use the commutative property of operations 3.6 use inverse operations to check answers to a calculation
	4. PATTERNS AND ALGEBRA	4.1 identify and continue number patterns involving whole numbers, fractions and decimals 4.2 describe the rule used to create number patterns for: 4.2.1 one -step patterns such as 2, 7, 12, ... 4.2.2 two – step patterns such as 6 → 12 → 15 4.3 create a number pattern given the rule and the first number 4.4 continue number patterns involving two steps and describe the rule
	5. FRACTIONS AND DECIMALS	5.1 demonstrate equivalence between fractions using 5.1.1 diagrams or models 5.1.2 the lowest common denominator 5.2 order fractions 5.2.1. unit fractions 5.2.2 other common fractions 5.3 compare fractions using >, < or = signs 5.4 add common fractions with 5.4.1 same denominators 5.4.2 different denominators 5.5 subtract common fractions with 5.5.1 same denominators 5.5.2 different denominators 5.6 convert common fractions to decimal fractions and vice versa 5.7 convert an improper fraction to a mixed number and vice versa 5.8 multiply a proper fraction by a 5.8.1 whole number 5.8.2 proper fraction

STRAND	SUB-STRAND	INDICATOR OF SUCCESS All learners can:
		5.9 find a simple fraction of a quantity 5.10 divide a proper fraction by a whole number 5.11 add decimal fractions up to 2 decimal places 5.12 subtract decimal fractions up to 2 decimal places 5.13 multiply decimal fractions, up to 2 decimal places, by a whole number 5.14 divide decimal fractions, up to 2 decimal places, by 10 and 100 and understand the effect on place value 5.15 demonstrate understanding of a percentage 5.16 calculate simple percentages of whole number quantities 5.17 compare percentages of quantities 5.18 express common fractions with denominators that are factors of 100 as percentages 5.19 express percentages as common fractions 5.20 convert decimal fractions to percentages and vice versa 5.21 show the equivalence between the fraction, decimal and percentage forms of the same number
	6.MONEY	6.1 apply the four basic operations in solving problems involving money 6.2 convert cents to Emalangenis and cents using a decimal point 6.3 represent Emalangenis and cents as a decimal fraction 6.4 solve problems involving addition and subtraction of money 6.5 make/explain a simple budget 6.6 solve problems involving Post Office transactions such as buying postal orders, renting post boxes, paying phone bills, paying cell phone charges including data, sending of parcels

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STRAND	SUB-STRAND	INDICATOR OF SUCCESS All learners can:
		6.7 calculate percentage discounts of 10%, 25% and 50% on sale items 6.8 calculate simple interest 6.9 calculate profit and loss using percentages
	7. PROBLEM SOLVING	7.1 solve problems deciding which of the four basic operations to use 7.2 solve problems involving addition and subtraction of fractions with the same or related denominators 7.3 solve problems involving decimals up to two decimal places 7.4 solve problems involving percentages 7.5 explain how a problem was solved
MEASUREMENT	8. TIME	8.1 read and write time on an analogue clock to the nearest minute 8.2 use a.m. and p.m. notation 8.3 read the time on a 12 - hour digital clock to the minute 8.4 read the time on a 24 - hour digital clock 8.5 use the 12 - hour and 24 –hour notation 8.6 convert 12 - hour time to 24 –hour time and vice versa 8.7 calculate time intervals in 12 - hour and 24 - hour times 8.8 interpret a variety of timetables/schedules involving 12 and 24 –hour times 8.9 convert from one unit of time to another, from seconds up to a century 8.10 solve simple time problems

STRAND	SUB-STRAND	INDICATOR OF SUCCESS All learners can:
	9. LENGTH	9.1 measure a variety of objects and distances using millimetres, centimetres and metres 9.2 write the standard metric units of measurement of length, including their abbreviations (i.e. mm, cm, m, km) 9.3 choose the best units of measurement for tasks 9.4 convert from one unit of length to another, from mm up to km and vice versa 9.5 explain the meaning of the prefixes in units of measurement 9.6 solve length problems which involve conversion of units 9.7 express the units of length as decimals and vice versa 9.8 explain how a problem involving length was solved
	10. MASS	10.1 state the mass of a variety of objects using grams and kilograms 10.2 write the standard metric units of mass (i.e. g, kg, tonne) 10.3 choose the best units of measurement of mass for tasks 10.4 convert from one unit of mass to another from grams(g) to tonnes(t) and vice versa 10.5 solve mass problems which involve conversion 10.6 express the units of mass as decimals and vice versa 10.7 explain how a problem involving mass was solved

STRAND	SUB-STRAND	INDICATOR OF SUCCESS All learners can:
	11. CAPACITY/ VOLUME	11.1 find the capacity of a variety of objects using millilitres and litres 11.2 find the volume of cubes and cuboids using cm^3 and m^3 11.3 compare the volume of cubes and cuboids using cm^3 and m^3 11.4 write the standard units of capacity including their abbreviations (i.e. ml, l) 11.5 choose the best units of measurement of capacity for tasks 11.6 convert millilitres to litres and vice versa 11.7 solve capacity problems which involve conversion from one unit of capacity to another 11.8 express the units of capacity in decimal notation and vice versa
	12. AREA	12.1 measure and calculate the area of rectangles and squares 12.2 use the standard units of area (mm^2 , cm^2 , m^2) 12.3 use the formula length by breadth to calculate the area of a rectangle 12.4 recognise that shapes with the same area can have the different perimeter and vice versa 12.5 calculate the area of compound shapes which can be divided into rectangles
	13. PERIMETER	13.1 measure and calculate the perimeter of rectangles and other 4 sided shapes 13.2 find the perimeter of rectangles using the formula 2 times length and 2 times breadth ($2l + 2b$) 13.3 calculate the perimeter of compound shapes which can be divided into rectangles

STRAND	SUB-STRAND	INDICATOR OF SUCCESS All learners can:
SHAPE & SPACE	14. 2-D SHAPES	14.1 identify and name quadrilaterals as shapes with 4 sides 14.2 identify and name regular polygons as shapes with sides with equal length and equal angles 14.3 compare and classify quadrilaterals and regular polygons according to their properties (number of corners, number of sides, number of equal sides, number of angles equal to, greater than or lesser than a right angle, number of perpendicular lines, number of parallel lines) 14.4 identify and name the types of triangles 14.5 compare and classify triangles according to their properties (number of equal sides, number of angles equal to, greater than or lesser than a right angle, number of perpendicular lines) 14.6 draw 2-D shapes using a ruler and a protractor given dimensions and angles 14.7 use conventional markings for parallel lines and right angles 14.8 find missing lengths and angles in any triangle, quadrilateral and regular polygon
	15. 3-D SHAPES	15.1 identify the net of a cubes and cuboids 15.2 draw the nets of cubes and cuboids 15.3 identify nets of cylinders and pyramids 15.4 draw the nets of cylinders and pyramids
	16 LINES	16.1 identify pairs of parallel and perpendicular lines 16.2 define parallel and perpendicular lines 16.3 use a compass to draw a circle to specific measurements 16.4 identify, describe and label the parts of a circle (circumference, radius, diameter) 16.5 use the relationship that the diameter is twice the radius in calculations 16.6 construct triangles to specific measurements
	17. ANGLES	

STRAND	SUB-STRAND	INDICATOR OF SUCCESS All learners can:
SHAPE & SPACE (GEOMETRY)		17.1 identify and name types of angles as right-angle, acute angle, obtuse and reflex 17.2 define the different types of angles 17.3 measure angles using a protractor 17.4 construct angles using a protractor to specific measurements 17.5 construct simple pie charts using a protractor 17.6 construct a triangle given <ul style="list-style-type: none"> 17.6.1 any two sides and an angle between them 17.6.2 any side and two angles 17.7 identify the sum of a right angle as 90° 17.8 identify angles at a point and one whole turn (total 360°) 17.9 identify angles in a straight line and half turn (total 180°)
	18. LOCATION AND TRANSFORMATION	18.1 perform and describe reflections (flips) of 2-D shapes on a grid along: <ul style="list-style-type: none"> 18.1.1 a vertical mirror- line 18.1.2 a horizontal mirror- line 18.1.3 a diagonal mirror-line 18.2 perform and describe translations(slide) of 2-D shapes on a grid from one place to another through <ul style="list-style-type: none"> 18.2.1 horizontal movement 18.2.2 vertical movement 18.2.3 horizontal and vertical movement 18.3 perform and describe rotations of 2-D shapes by rotating them on a grid about a point through: <ul style="list-style-type: none"> 18.3.1 90° clockwise 18.3.2. 180° 18.3.3 90° anticlockwise 18.4 perform combinations of rotations(turns), reflections(flips) and translations(flips) of 2 –D shapes and describe the resultant single transformation 18.5 describe the properties of reflections, translations and rotations in terms of position, orientation, shape and size

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STRAND	SUB-STRAND	INDICATOR OF SUCCESS All learners can:
		18.6 describe positions on a grid as coordinates 18.7 write and use pairs of coordinates 18.8 plot specified points and join them together to complete a given shape
	19. SYMMETRY	19.1 identify lines of symmetry in 2-D shapes including quadrilaterals, regular polygons and triangles 19.2 complete a symmetrical 2-D shape along its line of symmetry 19.3 create symmetrical shapes and patterns
DATA HANDLING	20. STATISTICS	20.1 collect data, organise into categories and display using lists, tables, and graphs 20.2 use picture graphs where one picture represents many data values 20.3 interpret and construct bar graphs and use them to solve problems 20.4 choose the most effective way to collect data for a given investigation 20.5 refine questions to ensure that the correct data is collected 20.6 make use of a scale to construct and interpret graphs 20.7 interpret and construct pie charts and use them to solve problems 20.8 interpret and construct line graphs and use them to solve problems 20.9 calculate and interpret the mean as average 20.10 identify the best method of presenting data and justify their choice 20.11 calculate the range and mode from given or collected data 20.12 use the data to answer questions 20.13 identify potentially misleading data

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STRAND	SUB-STRAND	INDICATOR OF SUCCESS All learners can:
PROBLEM SOLVING	21. PROBLEM SOLVING STRATEGIES AND MODELS	21.1 identify given facts and prioritise them 21.2 look for relationships and patterns in given information 21.3 use a systematic approach to solve a problem 21.4 use drawings to help visualize a problem 21.5 read given information to identify the question 21.6 decide on where to start solving a problem 21.7 show a systematic approach in recording given data 21.8 check that the answer works

8. GRADE DESCRIPTIONS

The scheme of assessment is intended to encourage positive achievement by all candidates. Grade descriptions are provided to give a general indication of the standards of achievement likely to have been shown by candidates awarded particular grades. The grade awarded will depend on the extent to which the candidate has met the assessment objectives overall.

Criteria for the standard of achievement likely to have been shown by candidates awarded Grades A, C and E is shown below.

Grade A

- 1 Count backwards/forwards from a given decimal number in steps of 0.1, 0.2, 0.25 and 0.5
- 2 Multiply any number up to 100 000 by a 3-digit number
- 3 Divide any number up to 100 000 by a 2-digit number with or without a remainder
- 4 Use the commutative property of operations
- 5 Use the inverse operations to check answers to a calculation
- 6 Identify and continue number patterns involving whole numbers, fractions and decimals
- 7 Describe the rule used to create number patterns for two-step patterns
- 8 Continue number patterns involving two steps and describe the rule
- 9 Order and compare ($>$, $<$, $=$) common fractions according to size
- 10 Add and subtract common fractions with different denominators
- 11 Convert common fractions to decimal fractions and vice versa
- 12 Divide a proper fraction by a whole number
- 13 Compare percentages of quantities
- 14 Make/explain a simple budget
- 15 Solve problems involving Post Office transactions such as buying postal orders, renting post boxes, paying phone bills, paying cell phone charges including data, sending of parcels
- 16 Calculate percentage discounts of 10%, 25% and 50% on sale items
- 17 Solve problems deciding which of the four basic operations to use
- 18 Solve problems involving addition and subtraction of fractions with the same or related denominators
- 19 Solve problems involving decimals up to 2 decimal places
- 20 Solve problems involving percentages
- 21 Explain how a problem was solved
- 22 Calculate time intervals in 12-hour and 24-hour times
- 23 Interpret a variety of timetables/schedules involving 12-hour and 24-hour times
- 24 Solve length, mass and capacity problems which involve conversion of units
- 25 Explain how problems involving length and mass were solved
- 26 Compare the volume of cubes and cuboids using cubic centimetres and cubic metres
- 27 Recognise that shapes with the same area can have different perimeters and vice versa
- 28 Calculate the perimeter and area of compound shapes which can be divided into rectangles
- 29 Draw 2-D shapes using a ruler and a protractor given dimensions and angles
- 30 Find missing lengths and angles in any triangle, quadrilateral and regular polygon
- 31 Draw the nets of cubes, cuboids, cylinders and pyramids

- 32 Construct triangles to specific measurements
- 33 Construct simple pie charts using a protractor and compass
- 34 Perform and describe reflections, translations and rotations on a grid
- 35 Perform combinations of rotations, reflections and translations of 2-D shapes and describe the resultant single transformation
- 36 Describe the properties of reflections, translations and rotations in terms of position, orientation shape and size
- 37 Create symmetrical shapes
- 38 Collect data, organise into categories and display using lists, tables, and graphs
- 39 Refine questions to ensure that the correct data is collected
- 40 Interpret and construct pie charts and line graphs and use them to solve problems
- 41 Identify the best method of presenting data and justify their choice
- 42 Identify potentially misleading data
- 43 Identify given facts and prioritise them
- 44 Look for relationships and patterns in given information
- 45 Use a systematic approach to solve a problem
- 46 Use drawings to help visualize a problem
- 47 Read given information to identify the question
- 48 Decide on where to start solving a problem
- 49 Show a systematic approach in recording given data
- 50 Check that the answer works

Grade C

- 1 Find common factors of given numbers
- 2 Find common multiples of given numbers
- 3 Find the LCM and HCF of 2 or 3 numbers
- 4 Arrange up to 7-digit in order of size
- 5 Divide any whole number up to 10 000 by 10, 100, and 1 000 to demonstrate understanding of the
- 6 Arrange up to 7 – digit in order of size
- 7 Divide any whole number up to 10 000 by 10, 100, and 1 000 to demonstrate understanding of the effect of these operations on the place value of each digit
- 8 Divide decimals up to 2 decimal places, by 10, and 100 and show understanding of the effect on place value
- 9 Multiply any number up to 100 000 by a 2-digit number
- 10 Divide any number up to 100 000 by a 1-digit number with a remainder
- 11 Identify and continue simple number patterns involving whole numbers
- 12 Describe the rule used to create number patterns for one – step patterns
- 13 Multiply a proper fraction by another proper fraction
- 14 Calculate simple percentages of whole number quantities
- 15 Round off whole numbers less than 10 000 000 to the nearest 10, 100 or 1 000
- 16 Locate decimals on a number line
- 17 Round off decimals to a stated place value
- 18 Add up to 6-digit numbers with a sum up to 1 000 000 with regrouping
- 19 Subtract any 2 numbers involving up-to 7 digits with regrouping
- 20 Demonstrate equivalence between fractions using diagrams or models or lowest common denominator
- 21 Add/subtract common fractions with the same denominator
- 22 Convert improper fraction to a mixed number and vice versa
- 23 Multiply a proper fraction by a whole number
- 24 Find a simple fraction of a quantity
- 25 Multiply decimals up to 2 decimal places by a whole number
- 26 Convert common fractions to percentages and vice versa
- 27 Show the equivalence between fraction, decimal and percentage forms of the same number
- 28 Apply the four basic operations in solving problems involving money
- 29 Express common fractions with denominators that are factors of 100 as percentages
- 30 Express percentages as common fractions
- 31 Interconvert between 12-hour and 24-hour times
- 32 Convert from one unit of time to another, from seconds up to a century
- 33 Solve simple time problems
- 34 Convert from one unit of length, mass and capacity to another
- 35 Express the units of length, mass and capacity as decimals and vice versa
- 36 Find the volume of cubes and cuboids using cubic centimetres and cubic metres

- 37 Choose the best units of measurement of length, mass and capacity for tasks
- 38 Explain the meaning of the prefixes in units of measurement
- 39 State the mass of objects using grams and kilograms
- 40 Find the capacity of objects using millilitres and litres
- 41 Measure and calculate the area of rectangles and squares
- 42 Use the formula length by breadth to calculate the area of a rectangle
- 43 Measure and calculate the perimeter of rectangles and other 4 sided shapes
- 44 Find the perimeter of rectangles using the formula $2l + 2b$
- 45 Compare and classify quadrilaterals, regular polygons and triangles
- 46 Use conventional markings for parallel lines and right angles
- 47 Identify nets of a cubes, cuboids, cylinders and pyramids
- 48 Use the relationship that the diameter is twice the radius
- 49 Construct angles using a protractor to specific measurements
- 50 Identify the sum of a right angle as 90°
- 51 Identify angles at a point and whole turn(360°)
- 52 Identify angles in a straight line and half turn(180°)
- 53 Describe positions on a grid as coordinates
- 54 Plot specified points and join them together to complete a given shape
- 55 Identify lines of symmetry in 2-D shapes
- 56 Complete a symmetrical 2-D shape along its line of symmetry
- 57 Use picture graphs where one picture represents many data values
- 58 Interpret and construct bar graphs and use them to solve problems
- 59 Choose the most effective way to collect data for a given investigation
- 60 Calculate and interpret the mean as average

Grade E

- 1 Count backwards/forwards from a given number in steps of powers of 10 up to 1 000 000
- 2 Multiply any number by a 1-digit number
- 3 Divide any number up to 100 000 by a 1-digit number without a remainder
- 4 Create a one-step number pattern given the rule and the first number
- 5 Extend the number line to millions and beyond by using the knowledge of place value- and multiplication by 10
- 6 Classify or list odd, even, multiples, factors, prime numbers and square numbers up to 100
- 7 define odd, even, prime, square of numbers, factors and multiples of
- 8 Partition up to 7-digit numbers into millions, Hundred thousand... and ones
- 9 Order unit fractions according to size
- 10 Find factors of a given number
- 11 Find multiples of a given number
- 12 Demonstrate understanding of a percentage
- 13 Read and write numbers up to 10 000 000 in words and numerals
- 14 Identify and use place value up to million
- 15 Use $>$, $<$ or $=$ to compare numbers up to 7 - digits
- 16 Write numbers up to 7-digits in expanded form
- 17 Multiply any whole number up to 10 000 by 10, 100, and 1 000 to demonstrate understanding of the effect of these operations on the place value of each digit
- 18 Identify the place value of each digit in a decimal number of up to 3 decimal places
- 19 Add up to 6 -digit numbers with a sum up to 1 000 000 without regrouping
- 20 Subtract any 2 numbers involving up to 7 -digits numbers without regrouping
- 21 Add/subtract decimals up to 2 decimal places
- 22 Convert cents to Emalangenis and cents and using the decimal point
- 23 Represent Emalangenis and cents using a decimal fraction
- 24 Use a.m. and p.m. notation
- 25 Use the 12-hour and 24-hour notation
- 26 Read and write time on an analogue clock to the nearest minute
- 27 Read the time on 12-hour and 24-hour digital clocks to the minute
- 28 Measure objects and distances using millimetres, centimetres and metres
- 29 Write the standard metric units of measurement of length, mass, capacity and area
- 30 Identify and name quadrilaterals, regular polygons and triangles
- 31 Identify solid shapes (cubes, cuboids, cylinders and pyramids)
- 32 Identify and define pairs of parallel and perpendicular lines
- 33 Use a compass to draw a circle to specific measurements
- 34 Identify and label parts of a circle
- 35 Identify and name different types of angles
- 36 Define the different types of angles
- 37 Measure angles using a protractor
- 38 Calculate the range and mode from given or collected data

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