THE UNITED REPUBLIC OF TANZANIA
MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY

MATHEMATICS SYLLABUS
FOR BASIC EDUCATION
STANDARD III-VI

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FOREWORD

The revised 2014 Education and Training Policy has changed the structure of basic education. Some reforms in the curriculum have been introduced to facilitate its implementation. Some subjects have been retained or reorganised with new ones introduced in the Standard III- VI curriculum. The Ministry of Education, Science and Technology has therefore, prepared this syllabus for the Mathematics subject, for all English-medium schools and other educational stakeholders so as to meet the requirements of the revised Education and Training Policy.

Mathematics syllabus has been prepared in line with the curriculum for Basic Education Standard III-VI of 2016 which focuses on developing competences among pupils. The emphasis in teaching Mathematics is on the development of both logical and analytical thinking so as to build confidence among pupils and their ability to communicate using logical arguments.

The expectation is that this syllabus will bring about the desired changes in the way teachers teach Mathematics in the classroom today by focusing more on pupil's tasks or activities than simply on providing information and Mathematical rules to them.

The Ministry of Education, Science and Technology takes this opportunity to thank all organisations, co-ordinators and experts who contributed to the designing and writing of this syllabus. It also expresses its gratitude to the teachers for their inputs and regular feedback which contributed significantly to the enrichment and development of this syllabus.

We will appreciate to receive any relevant feedback from all stakeholders for the continual improvement of this Mathematics syllabus. All recommendations should be sent to the Director General of the Tanzania Institute of Education (TIE).

Prof. Eustella P. Bhalalusesa
Commissioner for Education
Ministry of Education, Science and Technology

1.0 Introduction

The Mathematics syllabus for Standard III-VI has been developed based on the Curriculum for Basic Education of 2016. The syllabus is divided into three main parts: the introduction; the curriculum overview describing the Basic Education objectives for Standard III-VI, general and specific competences as well as subject objectives and finally, description of content for Standard III-VI provided in matrix form.

2.0 General Curriculum Overview

The Curriculum for Basic Education for standard III – VI comprises various aspects which show that the curriculum is holistic as it allows various aspects to be understood in an integrative way. This part presents some of the curriculum aspects which include Basic Education objectives, Competences in Basic Education for standard III– VI, the Importance and Objectives of Mathematics, the Main and Specific Competences, Teaching and Learning Mathematics, and the Assessment of Learning.

2.1 Basic Education Objectives for Standard III - VI

The objectives of Basic Education for Standard III-VI pupils are to:

a) develop their skills in reading, writing, arithmetic and oral communication.

b) know, use and appreciate the Kiswahili and English languages.

c) know the foundation of the rule of law.

d) appreciate the culture of Tanzania and those of other countries.

e) enhance their ability to think, create and solve problems.

f) enable them to recognise the importance of ethics, integrity and accountability as qualities of a good citizen.

g) participate in games and sports and appreciate artistic activities.

h) discover and develop their talents and abilities.

i) appreciate and like work.

j) recognise, appreciate and deploy technical skills.

k) join the next level of education and embrace a spirit of lifelong learning.

2.2 Competence in Basic Education for Standard III – VI

The Competences for Basic Education intend to enable the pupils to demonstrate the ability to:

a) communicate fluently in Kiswahili and English orally and in writing.
b) read confidently and understand specified texts.
c) use theoretical and mathematical principles in daily life situations.
d) apply scientific, technological and vocational skills in real life situations.
e) appreciate their culture and that of other communities.
f) respect diverse beliefs and ideologies of the community in which they live.
g) participate in games and sports and artistic activities.
h) respect oneself and others.
i) perform patriotic duties.
j) participate in different activities appropriate to their age.
k) participate in activities which enhance their logical and analytical thinking.
l) collaborate with other people to perform acceptable activities in the community.

2.3 Importance of Studying Mathematics

Mathematics is essential in the development and strengthening of logical, theoretical and abstract thinking. Children develop basics for counting, thinking and problem-solving skills as they learn and apply Mathematics. After all, Mathematics is applicable throughout our life. The importance of teaching and learning of Mathematics includes:

a) Enabling pupils to use mathematical knowledge and skills in everyday life;
b) Being the backbone of the development of science and technology;
c) Facilitating the understanding of other subjects;
d) Serving as a basis for problem-solving and reasoning, particularly the acquisition of critical, logical and analytical process (skills);
e) Developing Mathematical language to serve as a tool in approaching disciplines that require Mathematical skills;
f) Developing good attitudes for lifelong learning.

2.4 Objectives of Learning Mathematics

The objectives of learning Mathematics in Primary Schools include to:

a) develop logical thinking;

b) create curiosity and develop problem-solving skills,

c) develop the basics for the use of technology, communication, reasoning and reflections;

d) develop ability to analyse and present information;

e) strengthen the learner's understanding of the shapes, measurements and their respective applications in life; and

f) build confidence to apply mathematical competences in everyday life.

2.5 Main and Specific Competences

Table 1: Main and Specific Competences for Standard III-VI

Main Competences	Specific Competences
1.0 Use Mathematical language in presenting ideas or arguments.	1.1 Apply numbers to communicate in different contexts. 1.2 Apply statistics to present different information. 1.3 Apply algebra to solve problems in everyday life.
2.0 Apply skills of reasoning and proof in real life contexts.	2.1 Apply measurements in different life contexts. 2.2 Apply shapes and figures to solve different problems. 2.3 Apply patterns to solve word problems in everyday life.
3.0 Apply Mathematics to solving problems in different contexts.	3.1 Apply mathematical operations to solve problems. 3.2 Apply number relations to solve problems in different contexts.

2.6 Teaching and Learning of Mathematics

The teaching and learning of Mathematics has to focus on the conceptual understanding and moving from concrete to abstract learning. The link between theory and practice while teaching Mathematics is crucial for the pupils to be able to apply the mathematical knowledge and skills they acquire in their daily lives.

Mathematics is better understood when one associates teaching and learning of the concept with objects, charts and models. Indeed, it is important to consider the best use of appropriate tools in the teaching and learning of the subject. After all, Mathematics is more of the subject of actions than explanations. As such, the teacher and pupils all together are supposed to focus on doing. However, it is better for pupils to be given more opportunities to do with the teacher acting as a facilitator.

On the whole, the teaching of Mathematics should focus on concrete objects and models as teaching and learning materials for the learners to comprehend mathematical concepts and relate them to their real life contexts. In short, the teaching and learning has to be learner-centred and activity-based.

2.7   Assessment of Learning

Mathematical competences constitute rules and principles that pupils are expected to develop alongside concepts in a process of learning. Mathematical competences are reflected in computations, manipulations, reasoning and arguments as well as problem-solving processes. Therefore, this curriculum requires an assessment procedure that takes into account knowledge, skills and attitudes. Given the nature of the learning process described, the assessment must focus more on working processes rather than on the end results. Pupils' performance in given learning tasks have to be assessed based on the Assessment Criteria and tools developed by the teacher.

3.0   Content of the Syllabus

The content of the syllabus has been presented using a matrix with six columns: (a) Main Competence; (b) Specific Competence; (c) Students activities; (d) Assessment Criteria; (e) Performance indicators; and (f) Number of periods.

Description of column items are presented in the Syllabus Matrix.

3.1 Competence

This refers to the ability one demonstrates in a course of doing something. This competence is described in terms of knowledge, skills and attitudes.

3.2 Main Competence

The general competence is the ability one demonstrates after learning a set of specific competence. The general competence is developed step-by-step over a long period of instruction.

3.3 Specific Competence

This refers to the ability one demonstrates after performing a number of learning tasks for a specified instructional time.

3.4 Activities to be Performed by a Pupil

These are activities a pupil ought to do to acquire an intended specific competence based on the learner's physical and mental readiness.

3.5 Assessment Criteria

These are a set of performance conditions for a pupil to acquire a specific competence.

3.6 Benchmarking

This refers to performance indicators set to differentiate performance levels for each pupil in performing different learning tasks.

3.7 Number of Periods

A period is an estimated time of instruction for each specific competence. The cumulative number of periods is estimated based on the length and nature of the learning tasks for each specific competence. Total instructional time for Mathematics is six periods per week for Standard III and IV whereas for Standard V and VI it is five periods per week. Each period is estimated to last for 40 minutes. However, the proposed periods for each specific competence may be adjusted depending on the teaching and learning context.

3.8   STANDARD III CONTENTS

Table 2: Main and Specific Competences for Standard III

Main Competences	Specific Competences
1.0 Use Mathematical language in presenting ideas or arguments (Part One).	1. Apply the concepts of numbers to communicate ideas and concepts in different contexts.
2.0 Apply skills of reasoning and proof in real life contexts (Part One).	2. Apply the concepts of patterns to solve real life problems.
3.0 Apply Mathematics to solve problems in different contexts.	3.1 Apply mathematical operations to solve problems. 3.2 Apply number relations to solve problems in different contexts.
4.0 Apply skills of reasoning and proof in real life contexts (Part Two).	4.1 Apply measurements in different life contexts 4.2 Apply the concepts of shapes and figures to solve different problems.
5.0 Use Mathematical language to present ideas or arguments (Part Two).	5. Apply statistical skills to present different information.

Syllabus Contents

Main Competence	Specific Competence	Activities to be Performed by the Pupil	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
1.0 Use Mathematical language in presenting ideas or arguments (Part One).	1. Apply the concepts of numbers to communicate ideas and concepts in different contexts.	i) Counting from 1000 to 9999.	Counting from 1000 to 9999 is performed correctly.	Struggle to count from 1000 to 9999.	Count from 1000 to 9999 by skipping some numbers or making errors in pronunciations.	Count from 1000 to 9999 with minor errors.	Count from 1000 to 9999 fluently and with confidence.	46
		ii) Reading numbers from 1000 to 9999.	Reading numbers from 1000 to 9999 is performed correctly.	Sometimes read numbers with mistakes and errors in pronunciation.	Read numbers from 1000 to 9999 with some mistakes and errors in pronunciation.	Read numbers from 1000 to 9999 with minor errors in pronunciation.	Read numbers from 1000 to 9999 fluently and with confidence.	
		iii) Writing numbers in numerals from 1000 to 9999.	Numbers from 1000 to 9999 are written in numerals correctly.	Write only some numbers from 1000 to 9999 in numerals with mistakes.	Write numbers from 1000 to 9999 in numerals with errors.	Write numbers from 1000 to 9999 in numerals with minor errors.	Write numbers from 1000 to 9999 in numerals without errors.	
		iv) Writing numbers in words from 1000 to 9999.	Numbers from 1000 to 9999 are written in words correctly.	Write numbers in words from 1000 to 9999 with errors in spelling.	Write numbers in words from 1000 to 9999 with spelling errors for some words.	Write numbers in words from 1000 to 9999 with minor errors.	Write numbers in words from 1000 to 9999 without errors at a reasonable speed.	

Main Competence	Specific Competence	Activities to be Performed by the Pupil	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
		v) Identifying place values of numbers.	Place values of numbers are identified correctly.	Struggle to identify place values.	Identify place values for ones tens and hundreds with mistakes.	Identify place values of numbers up to thousands with minor errors.	Identifiy place values up to thousands without errors.	
		vi) Dividing real objects in pieces or equal groups.	Various real objects are divided into pieces or equal groups correctly.	Divide real objects but into unequal pieces or groups.	Divide real objects into equal groups but fail to divide a whole into equal pieces.	Divide real objects into equal pieces or equal groups with minor errors.	Divide real objects into equal pieces or equal groups with a clear concept.	
		vii) Reading fractions.	Fraction is read correctly.	Struggles to read fractions.	Read fractions with mistakes for some fractions.	Read fractions with minor errors.	Read fractions without errors.	
		viii) Writing fractions.	Fractions in numerals are written correctly.	Struggle to write fractions in numerals.	Write fractions in numerals with errors.	Write fractions in numerals with minor errors.	Write fractions in numerals without errors.	
2.0 Apply reasoning and proof in real life contexts.	2. Apply the concepts of patterns to solve real life problems.	i) Identifying things which show patterns.	Things that show patterns are identified correctly.	Hardly identify things that show patterns.	Identify a few things that show patterns with guidance from the teacher.	Identify things that show patterns without the guidance of the teacher.	Identify many things that show patterns with differentiation.	20
		ii) Identifying missing numbers in a sequence.	Missing numbers in a sequence are identified correctly.	Struggle to identify missing numbers in a sequence.	Identify missing numbers only in an increasing sequence with errors.	Identify missing numbers in both increasing and decreasing sequence with minor errors.	Identify missing numbers in both increasing and decreasing sequence without errors.	

Main Competence	Specific Competence	Activities to be Performed by the Pupil	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
		iii) Arranging numbers in ascending order.	Numbers are arranged in ascending order correctly.	Arrange numbers in ascending order with mistakes.	Arrange numbers in ascending order but skip some numbers.	Arrange numbers in ascending order with minor errors.	Arrange numbers in ascending order without errors.	
		iv) Arranging numbers in descending order.	Numbers are arranged in descending order correctly.	Arrange numbers in descending order with mistakes.	Arrange numbers in descending order but skip some numbers.	Arrange numbers in descending order with minor errors.	Arrange numbers in descending order without errors.	
3.0 Apply Mathematics to solve problems in different contexts.	3.1 Apply mathematical operations to solve problems.	i) Adding numbers to get a sum not exceeding 9999 without carrying forward.	Addition of numbers to get sum not exceeding 999 without carrying forward is performed correctly.	Struggle to add numbers to get a sum not exceeding 9999 without carrying forward.	Add numbers to get a sum not exceeding 9999 without carrying forward with errors in summing the numbers up.	Add numbers to get a sum not exceeding 9999 without carrying forward with minor errors in summing the numbers up.	Add numbers to get a sum not exceeding 9999 without carrying forward without errors.	46
		ii) Adding numbers to get a sum not exceeding 9999 with carrying forward.	Addition of numbers with carrying forward is performed correctly.	Struggle to add numbers with carrying forward to get a sum not exceeding 9999.	Add numbers with carrying forward to get a sum not exceeding 9999 with some errors in adding and carrying.	Add numbers with carrying forward to get a sum not exceeding 9999 with minor errors in adding and carrying.	Add numbers with carrying forward to get a sum not exceeding 9999 without errors.	

Main Competence	Specific Competence	Activities to be Performed by the Pupil	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
		iii) Solving word problems involving addition.	Solving word problems involving addition is performed correctly.	Solve word problems involving addition with mistakes in interpretation and computation.	Solve word problems involving addition with errors in interpretations.	Solve word problems involving addition with minor errors.	Solve word problems involving addition without errors.	
		iv) Subtracting without regrouping four digit numbers.	Subtraction without regrouping four digit numbers is performed correctly.	Struggle to subtract without regrouping four digit numbers.	Subtract without regrouping four digit numbers with errors in taking away.	Subtract without regrouping four digit numbers with minor errors.	Subtract without regrouping four digit numbers without errors.	
		v) Subtracting with regrouping of four digit numbers.	Subtraction with regrouping four digit numbers is performed correctly.	Struggle to subtract with regrouping four digit numbers.	Subtract with regrouping four digit numbers with errors in taking away and regrouping.	Subtract with regrouping four digit numbers with minor errors.	Subtract with regrouping four digit numbers without errors.	
		vi) Solving word problems involving subtraction.	Solving word problems involving subtraction is performed correctly.	Solve word problems involving subtraction with mistakes in interpretation and computation.	Solve word problems involving subtraction with errors in interpretations.	Solve word problems involving subtraction with minor errors.	Solve word problems involving subtraction without errors.	
		vii) Multiplying two digit numbers by one digit numbers.	Multiplication of two digit numbers by one digit numbers is performed correctly.	Multiply two digit numbers by one digit numbers with mistakes in calculation and answers.	Multiply two digit numbers by one digit numbers with some errors.	Multiply two digit numbers by one digit numbers with minor errors.	Multiply two digit numbers by one digit numbers without errors.	

Main Competence	Specific Competence	Activities to be Performed by the Pupil	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
		viii) Solving word problems involving multiplication.	Solving word problems involving multiplication is performed correctly.	Solve word problems involving multiplication with mistakes in interpretation and computation.	Solve word problems involving multiplication with errors in interpretation.	Solve word problems involving multiplication with minor errors.	Solve word problems involving multiplication without errors.	
	3.2 Apply number relations to solve problems in different contexts.	i) Identifying various units of measuring time.	Various units of measuring time are identified correctly.	Fail to identify commonly used units of measuring time such as year, day, week and hour without support from the teacher.	Identify commonly used units of measuring time such as year, day, week and hour and with support from the teacher.	Identify some of the commonly used units of measuring time such as year, day, week, and hour with little support from the teacher.	Identify most of the commonly used units of measuring time such as year, day, week, and hour without support from the teacher.	53
		ii) Identifying number of hours in a day using the 12-hours approach.	Identifying number of hours in a day using the 12-hours approach is identified correctly.	Struggle to identify the number of hours in a day.	Identify the number of hours in a day with errors.	Identify the number of hours in a day with minor errors.	Identify the number of hours in a day without errors.	
		iii) Mentioning the number of days in a week and their names.	Number of days in a week and their names are mentioned correctly.	Struggle to mention the number of days in a week and their names.	Mention the number of days in a week and their names with some mistakes.	Mention the number of days in a week and their names some with incorrect order.	Mention the number of days in a week and names of the days in order.	

Main Competence	Specific Competence	Activities to be Performed by the Pupil	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
		iv) Mentioning month names and their respective number of days.	Month names and respective number of days are mentioned correctly.	Mention names of months and their respective number of days with inaccuracy.	Mention some names of months not necessarily in order and correct number of days.	Mention names of months and their respective number of days with minor errors.	Mention names of months and their respective number of days without errors.	
		v) Identifying values of different Tanzanian bank- notes.	Values of different Tanzanian bank-notes are identified correctly.	Struggle to identify values of different Tanzanian bank- notes.	Identify values of different Tanzanian bank- notes with some errors.	Identify values of different Tanzanian bank- notes with minor errors.	Identify values of different Tanzanian bank- notes without errors.	
		vi) Mentioning the uses of currency and importance of bank notes.	Uses of currency and importance of bank-notes are mentioned correctly.	Struggle to mention the uses of currency and importance of bank-notes.	Mention some of the uses of currency but struggle to mention the importance of bank-notes.	Mention a considerable number of the uses of currency and importance of bank-notes.	Mention most of the uses of currency and importance of bank-notes.	
		vii) Adding Tanzanian currency in shillings to get a sum not exceeding 9999.	Addition involving Tanzanian currency in shillings to get a sum not exceeding 9999 is performed correctly.	Struggle to perform additions involving Tanzanian currency in shillings to get a sum not exceeding 9999 shillings.	Perform additions involving Tanzanian currency in shillings to get a sum not exceeding 9999 shillings with errors.	Perform additions involving Tanzanian currency in shillings to get a sum not exceeding 9999 shillings with minor errors.	Perform additions involving Tanzanian currency in shillings to get a sum not exceeding 9999 shillings without errors.	

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Main Competence	Specific Competence	Activities to be Performed by the Pupil	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
		viii) Subtracting Tanzanian shillings not exceeding 9999.	Subtraction involving Tanzanian shillings is performed correctly.	Struggle to perform subtractions involving Tanzanian shillings not exceeding 9999 shillings.	Perform subtractions involving Tanzanian shillings not exceeding 9999 shillings with errors.	Perform subtractions involving Tanzanian shillings not exceeding 9999 shillings with minor errors.	Perform subtractions involving Tanzanian shillings not exceeding 9999 shillings without errors.	
		ix) Solving word problems involving Tanzanian shillings.	Word problems involving Tanzanian shillings are solved correctly.	Struggle to interpret word problems involving Tanzanian shillings.	Interpret some problems and solve them with computational errors.	Interpret word problems and solve them with minor errors.	Interpret word problems and solve them without errors.	
4.0 Apply reasoning and proof in real life contexts.	4.1 Apply measurements in different contexts.	i) Identifying measurements of length.	Measurements of length are identified correctly.	Struggle to identify common measurements of length.	Identify some common measurements of length while mixing them with other units.	Identify most of the common measurements of length.	Identify with differentiation both standard and non-standard measurements of length.	23
		ii) Measuring, reading and recording the lengths of objects using non-standard and standard units of length (centimetre and metres).	Measuring length of objects, reading and recording are performed correctly.	Struggle to measure lengths of objects, read and record.	Measure, read and record the length of objects with a few mistakes in measuring, reading and recording.	Measure, read and record lengths of objects with minor errors.	Measure, read and record lengths of objects without errors.	

Main Competence	Specific Competence	Activities to be Performed by the Pupil	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
		iii) Identifying non-standard and standard units of weight (kilogram and gram).	Standard and non-standard units of weight are identified correctly.	Struggle to identify non- standard and standard units of weight with a mix-up of the units.	Identify one or two non-standard and one standard units of weight.	Identify most of the non-standard and standard units of weight.	Identify most of the non-standard and standard units of weight with clear differentiation.	
		iv) Measuring weights of objects by comparing quantities, reading and recording.	Measurement of weight of objects by comparing quantities, reading and recording is performed correctly.	Struggle to measure weights of objects, read and record.	Measure weight of objects by comparing, reading and recording with errors.	Measure weight of objects by comparing, reading and recording with minor errors.	Measure weight of objects by comparing, reading and recording without errors.	
	4.2 Apply the concepts of shapes and figures to solve different problems.	i) Identifying two-dimensional and three-dimensional figures.	Two-dimensional and three-dimensional figures are identified correctly.	Identify two-dimensional and non-two dimensional figures by mistaking other figures.	Identify some of the two-dimensional or non-two dimensional figures.	Identify two-dimensional and non-two dimensional figures.	Identify characteristics of two-dimensional and non-two dimensional figures correctly.	37
		ii) Mentioning names of some two dimensional figures.	The names of two-dimensional figures are mentioned correctly.	Struggle to mention some names of two-dimensional figures.	Mention some names of two-dimensional figures with a mixture of two and three dimensional figures.	Mention some names of two-dimensional figures with minor errors.	Mention some names of two-dimensional figures without errors.	

Main Competence	Specific Competence	Activities to be Performed by the Pupil	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
		iii) Creating shapes for two dimensional figures.	Shapes of two dimensional figures are created correctly.	Struggle to make two-dimensional figures.	Make some of two-dimensional figures using paper cuttings with errors.	Make some of two-dimensional figures using paper cuttings and constructions with minor errors.	Make two dimensional figures using paper cuttings and constructions.	
		iv) Drawing two-dimensional figures.	Two dimensional figures are drawn correctly.	Struggle to draw two-dimensional figures.	Draw some of the two dimensional figures with errors.	Draw some of the two dimensional figures with minor errors.	Draw some of the two dimensional figures without errors.	
		v) Making ornaments using two-dimensional figures.	Ornaments are made using two-dimensional figures correctly.	Struggle to make ornaments using two-dimensional shapes.	Make some ornaments using two-dimensional figures without clear pattern.	Make ornaments using two-dimensional figures with some definite patterns.	Make ornaments using two-dimensional figures with some creative patterns.	
		vi) Mentioning various objects with two-dimensional figures in our environment.	Various objects with two-dimensional figures are mentioned correctly.	Struggle to mention objects with two-dimensional figures.	Mention some objects with two-dimensional figures with errors.	Mention various objects with two dimensional figures with minor errors.	Mention many objects with two-dimensional figures with clear understanding.	

Main Competence	Specific Competence	Activities to be Performed by the Pupil	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
		vii) Mentioning various objects with three-dimensional figures in our environment.	Various objects with three-dimensional figures in our environment are mentioned correctly.	Struggle to mention objects with three-dimensional figures.	Mention objects with three-dimensional figures sometimes by mixing them with two- dimensional ones.	Mention various objects with three-dimensional figures in our environment.	Mention many objects with three-dimensional figures with a clear differentiation from two-dimensional ones.	
5.0 Use mathematical language to present ideas or arguments (Part Two).	5. Apply statistical skills to present different information.	i) Reading and interpreting pictorial statistics.	Pictorial statistics are read and interpreted correctly.	Struggle to read and interpret data using pictorial statistics by mistaking the data.	Read and interpret some data using pictorial statistics with errors.	Read and interpret data using pictorial statistics with minor errors.	Read and interpret pictorial statistics without errors.	9
		ii) Writing the number of objects from pictorial statistics.	Numbers of objects from pictorial statistics are written correctly.	Struggle to write numbers of objects from pictorial statistics.	Write some numbers of objects from pictorial statistics with errors.	Write numbers of objects from pictorial statistics with minor errors.	Write numbers of objects from pictorial statistics without errors.	

3.9   STANDARD IV CONTENTS

Table 3: Main and Specific Competences for Standard IV

Main Competences	Specific Competences
1.0 Use mathematical language to present ideas or arguments (Part One).	1. Apply the concepts of numbers to communicate ideas and concepts in different context.
2.0 Apply reasoning and proof in real life contexts (Part One).	2. Apply the concepts of patterns to solve real life problems.
3.0 Apply mathematics to solve problems in different contexts.	3.1 Apply mathematical operations to solve problems. 3.2 Apply number relations to solve problems in different contexts.
4.0 Apply reasoning and proofs in real life contexts (Part Two).	4.1 Apply measurements in different life contexts. 4.2 Apply the concepts of shapes and figures to solve different problems.
5.0 Use mathematical language to present ideas or arguments (Part Two).	5. Apply statistical skills to present different information.

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Main Competence	Specific Competence	Activities to be performed by the pupils	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
1.0 Use mathematical language to present ideas or arguments (Part One).	1. Apply the concepts of numbers to communicate ideas and concepts in different contexts.	i) Counting from 9999 to 99999.	Counting from 9999 to 99999 is performed correctly.	Struggle to count from 9999 to 99999 with errors.	Count from 9999 to 99999 with minor errors.	Count from 9999 to 999999 correctly.	Count from 9999 to 99999 fluently without errors.	42
		ii) Reading numbers from 9999 to 99999.	Reading numbers from 9999 to 99999 is performed correctly.	Struggle to read numbers from 9999 to 99999.	Read numbers to 99999 with errors in pronunciation.	Read numbers from 9999 to 99999 with minor errors in pronunciation.	Read numbers from 9999 to 99999 fluently without errors.	
		iii) Writing numbers in numerals from 9999 to 99999.	Numbers from 9999 to 99999 are written in numerals correctly.	Struggle to write numbers from 9999 to 99999 in numerals.	Write numbers from 9999 to 99999 in numerals with errors.	Write numbers in numerals to 99999 with minor errors.	Write numbers in numerals from 9999 to 99999 without errors.	
		iv) Writing numbers by words from 9999 to 99999.	Numbers from 9999 to 99999 are written in words correctly.	Struggles to write numbers in words from 9999 to 99999.	Write numbers in words from 9999 to 99999 with errors.	Write numbers in words from 9999 to 99999 with minor errors.	Write numbers in words from 9999 to 99999 without errors.	
		v) Identifying place values of numerical digits.	Place values of numerical digits are identified correctly for numbers from 9999 to 99999.	Identify place values of numerical digits with errors.	Identify place values of numerical digits with minor errors.	Identify place values of numerical digits.	Identify place values of numerical digits greater than 99999.	

Main Competence	Specific Competence	Activities to be performed by the pupils	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
		vi) Reading Roman numbers from I to L.	Roman numbers from I to L is read correctly.	Struggle to read Roman numbers I-L.	Read Roman numbers I-L with errors for some numbers.	Read Roman numbers I-L with minor errors.	Read Roman numbers I-L and greater than L without errors.	
		vii) Writing Roman numbers I-L.	Roman numbers I-L is written correctly.	Write Roman numbers I-L with errors.	Write Roman numbers I-L with minor errors.	Write Roman numbers I-L.	Write Roman numbers I-L and greater than L without errors.	
		viii) Mentioning applications of Roman numbers.	Applications of Roman numbers are mentioned correctly.	Struggle to mention applications of Roman numbers.	Mention one application of Roman numbers.	Mention two applications of Roman numbers.	Mention more than two applications of Roman numbers.	
2.0 Apply reasoning and proof in real life contexts.	2. Apply the concepts of patterns to solve real life problems.	i) Identifying an ascending or descending number patterns.	Ascending or descending numbers patterns are identified correctly.	Struggle to identify ascending or descending number patterns.	Identify an ascending or descending number patterns with errors.	Identify an ascending or descending number patterns with minor errors.	Identify an ascending or descending number patterns without errors.	12
		ii) Identifying missing numbers in ascending or descending number patterns.	Identifying missing numbers in ascending or descending numbers patterns is performed correctly.	Try to identify missing numbers in ascending or descending number patterns based on guess- work.	Identify missing numbers in a one-step simple number pattern.	Identify missing numbers in more than one-step simple number pattern.	Identify missing numbers in more than one-step simple and complex number patterns.	

Main Competence	Specific Competence	Activities to be performed by the pupils	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
3.0 Apply Mathematics to solve problems in different contexts.	3.1 Apply mathematical operations to solve problems.	i) Adding numbers to get a sum not exceeding 99999 without carrying forward.	Addition of numbers without carrying forward for the sum not exceeding 99999 is performed correctly.	Add numbers to get a sum not exceeding 99999 without carrying forward with mistakes.	Add numbers to get a sum not exceeding 99999 without carrying forward with errors in summing the numbers up.	Add numbers to get a sum not exceeding 99999 without carrying forward with minor errors in summing the numbers up.	Add numbers in thousands without carrying forward with no errors.	65
		ii) Adding numbers to get a sum not exceeding 99999 with carrying forward.	Addition of numbers to get a sum not exceeding 99999 with carrying forward is performed correctly.	Add numbers with carrying forward to get a sum not exceeding 99999 with mistakes in adding and carrying.	Add numbers with carrying forward to get a sum not exceeding 99999 with some mistakes in adding and carrying.	Add numbers with carrying forward to get a sum not exceeding 99999 with minor errors in adding and carrying.	Add numbers with carrying forward to get a sum not exceeding 99999 without errors.	
		iii) Solving word problems involving addition.	Solving word problems involving addition is performed correctly.	Solve word problems involving addition with mistakes in interpretation and computations.	Solve word problems involving addition with errors in interpretations.	Solve word problems involving addition with minor errors.	Solve word problems involving addition without errors.	

Main Competence	Specific Competence	Activities to be performed by the pupils	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
		iv) Subtracting without regrouping for five digit numbers.	Subtraction without regrouping for five digit numbers is performed correctly.	Subtract without regrouping for five digit numbers with errors in taking away.	Subtract without regrouping for five digit numbers with minor errors in taking away.	Subtract without regrouping for five digit numbers.	Subtract without regrouping for five digit numbers fluently.	
		v) Subtracting with regrouping of five digit numbers.	Subtraction with regrouping for five digit numbers is performed correctly.	Subtract with regrouping for five digit numbers with errors in taking away.	Subtract with regrouping for five digit numbers with minor errors in taking away.	Subtract with regrouping for five digit numbers with minor errors.	Subtract with regrouping for five digit numbers without errors.	
		vi) Solving word problems involving subtraction.	Solving word problems involving subtraction is performed correctly.	Solve word problems involving subtraction with regrouping with mistakes in interpretation and computations.	Solve word problems involving subtraction with regrouping with errors in interpretation.	Solve word problems involving subtraction with regrouping with minor errors.	Solve word problems involving subtraction with regrouping without errors.	
		vii) Multiplying three digit numbers by two digit numbers.	Multiplication of three digit numbers by two digit numbers is performed correctly.	Struggle to multiply a two digit number by one digit number.	Multiply three digit numbers by two digit numbers with errors.	Multiply three digit numbers with minor errors.	Multiply three digit numbers by two digit number without errors.	

Main Competence	Specific Competence	Activities to be performed by the pupils	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
		viii) Solving word problems involving multiplication.	Solving word problems involving multiplication is performed correctly.	Solve word problems involving multiplication with mistakes in interpretation and computation.	Solve word problems involving multiplication with errors in interpretation.	Solve word problems involving multiplication with minor errors.	Solve word problems involving multiplication without errors.	
		ix) Dividing objects in a given number of equal parts or groups.	Objects are divided in a given number of equal parts or groups correctly.	Struggle to divide objects in a given number of equal parts or groups.	Divide objects in a given number of equal parts or groups with errors.	Divide objects in a given number of equal parts or groups with minor errors.	Divide objects in a given number of equal parts or groups without errors.	
		x) Dividing three digit numbers by two digit numbers without a remainder.	Dividing three digit numbers by two digit numbers without a remainder is performed correctly.	Divide up to two digit numbers by one digit numbers without a remainder.	Divide three digit numbers by two digit numbers without a remainder with errors.	Divide up to three digit numbers by two digits number without a remainder with minor errors.	Divide up to three digit numbers by two digit numbers without a remainder without errors.	
		xi) Solving word problems involving the division of numbers.	Word problems involving the division of numbers are solved correctly.	Struggles to solve word problems involving the division of numbers.	Solve word problems involving the division of numbers with errors in interpretation.	Solve word problems involving division with minor errors.	Solve word problems involving division without errors.	

Main Competence	Specific Competence	Activities to be performed by the pupils	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
		xii) Adding fractions with the same denominator.	Addition of fractions with the same denominator is performed correctly.	Struggle to add fractions with the same denominator.	Add some fractions with the same denominator with errors.	Add some fractions with the same denominator with minor errors.	Add some fractions with the same denominator without errors.	
		xiii) Subtracting fractions with the same denominator.	Subtraction of fractions with the same denominator is performed correctly.	Struggle to subtract fractions with the same denominator.	Subtract some fractions with the same denominator with mistakes.	Add some fractions with the same denominator with minor errors.	Add some fractions with the same denominator without errors.	
	3.2 Apply number relations to solve problems in different contexts.	i) Reading time in hours and in minutes.	Time in hours and in minutes is read correctly.	Struggle to read time in hours and in minutes.	Read time in hours and in minutes with errors.	Read time in hours and in minutes with minor errors.	Read time in hours and in minutes with without errors.	47
		ii) Writing time in hours and minutes.	Time in hours and in minutes is written correctly.	Struggle to write time in hours and minutes.	Write time in hours and minutes with errors.	Write time in hours and minutes with minor errors.	Write time in hours and minutes without errors.	
		iii) Adding time in hours and minutes.	Addition involving time in hours and minutes is performed correctly.	Struggle to add time in hours and minutes.	Add time in hours and minutes with errors.	Add time in hours and minutes with minor errors.	Add time in hours and minutes without errors.	
		iv) Subtracting hours and minute.	Subtraction of hours and minutes is performed correctly.	Struggle to subtract time in hours and minutes.	Subtract time in hours and minutes with errors.	Subtract time in hours and minutes with minor errors.	Subtract time in hours and minutes without errors.	

Main Competence	Specific Competence	Activities to be performed by the pupils	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
		v) Solving word problems involving time.	Word problems involving time is solved correctly.	Struggle to solve word problems involving time.	Solve word problems involving time with errors in interpretation and in changing hours to minutes and minutes to hours.	Solve word problems involving time with minor errors in interpretation and changing hours to minutes and minutes to hours.	Solve word problems involving time without mistakes.	
		vi) Adding Tanzanian shillings.	Addition of Tanzanian shillings is performed correctly.	Struggle to perform additions of Tanzanian shillings.	Perform additions of Tanzanian shillings with errors.	Perform additions of Tanzanian shillings with minor errors.	Perform additions of Tanzanian shillings without errors.	
		vii)Subtracting Tanzanian shillings.	Subtraction of Tanzanian shillings is performed correctly.	Struggle to perform subtraction of Tanzanian shillings.	Perform subtractions of Tanzanian shillings with errors.	Perform subtractions of Tanzanian shillings with minor errors.	Perform subtractions of Tanzanian shillings without errors.	
		viii) Multiplying Tanzanian shillings.	Multiplication of Tanzanian shillings is performed correctly.	Struggle to perform multiplications of Tanzanian shillings.	Perform multiplication of Tanzanian shillings with errors and mistakes.	Perform multiplications of Tanzanian shillings with minor errors.	Perform multiplication of Tanzanian shillings without errors.	

Main Competence	Specific Competence	Activities to be performed by the pupils	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
		ix) Solving word problems relating to purchases and sales.	Word problems relating to purchases and sales are performed correctly.	Struggle to solve word problems relating to purchases and sales.	Solve word problems relating to purchases and sales with mistakes and errors in interpretation and computation.	Solve word problems relating to purchases and sales with minor errors.	Solve word problems relating to purchases and sales without errors.	
4.0 Apply reasoning and proof in real life contexts (Part Two).	4.1 Apply the concepts of measurements in different contexts.	i) Converting metric units of length.	Metric units of length are converted correctly.	Struggle to convert metric units of length.	Convert metric units of length with errors.	Convert metric units of length with minor errors.	Convert and use metric units of length without errors.	37
		ii) Measuring length using metric units.	Measuring length using metric units is performed correctly.	Struggle to measure length using metric units.	Measure length using metric units with errors.	Measure length using metric units with minor errors.	Measure length using metric units without errors.	
		iii) Converting units of weight.	Units of weight are converted correctly.	Struggle to convert units of weight.	Convert units of weight with mistakes and errors.	Convert units of weight with minor errors.	Convert units of weight without errors.	
		iv) Solving word problems involving units of weight.	Word problems pertaining to units of weight are solved correctly.	Struggle to solve word problems involving units of weight.	Solve some word problems involving units of weight with errors in interpretation and computation.	Solve word problems involving units of weight with minor errors.	Solve word problems involving units of weight without errors.	

Main Competence	Specific Competence	Activities to be performed by the pupils	Assessment Criteria	Benchmarking				N<u>o</u> of periods
				Beginning	*Average*	*Good*	*Very Good*	
		v) Identifying various measurement tools of volume used in the local environment.	Various measurement tools of volume in the used in the local environment are identified correctly.	Struggle to identify measurement tools of volume used in the local environment.	Identify measurement tools of volume used without a clear concept.	Identify measurement tools of volume used in local environment.	Identify various measurement tools of volume used in the local environment with a clear concept.	
		vi) Measuring volume using various measurement tools.	Measuring volume using various measurement tools is performed correctly.	Struggle to measure volume using various tools of measurement with support.	Measure volume using various tools of measurement with support from a teacher.	Measure volume using various tools of measurement with minimal support.	Measure and record volume using various tools of measurement and produce accurate data without support.	
		vii) Solving word problems using measurement tools of volume.	Word problems using measurement tools of volume are solved correctly.	Struggle to solve word problems using measurement tools of volume.	Solve word problems using measurement tools of volume with errors in interpretation and computation.	Solve word problems using measurement tools of volume with minor errors.	Solve word problems involving measurement tools of volume without errors.	
	4.2 Apply shapes and figures to solve different problems.	i) Drawing a straight line and a line segment.	A straight line and a line segment are drawn correctly.	Struggle to draw a straight line and a line segment.	Draw a straight line and a line segment with errors.	Draw a straight line and a line segment with minor errors.	Draw a straight line and a line segment without errors.	21

Main Competence	Specific Competence	Activities to be performed by the pupils	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
		ii) Measuring perimeters of two-dimensional figures.	Measuring perimeters of two-dimensional figures is performed correctly.	Struggle to measure the perimeter of two-dimensional figures.	Measure the perimeter of two-dimensional figures with errors.	Measure the perimeter of two-dimensional figures with minor errors.	Measure the perimeter of two-dimensional figures without errors.	
		iii) Calculating perimeters of a squares rectangle and triangle.	Perimeters of squares, rectangles, and triangle, are calculated correctly.	Struggle to calculate the perimeter of squares, rectangles, and triangles.	Calculate the perimeter of a squares, rectangles, and triangles, with mistakes in computation and choosing the relevant formula.	Calculate the perimeter of a square, rectangle, and triangles, with minor errors.	Calculate the perimeter of squares, rectangles, and triangles, without errors.	
		iv) Solving word problems involving the perimeter.	Word problems involving the perimeter are solved correctly.	A pupil struggle to solve word problems involving the perimeter.	Solve some of the word problems involving the perimeter with errors in interpretation and computation.	Solve word problems involving the perimeter with minor errors.	Solve word problems involving the perimeter without errors.	

Main Competence	Specific Competence	Activities to be performed by the pupils	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
5.0 Use mathematical language to present ideas or arguments (Part Two).	5.1 Apply statistical skills to present different information.	i) Collecting and recording data.	Collecting and recording data is performed correctly.	Struggles to collect relevant information and classify the information.	Collect data with difficulties in classifying and recording them.	Collect and record data with minor errors.	Collect and record data without errors.	10
		ii) Drawing pictorial statistics using the information presented.	Pictorial statistics are drawn using the data or information presented.	Struggles to draw pictorial statistics using information presented.	Draw pictorial statistics with difficulties in translating quantities into figure representations.	Draw pictorial statistics using information presented with a minimal support.	Draw pictorial statistics correctly without support.	

3.10 STANDARD V CONTENTS

Table 4: Main and Specific Competences for Standard V

Main Competences	Specific Competences
1.0 Use mathematical language in presenting ideas or arguments (Part One).	1. Apply the concepts of numbers to communicate in different context.
2.0 Apply reasoning and proof in real life contexts (Part One).	2. Apply the concepts of patterns to solve problems in everyday life.
3.0 Apply mathematics to solve problems in different contexts.	3.1 Apply mathematical operations to solve problems. 3.2 Apply number relations to solve problems in different contexts.
4.0 Apply reasoning and proofs in real life contexts (Part two).	4.1 Apply measurements in different life contexts. 4.2 Apply the concepts of shapes and figures to solve different problems.
5.0 Use mathematical language to present ideas or arguments (Part Two).	5.1 Apply the concepts of algebra to solve real life problems. 5.2 Apply statistical skills to present different information.

Main Competence	Specific Competence	Activities to be performed by the pupils	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
1.0 Use mathematical language in presenting ideas or arguments (Part One).	1. Apply the concepts of numbers to communicate ideas and concepts in different contexts.	i) Counting to 999999.	Counting from 99999 to 999999 is performed correctly.	Struggle to count from 99999 to 999999.	Count from 99999 to 999999 and skip some numbers or make errors.	Count from 99999 to 999999 with minor errors.	Count from 99999 to 999999 fluently and with confidence.	24
		ii) Reading numbers to 999999.	Numbers 99999 to 999999 are read correctly.	Struggle to read numbers 99999 up to 999999.	Read numbers from 99999 to 999999 with some errors in pronunciation.	Read numbers from 99999 to 999999 with minor errors in pronunciation.	Read numbers from 99999 to 999999 fluently and with confidence.	
		iii) Writing numbers in numerals to 999999.	Numbers 99999 to 999999 are written in numerals correctly.	Struggle to write only some numbers from 999 to 9999 in numerals.	Write number 999 to 9999 in numeral with errors.	Write numbers 999 to 9999 in numerals with minor errors.	Write numbers from 999 to 9999 in numerals without errors.	
		iv) Writing numbers in words to 999999.	Numbers 99999 to 9999 99 are written in words correctly.	Struggle to write numbers in words up to 9999.	Write numbers in words up to 999999 with errors in spelling.	Write numbers in words up to 999999 with minor errors.	Write numbers in words to 9999 without errors.	
		v) Identifying place values for numbers (ones, tens, hundreds, thousands, ten thousands and hundred thousands).	Place values for numbers are identified up to hundred thousand correctly.	Struggle to identify place values for numbers up to hundred thousands.	Identify place values for numbers up to hundred thousands with errors.	Identify place values for numbers up to hundred thousands with minor errors.	Identify place values for numbers up to hundred thousands without errors.	

Main Competence	Specific Competence	Activities to be performed by the pupils	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
		vi) Comparing fractions.	Fractions are compared correctly.	Struggle to compare fractions with only the same denominator.	Compare fractions with the same denominator with minor errors but with difficulties for those with different denominators.	Compare fractions with different denominators with minor errors.	Compare fractions with different denominators without errors.	
		vii) Identifying types of fractions.	Types of fractions are identified correctly.	Struggle to identify types of fractions.	Identify types of fractions but mixing up one type with another.	Identify types of fractions with minor errors.	Identify types of fractions without errors.	
		viii) Reading numbers up to two decimal places.	Numbers up to two decimal places are read correctly.	Struggle to read numbers up to two decimal places.	Read numbers up to two decimal places with errors.	Read numbers up to two decimal places with minor errors.	Read numbers up to two decimal places without errors.	
		ix) Writing numbers up to two decimal places.	Numbers up to two decimal places are written correctly.	Struggle to write numbers up to two decimal places.	Write numbers up to two decimal places with mistakes and errors.	Write numbers up to two decimal places with minor errors.	Write numbers up to two decimal places without errors.	

Main Competence	Specific Competence	Activities to be performed by the pupils	Assessment Criteria	Benchmarking				No of periods
				Beginning	Average	Good	Very Good	
2.0 Apply reasoning and proof in real life contexts.	2. Apply the concepts of patterns to solve real life problems.	i) Listing types of numbers.	Listing types of numbers are performed correctly.	Struggle to list different types of numbers.	List types of numbers with errors.	List types of numbers with minor mistakes.	List types of numbers without mistakes.	38
		ii) Mentioning even numbers.	Even numbers are mentioned correctly.	Struggle to mention even numbers.	Mention even numbers by skipping some numbers.	Mention even numbers with minor errors.	Mention even numbers and their characteristics without errors.	
		iii) Writing even numbers.	Writing even numbers is performed correctly.	Write even numbers but mixing them with other numbers.	Write even numbers with errors.	Write even numbers with minor errors.	Write even numbers and their characteristics without errors.	
		iv) Identifying odd numbers.	Odd numbers are identified correctly.	Struggle to identify odd numbers.	Identify odd numbers but skip some numbers.	Identify odd numbers with minor errors.	Identify odd numbers without errors.	
		v) Writing down odd numbers.	Writing down odd numbers is performed correctly.	Write down odd numbers but mixing them with other numbers.	Write down odd numbers with errors and mistakes.	Write down odd numbers with minor errors.	Write odd numbers without errors.	
		vi) Identifying prime numbers.	Prime numbers are identified correctly.	Struggle to identify prime numbers.	Identify prime numbers but skip some numbers.	Identify prime numbers with minor errors.	Identify prime numbers without errors.	

Main Competence	Specific Competence	Activities to be performed by the pupils	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
		vii) Writing down prime numbers.	Writing down prime numbers is performed correctly.	Write down prime numbers but mix them with other numbers.	Write down prime numbers with errors.	Write down prime numbers with minor errors.	Write down prime numbers without errors.	
		viii) Listing factors of a number.	Listing factors of a number is performed correctly.	Struggle to list factors of a number.	List factors of a number with mistakes e.g skipping some factors.	List factors of a number with minor errors.	List factors of a number without errors.	
		ix) Calculating the Highest Common Factor (HCF) of two numbers.	Calculating the Highest Common Factor (HCF) of two numbers is performed correctly.	Struggle to calculate the Highest Common Factor (HCF) of two numbers.	Calculate the Highest Common Factor (HCF) of two numbers with mistakes in listing the factors and choosing common factors.	Calculate Highest Common Factor (HCF) of two numbers with minor errors.	Calculate Highest Common Factor (HCF) of two numbers without errors.	
		x) Listing multiples of a number.	Listing multiples of a number is performed correctly.	Struggle to list multiples of a number.	List multiples of a number with mistakes e.g. skipping some factors.	List multiples of a number with minor errors.	List multiples of a number without errors.	
		xi) Calculating the Lowest Common Multiple (LCM) of two numbers.	Calculation of the Lowest Common Multiple (LCM) of two numbers is performed correctly.	Struggle to calculate the Lowest Common Multiple (LCM) of two numbers.	Calculate Lowest Common Multiple (LCM) of two numbers with errors in selecting multiples and common multiples.	Calculate the Lowest Common Multiple (LCM) of two numbers with minor errors.	Calculate the Lowest Common Multiple (LCM) of two numbers without errors.	

Main Competence	Specific Competence	Activities to be performed by the pupils	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
		xii) Calculating a square of numbers not exceeding 10000.	Calculation of squares of numbers not exceeding 10000 is performed correctly.	Struggle to calculate square of numbers not exceeding 10000.	Calculate a square of numbers not exceeding 10000 with errors and mistakes.	Calculate a square of numbers not exceeding 10000 with minor errors.	Calculate a square of numbers not exceeding 10000 without errors.	
		xiii) Calculating the exponent of two digit numbers.	Calculating exponent of two digit numbers is performed correctly.	Struggles to calculate the exponent of two digit numbers.	Calculate the exponent of two digit numbers with mistakes.	Calculate the exponent of a two digit numbers with minor error.	Calculate the exponent of a two digit numbers without errors.	
		xiv) Solving word problems involving the exponent of two digit numbers.	Word problems involving the exponent of two digit numbers are solved correctly.	Struggle to solve word problems involving the exponent of two digit numbers.	Solve word problems involving the exponent of two digit numbers with mistakes in interpretation and computation.	Solve word problems involving the exponent of a two digit numbers correctly.	Solve word problems involving the exponent of two digit numbers correctly and with confidence.	
		xv)Calculating the square root of a number not exceeding three digits.	Calculating the square root of a number not exceeding three digits is performed correctly.	Struggles to calculate the square root of a number not exceeding three digits.	Calculate the square root of a number not exceeding three digits with errors.	Calculate the square root of a number not exceeding three digits with minor errors.	Calculate the square root of a number not exceeding three digits without errors.	

Main Competence	Specific Competence	Activities to be performed by the pupils	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
		xvi) Solving word problems involving the square root of a number.	Word problems involving the square root of a number are solved correctly.	Struggle to solve word problems involving the square root of a number not exceeding three digits.	Solve word problems involving the square root of numbers not exceeding three digits with interpretation and computational errors.	Solve word problems involving the square root of numbers not exceeding three digits with minor errors.	Solve word problems involving the square root of numbers not exceeding three digits without errors.	
3.0 Apply Mathematics to solve problems in different contexts.	3.1 Apply mathematical operations to solve problems.	i) Adding numbers to get a sum not exceeding 999999 without carrying forward.	Addition of numbers without carrying forward to get a sum not exceeding 999999 is performed correctly.	Struggle to add numbers to get a sum not exceeding 999999 without carrying forward.	Add numbers to get a sum not exceeding 999999 without carrying forward with errors in summing the numbers up.	Add numbers to get a sum not exceeding 999999 without carrying forward with minor errors in summing the numbers up.	Add numbers to get a sum not exceeding 999999 without carrying forward without errors.	35
		ii) Adding numbers to get a sum not exceeding 999999 with carrying forward.	Addition of numbers with carrying forward to get a sum not exceeding 999999 is performed correctly.	Struggle to add numbers with carrying forward to get a sum not exceeding 999999.	Add numbers with carrying forward to get a sum not exceeding 999999 with mistakes in adding and carrying.	Add numbers with carrying forward to get a sum not exceeding 999999 with minor errors.	Add numbers with carrying forward to get a sum not exceeding 999999 without errors.	

Main Competence	Specific Competence	Activities to be performed by the pupils	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
		iii) Solving word problems involving addition.	Solving word problems involving addition is performed correctly.	Struggle to solve word problems involving addition.	Solve word problems involving addition with errors in interpretations.	Solve word problems involving addition with minor errors.	Solve word problems involving addition without errors.	
		iv) Subtracting numbers up to six digits without regrouping.	Subtraction of numbers up to six digits without regrouping is performed correctly.	Struggle to subtract without regrouping six digit numbers.	Subtract without regrouping six digit numbers with errors in taking away.	Subtract without regrouping six digit numbers with minor errors.	Subtract without regrouping six digit numbers without errors.	
		v) Subtracting with regrouping of six digit numbers.	Subtraction with regrouping of six digit numbers is performed correctly.	Struggles to subtract with regrouping six digit numbers.	Subtract with regrouping six digit numbers with errors in taking away and regrouping.	Subtract with regrouping six digit numbers with minor errors.	Subtract with regrouping six digit numbers without errors.	
		vi) Solving word problems involving subtraction of numbers with regrouping.	Solving word problems involving subtraction with regrouping is performed correctly.	Struggle to solve word problems involving subtraction with regrouping.	Solve word problems involving subtraction with regrouping with errors in interpretations.	Solve word problems involving subtraction with regrouping with minor errors.	Solve word problems involving subtraction with regrouping without errors.	

Main Competence	Specific Competence	Activities to be performed by the pupils	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
		vii) Multiplying numbers to get a product not exceeding six digits.	Multiplication of numbers to get a product not exceeding six digits is performed correctly.	Struggle to multiply a two- digit number by one digit number.	Multiply three digit numbers by two-digit numbers with errors.	Multiply three digit numbers with minor errors.	Multiply three digit numbers by two digit numbers without errors.	
		vii) Solving word problems involving multiplication.	Solving word problems involving multiplication is performed correctly.	Struggle to solve word problems involving multiplication.	Solve word problems involving multiplication with errors in interpretation.	Solve word problems involving multiplication with minor errors.	Solve word problems involving multiplication without errors.	
		ix) Dividing numbers with up to six digits by a three digit number without a remainder.	Division of numbers up to six digits by a three digit number without a remainder is performed correctly.	Struggles to divide up to six digits by a three-digit number without a remainder.	Divide up to six digits by a three-digit number without a remainder with errors.	Divide up to six digits by a three- digit number without a remainder with minor errors.	Divide up to six digits by a three- digit number without a remainder without errors.	
		x) Dividing numbers up to six digits by a three-digit number with a remainder.	Division of numbers up to six digits by a three-digit number with a remainder is performed correctly.	Struggle to divide up to six digits by a three-digit number with a remainder.	Divide up to six digits by a three- digit number with a remainder with errors.	Divide up to six digits by a three-digit number with a remainder with minor errors.	Divide up to six digit by a three- digits number with a remainder without errors.	

Main Competence	Specific Competence	Activities to be performed by the pupils	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
		xi) Solving word problems involving the division of numbers.	Word problems involving the division of numbers are solved correctly.	Struggle to solve word problems involving the division of numbers.	Solve word problems involving the division of numbers with computational mistakes.	Solve word problems involving the division of numbers with minor errors.	Solve word problems involving the division of numbers without errors.	
		xii) Adding fractions with different denominators.	Addition of fractions with different denominators is performed correctly.	Add only fractions with the same denominators.	Add fractions with different denominators but with mistakes in finding the LCM (Lowest Common Multiples) of denominators and computations.	Add fractions with different denominators with minor errors.	Add fractions with different denominators without errors.	
		xiii) Subtracting fractions with different denominators.	Subtraction of fractions with different denominators is performed correctly.	Subtract only fractions with the same denominators.	Subtract fractions with different denominators but with mistakes in finding the LCM of denominators and computations.	Subtract fractions with different denominators with minor errors.	Subtract fractions with different denominators without errors.	
		xiv) Multiplying fractions.	Multiplication of fractions is performed correctly.	Struggle to multiply fractions.	Multiply fractions with errors and mistakes in simplifying fractions.	Multiply fractions with minor errors.	Multiply fractions without errors.	

Main Competence	Specific Competence	Activities to be performed by the pupils	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
		xv) Adding numbers up to two decimal places.	Addition of numbers up to two decimal places is performed correctly.	Struggle to add numbers up to two decimal places.	Add numbers up to two decimal places with mistakes in interpreting place values and carrying forward.	Add numbers with up to two decimal places with minor errors.	Add numbers with up to two decimal places without errors.	
		xvi) Subtracting numbers up to two decimal places.	Subtraction of numbers up to two decimal places is performed correctly.	Struggles to subtract numbers up to two decimal places.	Subtract numbers with up to two decimal places with mistakes in interpreting place values and regrouping.	Subtract numbers with up to two decimal places with minor errors.	Subtract numbers with up to two decimal places without errors.	
		xvii) Multiplying a number with two decimal places by a whole number.	Multiplication of a two decimal place number by a whole number is performed correctly.	Struggles to multiply a number with two decimal places by a whole number.	Multiply a number with two decimal places by a whole number with errors in decimal point position and computation.	Multiply a number with two decimal places by a whole number with minor errors.	Multiply a number with two decimal places by a whole number without errors.	
	3.2 Apply number relations to solve problems in different contexts.	i) Making a calendar.	Making a calendar is performed correctly.	Struggle to make a calendar with support from the teacher.	Make a calendar with teacher's support.	Make a calendar with errors in lengths of months.	Make a calendar with required considerations of days per month including in section of public holidays.	26

Main Competence	Specific Competence	Activities to be performed by the pupils	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
		ii) Converting units of time.	Conversion of units of time is performed correctly.	Struggle to convert units of time.	Convert units of time with mistakes.	Convert units of time with minor errors.	Convert units of time without errors.	
		iii) Multiplying units of time.	Multiplication of units of time is performed correctly.	Struggles to multiply units of time.	Multiply units of time with mistakes in computation and changing the units.	Multiply units of time with minor errors.	Multiply units of time without errors.	
		iv) Dividing units of time.	Division of units of time is performed correctly.	Struggles to divide units of time.	Divide units of time with mistakes in the conversion of units.	Divide units of time with minor errors.	Divide units of time without errors.	
		v) Writing Tanzanian currency in shillings and cents.	Tanzanian currency in shillings and cents is written correctly.	Struggle to write currency in shillings and cents.	Write currency in shillings and cents with mistakes.	Write currency in shillings and cents with minor errors in cents.	Write currency in shillings and cents without errors.	
		vi) Adding Tanzanian shillings to get a sum not exceeding 999999.	Addition of Tanzanian shillings to obtain a sum not exceeding 999999 is performed correctly.	Struggle to add Tanzanian shillings to obtain a sum not exceeding 999999.	Add Tanzanian shillings to obtain a sum not exceeding 999999 with errors and mistakes in conversion of shillings and cents and carrying forward.	Add Tanzanian shillings to obtain a sum not exceeding 999999 with minor errors.	Add Tanzanian shillings to obtain a sum not exceeding 999999 without errors.	

Main Competence	Specific Competence	Activities to be performed by the pupils	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
		vii) Subtracting Tanzanian shillings up to 999999.	Subtraction involving Tanzanian shillings up to 999999 is performed correctly.	Struggles to subtract Tanzanian shillings up to 999999.	Subtract Tanzanian shillings up to 999999 with errors in the conversion of shillings and cents and regrouping.	Subtract Tanzanian shillings up to 999999 with minor errors.	Subtract Tanzanian shillings up to 999999 without errors.	
		viii) Multiplying Tanzanian shillings to get a product not exceeding 999999.	Multiplication involving Tanzanian shillings to get a product not exceeding 999999 is performed correctly.	Struggle to multiply Tanzanian shillings to get a product not exceeding 999999.	Multiply Tanzanian shillings to get a product not exceeding 999999 with errors in the conversion of shillings and cents and carrying forward.	Multiply Tanzanian shillings to get a product not exceeding 999999 with minor errors.	Multiply Tanzanian shillings to get a product not exceeding 999999 without errors.	
		ix) Dividing Tanzanian shillings not exceeding 999999.	Division involving Tanzanian shillings not exceeding 999999 is performed correctly.	Struggle to divide Tanzanian shillings not exceeding 999999.	Divide Tanzanian shillings not exceeding 999999 with errors in the conversion of shillings and cents and computation.	Divide Tanzanian shillings not exceeding 999999 with minor errors.	Divide Tanzanian shillings not exceeding 999999 without errors.	

Main Competence	Specific Competence	Activities to be performed by the pupils	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
		x) Solving word problems involving purchase and sales.	Word problems involving purchases and sales are performed correctly.	Struggle to solve word problems involving purchases and sales.	Solve word problems involving purchases and sales with mistakes in interpretation and computation.	Solve word problems involving purchases and sales with minor errors.	Solve word problems involving purchases and sales without errors.	
4.0 Apply reasoning and proofs in real life contexts (Part Two).	4.1 Apply measurements in different contexts.	i) Adding metric units of length.	Addition involving metric units of length is performed correctly.	Struggle to add metric units of length.	Add metric units of length with mistakes in unit conversion and computation.	Add metric units of length with minor errors.	Add metric units of length without errors.	23
		ii) Subtracting metric units of length.	Subtraction involving metric units of length is performed correctly.	Struggle to subtract metric units of length.	Subtract metric unit of length with mistakes in unit conversion and regrouping.	Subtract metric units of length with minor errors.	Subtract metric units of length without errors.	
		iii) Identifying metric units of weight (milligramme up to tonne).	Metric units of weight (milligramme up to tonne) are identified correctly.	Struggle to identify metric units of weight.	Identify metric units of weight without a clear concept.	Identify metric units of weight with errors in differentiation.	Identify metric units of weight with a clear concept.	

Main Competence	Specific Competence	Activities to be performed by the pupils	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
		iv) Converting metric units of weight.	Converting metric units of weight is performed correctly.	Struggles to convert units of weight.	Convert units of weight with mistakes.	Convert units of weight with minor errors.	Convert units of weight without errors.	
		v) Adding metric units of weight.	Addition involving metric units of weight is performed correctly.	Struggle to add metric units of weight.	Add metric units of weight with mistakes in unit conversion and computation.	Add metric units of weight with minor errors.	Add metric units of weight without errors.	
		vi) Subtracting metric units of weight.	Subtraction involving metric units of weight is performed correctly.	Struggle to subtract metric units of weight.	Subtract metric units of weight with mistakes in units conversion.	Subtract metric units of weight with minor errors.	Subtract metric units of weight without errors.	
		vii) Converting metric units of volume.	Conversion of metric units of volume is performed correctly.	Struggle to convert metric units of volume.	Convert metric units of volume with mistakes.	Convert metric units of volume with minor errors.	Convert metric units of volume without errors.	
		viii) Adding metric units of volume.	Addition involving metric units of volume is performed correctly.	Struggle to add metric units of volume.	Add metric unit of volume with mistakes in unit conversion and computation.	Add metric unit of volume with minor errors.	Add metric unit of volume without errors.	

Main Competence	Specific Competence	Activities to be performed by the pupils	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
		ix) Subtracting metric units of volume.	Subtraction involving metric units of volume is performed correctly.	Struggles to subtract metric units of volume.	Subtract metric unit of volume with mistakes in unit conversion and computation.	Subtract metric unit of volume with minor errors.	Subtract metric units of volume without errors.	
	4.2 Apply the concepts of shapes and figures to solve different problems.	i) Identifying types of angles.	Types of angles are identified correctly.	Struggle to identify types of angles.	Identify types of angles with mistakes in differentiating them.	Identify types of angles correctly.	Identify types of angles with their characteristics.	23
		ii) Drawing angles by sketching.	Drawing angles by sketching is performed correctly.	Struggles to draw angles by sketching.	Draw angles by sketching with mistakes.	Draw angles by sketching with minor mistakes.	Draw angles by sketching without mistakes.	
		iii) Identifying lines of symmetry in various shapes and figures.	Lines of symmetry in various shapes and figures are identified correctly.	Struggle to identify lines of symmetry in various shapes and figures of symmetry.	Identify lines of symmetry in various shapes and figures with mistakes.	Identify lines of symmetry in various shapes and figures with minor errors.	Identify lines of symmetry in various shapes and figures without errors.	
		iv) Identifying types of triangles.	Types of triangles are identified correctly.	Struggle to identify types of triangles.	Identify types of triangles but with errors.	Identify types of triangles but with minor errors.	Identify types of triangles without any mistakes.	

Main Competence	Specific Competence	Activities to be performed by the pupils	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
		v) Mentioning properties of triangles.	Properties of triangles are mentioned correctly.	Struggles to mention properties of triangles.	Mention properties of triangles but with mistakes.	Mention properties of triangles but with minor mistakes.	Mention properties of triangles without any mistakes.	
		vi) Calculating the area of a rectangle.	Calculating the area of a rectangle is performed correctly.	Struggle to calculate the area of a rectangle.	Calculate the area of a rectangle but with mistakes.	Calculate the area of a rectangle but with minor mistakes.	Calculate the area of a rectangle without any mistakes.	
		vii) Calculating the area of a square.	Calculating the area of a square is performed correctly.	Struggle to calculate the area of a square.	Calculate the area of a square but with mistakes.	Calculate the area of a square but with minor mistakes.	Calculate the area of a square without any mistakes.	
		viii) Calculating the area of a triangle.	Calculating the area of a triangle is performed correctly.	Struggle to calculate the area of a triangle.	Calculate the area of a triangle but with mistakes.	Calculate the area of a triangle but with minor mistakes.	Calculate the area of a triangle without any mistakes.	
5.0 Use mathematical language to present ideas or arguments (Part Two).	5.1 Apply the concepts of algebra to solve real life problems.	i) Formulating algebraic equations.	Formulating algebraic equations is performed correctly.	Struggles to formulate algebraic equations.	Formulate algebraic equations with mistakes in transforming words or sentences into a mathematical equation.	Formulate algebraic equations with minor mistakes.	Formulate algebraic equations without mistakes.	16

Main Competence	Specific Competence	Activities to be performed by the pupils	Assessment Criteria	Benchmarking				N<u>o</u> of periods
				Beginning	*Average*	*Good*	*Very Good*	
		ii) Adding algebraic terms.	Addition of algebraic terms is performed correctly.	Struggles to add algebraic terms.	Add algebraic terms with no clarity on like and unlike terms addition.	Add algebraic terms with minor mistakes.	Add algebraic terms without mistakes.	
		iii) Subtracting algebraic terms.	Subtraction involving algebraic terms is performed correctly.	Struggles to subtract algebraic terms.	Subtract algebraic terms with no clarity on like and unlike terms addition.	Subtract algebraic terms with minor mistakes.	Subtract algebraic terms without mistakes.	
		iv) Multiplying algebraic terms to get a product with not more than exponent 2.	Multiplication of algebraic terms to get a product with not more than exponent 2 is performed correctly.	Struggle to multiply algebraic terms.	Multiply algebraic terms to get a product with not more than exponent 2 with mistakes.	Multiply algebraic terms to get a product with not more than exponent 2 with minor errors.	Multiply algebraic terms to get a product with not more than exponent 2 without errors.	
		v) Dividing algebraic terms.	Division involving algebraic terms is performed correctly.	Struggle to divide algebraic terms.	Divide algebraic terms with mistakes.	Divide algebraic terms with minor errors.	Divide algebraic terms without errors.	

Main Competence	Specific Competence	Activities to be performed by the pupils	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
	5.2 Apply statistical skills to present different information.	i) Calculating the average using different data.	Calculating the average using different data is performed correctly.	Struggle to calculate the average using different data.	Calculate the average using different data with errors.	Calculate the average using different data with minor errors.	Calculate the average using different data without errors.	10
		ii) Reading and interpreting bar graphs.	Reading and interpreting bar graphs is performed correctly.	Struggle to read and interpret bar graphs.	Read and interpret bar graphs with mistakes.	Read and interpret bar graphs with minor mistakes.	Read and interpret bar graphs without mistakes.	

3.11 STANDARD VI CONTENTS

Table 5: Main and Specific Competence for Standard VI

Main Competences	Specific Competences
1.0 Use mathematical language to present ideas or arguments (Part One).	1. Apply the concepts of numbers to communicate ideas and concepts in different contexts.
2.0 Apply skills of reasoning and proofs in real life contexts (Part One).	2. Apply the concepts of patterns to solve real life problems.
3.0 Apply mathematics to solve problems in different contexts.	3.1 Apply mathematical operations to solve problems. 3.2 Apply number relations to solve problems in different contexts.
4.0 Apply skills of reasoning and proof in real life contexts (Part Two).	4.1 Apply measurements in different life contexts. 4.2 Apply the concepts of shapes and figures to solve different problems.
5.0 Use the language of Mathematics to present ideas or arguments (Part Two).	5.1 Apply the concepts of algebra to solve real life problems. 5.2 Apply statistical skills to present different information.

Syllabus Contents

Main Competence	Specific Competence	Activities to be Performed by the Pupils	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
1.0 Use mathematical language to present ideas or arguments (Part One).	1. Apply the concepts of numbers to communicate in different contexts.	i) Counting up 10,000,000.	Counting up to 10,000,000 is performed correctly.	Struggle to count up to 10,000,000.	Count up to 10,000,000 with errors of skipping some numbers.	Count up to 10,000,000 with minor errors.	Count up to 10,000,000 without errors.	23
		ii) Reading numbers up to 10,000,000.	Reading numbers up to 10,000,000 is performed correctly.	Struggle to read numbers up to 10,000,000.	Read numbers up to 10,000,000 with errors in pronunciation.	Read numbers up to 10,000,000 with minor errors in pronunciation.	Read numbers from 10,000,000 to 99999 fluently without errors.	
		iii) Writing numbers in numerals up to 10,000,000.	Numbers in numerals up to 10,000,000 are written correctly.	Struggle to write numbers in numerals up to 10,000,000.	Write numbers in numerals up to 10,000,000 with errors.	Write numbers in numerals up to 10,000,000 with minor errors.	Write numbers up to 10,000,000 without errors.	
		iv) Writing numbers in words up 10,000,000.	Numbers up to 10,000,000 are written in words correctly.	Struggle to write numbers in words up to 10,000,000.	Write numbers in words up to 10,000,000 with errors in spelling.	Write numbers in words up to 10,000,000 with minor errors.	Write numbers in words up to 10,000,000 without errors.	
		v) Identifying place value of numerical digits for numbers up to 10,000,000.	Place values of numerical digits are identified correctly.	Struggle to identify place value numeral digits of digits named.	Identify place values of numeral digits with errors.	Identify place values numeral digits with minor errors.	Identify place values numeral digits without errors.	

| Main Competence | Specific Competence | Activities to be Performed by the Pupils | Assessment Criteria | Benchmarking | | | | No of periods |
				Beginning	Average	Good	Very Good	
		vi) Writing whole numbers on a number line.	Whole numbers are written on a number line correctly.	Struggle to write whole numbers on a number line.	Write whole numbers on a number line with errors.	Write whole numbers on a number line with minor errors.	Write whole numbers on a number line without errors.	
		vii) Reading decimals to three decimal places.	Reading decimals to three decimal places is performed correctly.	Struggle to read decimals to three decimal places.	Read decimals up to three decimal places with errors.	Read decimals up to three decimal places with minor errors.	Read decimals up to three decimal places without errors.	
		viii) Writing decimals to three positions.	Decimal numbers up to three decimal places are written correctly.	Struggle to write decimals to three decimal places.	Write decimals up to three decimal places with errors.	Write decimals up to three decimal places with minor errors.	Write decimals up to three decimal places without errors.	
		ix) Approximating a whole number to the nearest tens, hundreds and thousands.	Approximation of whole numbers to the nearest tens, hundreds and thousands is done correctly.	Struggle to approximate whole numbers to the nearest tens, hundreds and thousands.	Approximate whole numbers to the nearest tens, hundreds and thousands with errors.	Approximate whole numbers to the nearest tens, hundreds and thousands with minor errors.	Approximate whole numbers to the nearest tens, hundreds and thousands without errors.	

Main Competence	Specific Competence	Activities to be Performed by the Pupils	Assessment Criteria	Benchmarking				No of periods
				Beginning	Average	Good	Very Good	
		x) Approximating a decimal number to a given number of decimal places.	Approximation of whole numbers to a given number of decimal places is done correctly.	Struggle to approximate whole numbers to a given number of decimal places.	Approximate whole numbers to a given number of decimal places and thousands with errors.	Approximate whole numbers to a given number of decimal places and thousands with minor errors.	Approximate whole numbers to a given number of decimal places and thousands without errors.	
2.0 Apply reasoning and proof in real life contexts (Part One).	2. Apply the concepts of patterns to solve real life problems.	i) Calculating the GCM of not more than three numbers.	Calculating the GCM of not more than three numbers is done correctly.	Struggle to calculate the GCM of not more than three numbers.	Calculate the GCM of not more than three numbers with computational errors.	Calculate the GCM of not more than three numbers with minor errors.	Calculate the GCM of not more than three numbers without errors.	19
		ii) Calculating LCM of not more than three numbers.	Calculating LCM of not more than three numbers is performed correctly.	Struggle to calculate LCM of not more than three numbers.	Calculate LCM of not more than three numbers with mistakes.	Calculate LCM of not more than three numbers with minor mistakes.	Calculate LCM of not more than three numbers without mistakes.	
		iii) Changing percentages into decimals.	Changing of percentages into decimals is performed accurately.	Struggle to change percentages into decimals.	Change percentages into decimals with errors in computation.	Change percentage into decimals with minor errors.	Change percentages into decimals without errors.	

Main Competence	Specific Competence	Activities to be Performed by the Pupils	Assessment Criteria	Benchmarking				No of periods
				Beginning	Average	Good	Very Good	
		iv) Changing percentages into fractions.	Changing of percentages into fractions is performed accurately.	Struggle to change percentages into fractions.	Change percentages into fractions with mistakes in computations.	Change percentages into fractions with minor mistakes.	Change percentages into fractions without mistakes.	
		v) Converting a fraction into decimals.	Conversion of fractions into decimals is performed correctly.	Struggle to convert fractions into decimals.	Convert fractions into decimals with computational errors.	Convert fractions into decimals with minor errors.	Convert fractions into decimals without errors.	
		vi) Converting decimals into fractions.	Conversion of decimals into fractions is performed correctly.	Struggle to convert decimals into fractions.	Convert decimals into fractions with computational errors.	Convert decimal into fractions with minor errors.	Convert decimals into fractions without errors.	
		vii) Converting decimals into percentages.	Conversion of decimals into percentages is performed correctly.	Struggle to convert decimals into percentages.	Convert decimals into percentages with computational errors.	Convert decimals into percentages with minor errors.	Convert decimals into percentages without errors.	
		viii) Converting fractions into percentages.	Conversion of fractions into percentages is performed correctly.	A pupil struggle to convert fractions into percentages.	Convert fractions into percentages with computational errors.	Convert fractions into percentages with minor errors.	Convert fraction into percentages without errors.	

Main Competence	Specific Competence	Activities to be Performed by the Pupils	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
3.0 Apply Mathematics to solve problems in different contexts.	3.1 Apply mathematical operations to solve problems.	i) Adding numbers to get the sum not exceeding 10,000,000 without carrying forward.	Addition of numbers without carrying forward to get a sum not exceeding 10,000,000 is performed correctly.	Add numbers to get a sum not exceeding 10,000,000 without carrying forward with a lot of errors.	Add numbers to get a sum not exceeding 10,000,000 without carrying forward with errors in summing the numbers up.	Add numbers to get a sum not exceeding 10,000,000 without carrying forward with minor errors in summing the numbers up.	Add numbers in thousands without carrying forward with no errors.	54
		ii) Adding numbers to get the total not exceeding 10,000,000 by carrying.	Addition of numbers with carrying forward to get a sum not exceeding 10,000,000 is performed correctly.	Struggle to add numbers with carrying forward to get a sum not exceeding 10,000,000.	Add numbers with carrying forward to get a sum not exceeding 10,000,000 with errors in adding and carrying.	Add numbers with carrying forward to get a sum not exceeding 10,000,000 with minor errors.	Add numbers with carrying forward to get a sum not exceeding 10,000,000 without errors.	
		iii) Solving word problem involving adding numbers.	Solving word problems involving addition is performed correctly.	Solve word problems involving addition with errors in interpretation and computation.	Solve word problems involving addition with errors in interpretation.	Solve word problems involving addition with minor errors.	Solve word problems involving addition without errors.	

Main Competence	Specific Competence	Activities to be Performed by the Pupils	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
		iv) Subtracting up to ten million numbers without regrouping.	Subtraction of numbers up to six digits without regrouping is performed correctly.	Struggle to subtract without regrouping up to ten million.	Subtract without regrouping up to ten million with errors in taking away.	Subtract without regrouping up to ten million with minor errors.	Subtract without regrouping up to ten million without errors.	
		v) Subtraction up to ten million numbers with regrouping.	Subtraction with regrouping up to ten million is performed correctly.	Struggle to subtract with regrouping up to ten million.	Subtract with regrouping up to ten million with errors in taking away and regrouping.	Subtract with regrouping up to ten million numbers with minor errors.	Subtract with regrouping up to ten million without errors.	
		vi) Solving word problems involving subtraction.	Solving word problems involving subtraction with regrouping is performed correctly.	Solve word problems involving subtraction with regrouping with mistakes in interpretation and computation.	Solve word problems involving subtraction with regrouping with errors in interpretation.	Solve word problems involving subtraction with regrouping with minor errors.	Solve word problems involving subtraction with regrouping without errors.	
		vii) Multiplying numbers to get a product not exceeding ten million.	Multiplication of numbers to get a product not exceeding ten million is performed correctly.	Struggle to multiply two numbers whose product does not exceed ten million.	Multiply two numbers whose product does not exceed ten million with errors.	Multiply two numbers whose product does not exceed ten million with minor errors.	Multiply two numbers whose product does not exceed ten million without errors.	

Main Competence	Specific Competence	Activities to be Performed by the Pupils	Assessment Criteria	Benchmarking				No of periods
				Beginning	Average	Good	Very Good	
		viii) Solving word problem related to multiplication.	Solving word problems involving multiplication is performed correctly.	Solve word problems involving multiplication with errors in interpretation and computation.	Solve word problems involving multiplication with errors in interpretation.	Solve word problems involving multiplication with minor errors.	Solve word problems involving multiplication without errors.	
		ix) Dividing numbers not exceeding ten million without a remainder.	Division of numbers up to ten million without a remainder is performed correctly.	Struggle to divide numbers up to ten million without a remainder.	Divide numbers up to ten million without a remainder with errors.	Divide numbers up to ten million without a remainder with minor errors.	Divide numbers up to ten million without a remainder without any errors.	
		x) Dividing numbers with a maximum of ten million with a remainder.	Division of numbers up to ten million with a remainder is performed correctly.	Struggle to divide numbers up to ten million with a remainder.	Divide numbers up to ten million with a remainder with errors.	Divide numbers up to ten million with a remainder with minor errors.	Divide numbers up to ten million with a remainder without errors.	
		xi) Solving word problems involving division.	Word problems involving division of numbers are solved correctly.	Struggle to solve word problems involving division.	Solve word problems involving division of numbers with errors in interpretation and computation.	Solve word problems involving division of numbers with minor errors.	Solve word problems involving division of numbers without errors.	

Main Competence	Specific Competence	Activities to be Performed by the Pupils	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
		xii) Subtracting decimal numbers to three decimal places.	Subtraction of decimal numbers to three decimal places is performed correctly.	Struggle to subtract decimals to three decimal places.	Subtract decimals to three decimal places with procedural and computational errors.	Subtract decimals to three decimal places with minor errors.	Subtract decimals to three decimal places without errors.	
		xiii) Multiplying numbers with two decimal places by numbers with one decimal place.	Multiplication of numbers with two decimal places by number with one decimal place is performed correctly.	Struggle to multiply numbers with two decimal places by numbers with one decimal place.	Multiply numbers with two decimal places by numbers with one decimal place with errors in computations and locating a decimal point.	Multiply numbers with two decimal places by numbers with one decimal place with minor errors.	Multiply numbers with two decimal places by numbers with one decimal place without errors.	
		xiv) Multiplying numbers with two decimal places by a whole number.	Multiplication of numbers with two decimal places by a whole number is performed correctly.	Struggle to multiply numbers with two decimal places by a whole number.	Multiply numbers with two decimal places by a whole number with errors in computation and locating of a decimal point.	Multiply numbers with two decimal places by a whole number with minor errors.	Multiply numbers with two decimal places by a whole number without errors.	

Main Competence	Specific Competence	Activities to be Performed by the Pupils	Assessment Criteria	Benchmarking				No of periods
				Beginning	*Average*	*Good*	*Very Good*	
		xv) Dividing decimal numbers to get a quotient with not more than two decimal places.	Division of numbers to get a quotient with not more than two decimal places is performed correctly.	Struggle to divide numbers to get a quotient with not more than two decimal places.	Divide numbers to get a quotient with not more than two decimal places with errors in computation and locating of a decimal point.	Divide numbers to get a quotient with not more than two decimal places with minor errors.	Divide numbers to get a quotient with not more than two decimal places without errors.	
		xvi) Adding integers.	Addition of integers is performed correctly.	A pupil struggle to add integers.	Add integers with errors in manipulation when it comes to negative and positive signs.	Add integers with minor errors.	Add integers without errors.	
		xvii) Subtracting integers.	Subtraction of integers is performed correctly.	Struggles to subtract integers.	Subtract integers with errors in manipulation with negative and positive signs.	Subtract integers with minor errors.	Subtract integers without errors.	
		xviii) Multiplying integers.	Multiplication of integers is performed correctly.	Struggle to multiply integers.	Multiply integers with errors in manipulation when it comes to negative and positive signs.	Multiply integers with minor errors.	Multiply integers without errors.	

Main Competence	Specific Competence	Activities to be Performed by the Pupils	Assessment Criteria	Benchmarking				No of Periods
				Beginning	*Average*	*Good*	*Very good*	
		xix) Dividing integers.	Division of integers is performed correctly.	Struggle to divide integers.	Divide integers with errors in manipulation when it comes to negative and positive signs.	Divide integers with minor errors.	Divide integers without errors.	
	3.2 Apply number relations to solve problems in different contexts.	i) Reading time in 12-hour format.	Reading time in 12-hour format is performed correctly.	Struggle to read time in 12- hour format.	Read time in 12-hours format with mistakes in reading minutes and am, pm and hours.	Read time in 12-hour format with minor errors.	Read time in 12-hour format without errors.	19
		ii) Writing time in 12-hour format.	Writing time in 12-hours format is performed correctly.	Struggle to write time in 12-hour format.	Write time in 12-hour format with errors.	Write time in 12-hour format with minor errors.	Write time in 12-hour format without errors.	
		iii) Reading time in 24-hours format.	Reading time in 24-hours format has been performed correctly.	Struggle to read time in 24-hours format.	Read time in 24-hour format with mistake in reading minutes.	Read time in 24-hour format with minor errors.	Read time in 24-hour format without errors.	
		iv) Writing time in 24-hour format.	Writing time in 24-hour format is performed correctly.	Struggle to write time in 24-hour format.	Write time in 24-hour format with errors.	Write time in 24-hour format with minor errors.	Write time in 24-hour format without errors.	
		v) Changing time from 12-hour to 24-hour format.	Changing time from 12-hour to 24-hour format is performed correctly.	Struggle to change time from 12-hour to 24-hour format.	Change time from 12-hour to 24-hour format with errors.	Change time from 12-hour to 24-hour format with minor errors.	Change time from 12-hour to 24-hour format without errors.	

Main Competence	Specific Competence	Activities to be Performed by the Pupils	Assessment Criteria	Benchmarking				No of Periods
				Beginning	*Average*	*Good*	*Very good*	
		vi) Changing time from 24-hours to 12-hours format.	Changing time from 24-hour to 12-hour format has been performed correctly.	Struggle to change time from 24-hour to 12-hour format.	Change time from 24-hour to 12-hour format with errors in relating to the *am* and *pm* hours.	Change time from 24-hour to 12-hour format with minor errors.	Change time from 24-hour to 12-hour format without errors.	
		vii) Solving word problems involving time.	Solving word problems involving time is performed correctly.	Struggle to Solve word problems involving time.	Solve word problems involving time with interpretational and computational errors.	Solve word problems involving time with minor errors.	Solve word problems involving time without errors.	
		viii) Solving word problems involving profit and loss.	Solving word problems involving profit and loss is performed correctly.	Struggle to Solve word problems involving profit and loss.	Solve word problems involving profit and loss with interpretational and computational errors.	Solve word problems relating to profit and loss with minor errors.	Solve word problems relating to profit and loss without errors.	

Main Competence	Specific Competence	Activities to be Performed by the Pupils	Assessment Criteria	Benchmarking				N<u>o</u> of Periods
				Beginning	*Average*	*Good*	*Very good*	
4.0 Apply reasoning and proof in real life contexts (Part Two).	4.1 Apply measurements in different life contexts.	i) Multiplying metric units of length.	Multiplication of metric units of length is performed correctly.	Struggle to multiply metric units of length.	Multiply metric units of length with errors in computation and units conversion.	Multiply metric units of length with minor errors.	Multiply metric units of length without errors.	16
		ii) Dividing metric units of length.	Division of metric units of length is performed correctly.	Struggle to divide metric units of length.	Divide metric units of length with errors in computation and unit conversion.	Divide metric units of length with minor errors.	Divide metric units of length without errors.	
		iii) Multiplying metric units of weight.	Multiplication of metric units of weight is performed correctly.	Struggle to multiply metric units of weight.	Multiply metric units of weight with errors in computation and units conversion.	Multiply metric units of weight with minor errors.	Multiply metric units of weight without errors.	
		iv) Dividing metric units of weight.	Division of metric units of weight is performed correctly.	Struggle to divide metric units of weight.	Divide metric units of weight with errors in computation and unit conversion.	Divide metric units of weight with minor errors.	Divide metric units of weight without errors.	
		v) Multiplying metric units of volume.	Multiplication of metric units of volume is performed correctly.	Struggle to multiply metric units of volume.	Multiply metric units of volume with errors in computation and unit conversion.	Multiply metric units of volume with minor errors.	Multiply metric units of volume without errors.	

Main Competence	Specific Competence	Activities to be Performed by the Pupils	Assessment Criteria	Benchmarking				No of Periods
				Beginning	*Average*	*Good*	*Very good*	
		vi) Dividing metric units of volume.	Division of metric units of volume is performed correctly.	Struggle to divide metric units of volume.	Divide metric units of volume with errors in computation and unit conversion.	Divide metric units of volume with minor errors.	Divide metric units of volume without errors.	
		vii) Solving word problems involving metric units of measurements.	Word problems involving metric units of measurements are solved correctly.	Struggle to solve word problems involving metric units of measurements.	Solve word problems involving metric units of measurements with interpretational, conversional and computational errors.	Solve word problems involving metric units of measurements with minor errors.	Solve word problems involving metric units of measurements without errors.	
	4.2 Apply the concepts of shapes and figures to solve different problems.	i) Measuring angles using standard measurement tools.	Measurement of angles using standard measurement tools is performed correctly.	Struggle to measure angles using standard tools of measurements.	Measure angles using standard measurement tools with accuracy and precision errors.	Measure angles using standard measurement tools with minor errors.	Measure angles using standard measurement tools without errors.	50
		ii) Drawing angles using standard measurement tools.	Drawing of angles using standard measurement tools is performed correctly.	Struggle to draw angles using standard measurement tools.	Draw angles using standard measurement tools with errors in accuracy and precision.	Draw angles using standard measurement tools with minor errors.	Draw angles using standard measurement tools without errors.	

Main Competence	Specific Competence	Activities to be Performed by the Pupils	Assessment Criteria	Benchmarking				No of Periods
				Beginning	*Average*	*Good*	*Very good*	
		iii) Identifying perpendicular and parallel lines.	Identification of perpendicular and parallel lines is performed correctly.	Struggle to identify perpendicular and parallel lines.	Identify perpendicular and parallel lines with mistakes due to unclear concepts.	Identify perpendicular and parallel lines with minor mistakes.	Identify perpendicular and parallel lines without mistakes.	
		iv) Calculating angles.	Angles are calculated correctly.	Struggle to calculate angles.	Calculate angles with loose adherence to the rules and principles.	Calculate angles with minor errors.	Calculate angles without errors.	
		v) Identifying rectangular shapes.	Rectangular shapes are identified correctly.	Struggle to identify rectangular shapes.	Identify rectangular shapes with errors.	Identify rectangular shapes with minor errors.	Identify rectangular shapes without errors.	
		vi) Mentioning properties of rectangular shapes.	Properties of rectangular shapes are mentioned correctly.	Struggle to mention properties of rectangular shapes.	Mention properties of rectangular shapes with errors.	Mention properties of rectangular shapes with minor errors.	Mention properties of rectangular shapes without errors.	
		vii) Calculating perimeters of parallelograms and trapeziums.	Perimeters of parallelograms and trapeziums are calculated correctly.	Struggle to calculate perimeters of parallelograms and trapeziums.	Calculate perimeters of parallelograms and trapeziums with procedural and computational errors.	Calculate perimeters of parallelograms and trapeziums with minor errors.	Calculate perimeters of parallelograms and trapeziums without errors.	

Main Competence	Specific Competence	Activities to be Performed by the Pupils	Assessment Criteria	Benchmarking				N<u>o</u> of Periods
				Beginning	*Average*	*Good*	*Very good*	
		viii) Calculating area of parallelograms.	Calculating the area of parallelograms is performed correctly.	Struggle to calculate the area of parallelograms.	Calculate area of parallelograms with procedural and computational errors.	Calculate area of parallelograms with minor errors.	Calculate area of parallelograms without errors.	
		ix) Calculating the area of trapeziums.	Area of trapeziums is calculated correctly.	Struggle to calculate the area of trapeziums.	Calculate area of trapeziums with procedural and computational errors.	Calculate area of trapeziums with minor errors.	Calculate area of trapeziums without errors.	
		x) Listing the three-dimensional (3D) shapes.	Listing of 3D shapes is performed correctly.	Struggle to list the 3D shapes.	List the 3D shapes with errors.	List the 3D shapes with minor errors.	List the 3D shapes without errors.	
		xi) Drawing 3D shapes.	Drawing of 3D Shapes is performed correctly.	Struggle to draw the 3D shapes.	Draw the 3D shapes with errors.	Draw the 3D shapes with minor errors.	Draw 3D shapes without errors.	
		xii) Making 3D shapes.	3D shapes are made correctly.	Struggle to make 3D shapes.	Make 3D shapes with errors.	Make 3D shapes.	Make attractive 3D shapes.	
		xiii) Calculating the circumference of a circle.	The circumferences of a circle are calculated correctly.	Struggle to calculate the circumference of a circle.	Calculate the circumference of a circle with procedural and computational errors.	Calculate the circumference of a circle with minor errors.	Calculate the circumference of a circle without errors.	

Main Competence	Specific Competence	Activities to be Performed by the Pupils	Assessment Criteria	Benchmarking				No of Periods
				Beginning	*Average*	*Good*	*Very good*	
		xiv) Calculating the area of a circle.	The area of circles is calculated correctly.	Struggle to calculate the area of a circle.	Calculate area of a circle with procedural and computational errors.	Calculate the area of a circle with minor errors.	Calculate the area of a circle without errors.	
		xv) Calculating the surface area of a rectangular prism.	The surface area of rectangular prism is calculated correctly.	Struggle to calculate the surface area of a rectangular prism.	Calculate the surface area of a rectangular prism with procedural and computational errors.	Calculate the surface area of a rectangular prism with minor errors.	Calculate the surface area of a rectangular prism without errors.	
		xvi) Calculating the surface area of a cube.	The surface area of a cube is calculated correctly.	Struggle to calculate the surface area of a cube.	Calculate the surface area of a cube with procedural and computational errors.	Calculate the surface area of a cube with minor errors.	Calculate the surface area of a cube without errors.	
		xvii) Calculating the surface area of a cylinder.	Surface area of cylinders is calculated correctly.	Struggle to calculate surface area of a cylinder.	Calculate the surface area of a cylinder with procedural and computational errors.	Calculate the surface area of a cylinder with minor errors.	Calculate the surface area of a cylinder without errors.	

Main Competence	Specific Competence	Activities to be Performed by the Pupils	Assessment Criteria	Benchmarking				No of Periods
				Beginning	*Average*	*Good*	*Very good*	
		xviii) Calculating the volume of a rectangular prism.	Volume of a rectangular prism is performed correctly.	Struggle to calculate the volume of a rectangular prism.	Calculate the volume of a rectangular prism with procedural and computational errors.	Calculate the volume of a rectangular prism with minor errors.	Calculate the volume of a rectangular prism without errors.	
		xix) Calculating the volume of the cube.	Volume of the cube is calculated correctly.	Struggle to calculate the volume of a cube.	Calculate the volume of a cube with procedural and computational errors.	Calculate the volume of a cube with minor errors.	Calculate the volume of a cube without errors.	
		xx) Calculating the volume of a cylinder.	Volume of the cylinder is calculated correctly.	Struggle to calculate the volume of a cylinder.	Calculate the volume of a cylinder with procedural and computational errors.	Calculate the volume of a cylinder with minor errors.	Calculate the volume of a cylinder without errors.	
		xxi) Locating a point on x-y co-ordinate plane.	Locating points on x-y co-ordinate plane is performed correctly.	Struggle to sketch and locate points on x-y co-ordinate plane.	Sketch and locate points on x-y co-ordinate plane with mistakes in sketching the plane and determining the x and y co-ordinates.	Sketch and locate points on x-y co-ordinate plane with minor mistakes.	Sketch and locate points on x-y co-ordinate plane without mistakes.	

Main Competence	Specific Competence	Activities to be Performed by the Pupils	Assessment Criteria	Benchmarking				N<u>o</u> of Periods
				Beginning	*Average*	*Good*	*Very good*	
		xxii) Reading a points on x-y co-ordinate system.	Reading of points on x-y co-ordinate system is performed correctly.	Struggle to read points on x-y co-ordinate system.	Read points in an x-y co-ordinate system with mistakes in determining the x and y co-ordinates.	Read points on x-y co-ordinate system with minor mistakes.	Read points on x-y co-ordinate system without mistakes.	
		xxiii) Writing co-ordinates of a point on x-y plane.	Writing of co-ordinates of the point on x-y plane is performed correctly.	Struggle to write co-ordinates of points on x-y plane.	Write co-ordinates of points on x-y plane with errors.	Write co-ordinates of points on x-y plane with minor errors.	Write co-ordinates of points on x-y plane without errors.	
		xxiv) Drawing plane figures on x-y co-ordinate plan.	Drawing plane figures on x-y co-ordinate plane is performed correctly.	Struggle to draw plane figures on x-y co-ordinate plane.	Draw plane figures on x-y co-ordinate plane with errors.	Draw plane figures on x-y co-ordinate plane with minor errors.	Draw plane figures on x-y co-ordinate plane without errors.	
5.0 Use mathematical language to present ideas or arguments (Part Two).	5.1 Apply the concepts of algebra to solve real life problems.	i) Solving simple algebraic equations.	Simple algebraic equations are solved correctly.	Struggle to solve simple algebraic equations.	Solve simple algebraic equations with procedural and computational errors.	Solve simple algebraic equations with minor errors.	Solve simple algebraic equations without errors.	6

Main Competence	Specific Competence	Activities to be Performed by the Pupils	Assessment Criteria	Benchmarking				No of Periods
				Beginning	*Average*	*Good*	*Very good*	
		ii) Solving word problems involving simple algebraic equations.	Word problems involving simple algebraic equations are solved correctly.	Struggle to solve word problems involving simple algebraic equations.	Solve word problems involving algebraic equations with errors in interpretation and computation.	Solve word problems involving algebraic equations with minor errors.	Solve word problems involving algebraic equations without errors.	
	5.2 Apply statistical skills to present different information.	i) Reading and interpreting Pie Charts.	Reading and interpreting Pie Charts is performed correctly.	Struggle to read and interpret Pie Charts.	Read and interpret Pie Charts with errors.	Read and interpret Pie Charts with minor errors.	Read and interpret Pie Charts without errors.	8
		ii) Drawing Pie Charts.	Drawing Pie Charts is performed correctly.	Struggle to draw Pie charts.	Draw Pie Charts with errors.	Draw Pie Charts with minor errors.	Draw Pie Charts without errors.	
		iii) Solving word problems involving Pie Charts.	Word problems involving Pie Charts are solved correctly.	Struggle to solve word problems involving Pie Charts.	Solve word problems involving Pie Charts with mistakes in interpretions.	Solve word problems involving Pie Charts with minor mistakes.	Solve word problems involving Pie Charts without mistakes.	