

CONTENT DISTRIBUTION

SUBJECT: MATHEMATICS

Class: Senior 1

Number of periods per week: periods

Note: Teachers will refer to this list of lessons depending on the number of weeks for a given school year.

Term 1 (60 periods)

UNIT 1: SETS (30 periods)		
Key unit Competence: To be able to use sets, Venn diagrams, and relations to represent situations and solve problems		
Week	Content	Number of Periods
1	Introduction to set concepts	1
	Membership of a set	1
	Number of members in a set	1
	Subset of a set	1
	Subsets of natural numbers	1
	Venn diagram	1
2	Intersection of sets	1
	Union of sets	2
	Complement of sets	2
	Simple and symmetric differences of sets	1
3	Other special sets	1
	Comparison of sets	1
	General problems in sets using venn diagram	2
	Relations and functions	2
4	Mapping, ordered pair, Cartesian product	2
	Domain and range, graph of a relation	2
	Equivalence relation (reflexive, symmetric, and transitive),	2
5	Particular relations (function, mapping, injection/one to one, surjection/onto, bijections/one to one and onto).	1
	Inverse relation	1
	Composite functions	2
	End Unit assessment	1
	Remediation	1
UNIT 2: Sets of numbers (36 periods)		
Key Unit Competence: To be able to use operations to explore properties of sets of numbers and their relationships		
Week	Content	Number of Periods
6	Sets of natural numbers	2
	Subset of natural numbers	2
	Operations on natural numbers	2

7	The set and subsets of integers	2
	Operations in the set of Integers	2
	Fractional numbers (Rational numbers)	2
8-9	Addition, subtraction, multiplication and division of rational numbers	4
	Decimals	1
	Addition, subtraction, multiplication and division of decimals	3
	Irrational numbers	1
	The set of real numbers	2
	The relationship between sets of numbers	1
10	Four operations in the set of Real numbers	4
	End Unit assessment	1
	Remediation	1
11	Exams	

TERM 2: 72 periods

UNIT 3: Linear functions, equations, and inequalities (36 periods)

Key unit Competence: To be able to represent and interpret graphs of linear functions and apply them in real life situations; solve linear equations and inequalities; appreciate the importance of checking solutions; and represent the solution.

Week	Content	Number of Periods
1	The number line	1
	Position of a point on a plane surface	2
	Drawing and labeling axes	2
2	Cartesian plane and coordinates of a point	2
	Graphs of Linear functions	3
	Intercepts, steepness: The y and x-intercept	2
3-4	The gradient of a straight line	2
	Liner equations	2
	Solve linear equations with one unknown and represent the solution.	6
	Linear inequality	2
5	Solve linear inequalities in one unknown and represent the solution on a number line	4
	Solving simultaneous inequalities	2
6	Model and solve problems using linear functions, equations, and inequalities.	3
	End unit assessment	1
	Remediation	2

UNIT 4: Percentage, discount, profit, and loss (12 periods)

Key unit Competence: To be able to solve problems that involves calculating percentage, discount, profit, loss, and other financial calculations.

Week	Content	Number of Periods
7	Percentage	1
	Discount	2
	Commission	1
	Introduction to profit and loss	1
8	Percentage profit and loss and their application	2
	Loans and savings with simple interest only	1
	Simple interest, tax and insurance	2
	End unit assessment	1
	Remediation	1
UNIT 5: Ratio and proportions (12 periods)		
Key Unit Competence: To be able to solve problems involving ratio and proportion		
Week	Content	Number of Periods
9	Introduction to Ratios	1
	Simplifying ratios	2
	Sharing quantities using ratios	2
	Applications of ratios in Scale drawing	1
10	Proportion	1
	Direct Proportion in practical contexts	2
	Inverse Proportion in practical contexts	1
	End unit assessment	1
	Remediation	1
UNIT 6: Points, lines, and angles (12/24 periods instead of 36 periods)		
Key Unit Competence: To be able to construct mathematical arguments using the angle properties of parallel lines.		
Week	Content	Number of Periods
11	Points, lines, segments, and rays	3
	Angles and their types	3
12	Angles on a straight line	2
	Angles at a point	2
	Assessment	1
	Remediation	1
13	Exams	

TERM 3 (72 periods)

UNIT 6: Points, lines, and angles (12 remaining periods /24)		
Key Unit Competence: To be able to construct mathematical arguments using the angle properties of parallel lines.		

Week	Content	Number of Periods
1	Angles on parallel lines	3
	Parallel and transversal lines and their properties	3
2	Remediation on the construction of mathematical arguments using angle properties of parallel lines and shapes.	3
	End unit assessment	2
	Remediation	1
UNIT 7: Solids (24 Periods)		
Key Unit Competence: To be able to select and use formulae to find the surface area and volume of solids		
Week	Content	Number of Periods
3	Definition of a solid: Faces, vertices, and edges	2
	Surface area of solids: cuboids, cube, cylinder, prism	4
4	Surface area of pyramid, cone, sphere, composite solid	6
5	Volume of cubes, cuboids, prism, cylinder, cone, pyramid,	6
6	Volume of a sphere	2
	Problem solving on areas and volumes for solids in real life	2
	End unit assessment	1
	Remediation	1
UNIT 8: Statistics with ungrouped data (24 Periods)		
Key Unit Competence: To be able to select and use formulae to find the surface area and volume of solids		
Week	Content	Number of Periods
7	Meaning of statistics	2
	Types of Data: Qualitative, quantitative, discrete, and continuous data	4
8	Frequency distribution	2
	Measures of central tendency: Mode, mean, median, quartiles (1st, 2nd, 3rd quartiles, inter-quartile range), midrange.	4
9	Data display: Bar chart, histogram, frequency polygon, pie chart, pictogram	4
	Reading statistical graphs: Line graph, Histogram, Frequency Polygon, Cumulative frequency diagram	3
10	Converting statistical graphs into frequency tables	3
	End unit assessment	1
	Remediation	1
UNIT 9: Elementary probability (6 Periods)		
Key Unit Competence: To be able to determine the probability of an event happening using equally likely events or experiments		

Week	Content	Number of Periods
11	Definition of terms used to describe probability: experiment, event, outcome, sample space.	2
	Types of events and examples: certain event, impossible event, uncertain event.	2
	Numerical expression of probability	2
12	Experimental probability: Probability of equally likely outcomes through experiments like tossing a coin or dice, etc	2
	Basic rules of probability	
	Estimation of probabilities where experimental data is required	2
	End unit assessment and	1
	Remediation	1
13	Exams	