Higher CHECKLIST – Grades 3 – 9 – 2019

Geometry and Measures

l can do this	Grade	Title
	9	Vectors involving ratios
	9	3d Sine and Cosine rule
	8	Vectors along a straight line
	8	3d Trig, angle between line and plane
	8	3d Pythagoras in pyramids
	7	3d Pythagoras in cuboids
	7	Surface area: cones and spheres
	7	Circle theorems
	7	Sine and Cosine Rule
	6/7	Trig with obtuse angles
	6	Volume: Spheres and cones
	6	Combined transformations
	6	Areas of sectors and segments
	6	Angles of elevation and depression
	6	Vector: Notation, arithmetic
	5	Enlargements and negative SF
	5	Pythagoras distance between two
		points.
	5	
	5	
	5	Circle theorems
	4	Pythagoras theorem
	4	Rotations
	4	Congruent triangles
	4	Enlargements and fractional SF
	4	
	4	Reflections
	4	Constructing bisectors
	3	Bearings
	3	
	3	volume of prisms
	3	Areas of composite shapes
	4	Area and circumference of circles
	3	Areas of triangles, trapezia and parallelograms
	3	Interior and exterior angles
	3	Angles on parallel lines
	3	Geometrical rules
	3	Measuring lines and angles
	3	Properties of quadrilaterals
	3	Properties of triangles
	3	Using standard units

Statistics

l can do this	Grade	Title
	8	Interpreting histograms
	7	Drawing histograms
	7	Similar area and volume
	6	Quartiles, interquartile range
	6	Comparing data
	4	Frequency Tables
	4	Relative frequency
	4	Listing Outcomes and Expected frequency

Probability

l can do this	Grade	Title
	8	Tree Diagrams, conditional
	7	Tree Diagrams
	7	Direct Proportion
	7	Inverse Proportion
	7	Probability from 3 set venn diagram
	6	The 'AND' Rule, Independent
	5	The 'OR' Rule, Mutually exclusive
	5	Probability from Venn diagrams
	4	Mutually exclusive sum
	4	Relative Frequency
	4	Expected Frequency
	4	Listing Outcomes (sample space
		diagrams)
	3	Probability of equally likely
		outcomes

Higher CHECKLIST – Grades 3 – 9 – 2019

Algebra

l can do	Grade	Title
this	Grade	inde
	9	Graph stretches
	0	Differentiation, displacement -
	9	velocity - acceleration
	9	Differentiation: max or min
	9	Quadratic inequalities (trinomial)
	9	Completing the square where a is not 1 of e.g. $2x^2 + 5x + 2$
	9	Sketching graph from completing
	9	Surds: Rationalising the
	Q	Differentiation: stationary points
	0 0	Graph reflections
	0	
	8	transformations
	8	Tangent to find gradient of a curve
		Graphing Quadratic linear
	8	simultaneous equations
	8	Sum of arithmetic series
	0	Algebraic quadratic linear
	ð	simultaneous equations
	8	Completing the square
	8	Algebraic fractions
	8	Trigonometry graphs
	8	Proof involving odds and evens
	8	Composite and inverse functions
	7	Graph translations
	7	Proof involving multiples
	7	Disproof by counter example
	7	Nth term from any two terms
	7	Quadratic inequalities (binomial)
	7	Applied quadratic equations
	7	Manipulating surds
	7	Fractional rule of indices
	7	Triple Bracket expansion
	7	Quadratic formula
	7	Factorising a quadratic where a is not 1 of e.g. $2x^2 + 5x + 2$
	7	Equations of perpendicular lines
	7	Excluding from a domain
	7	Differentiation to find the gradient
	6	Differentiation formula
	6	Functions
	6	Equations of parallel lines

	6	Graphing linear simultaneous
	U	equations
	6	Quadratic inequalities
	6	Simplifying algebraic fractions
	6	Changing the subject when it
	0	appears twice
	6	Factorising, difference of two
	Ŭ	squares
	6	Cubic and reciprocal graphs
	5	Showing inequalities on a graph
		(regions)
	5	Simultaneous equations
	5	Solving quadratic equations from a
	5	graph
	5	Factorising quadratic expressions
	5	Graphical solution to equations
	5	Deciding if a term is in a sequence
	5	Linear equations
	5	Quadratic graphs
	5	Simplify indices
	E	Solve linear inequalities with one
	5	variable
	5	Solving equations with fractions or
		squares
	5	Changing the subject (rearranging
		formulas)
	4	Inequalities on number lines
	4	Expressions
	4	Finding the equation of a line
	4	Graphs of linear functions
	4	Solving equations with brackets
	4	Factorising single brackets
	4	nth term of a linear sequence
	4	Expanding double brackets
	4	Substitution
	4	Using " $y = mx + c$ "
	3	Gradient of a line
	3	Plotting straight line graphs
	3	Inequalities
	3	Midpoint of a line
	3	Straight line graphs, Horizontal,
		vertical and diagonal
	3	Solving equations with one
	-	
	3	Expanding single brackets
	3/4	Using Formulae
	3	Number and shape patterns

Higher CHECKLIST – Grades 3 – 9 – 2019

Number

l can		
do	Grade	Title
this		
	8	3 Set Venn Diagram
	7	Bounds calculations: min and max
	7	Recurring decimals to fractions
	7	Venn diagrams with number of
		members
	7	Drawing a Venn diagram
	6	Subsets: Sets and Venn
	6	Sets: Describing sets, number
	5	Venn Diagrams to represent Sets
	5	Complement of sets
	5	Calculating with standard form
	5	Bounds
	5	Index Laws
	5	Recurring decimals
	5	LCM and HCF
	4	Sets: Member, union, intersection
		and number
	4	Prime Factors
	4	Estimation
	4	Fractions and percentages
	4	Fractions and ratio problems
	4	Interpret calculator displays
	4	Multiplying fractions
	4	Standard Form
	3	Rounding to significant figures
	3	Adding and subtracting fractions
	3	Decimals
	3	Mixed numbers and improper
		fractions
	3	Prime numbers
	3	Multiples and factors

Ratio, Proportion and rates of change

l can		
do	Grade	Title
this		
	6	Cumulative frequency
	5	Compound interest and
	5	depreciation
	л	Unit conversions: area and
	-	volume
	4	Scale factors and similarity
	4	Speed, density and pressure
	4	Reverse percentages
	4	Compare Fractions, Decimals and
	4	Percentages
	4	Comparing quantities as a ratio
	4	Division of a quantity as a ratio
	4	Express one quantity as a % of
	4	another
	4	Percentage change
	4	Ratio Sharing
	4	Speed Time graphs
	3	Distance time graphs
	3	Proportion and recipes
	3	Simple interest
	3	Express one quantity as a fraction
		of another
	3	Percentages of amounts
	3	Currency Conversions