

WIXAMS ACADEMY MATHEMATICS 5 YEAR CURRICULUM PLAN 2021-2022

KEY: UNIT TITLE PRIOR LEARNING NEEDED/RE-CAPPED – BUILDING DEPTH HOW ASSESSED?
KS 3 NATIONAL CURRICULUM DESCRIPTOR/KS4 ASSESSMENT OBJECTIVE WIDER CURRICULUM LINKS

Academy curriculum intent: *To provide EVERY student the opportunity to acquire academic excellence and those skills, qualities and experiences that develop well-rounded, successful and happy members of modern society.*

- A 5 Year curriculum design approach for most subjects providing a logically sequenced educational journey.
- We follow the full National Curriculum at Key Stage 3 (KS3) to give our students the broadest and best start to their secondary education.
- We believe in personalisation and choice, so we offer one of the broadest ranges of KS4 GCSE option subjects in the Borough.
- Students are encouraged, but not forced to take EBacc subjects, resulting in significantly more students choosing these subjects, compared to National average.
- Knowledge and skill acquisition are key.
- We have a 'Teach to the Top' mantra, where challenge is always present and differentiation ensures all students have the scaffolding and support to 'Access the Top'
- EVERY student has access to the full ambitious curriculum. We do not reduce, narrow or restrict the curriculum for any learners.
- We pride ourselves on an extremely rich 'wider curriculum' including extracurricular; electives; trips and visits; values; oracy to increase our students' 'Cultural Capital'
- We base our curriculum design and implementation on proven educational research methods.

Subject Curriculum Intent: We deliver a Mathematics curriculum that enables all students to make excellent progress across five years of study, leading to excellent outcomes and supporting a variety of further education options. Our curriculum will be a “joined-up” approach to Mathematics; emphasising the connections between topics, which encourages students to explore those links and enjoy the discovery of new ideas and their real life applications. These ideas are carefully sequenced so that prerequisite knowledge is taught early in their time at Wixams and so that links between subjects can be built upon. This will enable students of all abilities to access more sophisticated mathematical ideas. We also set homework to support this approach by alternating between lagged tasks and retrieval of key skills.

NATIONAL CURRICULUM FOR MATHEMATICS AIMS - FOR BOTH KS3 AND KS4:

1. become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.
2. **reason mathematically** by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
3. can **solve problems** by applying their mathematics to a variety of routine and nonroutine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

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	Year 7 INTRODUCE	Year 8 DEVELOP	Year 9 EMBED	Year 10 SECURE		Year 11 MASTER	
Aim	Year 7 will introduce students to key terminology, concepts and core skills needed to have success in this subject. In Mathematics we develop fluency in arithmetic processes, apply proportional reasoning methods to a variety of contexts and introduce problem solving skills.	Year 8 will develop the core skills introduced in year 7, placing greater emphasis on developing depth and understanding around key knowledge. In Mathematics we focus on multi-step processes and interpreting mathematical results, writing with clear, well-reasoned arguments	Year 9 will embed key knowledge so that it is firmly fixed in the long term memory. In Mathematics we concentrate on converting a worded or contextualised problem into mathematical processes, and then organising these processes to present a well-justified solution to a problem.	Year 10 will secure knowledge so that it can be recalled, explored and built upon with ease. In Mathematics we further develop problem solving strategies, evaluating various methods and checking the validity of an argument.		Year 11 will demonstrate mastery in the subject knowledge, making connections with other topics/subjects and applying it to different contexts. In Mathematics we focus on formal mathematical proof, evaluating methods, and combining mathematical topics applied to a problem.	
Unit 1	NUMBER 1 PLACE VALUE, ROUNDING, WRITTEN ARITHMETIC METHODS (KS2) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY¹ NUMBER CONCEPTS REQUIRED ACROSS STEM SUBJECTS	NUMBER 6 NUMBER 1, NUMBER 2, ALGEBRA 1 (Y7) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY¹ CALCULATOR USE IN SCIENCE	FOUR BOX GRID METHOD 1 NUMBER 1 (Y7) RATIO & PROPORTION 2 (Y8) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST REASONING², PROBLEM SOLVING³ EXCHANGE RATES IN BUSINESS	FOUNDATION	HIGHER	FOUNDATION	HIGHER
				FOUR BOX GRID METHOD F2 FOUR BOX GRIDS 1 (Y9) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST REASONING², PROBLEM SOLVING³ EXCHANGE RATES IN BUSINESS	FOUR BOX GRID METHOD H2 FOUR BOX GRIDS 1 (Y9) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST REASONING², PROBLEM SOLVING³ EXCHANGE RATES IN BUSINESS	RATIO & PROPORTION F6 FOUR BOX GRIDS F2, ALGEBRA F8 (Y10) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST REASONING², PROBLEM SOLVING³ COMPOUND MEASURES IN PHYSICS	RATIO & PROPORTION H6 FOUR BOX GRIDS H2, ALGEBRA H8 (Y10) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST REASONING², PROBLEM SOLVING³ COMPOUND MEASURES IN PHYSICS
Unit 1 end points	<ul style="list-style-type: none"> PLACE VALUE ORDERING NUMBERS ROUNDING WRITTEN ADDITION, SUBTRACTION RANGE PERIMETER 	<ul style="list-style-type: none"> ORDER OF OPERATIONS INCLUDING INDICES FRACTIONS ON A CALCULATOR ROUNDING ANSWERS FROM A CALCULATOR INTRODUCTION TO TRIAL & IMPROVEMENT 	<ul style="list-style-type: none"> PROPORTION PROBLEMS BEST BUY PROBLEMS EXCHANGE RATES 	<ul style="list-style-type: none"> PROPORTION PROBLEMS BEST BUY PROBLEMS EXCHANGE RATES 	<ul style="list-style-type: none"> PROPORTION PROBLEMS BEST BUY PROBLEMS EXCHANGE RATES 	<ul style="list-style-type: none"> SPEED DENSITY PRESSURE DISTANCE-TIME GRAPHS 	<ul style="list-style-type: none"> SPEED DENSITY PRESSURE DISTANCE-TIME GRAPHS VELOCITY TIME GRAPHS

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Unit 2	<p>NUMBER 2 ORDER OF OPERATIONS, MULTIPLICATION (KS2) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY¹ NUMBER CONCEPTS REQUIRED ACROSS STEM SUBJECTS</p>	<p>NUMBER 7 NUMBER 3 (Y7), NUMBER 6 (Y8) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY¹, REASONING² STANDARD FORM USED IN SCIENCE</p>	<p>NUMBER 8 NUMBER 6 (Y8) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY¹, PROBLEM SOLVING³ ROUNDING AND ACCURACY IN SCIENCE</p>	<p>RATIO & PROPORTION F5 GEOMETRY & MEASURES 10 (Y9) FOUR BOX GRIDS F2 (Y10) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST REASONING², PROBLEM SOLVING³</p>	<p>RATIO & PROPORTION H5 GEOMETRY & MEASURES 10 (Y9) FOUR BOX GRIDS H2 (Y10) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST REASONING², PROBLEM SOLVING³</p>		<p>COVID-19 RESEQUENCING NUMBER H11 NUMBER 3 (Y7) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY¹, REASONING²</p>
Unit 2 end points	<ul style="list-style-type: none"> WRITTEN METHODS FOR MULTIPLICATION, DIVISION MEAN CORRECT ORDER OF OPERATIONS, USE OF BRACKETS 	<ul style="list-style-type: none"> POWERS OF 10 STANDARD FORM PRIME FACTORS INDEX LAWS 	<ul style="list-style-type: none"> ROUNDING ESTIMATING UPPER & LOWER BOUNDS 	<ul style="list-style-type: none"> AREA AND VOLUME CONVERSIONS DIRECT AND INVERSE PROPORTION, INCLUDING EQUATIONS AND GRAPHS 	<ul style="list-style-type: none"> AREA AND VOLUME CONVERSIONS DIRECT AND INVERSE PROPORTION, INCLUDING EQUATIONS AND GRAPHS 	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> SIMPLIFYING SURDS MULTIPLYING DIVIDING SURDS RATIONALISING A DENOMINATOR
Unit 3	<p>GEOMETRY & MEASURES 1 NAMES OF SHAPES, USING MATHEMATICAL INSTRUMENTS (KS2) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY¹ USE OF RULERS ETC, AREA IN STEM</p>	<p>PROBABILITY 2 NUMBER 4, PROBABILITY 1 (Y7) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY¹, PROBLEM SOLVING³ USE OF FRACTIONS IN STEM SUBJECTS, IDEAS OF FAIRNESS IN RE</p>	<p>NUMBER 9 NUMBER 7 (Y8) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY¹, PROBLEM SOLVING³ STANDARD FORM IN SCIENCE</p>	<p>GEOMETRY & MEASURES F13 GEOMETRY & MEASURES 5 (Y8) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY¹, PROBLEM SOLVING³ BEARINGS IN GEOGRAPHY</p>	<p>GEOMETRY & MEASURES H13 GEOMETRY & MEASURES 5 (Y8) GEOMETRY & MEASURES 9 (Y9) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST REASONING², PROBLEM SOLVING³ BEARINGS IN GEOGRAPHY</p>	<p>COVID-19 RESEQUENCING STATISTICS F4 STATISTICS 3 (Y9) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST REASONING², PROBLEM SOLVING³ USE OF AVERAGES IN SCIENCES AND GEOGRAPHY</p>	<p>COVID-19 RESEQUENCING STATISTICS H4 STATISTICS 3 (Y9) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST REASONING², PROBLEM SOLVING³ USE OF AVERAGES IN SCIENCES AND GEOGRAPHY</p>
Unit 3 end points	<ul style="list-style-type: none"> USE MATHEMATICAL INSTRUMENTS AREA OF SIMPLE SHAPES 	<ul style="list-style-type: none"> SIMPLIFY FRACTIONS ADD, SUBTRACT, MULTIPLY, DIVIDE FRACTIONS 	<ul style="list-style-type: none"> PRIME FACTORS HCF & LCM INDEX LAWS, FRACTIONS AND NEGATIVES 	<ul style="list-style-type: none"> ANGLES IN POLYGONS BEARINGS 	<ul style="list-style-type: none"> ANGLES IN POLYGONS BEARINGS CIRCLE THEOREMS 	<ul style="list-style-type: none"> AVERAGES FROM UNGROUPED AND GROUPED 	<ul style="list-style-type: none"> AVERAGES FROM UNGROUPED AND GROUPED

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	<ul style="list-style-type: none"> SIMPLE NETS AND SURFACE AREA 	<ul style="list-style-type: none"> USING VENN DIAGRAMS WITH CORRECT NOTATION PROBABILITY FROM TWO-WAY TABLES AND VENN DIAGRAMS UNDERSTAND BIAS 	<ul style="list-style-type: none"> STANDARD FORM CALCULATING WITH STANDARD FORM 			FREQUENCY TABLES <ul style="list-style-type: none"> COMPARE DISTRIBUTIONS USING AVERAGES AND DIAGRAMS 	FREQUENCY TABLES <ul style="list-style-type: none"> COMBINED MEANS COMPARE DISTRIBUTIONS USING AVERAGES AND DIAGRAMS DRAWING AND USING HISTOGRAMS
Unit 4	NUMBER 3 MULTIPLICATION TABLES (KS2) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY ¹ MULTIPLES IN FOOD TECH RECIPES	ALGEBRA 4 ALGEBRA 1 (Y7) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY ¹ , REASONING ²	NUMBER 10 RATIO & PROPORTION 2 (Y8) FOUR BOX GRIDS 1 (Y9) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY ¹ , PROBLEM SOLVING ³ INTEREST IN BUSINESS, PERCENTAGES IN SCIENCE, GEOGRAPHY	ALGEBRA F8 ALGEBRA 5 (Y8) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY ¹ , PROBLEM SOLVING ³	ALGEBRA H8 ALGEBRA 5 (Y8) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY ¹ , REASONING ² , PROBLEM SOLVING ³	ALGEBRA F12 ALGEBRA 5 (Y8) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY ¹ , REASONING ² , PROBLEM SOLVING ³	ALGEBRA H12 ALGEBRA 5 (Y8) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY ¹ , REASONING ² , PROBLEM SOLVING ³
Unit 4 end points	<ul style="list-style-type: none"> MULTIPLES FACTORS STANDARD NUMBER PATTERNS HCF AND LCM 	<ul style="list-style-type: none"> SIMPLIFY ALGEBRAIC EXPRESSIONS EXPAND ONE OR MORE BRACKETS SOLVE SIMPLE LINEAR EQUATIONS USE AND INTERPRET INEQUALITIES 	<ul style="list-style-type: none"> USE MULTIPLIERS FOR PERCENTAGE INCREASE/DECREASE MULTIPLIERS FOR COMPOUND INTEREST MULTIPLIERS FOR REVERSE PERCENTAGES 	<ul style="list-style-type: none"> LINEAR SEQUENCES QUADRATIC AND GEOMETRIC SEQUENCES EQUATIONS OF STRAIGHT LINES, PARALLEL LINES 	<ul style="list-style-type: none"> LINEAR SEQUENCES QUADRATIC AND GEOMETRIC SEQUENCES EQUATIONS OF STRAIGHT LINES, PARALLEL AND PERPENDICULAR LINES 	<ul style="list-style-type: none"> EQUATIONS OF VERTICAL AND HORIZONTAL LINES EQUATIONS OF STRAIGHT LINE GRAPHS DRAWING AND INTERPRETING REAL LIFE GRAPHS 	<ul style="list-style-type: none"> EQUATIONS OF PARALLEL AND PERPENDICULAR LINES GRADIENT OF A CURVE AREA UNDER A CURVE
Unit 5	GEOMETRY & MEASURES 2 NAMES OF SHAPES, UNDERSTANDING OF ANGLE (KS2)	GEOMETRY & MEASURES 5 GEOMETRY & MEASURES 4 (Y7) IN CLASS TEACHER ASSESSMENT, SELF	ALGEBRA 6 ALGEBRA 4 (Y8) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET,	PROBABILITY F3 PROBABILITY 2 (Y8) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST REASONING ² , PROBLEM SOLVING ³	PROBABILITY H3 PROBABILITY 2 (Y8) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST REASONING ² , PROBLEM SOLVING ³	NUMBER F12 IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY ¹ , PROBLEM SOLVING ³	GEOMETRY & MEASURES H16 GEOMETRY & MEASURES 11 (Y9) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST

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	IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY ¹ USE OF ANGLES IN STEM SUBJECTS	ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY ¹ , REASONING ² USE OF ANGLES IN STEM SUBJECTS	END OF TERM SUMMATIVE TEST FLUENCY ¹ , PROBLEM SOLVING ³	USE OF PROBABILITY IN STEM SUBJECTS	USE OF PROBABILITY IN STEM SUBJECTS		REASONING ² , PROBLEM SOLVING ³
Unit 5 end points	<ul style="list-style-type: none"> SHAPE PROPERTIES, ESPECIALLY QUADRILATERALS TYPES OF ANGLE CALCULATING MISSING ANGLES 	<ul style="list-style-type: none"> DRAW ACCURATE TRIANGLES AND CONSTRUCTIONS SOLVE ANGLE PROBLEMS IN TRIANGLES AND QUADRILATERALS ANGLES WITH PARALLEL LINES 	<ul style="list-style-type: none"> SIMPLIFYING EXPRESSIONS EXPANDING BRACKETS SUBSTITUTE INTO A FORMULA SOLVE LINEAR EQUATIONS, UNKNOWN ON BOTH SIDES SET UP AND SOLVE EQUATIONS CHANGE THE SUBJECT OF A FORMULA 	<ul style="list-style-type: none"> PROBABILITY FROM SAMPLE SPACE DIAGRAM, TWO-WAY TABLES, VENN DIAGRAMS PROBABILITY TREE DIAGRAMS EXPECTATION AND RELATIVE FREQUENCY 	<ul style="list-style-type: none"> PROBABILITY FROM SAMPLE SPACE DIAGRAMS, TWO-WAY TABLES, VENN DIAGRAMS PROBABILITY TREE DIAGRAMS EXPECTATION AND RELATIVE FREQUENCY 	<ul style="list-style-type: none"> CALCULATING WITH TIME FUNCTIONAL PROBLEMS WITH MONEY BEST BUY CURRENCY CONVERSIONS 	<ul style="list-style-type: none"> PYTHAGORAS IN 3D LENGTHS IN 3D COORDINATES ANGLES IN 3D PROBLEMS SINE RULE COSINE RULE AREA OF NON-RIGHT TRIANGLES
Unit 6	<p>NUMBER 4 MULTIPLICATION TABLES (KS2), NUMBER 3 (Y7)</p> <p>IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY¹</p> <p>USE OF FRACTIONS IN STEM SUBJECTS</p>	<p>GEOMETRY & MEASURES 6</p> <p>GEOMETRY & MEASURES 1 (Y7)</p> <p>IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY¹, PROBLEM SOLVING³</p> <p>USE OF AREA IN STEM SUBJECTS</p>	<p>RATIO & PROPORTION 4</p> <p>ALGEBRA 4, RATIO & PROPORTION 2 (Y8)</p> <p>IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY¹, PROBLEM SOLVING³</p>	<p>ALGEBRA F9</p> <p>ALGEBRA 6 (Y9)</p> <p>IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY¹, REASONING²</p> <p>GRAPHS IN SCIENCE</p>	<p>ALGEBRA H9</p> <p>ALGEBRA 6 (Y9)</p> <p>IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY¹, REASONING²</p> <p>GRAPHS IN SCIENCE</p>	<p>COVID-19 RESEQUENCING</p> <p>GEOMETRY & MEASURES 12</p> <p>GEOMETRY & MEASURES 5 (Y8)</p> <p>IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY¹, PROBLEM SOLVING³</p> <p>ACCURATE DRAWING IN DESIGN TECH</p>	<p>ALGEBRA H13</p> <p>ALGEBRA 10 (Y10)</p> <p>IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY¹, REASONING²</p>
Unit 6 end points	<ul style="list-style-type: none"> SIMPLIFY FRACTIONS FIND FRACTIONS OF AMOUNTS CONVERT FRACTIONS, DECIMALS, PERCENTAGES ADD, SUBTRACT, MULTIPLY, DIVIDE FRACTIONS 	<ul style="list-style-type: none"> AREAS OF SIMPLE SHAPES SURFACE AREA OF CUBES AND CUBOIDS AREA AND CIRCUMFERENCE OF CIRCLES 	<ul style="list-style-type: none"> SIMPLIFY ALGEBRAIC FRACTIONS MULTIPLY, ADD, SUBTRACT ALGEBRAIC FRACTIONS CONVERT RATIOS, FRACTIONS, EQUATIONS SOLVE PROBLEMS BY SHARING IN COMBINED RATIOS 	<ul style="list-style-type: none"> SUBSTITUTION FACTORISING TO SOLVE QUADRATICS QUADRATIC GRAPHS 	<ul style="list-style-type: none"> FACTORISING TO SOLVE QUADRATICS COMPLETING THE SQUARE QUADRATIC FORMULA QUADRATIC GRAPHS FURTHER GRAPHS 	<ul style="list-style-type: none"> SCALE DRAWINGS STANDARD CONSTRUCTIONS OF BISECTORS AND PERPENDICULARS 	<ul style="list-style-type: none"> SOLVING SIMULTANEOUS EQUATIONS WITH ONE QUADRATIC SOLVE SIMULTANEOUS EQUATIONS GRAPHICALLY

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<p>Unit 7</p>	<p>PROBABILITY 1 UNDERSTANDING OF CHANCE (KS2), NUMBER 4 (Y7) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY¹ PROBABILITY IN SCIENCES</p>	<p>RATIO & PROPORTION 2 NUMBER 5 (Y7) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY¹, PROBLEM SOLVING³ RECIPES IN FOOD TECH</p>	<p>GEOMETRY & MEASURES 9 GEOMETRY & MEASURES 6 (Y8) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY¹, REASONING², PROBLEM SOLVING³ AREA IN SCIENCE AND DESIGN TECH</p>	<p>ALGEBRA F10 ALGEBRA 6 (Y9) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY¹, REASONING², PROBLEM SOLVING³</p>	<p>ALGEBRA H10 ALGEBRA 6 (Y9) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY¹, REASONING², PROBLEM SOLVING³</p>	<p>COVID-19 RESEQUENCING GEOMETRY & MEASURES 12 GEOMETRY & MEASURES 5 (Y8) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY¹, PROBLEM SOLVING³ ACCURATE DRAWING IN DESIGN TECH</p>
<p>Unit 7 end points</p>	<ul style="list-style-type: none"> VOCABULARY OF PROBABILITY PROBABILITY SCALE PROBABILITY AS A FRACTION EXPERIMENTAL AND THEORETICAL PROBABILITY 	<ul style="list-style-type: none"> RECIPE PROBLEMS SIMPLIFY A RATIO CONVERT RATIOS TO FRACTION DIVIDE QUANTITIES IN A RATIO PERCENTAGES OF AMOUNT INCREASE, DECREASE BY PERCENTAGE REVERSE PERCENTAGES 	<ul style="list-style-type: none"> AREAS OF SIMPLE SHAPES IN WORDED PROBLEMS CIRCUMFERENCE AND AREA OF CIRCLES AREAS AND PERIMETER OF SECTORS 	<ul style="list-style-type: none"> SOLVING SIMULTANEOUS EQUATIONS SOLVING WORDED PROBLEMS 	<ul style="list-style-type: none"> SOLVING SIMULTANEOUS EQUATIONS SOLVING WORDED PROBLEMS 	<ul style="list-style-type: none"> SCALE DRAWINGS STANDARD CONSTRUCTIONS OF BISECTORS AND PERPENDICULARS
<p>Unit 8</p>	<p>ALGEBRA 1 MULTIPLICATION TABLES (KS2), NUMBER 4 (Y7) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY¹ FORMULAE IN SCIENCES, COMPUTING</p>	<p>RATIO & PROPORTION 3 RATIO & PROPORTION 1 (Y7) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY¹, PROBLEM SOLVING³ USE OF SPEED IN SCIENCE</p>	<p>ALGEBRA 7 NUMBER 1 (Y7) ALGEBRA 5 (Y8) ALGEBRA 6 (Y9) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY¹, REASONING², PROBLEM SOLVING³</p>	<p>GEOMETRY & MEASURES F14 GEOMETRY & MEASURES 3 (Y7) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY¹, REASONING² ANIMATION IN COMPUTER SCIENCE. GEOMETRIC DESIGN IN ART</p>	<p>GEOMETRY & MEASURES H14 GEOMETRY & MEASURES 3 (Y7) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY¹, REASONING² ANIMATION IN COMPUTER SCIENCE. GEOMETRIC DESIGN IN ART</p>	<p>COVID-19 RESEQUENCING ALGEBRA H11 ALGEBRA 6 (Y9) ALGEBRA H8 (Y10) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY¹, REASONING²</p>

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Unit 8 end points	<ul style="list-style-type: none"> ALGEBRAIC SUBSTITUTION SIMPLIFY ALGEBRAIC EXPRESSIONS EXPAND A SINGLE BRACKET USE WORD FORMULAE 	<ul style="list-style-type: none"> CALCULATE WITH TIME CALCULATE SPEED, DISTANCE AND TIME DISTANCE TIME GRAPHS 	<ul style="list-style-type: none"> SHOWING AND LISTING INEQUALITIES SOLVING INEQUATIONS GRAPHICAL INEQUALITIES 	<ul style="list-style-type: none"> TRANSFORMATIONS SIMILAR SHAPES COLUMN VECTORS 	<ul style="list-style-type: none"> TRANSFORMATIONS SIMILAR SHAPES, AREA AND VOLUME COLUMN VECTORS CONGRUENT TRIANGLES FURTHER VECTORS 		<ul style="list-style-type: none"> ALGEBRAIC PROOF FUNCTION NOTATION COMPOSITE AND INVERSE FUNCTIONS
Unit 9	<p>STATISTICS 1 CHARTS AND GRAPHS (KS2), NUMBER 1, NUMBER 2 (Y7) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY¹ AVERAGE, CHARTS AND GRAPHS IN SCIENCES, GEOGRAPHY</p>	<p>GEOMETRY & MEASURES 7 GEOMETRY & MEASURES 1 (Y7) GEOMETRY & MEASURES 6 (Y8) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY¹, PROBLEM SOLVING³ USE OF VOLUME IN STEM SUBJECTS</p>	<p>GEOMETRY & MEASURES 10 GEOMETRY & MEASURES 7 (Y8) GEOMETRY & MEASURES 9 (Y9) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY¹, REASONING², PROBLEM SOLVING³ USE OF VOLUME IN STEM SUBJECTS</p>	<p>REVISION UNIT RATIO & PROPORTION 4, ALGEBRA 6, GEOMETRY & MEASURES 11 (Y9) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY¹, REASONING², PROBLEM SOLVING³</p>	<p>NUMBER H11 NUMBER 3 (Y7) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY¹, REASONING²</p>		<p>NUMBER H12 NUMBER 6 (Y8) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY¹, REASONING²</p>
Unit 9 end points	<ul style="list-style-type: none"> FINDING AVERAGES MEAN FROM A FREQUENCY TABLE BAR CHARTS FREQUENCY POLYGONS PIE CHARTS 	<ul style="list-style-type: none"> DESCRIBE 3D SHAPES VOLUMES OF PRISMS 	<ul style="list-style-type: none"> VOLUME OF PRISMS SURFACE AREAS VOLUME OF PYRAMIDS, CONES AND SPHERES 	<ul style="list-style-type: none"> FRACTIONS, DECIMALS, PERCENTAGES PYTHAGORAS FORMULAE 	<ul style="list-style-type: none"> SIMPLIFYING SURDS MULTIPLYING DIVIDING SURDS RATIONALISING A DENOMINATOR 		<ul style="list-style-type: none"> USE ITERATION TO APPROXIMATE SOLUTIONS TO EQUATIONS
Unit 10	<p>NUMBER 5 MULTIPLICATION TABLES, PERCENTAGE (KS2), NUMBER 4 (Y7) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST</p>	<p>STATISTICS 2 STATISTICS 1 (Y7) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY¹, REASONING²</p>	<p>STATISTICS 3 STATISTICS 2, PROBABILITY 2 (Y8) FOUR BOX GRIDS 1 (Y9) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST</p>	<p>STATISTICS F4 STATISTICS 3 (Y9) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST REASONING², PROBLEM SOLVING³ USE OF AVERAGES IN SCIENCES AND GEOGRAPHY</p>	<p>ALGEBRA H11 ALGEBRA 6 (Y9) ALGEBRA H8 (Y10) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY¹, REASONING²</p>		<p>ALGEBRA H14 ALGEBRA 5 (Y8) GEOMETRY & MEASURES 14 (Y10) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY¹, REASONING²</p>

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	FLUENCY ¹ , PROBLEM SOLVING ² PERCENTAGES IN SCIENCES, GEOGRAPHY	USE OF AVERAGES AND GRAPHS IN STEM SUBJECTS AND GEOGRAPHY	FLUENCY ¹ , PROBLEM SOLVING ³ SAMPLING IN BIOLOGY, CHARTS IN GEOGRAPHY			
Unit 10 end points	<ul style="list-style-type: none"> CONVERT FRACTIONS, DECIMALS, PERCENTAGES PERCENTAGES OF AN AMOUNT INCREASE, DECREASE BY A PERCENTAGE WORD PROBLEMS USING FRACTIONS, DECIMALS, PERCENTAGES 	<ul style="list-style-type: none"> COMPARING DISTRIBUTIONS USING AVERAGES GROUPED FREQUENCY TABLES STEM AND LEAF DIAGRAMMS PIE CHARTS SCATTER DIAGRAMS AND CORRELATION 	<ul style="list-style-type: none"> SAMPLING CAPTURE-RECAPTURE METHODS PIE CHARTS FREQUENCY TREES 	<ul style="list-style-type: none"> AVERAGES FROM UNGROUPED AND GROUPED FREQUENCY TABLES COMPARE DISTRIBUTIONS USING AVERAGES AND DIAGRAMMS 	<ul style="list-style-type: none"> ALGEBRAIC PROOF FUNCTION NOTATION COMPOSITE AND INVERSE FUNCTIONS 	<ul style="list-style-type: none"> DIFFERENT TYPES OF CURVE REFLECTING GRAPHS TRANSLATING GRAPHS
Unit 11	ALGEBRA 2 FUNCTION MACHINES, COORDINATES (KS2), NUMBER 2 (Y7) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY ¹ COORDINATES IN GEOGRAPHY	GEOMETRY & MEASURES 8 NUMBER 3 (Y7) GEOMETRY & MEASURES 5 (Y8) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY ¹	GEOMETRY & MEASURES 11 GEOMETRY & MEASURES 8 (Y8) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY ¹ , PROBLEM SOLVING ³	GEOMETRY & MEASURES F14 GEOMETRY & MEASURES 10 (Y9) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST REASONING ² , PROBLEM SOLVING ³ TECHNICAL DRAWING IN DESIGN TECH	STATISTICS H4 STATISTICS 3 (Y9) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST REASONING ² , PROBLEM SOLVING ³ USE OF AVERAGES IN SCIENCES AND GEOGRAPHY	
Unit 11 end points	<ul style="list-style-type: none"> FUNCTION MACHINES COORDINATES EQUATION OF A STRAIGHT LINE 	<ul style="list-style-type: none"> USE PYTHAGORAS THEOREM TO FIND MISSING SIDES FIND THE LENGTH OF LINE SEGMENTS 	<ul style="list-style-type: none"> PYTHAGORAS THEOREM USING TRIGONOMETRY TO FIND SIDES AND ANGLES 	<ul style="list-style-type: none"> DESCRIBE 3D SHAPES FIND SURFACE AREA PLANS AND ELEVATIONS PLANES OF SYMMETRY 	<ul style="list-style-type: none"> AVERAGES FROM UNGROUPED AND GROUPED FREQUENCY TABLES COMBINED MEANS COMPARE DISTRIBUTIONS USING AVERAGES AND DIAGRAMMS DRAWING AND USING HISTOGRAMS 	
Unit 12	GEOMETRY & MEASURES 3 TRANSFORMATIONS (KS2), NUMBER 3 (Y7)	ALGEBRA 5 ALGEBRA 2 (Y7) IN CLASS TEACHER ASSESSMENT, SELF	GEOMETRY & MEASURES 12 GEOMETRY & MEASURES 5 (Y8)	STATISTICS F5 STATISTICS 3 (Y9) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST	GEOMETRY & MEASURES H14 GEOMETRY & MEASURES 10 (Y9) IN CLASS TEACHER ASSESSMENT, SELF	

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	<p>IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST</p> <p>FLUENCY¹</p> <p>GEOMETRIC DESIGNS IN ART, DESIGN</p>	<p>ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST</p> <p>FLUENCY¹</p> <p>COORDINATES AND GRADIENT IN GEOGRAPHY</p>	<p>IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST</p> <p>FLUENCY¹, PROBLEM SOLVING³</p> <p>ACCURATE DRAWING IN DESIGN TECH</p>	<p>REASONING², PROBLEM SOLVING³</p> <p>USE OF GRAPHS IN SCIENCES AND GEOGRAPHY</p>	<p>ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST</p> <p>REASONING², PROBLEM SOLVING³</p> <p>TECHNICAL DRAWING IN DESIGN TECH</p>		
Unit 12 end points	<ul style="list-style-type: none"> • CONGRUENT AND SIMILAR SHAPES • REFLECTIONS • ROTATIONS • TRANSLATIONS • ENLARGEMENTS 	<ul style="list-style-type: none"> • USE COORDINATES • MIDPOINTS OF LINE SEGMENTS • EQUATION OF A STRAIGHT LINE • GRADIENTS • QUADRATIC GRAPHS 	<ul style="list-style-type: none"> • SCALE DRAWINGS • STANDARD CONSTRUCTIONS OF BISECTORS AND PERPENDICULARS 	<ul style="list-style-type: none"> • DRAW SCATTER GRAPHS • CORRELATION • ESTIMATING USING A LINE OF BEST FIT • OUTLIERS 	<ul style="list-style-type: none"> • DESCRIBE 3D SHAPES • FIND SURFACE AREA • PLANS AND ELEVATIONS • PLANES OF SYMMETRY 		
Unit 13	<p>ALGEBRA 3</p> <p>NUMBER SEQUENCES (KS2), NUMBER 3, ALGEBRA 2 (Y7)</p> <p>IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST</p> <p>FLUENCY¹, REASONING²</p> <p>GEOMETRIC DESIGNS IN ART, DESIGN</p>				<p>STATISTICS H5</p> <p>STATISTICS 3 (Y9)</p> <p>IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST</p> <p>REASONING², PROBLEM SOLVING³</p> <p>USE OF GRAPHS IN SCIENCES AND GEOGRAPHY</p>		
Unit 13 end points	<ul style="list-style-type: none"> • GENERATING SEQUENCES • NTH TERM • FIBONNACCI SEQUENCES 				<ul style="list-style-type: none"> • DRAW SCATTER GRAPHS • CORRELATION • ESTIMATING USING A LINE OF BEST FIT • OUTLIERS 		
Unit 14	<p>RATIO & PROPORTION</p> <p>1</p>						

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	READING TIME (KS2), GEOMETRY & MEASURES 1 (Y7) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY ¹ , PROBLEM SOLVING ³ GEOMETRIC DESIGNS IN ART, DESIGN						
Unit 14 end points	<ul style="list-style-type: none"> METRIC UNITS TIME CALCULATIONS PROBLEMS INVOLVING MEASUREMENTS AND TIME 						
Unit 15	GEMETRY & MEASURES 4 GEOMETRY & MEASURES 1 (Y7) IN CLASS TEACHER ASSESSMENT, SELF ASSESSMENT SHEET, END OF TERM SUMMATIVE TEST FLUENCY ¹ GEOMETRIC DESIGNS IN ART, DESIGN						
Unit 15 end points	<ul style="list-style-type: none"> CONSTRUCTING ACCURATE TRIANGLES CONSTRUCTING BISECTORS AND PERPENDICULARS 						