

Subject: Mathematics**Year group: 7**

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Numbers and the number system	Exploring fractions, decimals and percentages	Algebraic manipulation	Transformations	Investigating angles	Presentation of data
Calculating and comparing numbers, approximating and estimating. Calculating with powers and roots.	Calculating with fractions, decimals and percentages	Sequences	Visualising and constructing shapes	Investigating properties of shapes	Representing data
Primes, factors and standard form	Proportional reasoning	Solving equations and inequalities	Measuring and calculating space	Visualising and constructing enlargement	Interpreting data
Assessment	Assessment	Assessment	Assessment	Assessment	Assessment
End of Unit test	End of half term test	End of unit test	End of half term test	End of unit test	End of year test

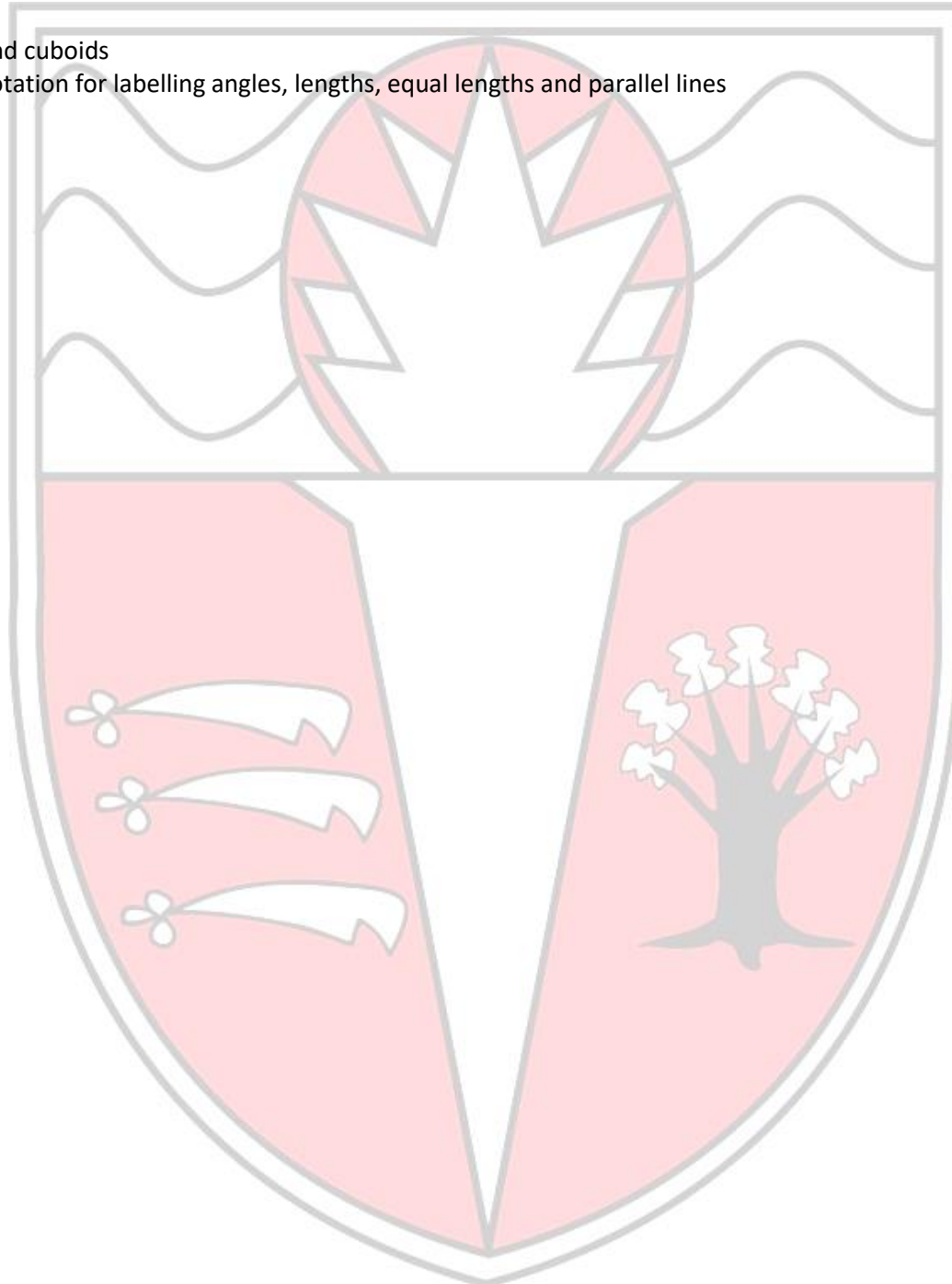
Skills developed through the year:

- Use positive integer powers and associated real roots
- Apply the four operations with decimal numbers
- Write a quantity as a fraction or percentage of another
- Use multiplicative reasoning to interpret percentage change
- Add, subtract, multiply and divide with fractions and mixed numbers
- Check calculations using approximation, estimation or inverse operations
- Simplify and manipulate expressions by collecting like terms
- Simplify and manipulate expressions by multiplying a single term over a bracket
- Substitute numbers into formulae
- Solve linear equations in one unknown
- Understand and use lines parallel to the axes, $y = x$ and $y = -x$

- Calculate surface area of cubes and cuboids
- Understand and use geometric notation for labelling angles, lengths, equal lengths and parallel lines

Extra-Curricular Opportunities:

Junior Maths Challenge



Subject: Mathematics**Year group: 8**

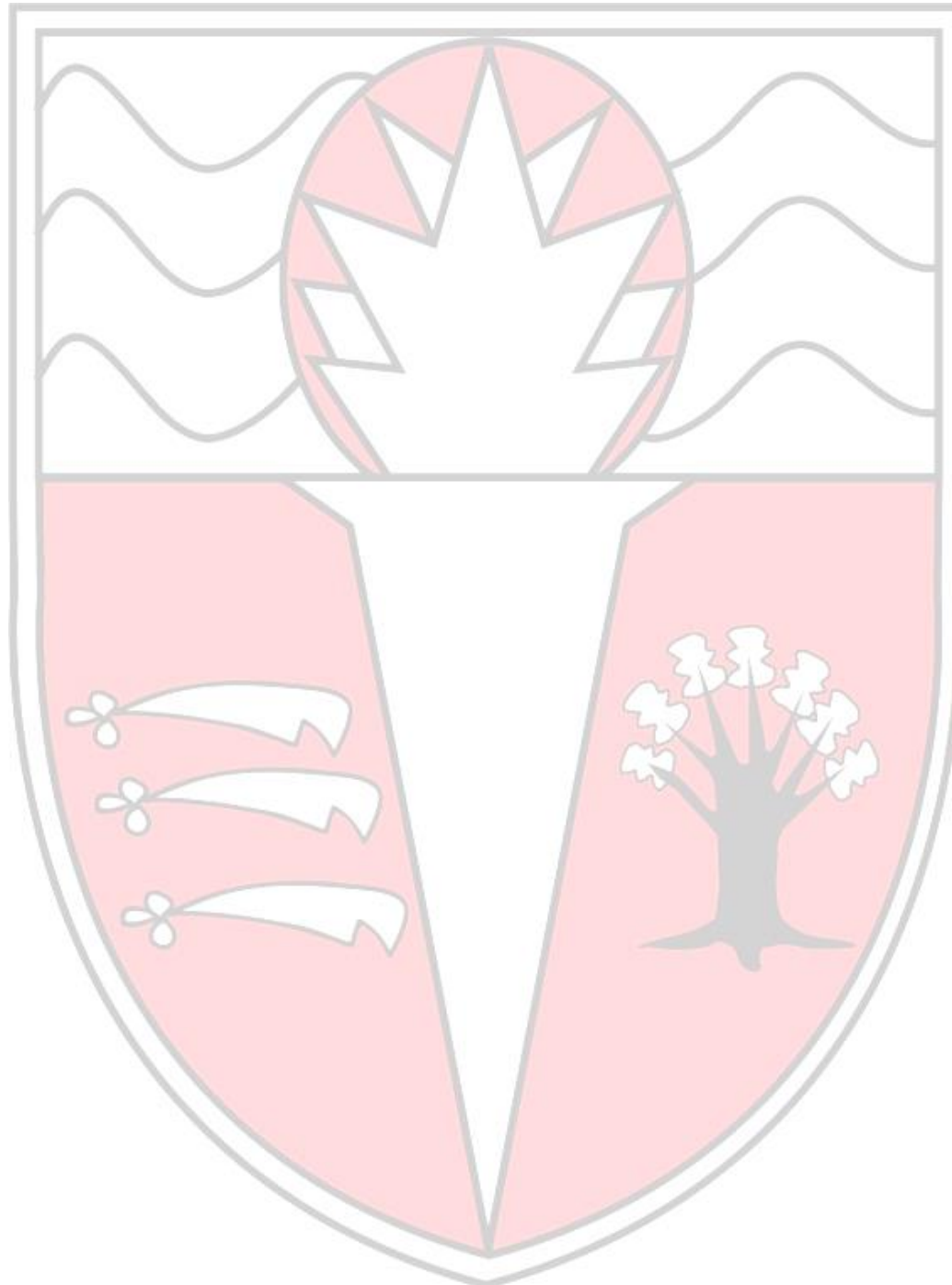
Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Primes, Factors, Multiples and Standard form	Converting fractions, decimals and percentages	Algebraic manipulation	Sequences	Calculating space	Understanding risk
Calculating with negative numbers, powers and roots	Ratio and proportional reasoning	Solving linear equations and inequalities	Algebra: graphs	visualising, constructing and enlargement	Presentation and interpretation of data
	Calculating with fractions, decimals and percentages	Rearranging formulae	Transformations		
Assessment	Assessment	Assessment	Assessment	Assessment	Assessment
End of Unit test	End of half term test	End of unit test	End of half term test	End of unit test	End of year test

Skills developed through the year:

- Apply the four operations with negative numbers
- Convert numbers into standard form and vice versa
- Apply the multiplication, division and power laws of indices
- Convert between terminating decimals and fractions
- Find a relevant multiplier when solving problems involving proportion
- Solve problems involving percentage change, including original value problems
- Factorise an expression by taking out common factors
- Change the subject of a formula when two steps are required
- Find and use the nth term for a linear sequence
- Solve linear equations with unknowns on both sides
- Plot and interpret graphs of linear functions
- Apply the formulae for circumference and area of a circle
- Calculate theoretical probabilities for single event

Extra-Curricular Opportunities:

Junior Maths Challenge



Subject: Mathematics

Year group: 9 (Foundation, Set 4-6)

GCSE title: GCSE (9–1) – 1MA1

Exam Board: EDEXCEL

[Paper 1 Non-Calculator](#)

[Paper 2 Calculator](#)

[Paper 3 Calculator](#)

Each Paper is out of 80 marks and all are equally weighted.

The content outlined for each tier will be assessed across all three papers.

Each paper will cover all Assessment Objectives.

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Negative Numbers	Use of symbols and Index Notation	Fractions	Fractions, Decimals and Percentages	Sequences	Number and Four Rules including decimals
Calculating Integers Powers and Roots	Scale factors	Solving linear equations	Linear graphs	Angles 2	Drawing and Constructing 2-D Shapes
Coordinates	Collecting Data	Transformations	Angles 1	Presenting Data	Pie Charts
Assessment	Assessment	Assessment	Assessment	Assessment	Assessment
IA (October)			IA (End of Term Test)		IA (End of year test)

Skills developed through the year:

- Accurately recall facts, terminology and definitions
- Use and interpret notation correctly
- Accurately carry out routine procedures or set tasks requiring multi-step solutions make deductions, inferences and draw conclusions from mathematical information
- Construct chains of reasoning to achieve a given result
- Interpret and communicate information accurately
- Present arguments and proofs
- Assess the validity of an argument and critically evaluate a given way of presenting information
- Translate problems in mathematical or non-mathematical contexts into a process or a series of mathematical processes
- Make and use connections between different parts of mathematics
- Interpret results in the context of the given problem
- Evaluate methods used and results obtained
- Evaluate solutions to identify how they may have been affected by assumptions made.

Extra-Curricular Opportunities:

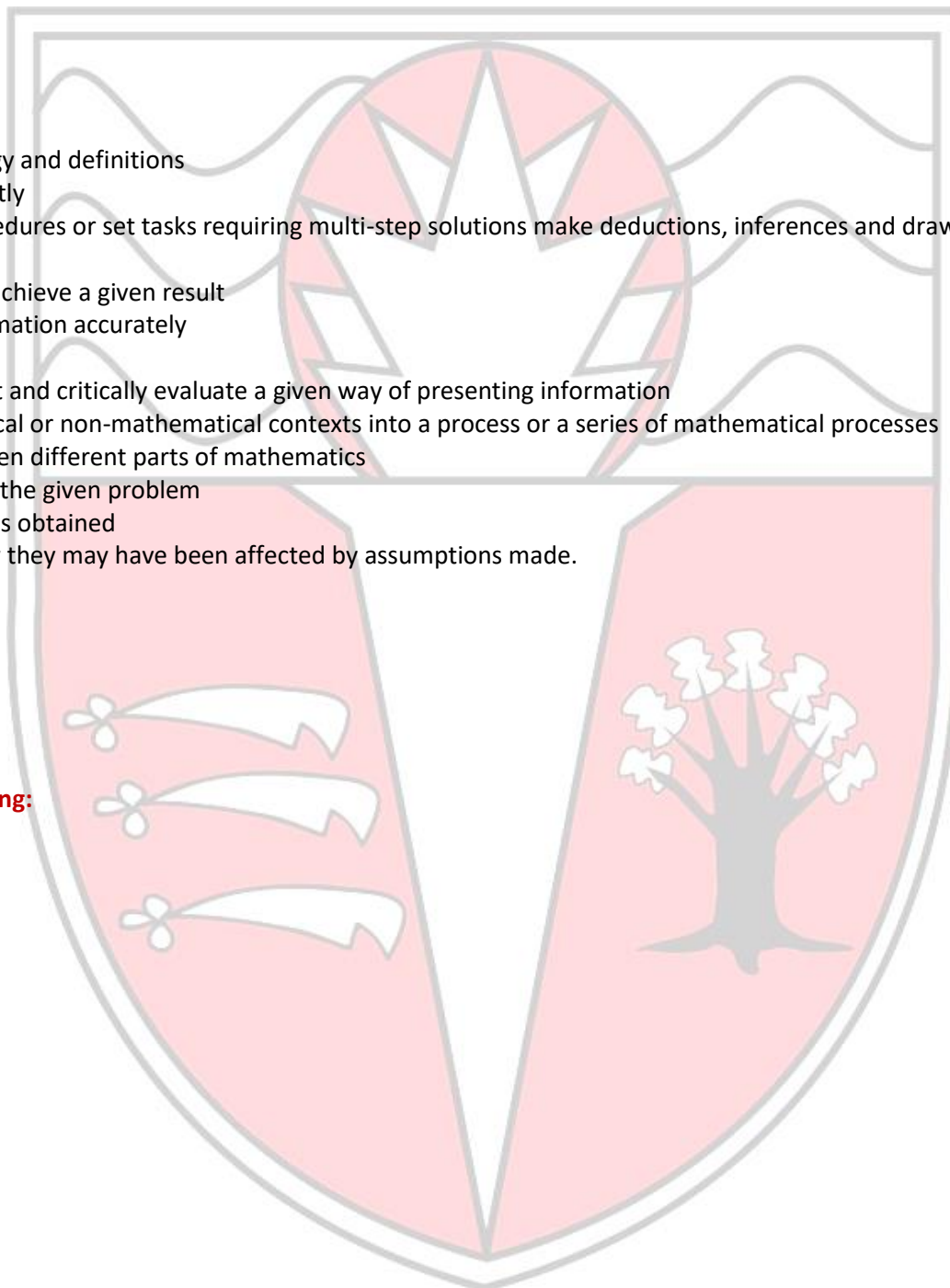
Intermediate Maths Challenge

Resources to support independent learning:

www.vle.mathswatch.co.uk

<https://hegartymaths.com/>

<https://www.mymaths.co.uk/>



Subject: Mathematics

Year group: 9 (Higher, Set 1-3)

GCSE title: GCSE (9–1) – 1MA1

Exam Board: EDEXCEL

[Paper 1 Non-Calculator](#)

[Paper 2 Calculator](#)

[Paper 3 Calculator](#)

Each Paper is out of 80 marks and all are equally weighted.

The content outlined for each tier will be assessed across all three papers.

Each paper will cover all Assessment Objectives.

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Integers Powers and Roots	Fractions	Decimals and Percentages	Formulae and Linear Graphs	Sequences	Iteration
Use of Symbols and Index Notation	Area and Perimeter	Solving Linear Equations	Circle Theorems	Drawing and Constructing 2-D and 3-D Shapes	Similar Shapes
Pythagoras' Theorem	Collecting Data	Angles	Averages	Representing and Interpreting Data	
Assessment	Assessment	Assessment	Assessment	Assessment	Assessment
IA (October)			IA (End of Term Test)		IA (End of year test)

Skills developed through the year:

- Accurately recall facts, terminology and definitions
- Use and interpret notation correctly
- Accurately carry out routine procedures or set tasks requiring multi-step solutions make deductions, inferences and draw conclusions from mathematical information
- Construct chains of reasoning to achieve a given result
- Interpret and communicate information accurately
- Present arguments and proofs
- Assess the validity of an argument and critically evaluate a given way of presenting information
- Translate problems in mathematical or non-mathematical contexts into a process or a series of mathematical processes
- Make and use connections between different parts of mathematics
- Interpret results in the context of the given problem
- Evaluate methods used and results obtained
- Evaluate solutions to identify how they may have been affected by assumptions made.

Extra-Curricular Opportunities:

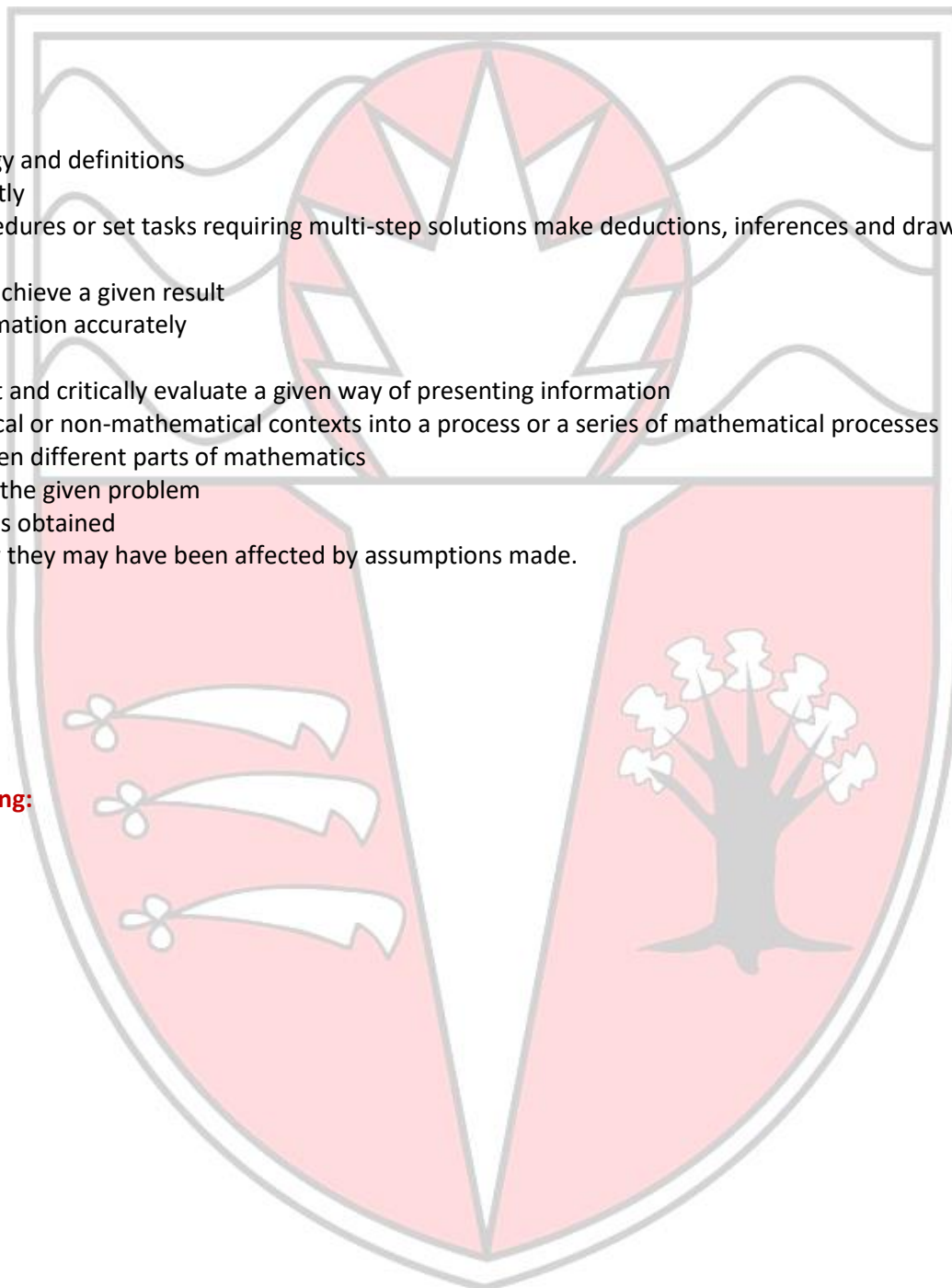
Intermediate Maths Challenge

Resources to support independent learning:

www.vle.mathswatch.co.uk

<https://hegartymaths.com/>

<https://www.mymaths.co.uk/>



Subject: Mathematics

Year group: 10 (Foundation, Set 4-6)

GCSE title: GCSE (9–1) – 1MA1

Exam Board: EDEXCEL

[Paper 1 Non-Calculator](#)

[Paper 2 Calculator](#)

[Paper 3 Calculator](#)

Each Paper is out of 80 marks and all are equally weighted.

The content outlined for each tier will be assessed across all three papers.

Each paper will cover all Assessment Objectives.

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Formulae	Inequalities	Ratio and Proportion	Applications of Percentages	Pythagoras' Theorem and Trigonometry	Simultaneous Equations and Graphs
Measures	3-D Shapes	Perimeter and Area	Quadratic Equations and Graphs	Probability	Similarity and Congruence in 2-D Shapes
Scatter Diagrams	Averages for Small data set	Averages for Large data set	Volume and Surface Area		Vectors
Assessment	Assessment	Assessment	Assessment	Assessment	Assessment
IA (October)			IA (End of Term Test)		IA (End of year test)

Skills developed through the year:

- Accurately recall facts, terminology and definitions
- Use and interpret notation correctly
- Accurately carry out routine procedures or set tasks requiring multi-step solutions make deductions, inferences and draw conclusions from mathematical information
- Construct chains of reasoning to achieve a given result
- Interpret and communicate information accurately
- Present arguments and proofs
- Assess the validity of an argument and critically evaluate a given way of presenting information
- Translate problems in mathematical or non-mathematical contexts into a process or a series of mathematical processes
- Make and use connections between different parts of mathematics
- Interpret results in the context of the given problem
- Evaluate methods used and results obtained
- Evaluate solutions to identify how they may have been affected by assumptions made.

Extra-Curricular Opportunities:

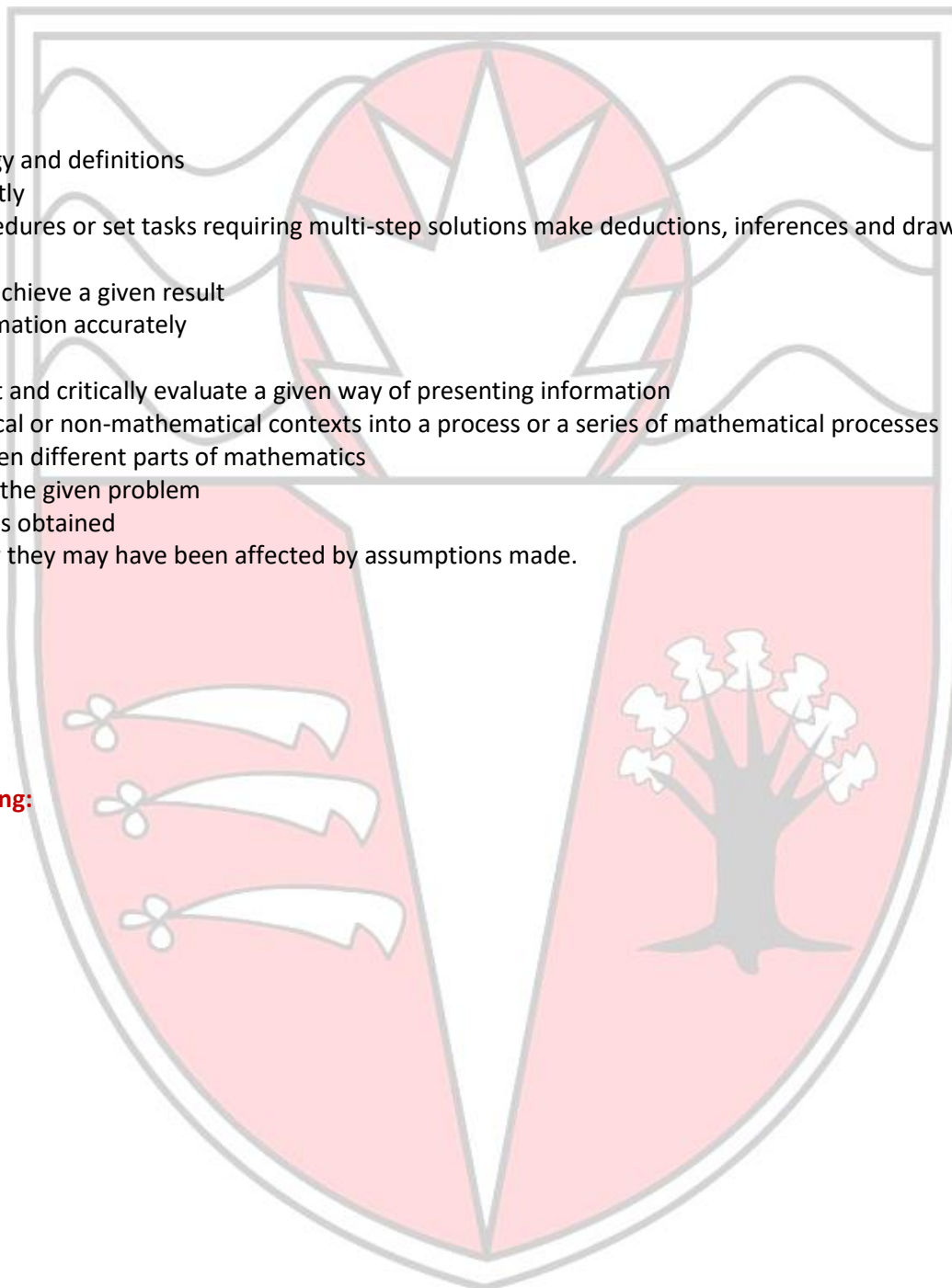
Intermediate Maths Challenge

Resources to support independent learning:

www.vle.mathswatch.co.uk

<https://hegartymaths.com/>

<https://www.mymaths.co.uk/>



Subject: Mathematics

Year group: 10 (Higher, Set 1-3)

GCSE title: GCSE (9–1) – 1MA1

Exam Board: EDEXCEL

[Paper 1 Non-Calculator](#)

[Paper 2 Calculator](#)

[Paper 3 Calculator](#)

Each Paper is out of 80 marks and all are equally weighted.

The content outlined for each tier will be assessed across all three papers.

Each paper will cover all Assessment Objectives.

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Ratio and Proportion	Simultaneous Equations	Index Notation and Surds	Further Functions	Transformations of Functions	Proofs
Quadratic Functions and Graphs	Transformations	Inequalities	Surface Area and Volume of 3-D Shapes	Trigonometry	Vectors
Coordinates	Median and Interquartile Range	Compound Measures and Real Life	Scatter Graphs and Correlation	Probability	
Assessment	Assessment	Assessment	Assessment	Assessment	Assessment
IA (October)			IA (End of Term Test)		IA (End of year test)

Skills developed through the year:

- Accurately recall facts, terminology and definitions
- Use and interpret notation correctly
- Accurately carry out routine procedures or set tasks requiring multi-step solutions make deductions, inferences and draw conclusions from mathematical information
- Construct chains of reasoning to achieve a given result
- Interpret and communicate information accurately
- Present arguments and proofs
- Assess the validity of an argument and critically evaluate a given way of presenting information
- Translate problems in mathematical or non-mathematical contexts into a process or a series of mathematical processes
- Make and use connections between different parts of mathematics
- Interpret results in the context of the given problem
- Evaluate methods used and results obtained
- Evaluate solutions to identify how they may have been affected by assumptions made.

Extra-Curricular Opportunities:

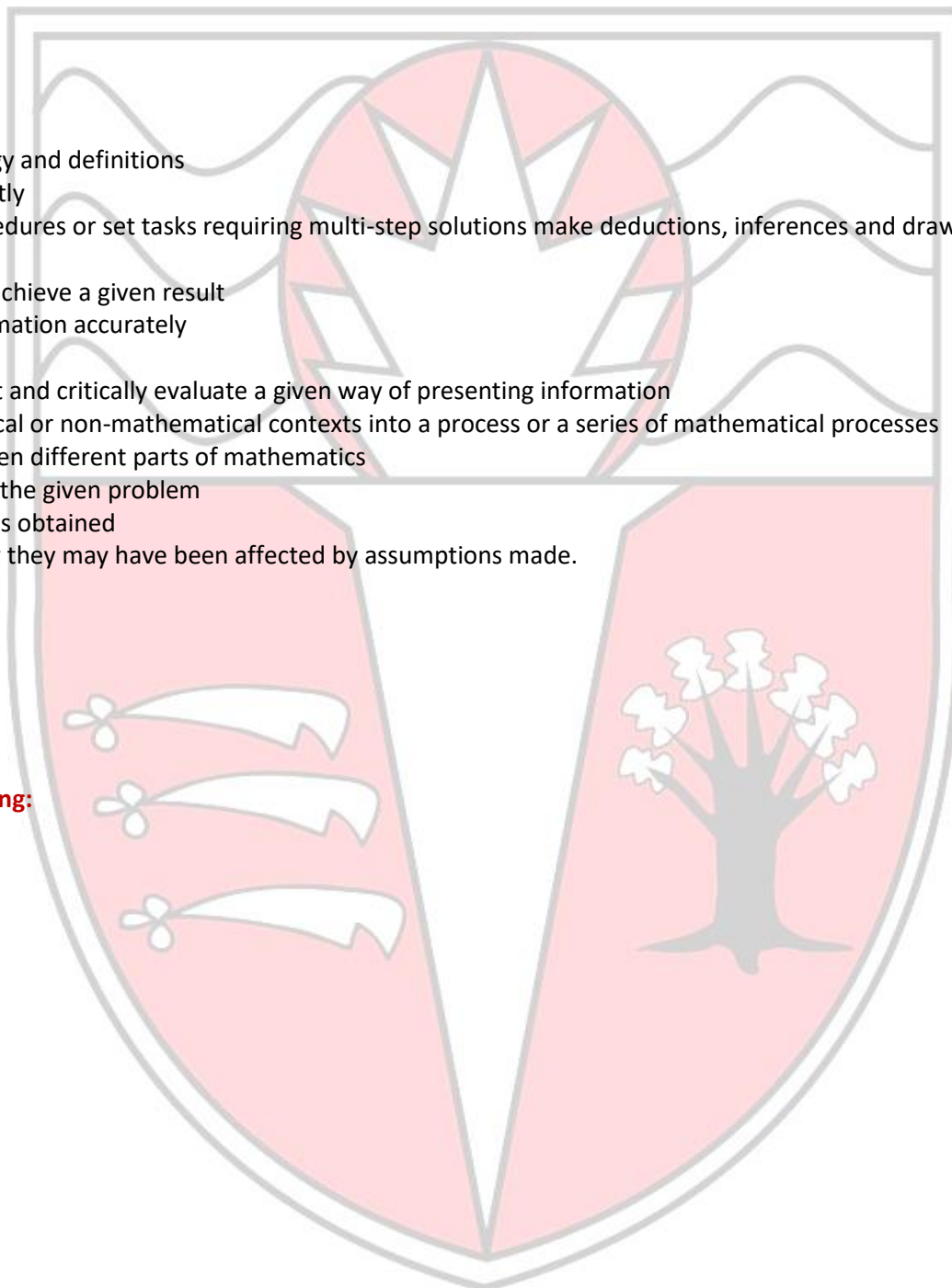
Intermediate Maths Challenge

Resources to support independent learning:

www.vle.mathswatch.co.uk

<https://hegartymaths.com/>

<https://www.mymaths.co.uk/>



Subject: Mathematics

Year group: 11

GCSE title: GCSE (9–1) – 1MA1

Exam Board: EDEXCEL

[Paper 1 Non-Calculator](#)

[Paper 2 Calculator](#)

[Paper 3 Calculator](#)

Each Paper is out of 80 marks and all are equally weighted.

The content outlined for each tier will be assessed across all three papers.

Each paper will cover all Assessment Objectives.

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Targeted revision based on end of year 10 exams	Targeted revision based on end of year 10 exams	Targeted revision based on end of year 11 mock exams	Targeted revision based on end of year 11 mock exams		
Assessment	Assessment	Assessment	Assessment	Assessment	Assessment
Weekly tests (half papers)	Weekly tests (half papers) Mock Exams (Dec)	Weekly tests (half papers)	Weekly tests (half papers)		

Skills developed through the year:

- Accurately recall facts, terminology and definitions
- Use and interpret notation correctly
- Accurately carry out routine procedures or set tasks requiring multi-step solutions make deductions, inferences and draw conclusions from mathematical information
- Construct chains of reasoning to achieve a given result

- Interpret and communicate information accurately
- Present arguments and proofs
- Assess the validity of an argument and critically evaluate a given way of presenting information
- Translate problems in mathematical or non-mathematical contexts into a process or a series of mathematical processes
- Make and use connections between different parts of mathematics
- Interpret results in the context of the given problem
- Evaluate methods used and results obtained
- Evaluate solutions to identify how they may have been affected by assumptions made.

Extra-Curricular Opportunities:

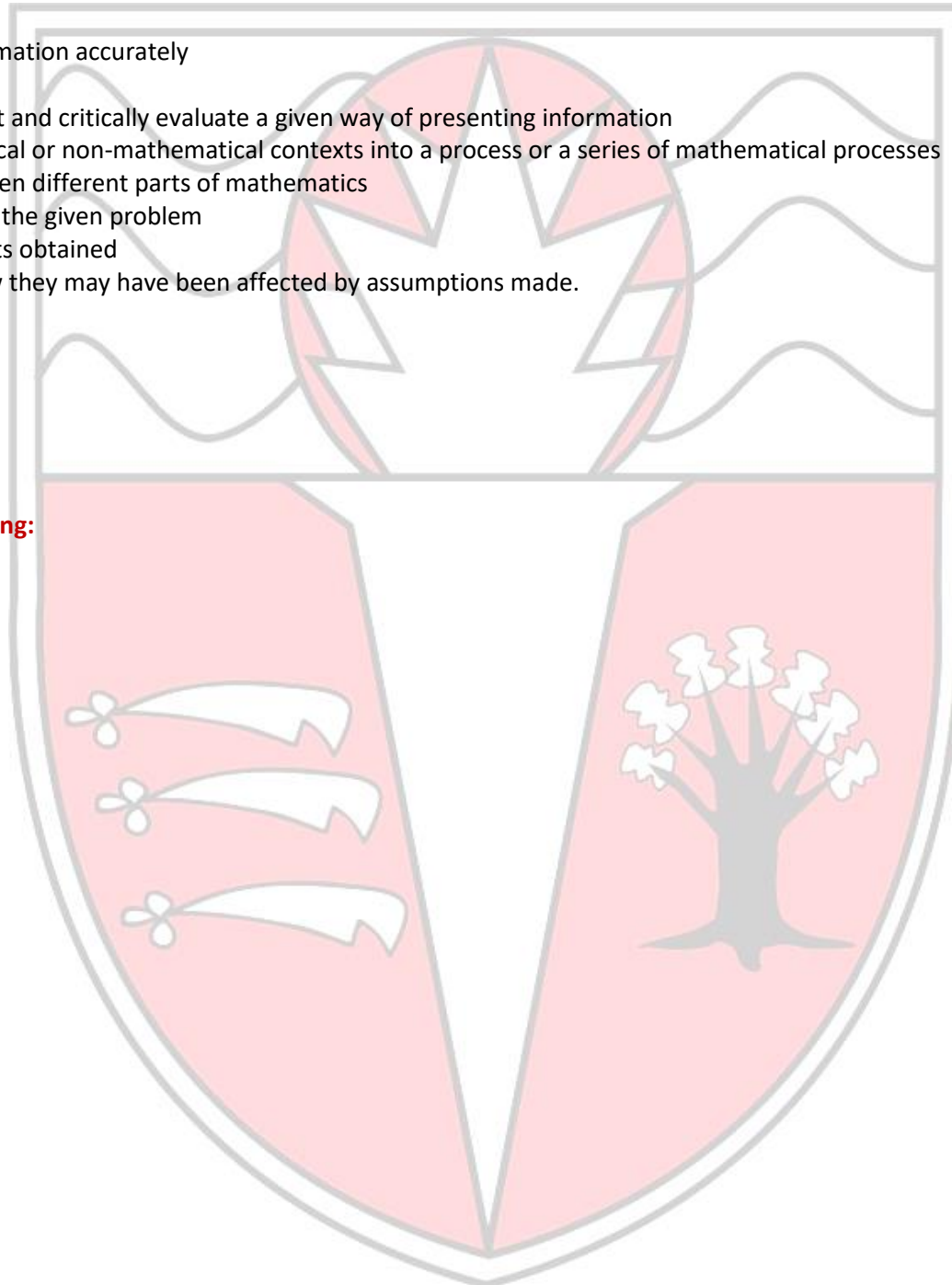
Intermediate Maths Challenge

Resources to support independent learning:

www.vle.mathswatch.co.uk

<https://hegartymaths.com/>

<https://www.mymaths.co.uk/>



Subject: Further Mathematics

Year group: 11 (Set 1 and 2)

GCSE title: AQA Level 2 Certificate in Further Mathematics

Exam Board: AQA

Paper 1 Non-Calculator

Paper 2 Calculator

Each Paper is out of 80 marks and all are equally weighted.

The content outlined for each tier will be assessed across both papers.

Each paper will cover all Assessment Objectives.

Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Percentages, ratios and fractions Algebra: Factorising, rearranging formulae, simplifying algebraic fractions, solving equations, completing the square	Coordinate Geometry	Differentiation	Revision		
Functions, Graphs of Functions	Pythagoras's Theorem, Circle Theorems, Trigonometric Graphs	Matrices			
Quadratic Equations, simultaneous equations, Factor Theorem, Inequalities, Indices,	Advanced Trigonometry				

Algebraic proofs, Sequences					
Assessment	Assessment	Assessment	Assessment	Assessment	Assessment
	Mock Exams (Dec)	Fortnightly class tests.	Fortnightly class tests.		IA (End of year test)

Skills developed through the year:

- Accurately recall facts, terminology and definitions
- Use and interpret notation correctly
- Accurately carry out routine procedures or set tasks requiring multi-step solutions make deductions, inferences and draw conclusions from mathematical information
- Construct chains of reasoning to achieve a given result
- Interpret and communicate information accurately
- Present arguments and proofs
- Assess the validity of an argument and critically evaluate a given way of presenting information
- Translate problems in mathematical or non-mathematical contexts into a process or a series of mathematical processes
- Make and use connections between different parts of mathematics
- Interpret results in the context of the given problem
- Evaluate methods used and results obtained
- Evaluate solutions to identify how they may have been affected by assumptions made.

Extra-Curricular Opportunities:

Intermediate Maths Challenge

Resources to support independent learning:

Text Book: AQA Level 2 Certificate in Further Mathematics ISBN: 978-1-5104-4693-9

Revision Guide: CGP New Grade 9-4 AQA Level 2 Certificate: Further Maths