Thomas Deacon Academy

Vision Statement

"To provide learning of Mathematics that is challenging, engaging and enthuses both students and staff so that all achieve to their full potential".

Year 9 Mathematics at TDA

- Stage 9 Mathematicians – Class Names Angelou and Boyle (3 lessons per week)

- Stage 8 Mathematicians – Class Names Curie and Dahl (3 lessons per week)

- Stage 7 Mathematicians – Class Names Euclid and Fermat (3 or 4 lessons per week)

- Stage 6 Mathematicians – Class Name Golding (4 lessons per week)

Class		Stage	Teacher				
9SBoyle	(31)	9	TMA	3			
9SCurie	(29)	8	CVS	3			
9SDahl	(28)	8	CAM	3			
9SEuclid	(31)	7	AMT	3			
9SFermat	(23)	7	NFW	1	EGM	3	
9SGolding	(18)	6	RZB	3	TFM	1	

Class		Stage	Teachers				
9NAngelou	(31)	9	LZT	3			
9NBoyle	(30)	9	TFM	2	NJW	1	
9NCurie	(31)	8	RZB	3			
9NDahl	(30)	8	AYB	1	CPG	2	
9NEuclid	(28)	7	JNH	2	NJW	1	
9NFermat	(19)	7	GDR	2	CAM	2	

Can I See What My Young Mathematician Will Be Studying?

**You can find all SoW on the TDA webpage in the curriculum area.**

Thomas Deacon Academy

Mathematics Curriculum map Year 9 Extension

Term	Topic	Skills addressed	Literacy skills addressed	Key assessment tasks
Term 1	Calculating Visualising and constructing	• Calculate with powers and roots. Explore the use of standard form. Explore the effects of rounding. • Know standard mathematical constructions. Apply standard mathematical constructions. Explore ways of representing 3D shapes.	Speaking and listening - LK3, SK5 Reading - RK2 Writing - WS2	Progress test 1
Term 2	Algebraic proficiency: tinkering Proportional reasoning	• Understand equations and identities. Manipulate algebraic expressions. Construct algebraic statements. • Solve problems involving different types of proportion. Investigate ways of representing proportion. Understand and solve problems involving congruence. Understand and solve problems involving similarity. Know and use compound units in a range of situations.	Speaking and listening - LK3, SK5 Reading - RK2 Writing - WS2	Progress test 2
Term 3	Pattern sniffing Solving equations and inequalities I	• Investigate Fibonacci numbers. Investigate Fibonacci type sequences. Explore quadratic sequences. • Explore the meaning of an inequality. Solve linear inequalities.	Speaking and listening - LK3, SK5 Reading - RK2 Writing - WS2	Progress test 3
Term 4	Calculating space	• Solve problems involving arcs and sectors. Solve problems involving prisms. Investigate right-angled triangles. Solve problems involving Pythagoras' theorem.	Speaking and listening - LK3, SK5 Reading - RK2 Writing - WS2	
Term 5	Conjecturing Algebraic proficiency: visualising Solving equations and inequalities II	• Explore the congruence of triangles. Investigate geometrical situations. Form conjectures. Create a mathematical proof. • Investigate features of straight line graphs. Explore graphs of quadratic functions. Explore graphs of other standard non-linear functions. Create and use graphs of non-standard functions. Solve kinematic problems.	Speaking and listening - LK3, SK5 Reading - RK2 Writing - WS2	Yr9 Examination
Term 6	Solving equations and inequalities II Understanding risk Presentation of data	• Solve simultaneous equations. Use graphs to solve equations. Solve problems involving simultaneous equations. • Understand and use tree diagrams. Develop understanding of probability in situations involving combined events. Use probability to make predictions. • Construct and interpret graphs of time series. Interpret a range of charts and graphs. Interpret scatter diagrams. Explore correlation.	Reading - RK3 Writing - WK4 Comparing data sets	Progress test 4

Tools For Mathematicians

- ✓ A pen
- ✓ A pencil
- ✓ A ruler
- ✓ A compass
- ✓ A protractor
- ✓ A **Scientific** calculator
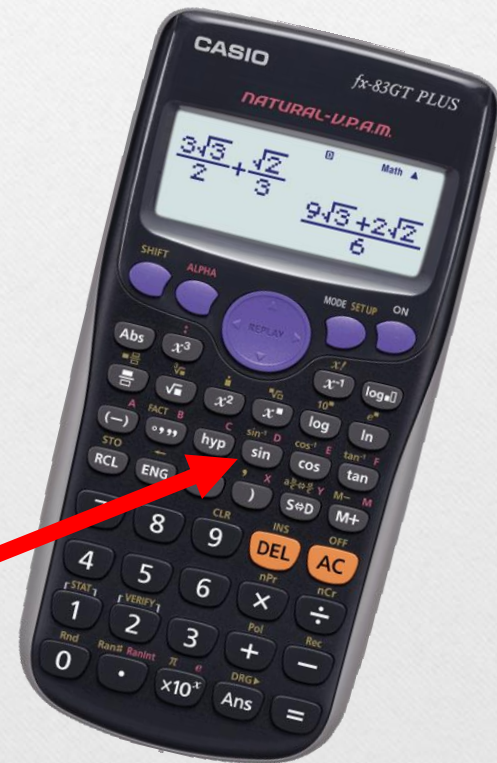
Encourage your child to be neat. Why?

- It saves time since things don't get lost on the page.
- It leads to self-discipline and planning.
- It leads to greater self-confidence and pride.

In Maths neatness makes a huge difference. If your child does not lay work out neatly, there is every chance that mistakes will be made. Encourage them to present their homework neatly and to take pride in all of their work.

Tests and Exams

- Students will complete 4 progress tests and 1 main mock exam throughout the year.

- Main mock exams for the year are in May. They will sit 2 exam papers, one non-calculator and one calculator.

- Please ensure students have the correct equipment. They need a calculator, ruler, protractor, a pair of compasses for drawing circles, pens, pencils and a rubber.
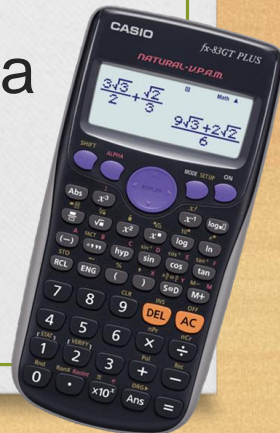
GCSE Mathematics

- AQA Mathematics GCSE specification 8300

Assessment structure

Paper 1 33.3%	Paper 2 33.3%	Paper 3 33.3%
Non-calculator	Calculator	Calculator
80 marks	80 marks	80 marks
1 hr 30 mins	1 hr 30 mins	1 hr 30 mins

All papers may assess any content domains and all assessment objectives in roughly same proportions across all three papers.

Foundation Tier

Grades 1-5. Half the marks on each paper targeting grades 1 to 3 and the other half at 3 to 5.

Higher Tier

Grades 4-9. Half the marks on each paper targeting grades 4-6 and other half at 7-9.

Checkpoint Data

- Progress tests and mock exams are marked by staff and a raw score is awarded. Raw scores are converted into 1 – 9 grades. These will also have sublevels attached to them – or +.
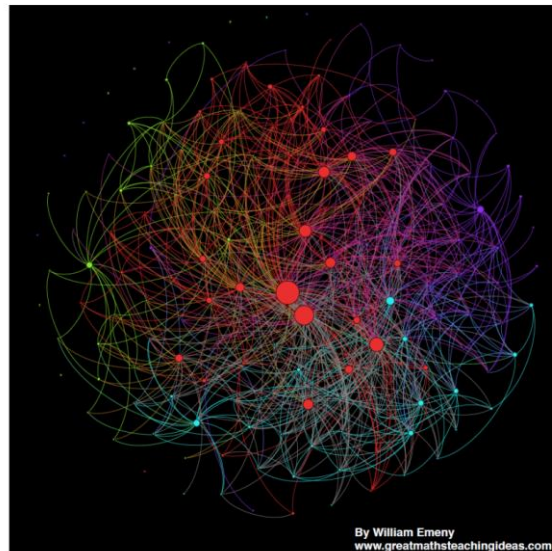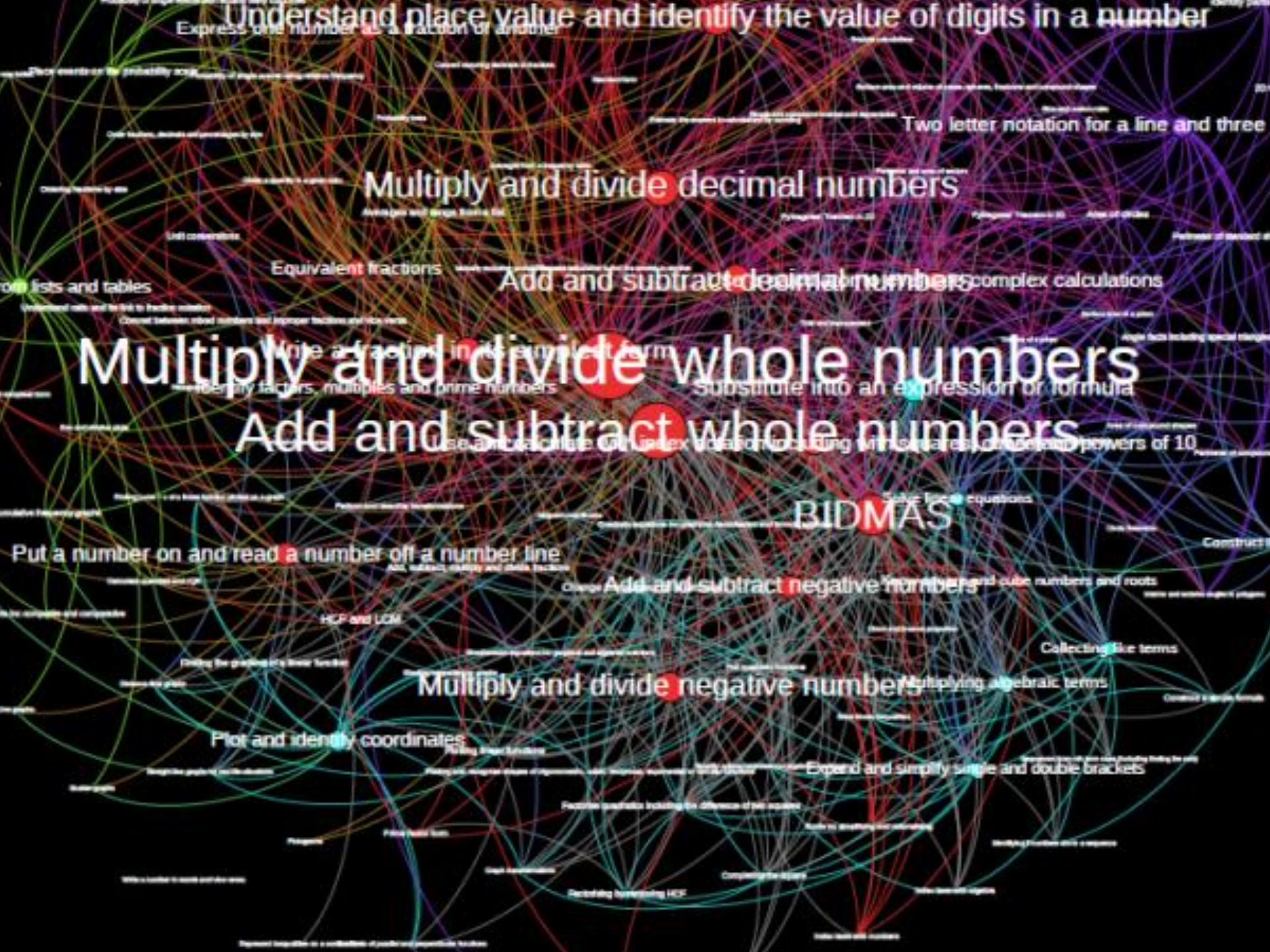
- In Maths we combine grades from different progress tests and mock exams throughout the year to provide a current grade provided at checkpoints.

- Checkpoint 1 – 80% from current grade at CP4 of Yr8 combined with 20% from first progress test.

- Checkpoint 2 – 60% from current grade at CP4 of Yr8 combined with 20% PT1 and 20% from PT2.

- Checkpoint 3 – 20% PT1, 20%PT2, 40% Mock exam and 20% PT3.

- Checkpoint 4 – 20% PT2, 20% PT3, 40% Mock Exam, 20% PT4.

Why does my child need to be good at Mental Maths?

As your child progresses through Secondary School, the maths problems they will attempt to solve will become more complex. They need to be focussed on thinking about which formula to use and which strategy to apply – they do not want to be slowed down by the basics. Ultimately, they will be taking their GCSE examination – any time lost by having to spend a disproportionate amount of time thinking about the basics is time that they could be using to complete the paper or to check questions for any errors.

By William Emeny
www.greatmathsteachingideas.com

Name... **Stage 9 - Term 2**

		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7		🙂	😐	☹️
1	Expanding a double bracket											
2	Multiplying and dividing by powers of 10											
3	Calculating speed											
4	Multiplying mixed numbers											
5	Expressing as a product of prime factors											
6	Solving linear equations											
7	Generating a GP given 1st term and common ratio											
8	Dividing in a given ratio											
9	Increase and decreasing by a given percentage											
10	Simplifying indices											

Target / Question

Date Achieved

Week 1		

Websites

The best way to prepare for Maths exams is by doing practice questions, the following resources provide support for doing this:

- www.mymaths.co.uk

  Login: deacon   Password: circle

- www.online.justmaths.co.uk/

  Login: DeaconStudent   Password: Deacon

- www.mathedup.co.uk/classes/10n2/gcse-maths-takeaway/   no password required

Mr Barton Maths

Maths Topic Index Page

This is my favourite part of my website. It is how I plan each of my lessons, and how I encourage my students to revise.

HOW TEACHERS COULD USE THE PAGE   HOW STUDENTS COULD USE THE PAGE

Just start typing the topic here...

Number Skills	Rounding and Estimating	Fractions, Decimals, Percentages	Ratio and Proportion
Surds and Indices	Algebra Skills	Brackets	Solving Equations

Supporting your Child's Maths

✓ Lots of praise

✓ Plenty of encouragement

✓ Support them with their homework

✓ Encourage them to present their work neatly

✓ Encourage your child to practise their times tables

✓ Speak to them about any worries they have

✓ Talk to their Maths Teacher

✓ Keep practicing