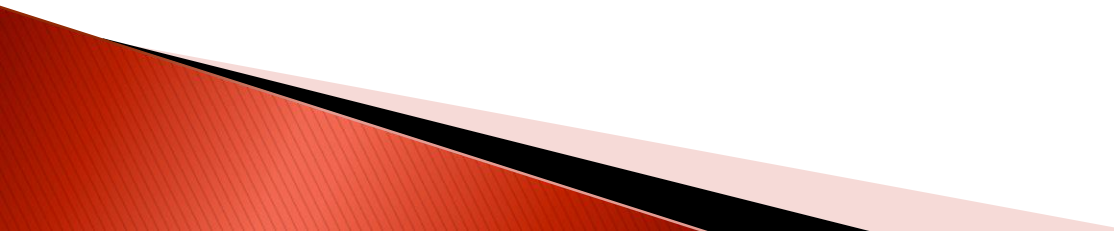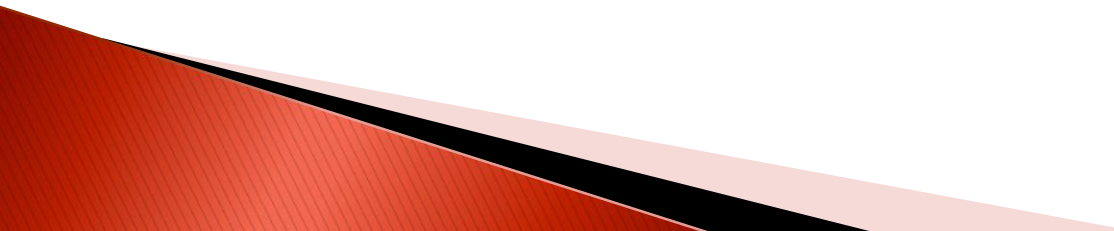# Year 11 Parents Information evening
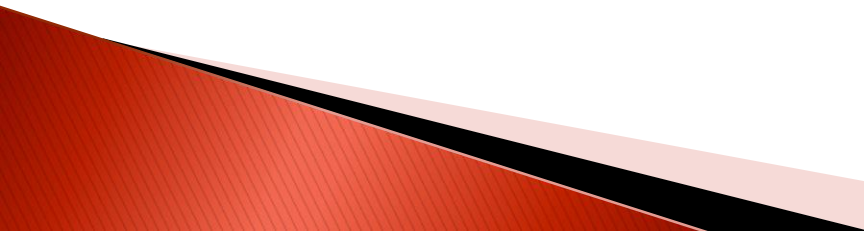
Mathematics

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".

Lessons

- Students all have five 1 hour lessons of Maths per week.

- Each half of the year is set by ability.

- Please ensure students arrive at lessons fully equipment. They need a calculator, a ruler, a protractor, a pair of compasses for drawing circles, pens, pencils and a rubber.

Homework

- Students should have 1 hours Maths homework per week.
- This may be a written homework completed in their exercise book or an electronic piece of work completed on the computer.
- Computer based homework provides instant feedback, best completed with access to paper for working out on.
- Written homework should show all of the students method not just a list of answers.

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.

Tier of entry

- Classes following stage 9 and 10 this year are aiming for higher tier entry, 8 and 7 foundation.
- Final decisions on tier of entry are not made until after PPEs in March of Yr11.

Class	Stage	Teachers		
11SAngelou	11	TDH	4	
11SBoyle	HL	NXR	4	
11SCurie	HL/FU	DJC	4	
11SDahl	FU	JNH	4	
11SEuclid	FL	NJW 1	AYB	3
11SFermat	FL	EGM 2	NFW	2

Class	Stage	Teachers		
11NAngelou	11	MAL	4	
11NBoyle	HL	CVS	4	
11NCurie	HL	GDR	4	
11NDahl	FU	RZB	4	
11NEuclid	FL	LZT	3	CAM 1
11NFermat	FL	TMA	4	

Tests and exams
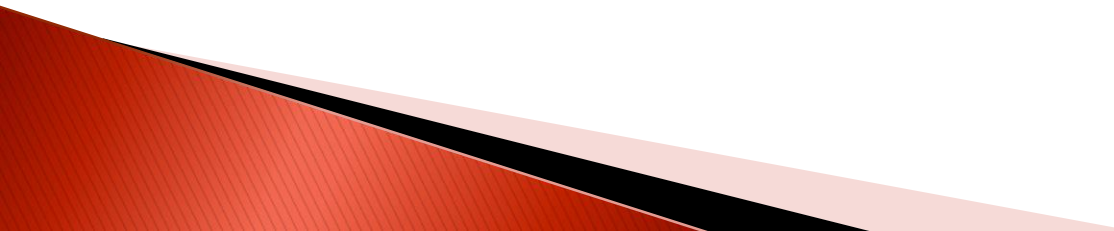
- Progress tests.

- November Mocks, March PPEs.

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

- All students in the academy take GCSE Maths in Year 11; at least a grade 4 is required in order for students to not have to re-sit GCSE Maths in Yr12 if they come into the sixth form.

Checkpoint data

- Students 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 + so you can see how far into a grade students are.

- 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 Yr10 combined with 20% from first progress test.
- Checkpoint 2 – 30% from current grade at CP4 of Yr10 combined with 20% PT1 and 50% from Nov Mock.
- Checkpoint 3 – grade from PPEs

Parental support

- Equipment.

- Revision guides and workbooks

- Access to websites.

- Access to the PiXL Maths APP.

- A place to work quietly.

Websites

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

- www.mymaths.co.uk   Login: deacon circle
- www.online.justmaths.co.uk/   Login: DeaconStudent Deacon
- www.mathedup.co.uk/classes/10n2/gcse-maths-takeaway/   no passwords are required.

PiXL Maths App

PiXL Maths App

PiXL maths
2009-2015 The PiXL Club. Created by Matthew Woodfine. Version 1.18.

Therapy videos

Fractions, decimals & percentages - part a

Simplify the following fractions to their simplest form:

$$\frac{16}{80} = \frac{1}{5} \checkmark \qquad \frac{9}{45} = \frac{1}{5} \checkmark \qquad \frac{12}{48} = \frac{1}{4} \checkmark$$

Convert between the following different types of number and simplify where necessary:

Fraction to decimal

$$\frac{1}{8} = 0.125 \checkmark$$

Decimal to fraction

$$0.5 = \frac{5}{10} \text{ ✗} \quad \begin{matrix}1\\2\end{matrix}$$

Decimal to percentage

$$0.2 = 20 \% \checkmark$$

You recently received your Science result. You got 31 out of 60. What is this as a percentage? Where necessary, give the answer to 1d.p.

$$52.2 \% \text{ ✗}$$
51.7

PiXL Maths App - Therapy videos

PiXL Maths App - Tracking progress

Skill 1: Operate with integers (+, -, x, ÷)
Skill 2: Operate with decimals (+, -, x, ÷)
Skill 3: Operate with directed numbers (+, -, x, ÷)
Skill 4: Calculate a number complement to 100
Skill 5: Calculate an answer to a related calculation
Skill 6: Operate with integers and apply BIDMAS
Skill 7: Round numbers to a decimal place or significant figure
Skill 8: Identify a factor or a multiple
Skill 9: Reduce a number to it's prime factors using the factor tree
Skill 10: Find the HCF and LCM of 2 numbers
Skill 11: Simplify a fraction
Skill 12: Convert between fractions, decimals and percentages
Skill 13: Write one number as a percentage of another
Skill 14: Order fractions
Skill 15: Convert between improper fractions and mixed numbers
Skill 16: Add fractions with common denominators
Skill 17: Subtract fractions with different denominators
Skill 18: Multiply and divide vulgar fractions
Skill 19: Add mixed numbers
Skill 20: Convert recurring decimals into fractions
Skill 21: Find a fraction or percentage of a quantity
Skill 22: Increase or decrease a quantity by a given percentage
Skill 23: Find a reverse percentage of a quantity
Skill 24: Recall simple powers, including square and cube numbers
Skill 25: Understand and apply the first 3 index laws
Skill 26: Evaluate positive, negative or fractional indices
Skill 27: Convert between standard index form and ordinary numbers
Skill 28: Operate with numbers written in standard index form
Skill 29: Simplify a surd
Skill 30: Rationalise a denominator
Skill 31: Operate with surds
Skill 32: Calculate the upper and lower bounds of integer values
Skill 33: Calculate using upper and lower bounds
Skill 34: Simplify an expression by collecting like terms
Skill 35: Simplify an expression by expanding and then collecting like terms
Skill 36: Factorise an expression
Skill 37: Substitute positive and negative numbers into a formula and rearrange it
Skill 38: Identify expressions, equations, formulae and identities
Skill 39: Write expressions and substitute values into them
Skill 40: Write a quadratic in surd form and evaluate the answers
Skill 41: Interpret formulae for length, area and volume
Skill 42: Identify expressions, equations, formulae and identities
Skill 43: Continue a sequence given by an illustration
Skill 44: Calculate the next term of common number patterns
Skill 45: Generate the nth term to calculate the 100th term
Skill 46: Solve a linear equation (including 2-step and involving brackets)
Skill 47: Solve a linear equation with unknowns on both sides
Skill 48: Solve a simple quadratic equation
Skill 49: Solve a linear equation graphically
Skill 50: Solve 2 linear simultaneous equations
Skill 51: Solve one linear, one non-linear simultaneous equations

PiXL Maths App

PiXL Maths App - Key messages

1) Full coverage of the skills required at GCSE level
2) Students have access to everything and can complete anything whenever is good for them (even to and from school!)
3) Independent learning and improvement through the use of the Therapy Videos
4) They can analyse progress so far this year using the electronic assessments.