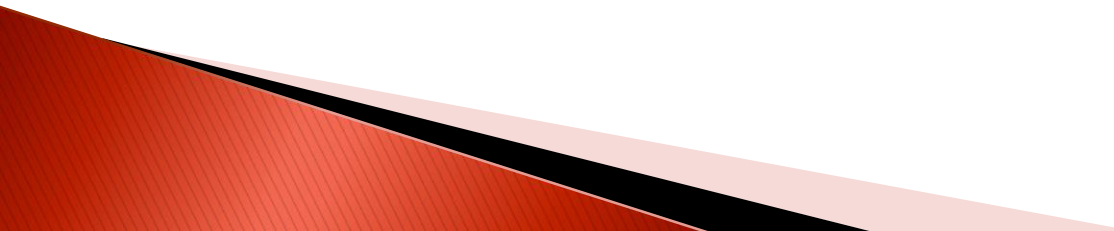


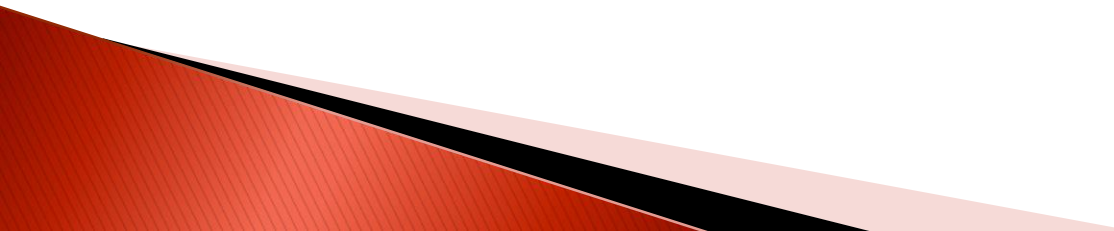
# Year 10 Parents Information evening 2018

## Mathematics



## Vision Statement

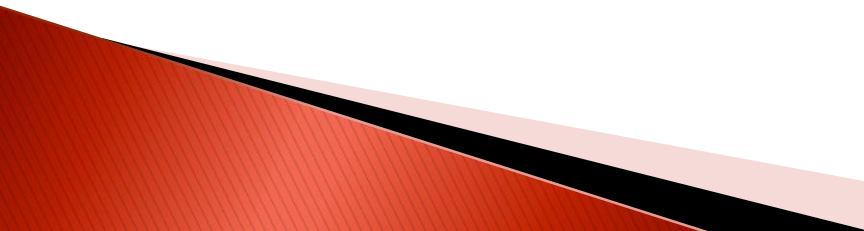
“To provide learning of Mathematics that is challenging, engaging and enthuses both students and staff so that all achieve to their full potential”.



# 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 equipped. They need a calculator, a ruler, a protractor, a pair of compasses for drawing circles, pens, pencils and a rubber.

# Homework

- ▶ Students should get 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

## Assessment structure

<b>Paper 1 33.3%</b>	<b>Paper 2 33.3%</b>	<b>Paper 3 33.3%</b>
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 and crossover this year are aiming for higher tier entry, classes doing 8 and 7 foundation.
- ▶ Final decisions on tier of entry are not made until after mock exams in Yr11.

Class	Stage	Teachers					
10SAngelou	10	MAL	1	JNH	4		
10SBoyle	9	CAM	5				
10SCurie	Cross	TMA	5				
10SDahl	8	RXB	5				
10SEuclid	8	AYB	2	CVS	1	EGM	2
10SFermat	7	DXL	1	LZT	2	CVS	2

Class	Stage	Teachers					
10NAngelou	10	BXN	4	NXR	1		
10NBoyle	10	RXS	5				
10NCurie	9	JNH	5				
10NDahl	Cross	AYB	5				
10NEuclid	8	DXL	5				
10NFermat	8	TMA	3	DXP	2		

# Tests and exams

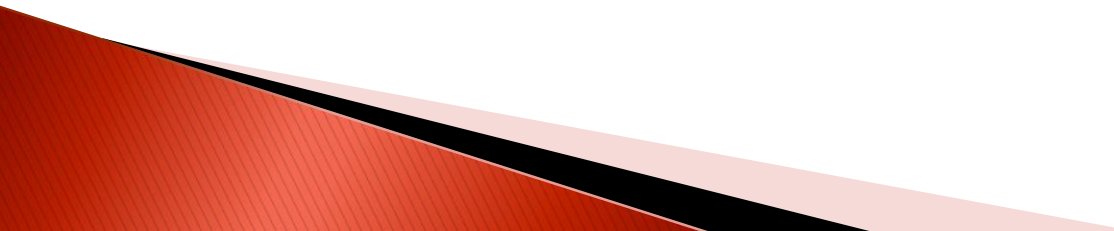
- ▶ Students will complete 3 progress tests and 1 main mock exam throughout the year.
- ▶ Main mock exams for the year are in term 6, they will sit 3 exam papers.
- ▶ Please ensure students have the correct equipment. They need a calculator, a ruler, a protractor, a pair of compasses for drawing circles, 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 Yr9 combined with 20% from first progress test.
- ▶ Checkpoint 2 – 60% from current grade at CP4 of Yr9 combined with 20% PT1 and 20% from PT2.
- ▶ Checkpoint 3 – 20% from CP4 Yr9, 20% PT1, 20%PT2, 40% Mock exam.
- ▶ Checkpoint 4 – 20% PT1, 20% PT2, 40% Mock Exam, 20% PT3.



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

# PiXL Maths App



# PiXL Maths App

PiXLmaths

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Therapy videos

Summary

## Fractions, decimals & percentages - part a



Question 1 of 1

Simplify the following fractions to their simplest form:

$$\frac{16}{80} = \frac{1}{5} \quad \checkmark$$

$$\frac{9}{45} = \frac{1}{5} \quad \checkmark$$

$$\frac{12}{48} = \frac{1}{4} \quad \checkmark$$

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

Fraction to decimal

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

Decimal to fraction

$$0.5 = \frac{5}{10} \quad \times$$

Decimal to percentage

$$0.2 = 20\% \quad \checkmark$$

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.

$$52.2\% \quad \times$$

51.7

# PiXL Maths App - Therapy videos

PiXLmaths

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Simplify a fraction



Convert between fractions, decimals  
and percentages



Write one number as a percentage of  
another

# PiXL Maths App - Tracking progress

Name	Last accessed	.S1.	.S2.	.S3.	.S4.	.S5.	.S6.	.S7.	.S8.	.S9.	.S10.	.S11.	.S12.	.S13.	.S14.	.S15.	.S16.	.S17.	.S18.	.S19.	.S20.	.S21.	.S22.	.S23.	.S24.	.S25.	.S26.	.S27.	.S28.
AHMADMOHAMMED	02.10.15	3/4	3/4	4/4	1/2	2/2	0/1	1/2	0/2	0/1	0/2	0/3	0/3	0/1	0/1	0/2	0/1	0/1	0/2	0/1	0/3	0/2	0/2	0/1	4/4	3/3	3/3	4/4	0/3
BALLANTINESHANNON	22.09.15	4/4	3/4	2/4	0/2	0/2	0/1	0/2	0/2	0/1	0/2	0/3	0/3	0/1	0/1	0/2	0/1	0/1	0/2	0/1	0/3	0/2	0/2	0/1	3/4	2/3	3/3	4/4	1/3
BHARMALREZ	02.10.15	4/4	4/4	4/4	2/2	0/2	0/1	0/2	2/2	1/1	2/2	0/3	0/3	0/1	0/1	0/2	0/1	0/1	0/2	0/1	1/3	1/2	0/2	0/1	4/4	3/3	3/3	0/4	0/3
BOWDENHARRY	02.10.15	0/4	0/4	0/4	0/2	0/2	0/1	0/2	0/2	1/1	0/2	0/3	0/3	0/1	0/1	0/2	0/1	0/1	0/2	0/1	0/3	0/2	0/2	0/1	0/4	0/3	0/3	4/4	1/3
BRASSMIA	02.10.15	0/4	0/4	0/4	0/2	0/2	0/1	0/2	0/2	0/1	0/2	2/3	2/3	0/1	0/1	0/2	0/1	0/1	0/2	0/1	0/3	0/2	0/2	0/1	4/4	3/3	0/3	0/4	0/3
CASTELLOLUCA	02.10.15	4/4	3/4	4/4	2/2	0/2	0/1	0/2	0/2	0/1	0/2	0/3	0/3	0/1	0/1	0/2	0/1	0/1	0/2	0/1	0/3	0/2	0/2	0/1	3/4	3/3	2/3	2/4	1/3
CATOGULERKAYA	02.10.15	4/4	2/4	2/4	0/2	0/2	0/1	0/2	0/2	0/1	0/2	0/3	0/3	0/1	0/1	0/2	0/1	0/1	0/2	0/1	0/3	0/2	0/2	0/1	3/4	2/3	3/3	4/4	0/3
DAVENPORTS	0	0/4	0/4	0/4	0/2	0/2	0/1	0/2	0/2	0/1	0/2	0/3	0/3	0/1	0/1	0/2	0/1	0/1	0/2	0/1	0/3	0/2	0/2	0/1	0/4	0/3	0/3	0/4	0/3
ENRIGHTEUAN	02.10.15	4/4	3/4	4/4	0/2	0/2	0/1	0/2	0/2	0/1	0/2	0/3	0/3	0/1	0/1	0/2	0/1	0/1	0/2	0/1	0/3	0/2	0/2	0/1	4/4	3/3	2/3	2/4	0/3
FARMERJORDAN	18.10.15	2/4	2/4	4/4	0/2	0/2	0/1	0/2	1/2	1/1	0/2	0/3	0/3	0/1	0/1	0/2	0/1	0/1	0/2	0/1	0/3	0/2	0/2	0/1	3/4	3/3	3/3	3/4	2/3
FEASEYKYRAN	02.10.15	4/4	4/4	4/4	2/2	0/2	0/1	0/2	0/2	0/1	0/2	0/3	0/3	0/1	0/1	0/2	0/1	0/1	0/2	0/1	0/3	0/2	0/2	0/1	4/4	3/3	3/3	4/4	0/3
GERAGHTYKEELEY	02.10.15	0/4	0/4	0/4	0/2	0/2	0/1	0/2	0/2	0/1	0/2	0/3	0/3	0/1	0/1	0/2	0/1	0/1	0/2	0/1	0/3	0/2	0/2	0/1	3/4	3/3	3/3	3/4	1/3
HOWEYJAMIE	02.10.15	0/4	0/4	0/4	0/2	0/2	0/1	0/2	2/2	1/1	2/2	0/3	0/3	0/1	0/1	0/2	0/1	0/1	0/2	0/1	0/3	0/2	0/2	0/1	4/4	3/3	3/3	4/4	2/3
JARVISLILY	02.10.15	0/4	0/4	0/4	0/2	1/2	1/1	1/2	0/2	0/1	0/2	2/3	1/3	0/1	1/1	2/2	1/1	0/4	2/2	0/1	0/3	0/2	0/2	0/1	4/4	3/3	3/3	4/4	1/3
LAKHANPRANAV	09.10.15	4/4	4/4	4/4	2/2	2/2	1/1	2/2	2/2	1/1	2/2	3/3	3/3	1/1	1/1	2/2	1/1	1/1	2/2	1/1	3/3	2/2	2/2	1/1	4/4	3/3	3/3	4/4	1/3
LAWRIECALLUM	02.10.15	0/4	0/4	0/4	0/2	0/2	0/1	0/2	0/2	0/1	0/2	0/3	0/3	0/1	0/1	0/2	0/1	0/1	0/2	0/1	0/3	0/2	0/2	0/1	4/4	2/3	2/3	3/4	2/3
MANNERINGJOSHUA	02.10.15	3/4	3/4	3/4	2/2	2/2	1/1	1/2	2/2	1/1	0/2	3/3	2/3	1/1	1/1	2/2	0/1	1/1	2/2	1/1	0/3	0/2	0/2	0/1	4/4	3/3	3/3	3/4	0/3
MONFAREDGHAZAL	02.10.15	0/4	0/4	0/4	0/2	0/2	0/1	0/2	0/2	0/1	0/2	0/3	0/3	0/1	0/1	0/2	0/1	0/1	0/2	0/1	0/3	0/2	0/2	0/1	4/4	3/3	3/3	0/4	0/3
MORSEJACK	02.10.15	0/4	0/4	0/4	0/2	0/2	0/1	0/2	0/2	0/1	0/2	0/3	0/3	0/1	0/1	0/2	0/1	0/1	0/2	0/1	0/3	0/2	0/2	0/1	4/4	3/3	3/3	4/4	0/3
OLYETDAISY	04.10.15	0/4	0/4	0/4	0/2	0/2	0/1	0/2	2/2	1/1	2/2	3/3	3/3	0/1	0/1	2/2	1/1	0/4	0/2	1/1	0/3	2/2	2/2	1/1	4/4	2/3	3/3	4/4	3/3
OMAHONYAIDAN	02.10.15	4/4	4/4	3/4	1/2	0/2	0/1	0/2	0/2	0/1	0/2	0/3	0/3	0/1	0/1	0/2	0/1	0/1	0/2	0/1	0/3	0/2	0/2	0/1	4/4	3/3	3/3	1/4	1/3
PARMARDEVAN	02.10.15	0/4	0/4	0/4	0/2	0/2	0/1	0/2	2/2	1/1	2/2	0/3	0/3	0/1	0/1	0/2	0/1	0/1	0/2	0/1	0/3	0/2	0/2	0/1	4/4	2/3	3/3	4/4	1/3
PARMARMAYA	02.10.15	4/4	3/4	4/4	2/2	0/2	0/1	0/2	2/2	1/1	2/2	0/3	0/3	0/1	0/1	0/2	0/1	0/1	0/2	0/1	0/3	0/2	0/2	0/1	4/4	3/3	3/3	4/4	1/3
PARRKRISTIAN	22.09.15	0/4	0/4	0/4	0/2	0/2	0/1	0/2	0/2	0/1	0/2	0/3	0/3	0/1	0/1	0/2	0/1	0/1	0/2	0/1	0/3	0/2	0/2	0/1	4/4	2/3	2/3	2/4	1/3
RINKSHAREEF	02.10.15	4/4	3/4	2/4	2/2	0/2	0/1	0/2	0/2	0/1	0/2	0/3	0/3	0/1	0/1	0/2	0/1	0/1	0/2	0/1	0/3	2/2	2/2	0/1	4/4	1/3	3/3	4/4	2/3
SALEYZAHRA	02.10.15	0/4	0/4	0/4	0/2	0/2	0/1	0/2	2/2	1/1	2/2	3/3	3/3	1/1	0/1	0/2	0/1	0/1	0/2	0/1	0/3	0/2	0/2	0/1	4/4	2/3	2/3	4/4	2/3
SMITHJESS	02.10.15	0/4	0/4	0/4	0/2	0/2	0/1	0/2	1/2	1/1	1/2	0/3	0/3	0/1	0/1	0/2	0/1	0/1	0/2	0/1	0/3	0/2	0/2	0/1	4/4	3/3	3/3	4/4	2/3
SMITHJOEL	02.10.15	0/4	0/4	0/4	0/2	0/2	0/1	0/2	0/2	0/1	0/2	0/3	1/3	0/1	0/1	0/2	0/1	0/1	0/2	0/1	0/3	0/2	0/2	0/1	4/4	3/3	3/3	4/4	2/3
STEFANOVMILITSA	02.10.15	0/4	0/4	0/4	0/2	0/2	0/1	0/2	2/2	1/1	1/2	0/3	0/3	0/1	0/1	0/2	0/1	0/1	0/2	0/1	0/3	0/2	0/2	0/1	3/4	3/3	3/3	3/4	1/3
STYLESIONPAUL	02.10.15	4/4	4/4	4/4	2/2	0/2	0/1	0/2	0/2	0/1	0/2	0/3	0/3	0/1	0/1	0/2	0/1	0/1	0/2	0/1	0/3	0/2	0/2	0/1	4/4	3/3	3/3	4/4	2/3
VARSANISURESH	28.09.15	0/4	0/4	0/4	0/2	0/2	0/1	0/2	0/2	0/1	0/2	0/3	0/3	0/1	0/1	0/2	0/1	0/1	0/2	0/1	0/3	0/2	0/2	0/1	4/4	2/3	0/3	0/4	0/3
WATTCALLUM	06.10.15	0/4	0/4	0/4	0/2	0/2	0/1	0/2	0/2	0/1	0/2	2/3	3/3	1/1	1/1	2/2	1/1	1/1	2/2	0/1	0/3	0/2	0/2	0/1	4/4	2/3	3/3	3/4	0/3

- 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 its 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

PiXLmaths

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Class edit

Class analysis

Logout

Design a test

Skills overview

Gap analysis

Take a challenge

Score board

Suggestion box

Success Line

Number

Algebra

Ratio & Proportion

Geometry

Probability

Statistics

- 3/4 Operate with integers (+, -, x, ÷)
- 1/4 Operate with decimals (+, -, x, ÷)
- 2/4 Operate with directed numbers (+, -, x, ÷)
- 0/2 Calculate a number complement to 100
- 0/2 Calculate an answer to a related calculation
- 0/1 Operate with integers and apply BIDMAS
- 0/2 Round numbers to a decimal place or significant figure
- 0/2 Identify a factor or a multiple
- 0/1 Reduce a number to its prime factors
- 0/2 Find the HCF and LCM of 2 numbers
- 3/3 Simplify a fraction
- 2/3 Convert between fractions, decimals and percentages
- 0/1 Write one number as a percentage of another
- 0/1 Order fractions
- 0/2 Convert between improper and mixed numbers
- 0/1 Add fractions with common denominators
- 0/1 Subtract fractions with different denominators
- 0/2 Multiply and divide vulgar fractions
- 0/1 Add mixed numbers
- 2/3 Convert recurring decimals into fractions
- 0/2 Find a fraction or percentage of a quantity
- 0/2 Increase/decrease a quantity by a given percentage
- 0/1 Find a reverse percentage of a quantity
- 4/4 Recall simple powers, including squares and cubes
- 0/3 Understand and apply the first 3 index laws
- 0/3 Evaluate positive, negative or fractional indices
- 0/4 Convert between standard index form and ordinary
- 0/3 Operate with numbers in standard index form
- 0/2 Simplify a surd
- 0/2 Rationalise a denominator
- 0/3 Operate with surds
- 0/4 Calculate the upper and lower bounds
- 0/8 Calculate using upper and lower bounds

# 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.