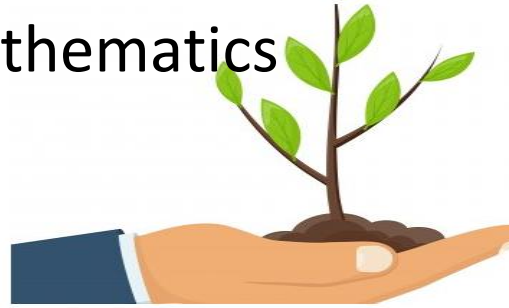


Curriculum plan: Mathematics

CONNECTED

INTENT:



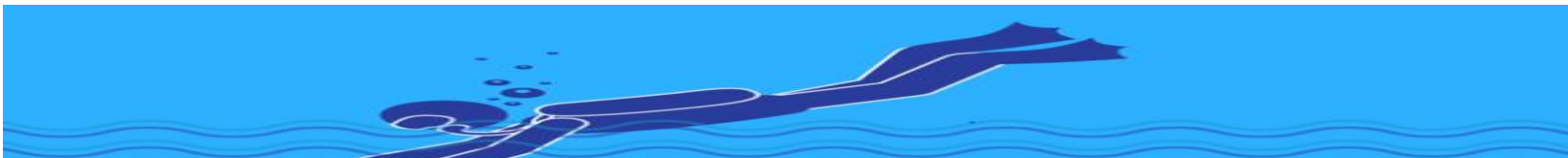
“God used beautiful mathematics in creating the world”

Paul Dirac

Maths is a universal language that explains the world around us. The study of mathematics in The King's enables students to make sense of everyday situations, forge links between topics and establish connections to real life context.

As a fundamental discipline in our lives, maths fosters curiosity, equipping students with various strategies to tackle problems; it empowers students with resilience to take risks, get it wrong, form a new strategy and start again, with determination and drive to reach the final answer.

Maths is logical thinking, reasoning, intuition, analysis, construction, generalization and beauty.



Please click on the icons to access our online portal where you can learn more about each topic

Half term points

AUTUMN 1

All:



H/ HF:



F:

AUTUMN 2

H:



H/ FH:



FH:



F:



SPRING 1

H



H/ HF:



F:



SPRING 2

H



H/ HF:



F:



SUMMER 1

H:



F:



SUMMER 2

H:



F:



Learning includes:

- N2.1 Whole numbers
- N1.1 Adding and subtracting whole numbers
- N7.1 Multiples
- N3.1 Rounding to the nearest 10 or 100
- GM1.1 Length
- GM1.2 Mass
- GM1.3 Time
- GM1.4 Volume
- GM5.1 Position and cartesian coordinates
- N2.2 Writing and ordering decimals
- N1.2 Multiplying whole numbers

Learning includes:

- SP2.1 Using tables and charts
- GM2.1 Common shapes
- GM4.1 Angles in degrees
- GM2.2 Line symmetry
- SP1.3 Using frequency tables
- SP2.4 Pie charts
- GM5.4 Reflection
- N3.3 Rounding decimals to the nearest integer
- SP1.1 Mode, median and range
- SP1.2 Using mean, median, mode and range
- SP2.2 Stem and leaf diagrams

Learning includes:

- N2.4 Negative numbers
- SP1.3 Using frequency tables
- SP2.3 Vertical line charts
- N2.4 Negative numbers
- A1.1 Making and using word formulae
- A1.2 Using letters
- N1.5 Adding and subtracting negative numbers
- N1.6 Multiplying and dividing negative numbers
- SP3.1 Collecting data
- SP1.2 Using mean, median, mode and range

Learning includes:

- N4.1 Understanding fractions
- A2.1 What is a sequence?
- N4.2 Finding equivalent fractions
- A2.2 Generating sequences
- N4.3 Multiplying fractions
- GM2.3 Angle facts

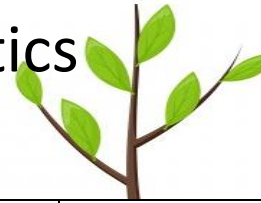
Learning includes:

- N5.1 Understanding and using percentages
- N5.2 Calculating percentages of quantities
- N5.3 Converting between fractions, decimals and percentages
- SP4.2 Single event probability
- GM4.2 Constructions with a ruler and protractor
- SP4.1 Introduction to probability
- GM2.5 Angles in triangles and quadrilaterals

Learning includes:

- N1.4 Dividing whole numbers
- GM3.1 Understanding area
- N7.3 Divisibility tests
- N2.5 Using the number system effectively
- N3.4 Rounding decimals
- N3.5 Significance
- GM3.2 Finding area and perimeter
- A3.1 Real life graphs

Curriculum plan: Mathematics



CONNECTED

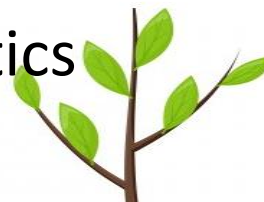
	N2.3 Multiplying and dividing by powers of 10 ⦿ N7.2 Factors, primes and powers N3.2 Rounding larger numbers ⦿ GM1.5 Interpreting Scales ⦿ GM1.6 The metric system ⦿ GM5.2 Cartesian coordinates in four quadrants ⦿ GM5.3 Translation	⦿ GM2.4 Rotational symmetry ⦿ GM5.5 Rotation ⦿ GM6.1 Properties of 3-D shapes ⦿ N1.3 Adding and subtracting decimals	⦿ A1.3 Combining variables A1.4 Working with formulae			
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Half term points

	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
8	H:    F:    H/F:   	H:    F:    H/F:   	H:   H/ HF:   F: 	H:   H/ HF:   F:  	H:    F:   	H:    F:   
	Learning includes: N1.2 Multiplying whole numbers N2.2 Writing and ordering decimals  N3.2 Rounding larger numbers A2.1 What is a sequence? review  GM2.3 Angle facts N2.3 Multiplying and dividing by powers of 10  N7.2 Factors, primes, and powers  N1.5 Adding and subtracting negative numbers  N1.6 Multiplying and dividing negative numbers  A2.2 Generating sequences GM2.5 Angles in triangles and quadrilaterals	Learning includes: A1.1 Making and using word formulae A1.2 Using letters SP2.3 Vertical line charts  SP2.4 Pie charts  N4.2 Equivalent fractions N1.4 Dividing whole GM6.2 Understanding nets  GM6.1 Properties of 3-D shapes A1.3 Combining variables SP2.2 Stem & leaf diagrams  SP1.1/2 Using mean, median, mode and range SP3.1 Collecting data N4.3 Multiplying fractions N7.3 Divisibility tests GM4.2 Constructions with a ruler and protractor GM2.4 Rotational symmetry  GM2.6 Types of quadrilateral	Learning includes:  A1.2 Using letters  N1.3 Adding and subtracting decimals N3.3 Rounding decimals to the nearest integer GM1.5 Interpreting scales A1.4 Working with formulae  A3.1 Real life graphs  N1.7 Order of operations BIDMAS  GM1.8 Bearings  A3.2 Plotting graphs of linear functions N1.8 Multiplying decimals N1.9 Dividing decimals  GM3.3 Circumference	Learning includes: A1.3 Combining variables  N4.2 Equivalent fractions GM1.6 The metric system  GM5.2 Cartesian coordinates in four quadrants GM5.3 Translation A1.5 Setting up and solving simple equations A1.6 Using brackets  SP4.1 Introduction to Probability  SP4.2 Single event probability N2.5 Using the number system effectively GM5.5 Rotation A1.7 Working with more complex equations	Learning includes  N7.2 Factors, primes and powers  N1.5 Adding and subtracting negative numbers A1.4 Working with formulae A2.2 Generating sequences GM3.1 Understanding area  GM6.1 Properties of 3-D shapes  A2.3 Linear sequences  GM3.2 Finding area and perimeter GM6.2 Understanding nets  A2.4 Special sequences	Learning includes: A1.5 Setting up and solving simple equations SP1.1 Mode, median and range  SP1.2 Using mean, median, mode and range SP2.2 Stem and leaf diagrams N5.1 Understanding and using percentages  N5.2 Calculating percentages of quantities GM2.4 Rotational symmetry GM6.2 Understanding nets SP3.1 Collecting data  SP1.3 Using frequency tables N3.4 Rounding decimals  N5.3 Converting between fractions decimals and percentages

Curriculum plan: Mathematics



CONNECTED

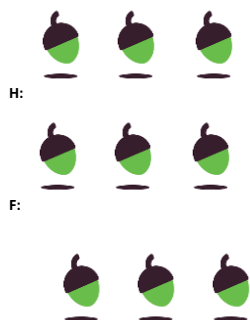
	🌀 N1.7 Order of operations BIDMAS A2.3 Linear sequences GM2.6 Types of quadrilateral 🌀 GM2.7 Angles and parallel lines	GM6.1 Properties of 3-D shapes A1.5 Setting up and solving simple equations 🌀 A1.6 Using brackets SP2.6 Scatter diagrams 🌀 N4.4 Adding and subtracting fractions N4.5 Working with mixed numbers N4.6 Dividing fractions GM4.3 Constructions with a pair of compasses GM6.2 Understanding nets		A1.8 Solving equations with brackets 🌀 SP4.3 Combined events 🌀 N6.2 Sharing in a given ratio N6.3 Working with proportional quantities GM1.7 Metric-imperial conversions GM1.9 Scale drawing GM5.6 Enlargement 🌀 N6.1 Understanding ratio notation	GM6.3 Volume and surface area of cuboids 🌀 N7.4 Index notation	GM6.3 Volume and surface area of cuboids A4.1 Trial and improvement S3.2 Designing a questionnaire 🌀 S1.4 Using grouped frequency tables S2.5 Displaying grouped data N5.4 Applying percentage increases and decreases to amounts 🌀 GM6.4 2-D representations of 3-D shapes
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****Please click on the icons to access our online portal where you can learn more about each topic****

Key found at the bottom of this document

Half term points

AUTUMN 1



Key learning to include:

A3.1 Real-life graphs
SP1.3 Using frequency tables
GM3.2 Finding area and perimeter
N2.5 Using the number system effectively

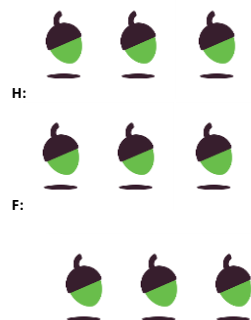
Key learning to include:

A3.2 Plotting graphs of linear functions
SP3.2 Designing a questionnaire
SP2.6 Scatter diagrams
GM3.3 Circumference
N1.8 Multiplying decimals
N1.9 Dividing decimals

Key learning to include:

A3.3 The equation of a straight line
SP1.4 Using grouped frequency tables
SP2.5 Displaying grouped data
GM3.4 Area of circles
N2.6 Writing numbers in standard form

AUTUMN 2



Key learning to include:

A1.5 Setting up, solving simple equations
A1.6 Using brackets
N1.7 BIDMAS
GM3.3 Circumference
N4.3 Multiplying fraction's
N5.3 Converting between fractions, decimals and percentages

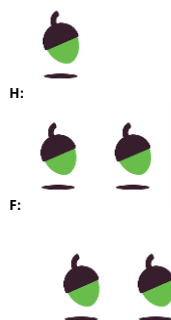
Key learning to include:

A1.7 Working with more complex equations
A1.8 Solving equations with brackets
GM3.4 Area of circles
N5.4 Applying percentage increases and decreases to amounts

Key learning to include:

A1.9 Simplifying harder expressions
GM3.5 Pythagoras' theorem
N5.5 Finding the percentage change from one amount to another
N5.6 Reverse percentages

SPRING 1



Key learning to include:

A1.7 Working with more complex equations
GM2.5 Angles in triangles and quadrilaterals
GM2.6 Types of quadrilateral
SP1.3 Using frequency tables
SP2.2 Stem and leaf diagrams

Key learning to include:

A4.1 Trial and improvement
GM2.7 Angles and parallel lines
GM1.8 Bearings
SP1.4 Using grouped frequency tables

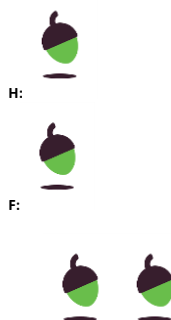
Key learning to include:

A4.2 Linear inequalities
GM2.8 Angles in a polygon
N7.5 Prime factorisation
SP1.5 Interquartile range
SP2.5 Displaying grouped data

Key learning to include:

N7.4 Index notation

SPRING 2



Key learning to include:

N1.6 Multiplying and dividing negative numbers
A2.3 Linear sequences
A3.2 Plotting graphs of linear functions
GM6.3 Volume and surface area of cuboids
N6.1 Understanding ratio notation

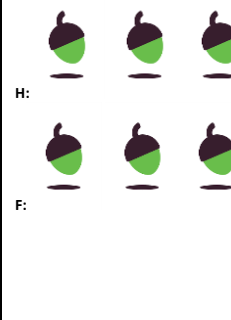
Key learning to include:

A2.4 Special sequences
A3.3 The equation of a straight line
GM6.4 2-D representations of 3-D shapes
N4.5 Working with mixed numbers
GM1.7 Metric-imperial conversions
N6.3 Working with proportional quantities

Key learning to include:

A2.5 Quadratic sequences
A3.4 Plotting quadratic and cubic graphs
GM6.5 Prisms
GM1.10 Compound units

SUMMER 1



Key learning to include:

A3.2 Plotting graphs of linear functions
N3.4 Rounding decimals
GM1.7 Metric-imperial conversions
GM1.8 Bearings
GM4.2 Constructions with a ruler and protractor

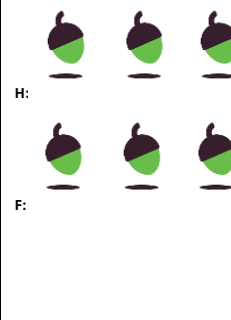
Key learning to include:

A4.2 Linear inequalities
N3.5 Significance
GM1.9 Scale drawing
GM4.3 Constructions with a pair of compasses

Key learning to include:

A4.3 Solve pairs of equations by substitution
A4.4 Solve simultaneous equations using elimination
A4.5 Using graphs to solve simultaneous equations
N3.6 Approximating
N3.7 Limits of accuracy
GM4.4 Loci

SUMMER 2



Key learning to include:

N6.3 Working with proportional quantities
A1.4 Working with formulae
A1.5 Setting up and solving simple equations
A1.6 Using brackets
A1.7 Working with more complex equations
A1.8 Solving equations with brackets
GM5.4 Reflection
GM5.5 Rotation
SP4.1 probability
SP4.2 Single event probability

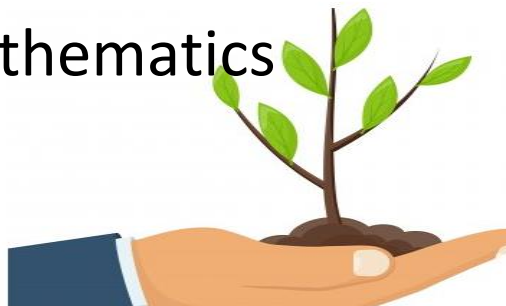
Key learning to include:

N6.2 Sharing in a given ratio
A1.9 Simplifying harder expressions
GM5.6 Enlargement
SP4.3 Combined events
N4.4 Add, sub fractions
N4.6 Dividing fractions

Key learning to include:

N6.5 Inversely proportional quantities
A1.10 Using complex formulae
GM5.7 Similarity
GM5.8 Trigonometry
SP4.4 Estimating probability

Curriculum plan: Mathematics



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Working towards (Key)
Higher Tier Grades 9 - 4
Both Higher Tier and Higher/Foundation Students will take either the Higher Tier Or the Foundation Tier
Higher/Foundation Tier
Both Higher/Foundation and Foundation Tier Students will take the Foundation Tier or Higher Tier
Foundation Tier Grades 5 - 1
All Tiers Grades 9 – 1