

GCSE Mathematics

Exam Information

ASSESSMENT

Paper 1: Non-Calculator

Duration: 1hr 30 mins 80 marks

Weighting: 33.33% of GCSE Qualification

Extra information: Pupils need to be efficient in mental calculations, skilled in using directed numbers and should be able to recall mathematical facts and formulas.

Paper 2: Calculator

Duration: 1hr 30 mins 80 marks

Weighting: 33.33% of GCSE Qualification

Extra information: Pupils need to recall mathematics facts, apply mathematical methods to solving real life problems and be well-practiced and confident in using a scientific calculator.

Paper 3: Calculator

Duration: 1hr 30 mins 80 marks

Weighting: 33.33% of GCSE Qualification

Extra information: Pupils need to recall mathematics facts, apply mathematical methods to solving real life problems and be well-practiced and confident in using a scientific calculator.

Key skills

Number:

Fractions
Factors, multiples, LCM and HCF
Percentages
Indices (powers), standard form
Rounding and estimating

Ratio and proportion and rates of change:

Scale factors
Compound units
Ratio and fractions
Interest
Proportionality
Growth and decay problems

Algebra:

Trial and improvement
Simplifying algebraic expressions
Expanding and factorising
Sequences and finding the n th term
Plotting graphs
Solving equations
Simultaneous Equations

Geometry:

Perimeter, area and volume
Angles
Circle properties
Symmetry and transformations
Pythagoras
Similarity
Coordinates and bearings
Trigonometry

Statistics:& Probability:

Mean, median, mode from lists, tables, charts
Scatter diagrams, lines of best fit
Two way tables
Stem and leaf diagrams
Questionnaires
Probability
Cumulative frequency graphs

Kingsdale Mathematics
Department



Mathematics

in Years 9,10 &11



Kingsdale Foundation School

USEFUL LINKS

www.eedi.co.uk

www.kerboodle.com

www.mymaths.co.uk

www.mathswatchvle.com

WHY STUDY MATHEMATICS?

- Mathematics is a powerful and exciting subject. It is the science of art and the language of science.
- Mathematics challenges the mind and has been used for generations to solve real life problems. It is universal and is accessible to all those who wish to embrace it.
- Many colleges and universities state that learners must achieve GCSE Maths and English at Grade 5 or above in order to obtain a place at their establishment.
- Employers want people with sound mathematical skills and who possess some kind of mathematical qualification. Often it is compulsory to have mathematics as a qualification if you wish to be accepted onto a certain course or considered for a particular job.

Mathematics qualifications at Kingsdale

GCSE qualification in Mathematics (AQA).

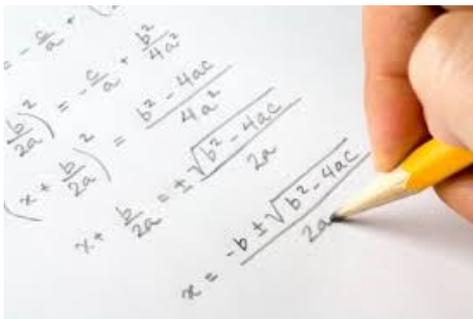
From the 2015/16 academic year, pupils have studied the new specification 9-1 AQA GCSE course. Students begin the course in year 9 and take their exams at the end of year 11. More able pupils may get the chance to study for additional maths qualifications in year 11 as well as the normal maths GCSE.

GCSE MATHS AND COURSE CONTENT:

GCSE Mathematics: AQA

The GCSE Mathematics curriculum focuses on students developing fluent knowledge, skills and understanding in mathematics and using mathematical techniques to solve problems. There is content in the Foundation tier previously assessed only in the Higher tier and, content in the Higher tier previously assessed only at A level. The GCSE in Mathematics follows two tiers: Foundation (for grades 1 to 5) and Higher (for grades 4 to 9).

The GCSE in Mathematics covers six areas: *Number, Algebra, Ratio, proportion and rates of change, Geometry and measures, Probability and Statistics*. It is entirely externally assessed.



Helping your child at home

Getting involved in your child's studies is the best way to support their learning of mathematics. Here are a few ways to support your child:

- Reading the comments in your child's exercise book which inform you about what areas your child is strong in and about any areas they may need to improve upon.
- Ensuring that written and online homework is done which help consolidate their learning in class.
- Ensuring they are punctual to lessons and attend all the revision provided by the Mathematics Department. Ensure they revise for upcoming assessment tests.
- Ensuring pupils are fully equipped to lessons with a geometry set and a scientific calculator.
- These are very important years so the best help a parent could give to their child is to tell them never to give up and always persevere.