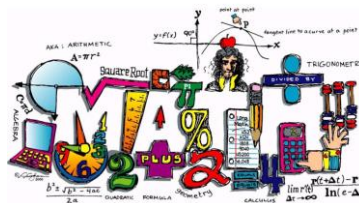


MATHEMATICS



AWARD RECEIVED

National 3 Mathematics

Successful completion of your S3/4 Mathematics studies will allow you to attain the National 3 Mathematics qualification.

National 3 Mathematics is internally assessed, pass or fail.



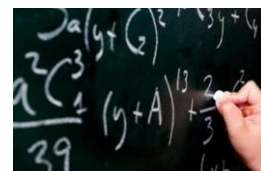
ENTRY LEVEL – What do I need to do it?

The level at which you study in S3/4 will be decided based on your attainment and achievement from S1 – S2 Mathematics.

Your mathematics teacher will help you to decide which level of study is the most appropriate.



COURSE CONTENT – What will I learn?



National 3 Mathematics

Course structure

The National 3 Applications of Mathematics Course will help learners to become numerate, to make sense of the world around them and to function responsibly and independently in everyday life. This Course will develop skills for further learning, as well as skills for life and work.

The aims of this Course are to enable learners to:

- interpret real-life situations involving mathematics
- investigate the use of basic mathematical ideas and number processes in real-life contexts
- select and apply basic mathematical and numeracy skills in real-life contexts
- interpret and use the results of calculations, measurements and data to make informed decisions
- communicate mathematical information in an appropriate way

(For more information go to:

<https://www.sqa.org.uk/files/nq/AppsofMathsCourseSpecN3.pdf>)

Applications of Mathematics: Manage Money and Data (National 3) The general aim of this Unit is to enable learners to apply their skills, knowledge and understanding of mathematics and numeracy to manage money and data in real-life contexts. Learners will build on their mathematical and numerical skills to determine factors affecting income and expenditure, budgeting and saving. Learners will also organise, present and interpret data based on real-life contexts.

Applications of Mathematics: Shape, Space and Measures (National 3) The general aims of this Unit is to enable learners to apply their skills, knowledge and understanding of shape, space and measures in real-life contexts. Learners will build on their mathematical and numerical skills by using measures and elementary geometry to tackle real-life situations.

Numeracy (National 3) The general aim of this Unit is to develop learners' numerical and information handling skills to solve simple, real-life problems involving number, money, time and measurement. As learners tackle real-life problems, they will use their knowledge of number processes, information handling and probability to make informed decisions.



TEACHING METHODS – What will I do?

The National 3 Mathematics course is application based, with the work being covered in a real-life context. Teaching methods will include:

- Class discussion
- Written tasks including research
- Group work
- Role play
- Giving presentations (individual or group)



ASSESSMENT

National 3 Mathematics

You will undertake 3 unit assessments:

- Manage Money and Data
- Shape, Space and Measure
- Numeracy

These will be internally assessed.



HOMEWORK

You will be given regular homework. Homework will be communicated to you in class and through the Show My Homework website. Extra study will also be required at assessment times.



PROGRESSION IN THE SENIOR PHASE

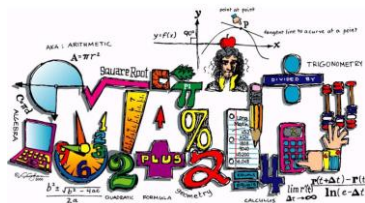
Students who pass National 3 Mathematics may progress to National 4 Mathematics.



COSTS This course carries no cost implication. A fee will be charged to replace any lost books or printed materials. You will be expected to bring a calculator, pen/pencil and ruler to every lesson.

MATHEMATICS

AWARD RECEIVED



National 4 Mathematics

Successful completion of your S3/4 Mathematics studies will allow you to attain the National 4 Mathematics qualification.

National 4 Mathematics is assessed pass or fail.



ENTRY LEVEL – What do I need to do it?

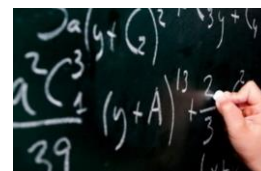
The level at which you study in S3/4 will be decided based on your attainment and achievement from S1 – S2 Mathematics.

Your mathematics teacher will help you to decide which level of study is the most appropriate.



COURSE CONTENT – What will I learn?

National 4 Mathematics



Course structure

This Course will develop skills for further learning, as well as skills for life and work. You will acquire and apply operational skills necessary for developing mathematical ideas through symbolic representation and diagrams. You will select and apply mathematical techniques and will develop your understanding of the interdependencies within mathematics. You will develop mathematical reasoning skills and will gain experience in making informed decisions.

(For more information go to: <http://www.sqa.org.uk/sqa/45751.html>)

Mathematics: Expressions and Formulae (National 4)

The general aim of this Unit is to develop skills linked to straightforward mathematical expressions and formulae. These include the manipulation of abstract terms, the simplification of expressions and the evaluation of formulae. The Outcomes cover aspects of algebra, geometry, statistics and reasoning.

Mathematics: Relationships (National 4)

The general aim of this Unit is to develop skills linked to straightforward mathematical relationships. These include solving equations, understanding graphs and working with trigonometric ratios. The Outcomes cover aspects of algebra, geometry, trigonometry, statistics and reasoning.

Numeracy (National 4)

The general aim of this Unit is to develop numerical and information handling skills to solve straightforward, real-life problems involving number, money, time and measurement. As you tackle real-life problems, you will decide what numeracy skills to use and how to apply these skills to an appropriate level of accuracy. You will also interpret graphical data and use your knowledge and understanding of probability to identify solutions to straightforward real-life problems involving money, time and measurement. You will use your solutions to make and explain decisions.

Mathematics Test (National 4)

This is the Added Value Unit of the National 4 Mathematics Course. The general aim of this Unit is to enable you to provide evidence of added value for the National 4 Mathematics Course through the successful completion of a test which will allow you to demonstrate breadth and challenge.



TEACHING METHODS – What will I do?

The National 4 Mathematics course is application based, with the work being covered in a real-life context. Teaching methods will include:

- Class discussion
- Written tasks including research
- Group work
- Role play
- Giving presentations (individual or group)



ASSESSMENT

National 4 Mathematics

You will undertake 3 unit assessments:

- Expression and Formulae
- Relationships
- Numeracy

You will also undertake the Added Value Unit Assessment. This consists of two parts:

Part 1 is made up of approximately five questions. These questions will be suitable to assess mathematical operational skills **without** the aid of a calculator. The test will have a time allocation of 20 minutes.

Part 2 is made up of approximately eight questions, four of which will require reasoning skills. In this part of the test a calculator can be used. The test will have a time allocation of 40 minutes.



HOMEWORK

You will be given regular homework. Homework will be communicated to you in class and through the Show My Homework website. Extra study will also be required at assessment times.



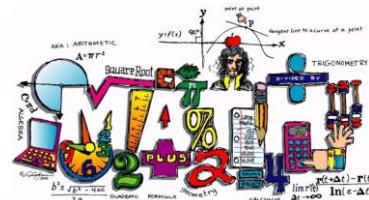
PROGRESSION IN THE SENIOR PHASE

Students who pass National 4 Mathematics may progress to National 5 Mathematics or to National 5 Applications of Mathematics.



COSTS This course carries no cost implication. A fee will be charged to replace any lost books or printed materials. You will be expected to bring a calculator, pen/pencil and ruler to every lesson.

MATHEMATICS



AWARD RECEIVED

National 5 Mathematics

Successful completion of your S4 Mathematics studies will allow you to attain the National 5 Mathematics qualification.

National 5 Mathematics is graded A – D.



ENTRY LEVEL – What do I need to do it?

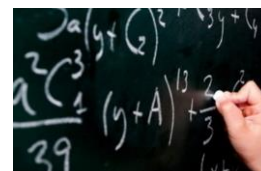
The level at which you start to study in S3 will be decided based on your attainment and achievement from S1 – S2 Mathematics.

Your mathematics teacher will help you to decide which level of study is the most appropriate.



COURSE CONTENT – What will I learn?

National 5 Mathematics



Course structure

You will acquire and apply operational skills necessary for developing mathematical ideas through symbolic representation and diagrams. You will select and apply mathematical techniques and will develop your understanding of the interdependencies within mathematics. You will develop mathematical reasoning skills and will gain experience in making informed decisions.

(For more information go to: <http://www.sqa.org.uk/sqa/45752.html>)

Mathematics: Expressions and Formulae (National 5)

The general aim of this Unit is to develop skills linked to mathematical expressions and formulae. These include the manipulation of abstract terms, the simplification of expressions and the evaluation of formulae. The Outcomes cover aspects of number, algebra, geometry and reasoning.

Mathematics: Relationships (National 5)

The general aim of this Unit is to develop skills linked to mathematical relationships. These include solving and manipulating equations, working with graphs and carrying out calculations on the lengths and angles of shapes. The Outcomes cover aspects of algebra, geometry, trigonometry and reasoning.

Mathematics: Applications (National 5)

The general aim of this Unit is to develop skills linked to applications of mathematics. These include using trigonometry, geometry, number processes and statistics within real-life contexts. The Outcomes cover aspects of the skills required for these topics and skills in reasoning.



TEACHING METHODS – What will I do?

Teaching methods will include:

- Class discussion
- Written tasks including research
- Group work
- Role play
- Giving presentations (individual or group)



ASSESSMENT

National 5 Mathematics

Progress will be monitored throughout the course by a series of assessments and extended assessments. At the end of the course you will sit a formal examination. The course assessment will consist of two papers:

Component	Paper 1	Paper 2
Time	75 mins	115 mins
Marks	50	60



HOMEWORK

You will be given regular homework. Homework will be communicated to you in class and through the Show My Homework website, please log in to SMHW when you use this site. Extra study will also be required at assessment times.



PROGRESSION IN THE SENIOR PHASE

Students who pass National 5 Mathematics with an A or B grade may progress to Higher Mathematics.



COSTS

This course carries no cost implication. A fee will be charged to replace any lost books or printed materials. You will be expected to bring a calculator, pen/pencil and ruler to every lesson