

# NATIONALS IN A NUTSHELL

The National Parent Forum of Scotland Summary of Mathematics National 5

MATHEMATICS

NATIONAL

5

3

UNITS

**EXPRESSIONS AND FORMULAE  
RELATIONSHIPS  
APPLICATIONS**

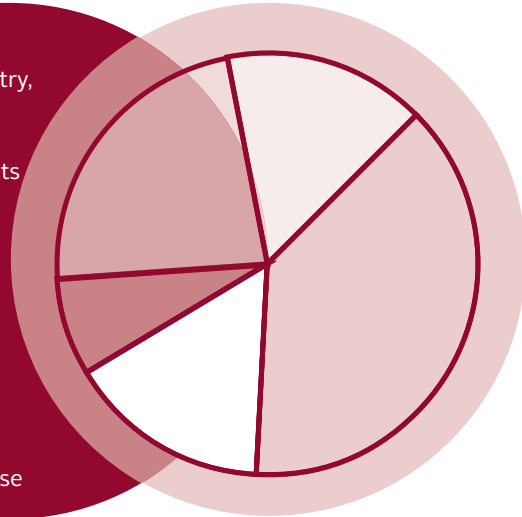
**COURSE ASSESSMENT: TWO QUESTION PAPERS**

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COURSE  
ASSESSMENT

## What skills will my child develop?

- understanding and applying mathematical skills in algebra, geometry, trigonometry, and statistics
- simplifying and solving problems
- selecting and applying mathematical techniques to real-life contexts
- making connections and informed predictions
- using mathematical language and exploring mathematical ideas
- resilience and confidence in problem-solving
- analytical and evaluative skills
- interpreting, communicating and managing information in mathematical form
- logical reasoning skills
- assessing risk and making informed decisions
- creativity and the ability to think in abstract ways
- the manipulation of abstract terms to solve problems and generalise



## WHAT WILL MY CHILD EXPERIENCE DURING THE COURSE?

- Active and independent learning will develop confidence and self-motivation as learners experience a range of tasks and activities
- A blend of classroom approaches including whole class, small group or one to one discussions; direct interactive teaching
- Space for personalisation and choice for developing areas of interest
- Collaborative learning using technology (blogs, software) to engage with others; partnerships with learners in the sciences, technologies, social subjects
- Applying learning to real-life situations and to course work in other subjects
- Embedding literacy skills by learning to use mathematical language and abstract terms.

## ASSESSMENT

- To gain National 5, learners must pass all Units and the Course Assessment (two Question Papers)
- Unit Assessment (or 'evidence of learning') may be gathered through class work, tests, oral evidence, computer-generated class work, photographs or project or investigative work. Learners may use these to build a portfolio to show their progress through the Units
- The Course Assessment consists of two Question Papers (exams marked by the SQA) and is graded A to D.

## ACTIVE LEARNING AND REAL LIFE CONTEXTS IN THE CLASSROOM

We worked with younger Modern Studies pupils, comparing annual gun crime statistics from the United States with those from the United Kingdom. We discussed whether the statistics were valid before working out how they could be turned into user-friendly graphs on the computer. These were used to illustrate the PowerPoint presentations the Modern Studies pupils were preparing. We explained the graphs to the younger pupils and helped them to understand the importance of statistics and of interpreting them.

National 5 progresses onto Higher Mathematics

For more detailed course information:

SQA: Mathematics National 5: [www.sqa.org.uk/sqa/47419.html](http://www.sqa.org.uk/sqa/47419.html)

Education Scotland: [www.educationscotland.gov.uk/nationalqualifications/index.asp](http://www.educationscotland.gov.uk/nationalqualifications/index.asp)

Curriculum for Excellence Key Terms and Features Factfile:

[www.educationscotland.gov.uk/Images/CfEFactfileOverview\\_tcm4-665983.pdf](http://www.educationscotland.gov.uk/Images/CfEFactfileOverview_tcm4-665983.pdf)