

NATIONALS IN A NUTSHELL

The National Parent Forum of Scotland Summary of Mathematics National 4

MATHEMATICS

3

UNITS

**EXPRESSIONS AND FORMULAE
RELATIONSHIPS
NUMERACY**

NATIONAL

4

+
ADDED
VALUE
UNIT

ADDED VALUE UNIT: MATHEMATICS TEST

What skills will my child develop?

- understanding and applying straightforward mathematical skills in algebra, geometry, trigonometry, and statistics
- using mathematical techniques and reasoning skills to solve mathematical problems
- a positive attitude to mathematics based on an understanding of its use in real-life situations
- skills in using mathematical language and exploring mathematical ideas
- resilience and confidence in problem-solving
- analytical skills
- understanding the importance of accuracy
- interpreting, communicating and managing information in mathematical form
- logical reasoning skills
- communicating solutions, using presentation skills
- decision-making
- creativity and deduction
- leadership and teamwork skills in group activities

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 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 4, learners must pass all Units including the Added Value Unit (test)
- Units are assessed as pass or fail by the school/centre (following SQA external quality assurance to meet national standards)
- Assessment (or 'evidence of learning') may be gathered through class work, tests, oral evidence, computer-generated class work, photographs. Learners may use these to build a portfolio to show their progress through the Units
- The Added Value Unit (the Test) is in two parts (non calculator and calculator).

ACTIVE LEARNING AND REAL LIFE CONTEXTS IN THE CLASSROOM

Maths in Business

The class divides into two groups. One makes contact with a local company which uses data to develop its business. A representative comes in and talks about the importance and uses of reliable data. The other invites a local kitchen designer to talk about how maths is used in design and installation.

National 4 progresses onto National 5

For more detailed course information:

SQA: Mathematics National 4: www.sqa.org.uk/sqa/47417.html

Education Scotland: www.educationscotland.gov.uk/nationalqualifications/index.asp

Curriculum for Excellence Key Terms and Features Factfile:

www.educationscotland.gov.uk/Images/CfEFactfileOverview_tcm4-665983.pdf



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