

# NATIONALS IN A NUTSHELL

The National Parent Forum of Scotland Summary of Chemistry National 4

CHEMISTRY  
SCIENCES

NATIONAL  
4

3  
UNITS

CHEMICAL CHANGES AND STRUCTURE  
NATURE'S CHEMISTRY  
CHEMISTRY IN SOCIETY

+  
ADDED  
VALUE  
UNIT

ADDED VALUE UNIT: CHEMISTRY ASSIGNMENT

## What skills will my child develop?

- application of knowledge and understanding of chemistry
- scientific inquiry and investigation skills
- scientific analytical thinking skills
- the ability to use technology, equipment and materials
- questioning and independent thinking
- problem-solving in a chemistry context
- using and understanding scientific literacy in everyday contexts
- planning experiments
- recording observations
- collecting and analysing data
- reviewing and re-designing research methods
- evaluating
- communicating findings



## WHAT WILL MY CHILD EXPERIENCE DURING THE COURSE?

- Active, collaborative and independent learning
- A blend of classroom approaches: practical tasks (experiments and open-ended investigations); whole class, small group or one to one discussions; direct interactive teaching
- Space for personalisation and choice
- The Added Value Unit (Assignment) allows learners to choose their research topic and present their findings
- Collaborative learning: partnerships with learners in other curriculum areas; links with businesses, employers, organisations
- Applying learning to familiar situations
- Embedding literacy skills: selecting and assessing information, presenting findings; evaluating; debating; listening; reading; writing
- Embedding numeracy skills: recording and displaying data in graphs/tables; accuracy; interpreting and assessing data; using technologies.

## ASSESSMENT

- To gain National 4, learners must pass all Units and the Assignment
- Units are assessed as pass or fail by the school/centre (following SQA external quality assurance to meet national standards)
- Unit Assessment (or 'evidence of learning') could be digital or spoken presentations, posters, leaflets, extended writing, notes or podcasts. Learners may use these to build a portfolio to show their progress through the Units.

National 4 progresses onto National 5

## DISCUSSION IN THE CLASSROOM

### Nature's Chemistry and Chemistry in Society:

We are studying acids and alkalis and their use in the food and drink industry. We have been looking at media coverage of health issues and the healthy eating agenda.

Our task is to examine to what extent media coverage is based on scientific evidence using numeracy and evaluation.

For more detailed course information:

SQA: Chemistry National 4: [www.sqa.org.uk/sqa/45721.html](http://www.sqa.org.uk/sqa/45721.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)