

World-class standards

Edexcel Science
qualifications



About Pearson

At the core of everything we do is the desire to make a measurable impact on improving people's lives through learning. Pearson aspires to be the world's leading learning company. From primary to secondary school, through to professional certification; our qualifications, curriculum materials, multimedia learning tools and testing programmes help to educate millions of people worldwide.

Newsflash

We are making some updates to our Edexcel International GCSE qualifications for first teaching in September 2016 and 2017. One of the key elements will be the introduction of the new 9-1 grading scale, ensuring comparability to Edexcel GCSEs and rewarding outstanding achievement. The updated content will also represent the latest thinking in each subject, plus more international content.

To find out more please visit:
[qualifications.pearson.com/
edexcel-internationalgcse-
update](http://qualifications.pearson.com/edexcel-internationalgcse-update)



Edexcel Science qualifications

This varied and stimulating suite of qualifications is designed to impart a thorough, yet broad range of scientific knowledge across all three disciplines, inviting the student to discover the possibilities inherent in scientific investigation and discovery.

At a glance

	GCSE	International GCSE	A level	IAL
Astronomy	✓			
Biology	✓	✓	✓	✓
Chemistry	✓	✓	✓	✓
Human Biology		✓		
Physics	✓	✓	✓	✓
Psychology	✓		✓	✓
Science	✓			
Science (Double Award)		✓		
Additional Science	✓			
Further Additional Science	✓			

- These qualifications provide seamless progression to higher level academic (i.e. degree level programmes) and vocational qualifications.

Making learners' and teachers' lives easier

We understand that delivering first-class qualifications takes time and careful planning, which is why we strive to provide you with an unparalleled level of support alongside our high-quality Edexcel qualifications.

Support with exam preparation and assessment

- › Past papers
- › Mark schemes
- › Examiner reports
- › ResultsPlus Mock Analysis

Resources

- › Range of free teaching resources including: past exam papers, schemes of work and more
- › Range of paid-for digital and print resources

Teaching and delivery support

- › Ask the Expert
- › Subject Advisors
- › Subject community forums
- › Training solutions

Results/post results support

- › ResultsPlus
- › Certification
- › Exam feedback sessions
- › Grade boundaries

ResultsPlus

Provides centres with instant and detailed analysis of your students' exam and mock performance. Widely used by teachers across the world, it helps you identify the areas where students could benefit from extra support and guidance, driving attainment.

Find out more at:
qualifications.pearson.com/resultsplus

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ResultsPlus helps me by looking at individual students and analysing their performance, finding the exact topic they either did well and succeeded in, or the ones that need improvement...we then look at setting up revision or booster classes, some sort of intervention, so we can improve their result for the re-sit.

Pietro Tozzi, Maths Teacher, Gumley House School, UK.



Astronomy

GCSE

Overview:

Our Astronomy GCSE features an accessible assessment regime that offers challenges to students of all abilities. The content is engaging with a strong practical element for a broader appeal, while teachers have a clear, concise mark scheme to help them prepare students for assessment. It complements the Key Stage 4 science programme of study, for GCSE Science and GCSE Additional Science.

Content:

Understanding the Universe (earth, moon and sun; planetary systems; stars; galaxies and cosmology) and exploring the universe.

Assessment:

Understanding the universe is externally assessed through a 2 hour examination; exploring the universe is internally assessed under controlled conditions. Externally assessed examinations take place annually in June.



Biology

GCSE

Overview:

Our GCSE in biology is part of a new suite of GCSEs for science that puts good science at the heart of teaching and is designed to allow you to choose the best learning pathway for each student.

Content:

Influences of life; the components of life; using biology and a biology controlled assessment.

Assessment:

Influences of life; the components of life and using biology is externally assessed through a one hour, 60 mark, tiered written examination, containing six questions. The Additional Science controlled assessment is internally assessed under controlled conditions. Externally assessed examinations take place annually in June.

International GCSE

Overview:

Overview: our International GCSE in biology aims to give students a knowledge and understanding of biological facts, concepts and principles, while developing experimental skills. Students will also learn to form hypotheses and design experiments to test them.

Content:

The nature and variety of living organisms; structures and functions in living organisms; reproduction and inheritance; ecology and the environment; use of biological resources.

Assessment:

Assessment is external through the marking of two examination papers. Examinations take place bi-annually in January and June.

GCE A level

Overview:

Our GCE A level in biology has been designed to engage and inspire students by showing how an understanding of many contemporary issues requires a grasp of fundamental biological ideas. With a realistic, manageable level of content and assessment, it provides an enjoyable teaching and learning experience.

Content:

Lifestyle; transport; genes & health; development; plants and the environment; practical biology and research skills; the natural environment and species survival; energy, exercise and co-ordination; practical biology; investigative skills.

Assessment:

Four units are assessed by means of written examination papers and 2 units are internally assessed. Externally assessed examinations take place annually in June.

International Advanced Level (IAL)

Overview:

Our IAL in Biology is the new name for the international version of the Edexcel GCE A level in biology. Available for international centres only, this qualification contains a written exam instead of coursework. Note: only the name of the qualification has changed. The content and assessment methodology are the same as the current international version of the Edexcel GCE A level biology specification. The qualification builds on the knowledge and skills developed from the GCSE or International GCSE biology, encouraging creative thinking and problem-solving.

Content:

Lifestyle; transport; genes & health; development; plants and the environment; practical biology and research skills; the natural environment and species survival; energy, exercise and co-ordination; practical biology; investigative skills.

Assessment:

Assessment is via a written exam, with exam options in January and June.

Chemistry

GCSE

Overview:

Our GCSE in Chemistry encourages students to develop their curiosity about the material and physical worlds and provides insight into and experience of how science works. It enables students to engage with chemistry in their everyday lives and to make informed choices about further study in chemistry and related disciplines and career choices.

Content:

Chemistry in our world; discovering chemistry; chemistry in action; chemistry controlled assessment.

Assessment:

The first three units are all examined and externally assessed; CCA is an internal assessment consisting of three pieces of work. Externally assessed examinations take place annually in June.

International GCSE

Overview:

Our International GCSE in Chemistry aims to develop an understanding of the unifying patterns and themes of chemistry, as well as experimental and investigative skills based on correct and safe laboratory techniques. Students will gain an appreciation of scientific methods and learn to form hypotheses and design experiments to test them.

Content:

Principles of chemistry; chemistry of the elements; organic chemistry; physical chemistry; chemistry in society.

Assessment:

Assessment is external through the marking of two examination papers. Examinations take place bi-annually in January and June.

GCE A level

Overview:

Developed from the best of the pre-2008 Edexcel Chemistry and Nuffield specifications, our engaging and inspiring GCE A level Chemistry specification enables contemporary chemistry contexts to be included within the teaching and learning programme. With a realistic, manageable level of content and assessment, it provides an enjoyable teaching and learning experience.

Content:

The core principles of chemistry; application of core principles of chemistry; chemistry laboratory skills 1; general principles of chemistry 1 – rates, equilibria and further organic chemistry; general principles of chemistry 2 – transition metals and organic nitrogen chemistry; chemistry laboratory skills 2.

Assessment:

Four units are assessed by means of written examination papers and 2 units are internally assessed. Externally assessed examinations take place annually in June.

International Advanced Level (IAL)

Overview:

The IAL in Chemistry is the new name for the international version of the Edexcel GCE A level in Chemistry. Available for international centres only, this qualification contains a written exam instead of coursework. Please note: only the name of the qualification has changed. The content and assessment methodology are the same as the current international version of the Edexcel GCE A level in Chemistry specification.

Content:

The core principles of chemistry; application of core principles of chemistry; chemistry laboratory skills 1; general principles of chemistry 1 – rates, equilibria and further organic chemistry; general principles of chemistry 2 – transition metals and organic nitrogen chemistry; chemistry laboratory skills 2.

Assessment:

Assessment is via a written exam, with exam options in January and June.

Human Biology

International GCSE

Overview:

Our International GCSE in human biology aims to impart knowledge of the structure and functions of the human body and develop an appreciation of how the human organism maintains itself.

Content:

Cells and tissues; biological molecules; movement of substances into and out of cells; form and movement: bones, muscles and joints; coordination; nutrition and energy; respiration; gas exchange; internal transport; homeostatic mechanisms; reproduction and heredity; disease; non-pathogenic organisms and their importance; environment.

Assessment:

Assessment is external through the marking of two examination papers. Examinations take place bi-annually in January and June.





Physics

GCSE

Overview:

Our GCSE qualification in Physics encourages students to be inspired, motivated and challenged. It encourages students to develop their curiosity about the physical world, and provide insight into and experience of how science works. It enables students to engage with physics in their everyday lives and to make informed choices about further study and career choices.

Content:

Universal physics; physics for your future; applications of physics; physics controlled assessment.

Assessment:

The first three units are all examined and externally assessed; PCA is an internal assessment consisting of three pieces of work. Externally assessed examinations take place annually in June.

International GCSE

Overview:

Our International GCSE in Physics aims to impart a systematic body of scientific knowledge and skills as well as foster an appreciation of the practical nature of physics. Experimental and investigative skills based on safe, correct laboratory techniques will be developed. Students will also gain an appreciation of scientific methods and learn to form hypotheses and design experiments to test them.

Content:

Forces and motion; electricity; waves; energy resources and energy transfer; solids, liquids and gases; magnetism and electromagnetism; radio activity and particles.

Assessment:

The course is externally assessed through two examination papers. Examinations take place bi-annually in January and June.

GCE A level

Overview:

Developed from the best of the pre-2008 Edexcel and Salters Horners (SHAP) specifications, our engaging and inspiring GCE A level Physics specification enables current, contemporary contexts to be included in the teaching and learning programme. With a realistic, manageable level of content and assessment, it provides an enjoyable teaching and learning experience.

Content:

Physics on the go; physics at work; exploring physics; physics on the move; physics from creation to collapse; experimental physics.

Assessment:

Four units are assessed by means of written examination papers and 2 units are internally assessed. Externally assessed examinations take place annually in June.

International Advanced Level (IAL)

Overview:

The IAL in Physics is the new name for the international version of the Edexcel GCE A level in Physics. Available for international centres only, this qualification contains a written exam instead of coursework. Please note: only the name of the qualification has changed. The content and assessment methodology are the same as the current international version of the Edexcel GCE A level in Physics specification.

Content:

Physics on the go; physics at work; exploring physics; physics on the move; physics from creation to collapse; experimental physics.

Assessment:

All six units are externally assessed through examination, exam options in both January and June.

Psychology

GCSE

Overview:

Edexcel's GCSE in Psychology contains a motivating range of current and accessible themes giving it broader appeal. It seeks to develop students' understanding of the key underpinning methodology in psychology. The modular structure allows students to bank success as they go, and teachers will find that the straightforward specification tells them exactly what you need to teach. The course's context-based approach develops students' knowledge and understanding, preparing them for GCE A level study.

Content:

Perception and dreaming; social and biological psychological debates.

Assessment:

Both units are examined and externally assessed. Externally assessed examinations take place annually in June.

GCE A level

Overview:

Our GCE Psychology specification aims to develop students' enthusiasm for the subject, while allowing students to appreciate the scientific nature of psychology and encouraging an appreciation of the skills and knowledge required to study psychology. It develops students' essential knowledge and understanding of different areas of the subject and how they relate to each other.

Content:

Social and cognitive psychology; understanding the individual; applications of psychology; how psychology works.

Assessment:

Each unit is externally assessed through examination. Externally assessed examinations take place annually in June.



Science

GCSE

Overview:

Like you, we're passionate about science and we want to give your GCSE students the opportunity to achieve their potential in science. GCSEs in science, additional science, biology, chemistry and physics are now fully accredited by Ofqual, February 2011.

Content:

B1, influences on life; C1 chemistry in our world; P1 universal physics; SCA Scientific Controlled Assessment.

Assessment:

The first three units are all examined and externally assessed; SCA is an internal assessment consisting of three pieces of work. Externally assessed examinations take place annually in June.

Science (Double Award)

International GCSE

Overview:

Our International GCSE in Science (Double Award) aims to impart a systematic body of scientific knowledge facts, and an understanding of scientific concepts, principles, themes and patterns. Experimental skills based on correct and safe laboratory techniques are developed, as well as students' ability to form hypotheses and design experiments to test them.

Content:

Biology – the nature and variety of living organisms; structures and functions of living organisms; reproduction and inheritance; ecology and the environment; use of biological resources. Chemistry – principles of chemistry; chemistry of the elements; organic chemistry; physical chemistry; chemistry in society. Physics – forces and motion; electricity; waves; energy sources and energy transfer; solids, liquids and gases; magnetism and electromagnetism; radioactivity and particles.

Assessment:

The International GCSE Science (Double Award) comprises three externally assessed papers. Examinations take place bi-annually in January and June.

Additional Science

GCSE

Overview:

Additional Science is part of the suite of GCSE qualifications offered by Edexcel. It is designed to encourage students to be inspired, motivated and challenged by following a broad, coherent, practical, satisfying and worthwhile course of study.

Content:

The components of life; discovering chemistry; physics for your future and an Additional Science controlled assessment.

Assessment:

The components of life; discovering chemistry and physics for your future is externally assessed through a one hour written examination. The Additional Science controlled assessment is internally assessed under controlled conditions. Externally assessed examinations take place annually in June.

Further Additional Science

GCSE

Overview:

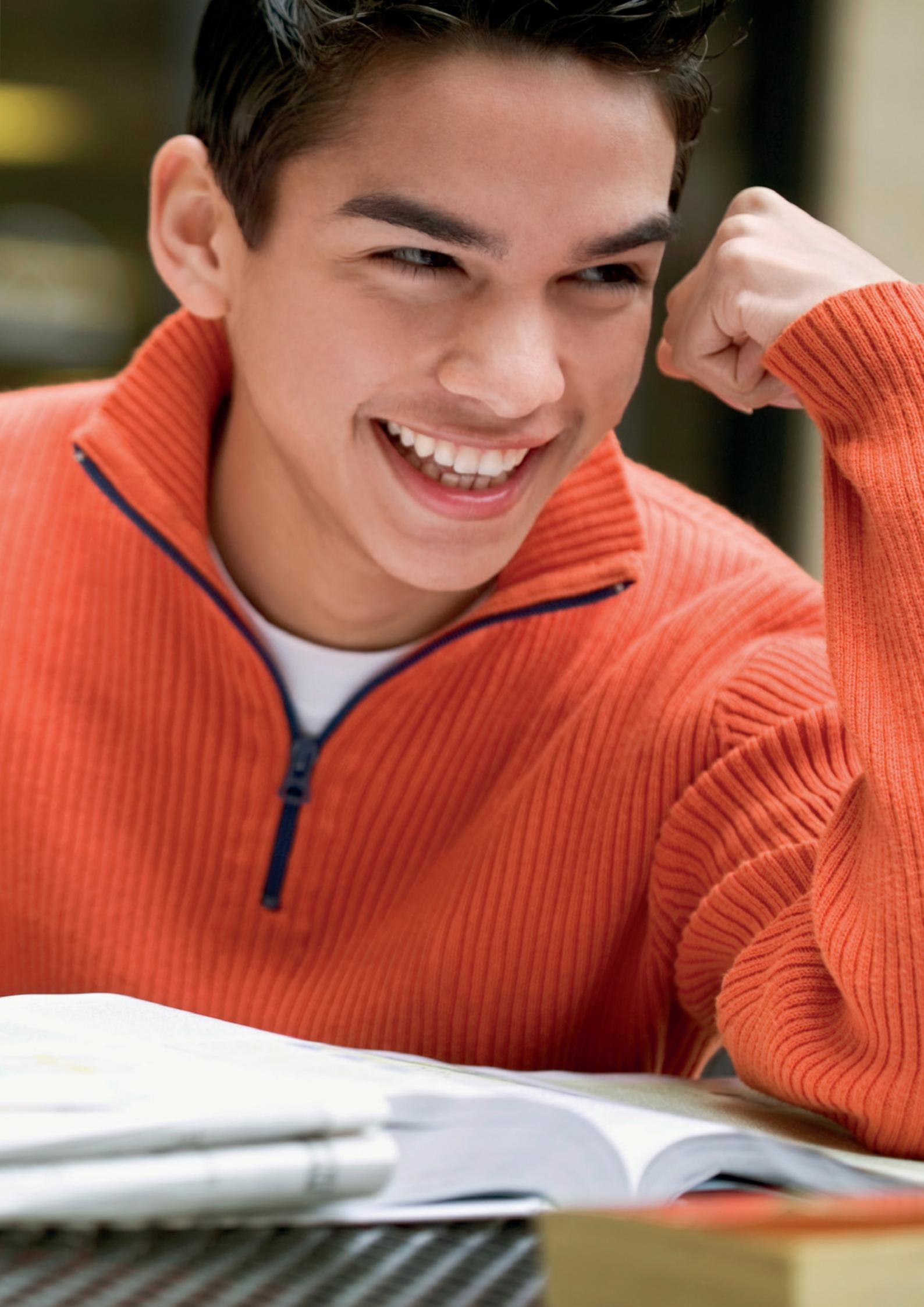
Taken in conjunction with Science and Additional Science, this qualification helps you provide flexible ways for students to study three GCSEs' worth of science. An Edexcel GCSE Science/Additional/Extension route would allow students to move to studying three GCSEs' worth of science at any point, even after completing Edexcel GCSE in Science and Additional Science. This is a more flexible alternative than our Biology, Chemistry, Physics route, and it's available for first assessment in June 2014.

Content:

Using biology; chemistry in action; applications of Physics and Further Additional Science controlled assessment.

Assessment:

Using biology; chemistry in action and applications of physics is externally assessed through a one hour written examination. Further Additional Science is internally assessed under controlled conditions. Externally assessed examinations take place annually in June.



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