

MATHEMATICS AND NUMERACY

All students in Key Stages 3 and 4 study Mathematics and Numeracy, this helps students to:

- Develop fluent knowledge, skills and understanding of mathematical methods and concepts.
- Acquire, select and apply mathematical techniques to solve problems.
- Reason mathematically, make deductions and inferences, and draw conclusions.
- Comprehend, interpret and communicate mathematical information in a variety of forms appropriate to the information and context.

The Mathematics and Numeracy course covers the following topics:

- Number
- Algebra
- Ratio, proportion and rates of change
- Geometry and measures
- Statistics and probability

Students in Key Stages 3 and 4 study the full range of topics within the Mathematics curriculum. Each year topics are revisited to reinforce previous learning, and their knowledge, skills and understanding are extended to progress to the next steps within each topic. This allows staff to differentiate within the topics for individual learners needs and for all students to make progress from their personal starting points.

Learners are regularly assessed using a combination of formative teacher assessments and summative formal testing.

GCSE ASSESSMENT FORMAT

Students study Pearson Edexcel Level 1/Level 2 International GCSE (9 - 1) in Year 10 and Year 11.

Two assessment opportunities are offered in Year 11, these are in January and May/June.

The qualification consists of two equally weighted written examination papers at either Foundation tier or Higher tier.

A calculator is allowed for both Paper 1 and Paper 2.

Each paper is 2 hours long and is worth a total of 100 marks.

All topics are assessed across both papers.

Each paper has a range of question types; some questions will be set in both mathematical and non-mathematical contexts.

The qualification is graded and certificated on a nine-grade scale from 9 to 1 using the total mark across both papers where 9 is the highest grade.

Foundation tier covers grades 1 to 5 and the Higher tier covers grades 4 to 9.

WEBSITE

<https://qualifications.pearson.com/en/qualifications/edexcel-international-gcses-and-edexcel-certificates/international-gcse-mathematics-a-2016.html>

FUNCTIONAL SKILLS MATHEMATICS

The Pearson Edexcel Functional Skills Qualifications in Mathematics develop understanding and skills in mathematics and help learners to develop skills for everyday life and the workplace.

The qualifications give learners the opportunity to:

- Demonstrate a sound grasp of the underpinning skills and basics of mathematical skills appropriate to the level.
- Apply mathematical thinking to solve simple problems in familiar and unfamiliar situations.
- Achieve the skills for further study at Levels 1 and 2 and beyond.
- Achieve a foundation for progression into employment.

Functional Skills mathematics qualifications:

- Enable learners to become confident in their use of fundamental mathematical knowledge and skills.
- Indicate that students can demonstrate their understanding and knowledge of mathematical skills and their ability to apply these, through appropriate reasoning and decision making, to solve realistic problems of increasing complexity.
- Introduce students to new areas of life and work so that they are exposed to concepts and problems which, while not of immediate concern, may be of value in later life.
- Enable students to develop an appreciation of the role played by mathematics in the world of work and in life generally.

The course covers the following topics:

- Using numbers and the number system: whole numbers, fractions, decimals, percentages
- Using common measures, shapes and space
- Handling information and data

FUNCTIONAL SKILLS ASSESSMENT FORMAT

The Pearson Edexcel Functional Skills Qualification in Mathematics at Levels 1 and Level 2 consist of one externally set, on-screen assessment at each Level.

The Pearson Edexcel Functional Skills Qualification in Mathematics at Entry Levels 1 to 3 consist of one externally set, internally marked and externally verified paper-based assessment at each Level.

Each assessment comprises two sections

Section A: Non-calculator 25 minutes (25%)

Section B: Calculator 1 hour 30 minutes (75%)

The qualification is graded Pass or Fail.

WEBSITE

<https://qualifications.pearson.com/en/qualifications/edexcel-functional-skills/maths-2019.html>

PROGRESSION OPPORTUNITIES

Mathematics is a core subject which gives students a greater understanding of the world in which they live. It is useful to students pursuing a wide range of careers, from accounting, computing, and engineering to nursing and business. Mathematics is a benefit when studying most subjects at A Level, including, Psychology, Sciences, Business Studies and Geography, as it allows students to understand and interpret results. University courses often require pupils to have a good understanding of Mathematics, as many courses require a good level of numeracy.

Functional Skills qualifications provide reliable evidence of a learner's achievements against demanding content that is relevant to the workplace. The qualifications assess learners' underpinning subject knowledge and their ability to apply this knowledge to different contexts. They provide a foundation for progression to employment and further technical education, and they help learners to develop skills for everyday life.

Learners who achieve Pearson Edexcel Functional Skills Qualifications in Mathematics at Entry Levels 1 to 3 can progress through the levels (from Entry Level 1 to Entry Level 2, and Entry Level 2 to Entry Level 3), and to Functional Skills Qualifications in Mathematics at Levels 1 and 2 or further mathematical study, such as GCSE. Alternatively, learners can progress to employment or to further technical or vocational education.