**Why study Mathematics?**

**GCSE Mathematics**

Mathematics is a core subject which is studied by all students for GCSE. The learning in mathematics is transferable across many of the subjects you will study, particularly in science and technology. Students will learn key skills for everyday use as well as valuable skills in logic, problem solving and analysis.

**Features of the course:**

There are two tiers of entry for GCSE mathematics; higher tier which accesses grades 4 - 9 and foundation which accesses grades 1 - 5. Students will continue to be taught mathematics in ability groups and all will study for the higher tier course. A small number of students may be entered for the foundation paper at the end of Year 11 based on the target grade they are expected to achieve and their progress throughout the course.

Students will learn through a range of styles of activities including individual learning, group work and problem solving tasks. A mastery approach is adopted by all our teachers to ensure that deep understanding is developed by pupils. The topics covered in Years 7 - 9 will be revisited and built upon with a number of new topics introduced. Students will see an increasing overlap in the topics that are covered and problem solving in real life contexts becomes a significant focus.

For all lessons and examinations students will be expected to have mathematical instruments and a scientific calculator, we recommend the Casio FX83GTX or if students are planning future mathematical study the Casio FX-991EX.

**Enrichment:**

There will be the opportunity to take part in the UKMT Maths challenge during the course. Additionally, we invite students to attend the weekly problem solving club as this will enhance their skills for this element of the course. Support is offered through the weekly maths clinic for students to drop in with any questions they may have.

**What opportunities for progression does it offer?**

A grade 5 or above in mathematics is the threshold for many progression opportunities such as some university courses or employment.

This course is an excellent foundation for those students who are aspiring to study mathematics at A-Level.

Key information:

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|  **Topics for Study:** | Revisiting topics from Years 7-9 with an emphasis on generalised solutions using algebraic techniques; problem solving; number; geometry; algebra; and shape |
| **Assessment summary** | 3 x 1 hour 30 minutes examinations.1 x non-calculator paper, 2 x calculator allowed papers. |
| **Exam Board** | Edexcel |
| **Subject lead contact details:** | Mrs FordNFord@qegs.cumbria.sch.uk |