PLUME ACADEMY - LEARNING OVERVIEW

Year	11	
Course	Maths GCSE	Entry level Certificate Mathematics Level 1 and/or 2 for those students who struggle to access the GCSE
Specification Number/Exam Board	1MA1/Edexcel	NMA0/Edexcel EL1/EL2
End of course assessment and weightings	3 x 1hr 30 min exams, 80 marks per paper. Equally weighted.	Component 1: Test (60%) Component 2: Task (40%)

Prior Learning

The subject builds on your child's key stage 3 experience in mathematics by developing understanding of previous concepts in new contexts and introducing some entirely new content to explore.
All students will study the same broad curriculum areas, but to varying depths, dependent on their prior learning. This will guide the decision as to whether they are entered for higher tier or foundation tier at GCSE.

Curriculum Intent – What are the curriculum aims?

We believe that students deserve a creative and ambitious mathematics curriculum, rich in skills and knowledge, which ignites curiosity and prepares them well for everyday life and future employment.

An important aim of the course is to help students to talk about Mathematics and use mathematical language correctly. We develop the skills to able the students to explain and give reasons to support mathematical thinking, as this is essential at GCSE. confidence is built to enable them to pass on their knowledge to others in a clear, concise and logical way. A 'Mathematics Mastery' approach is used to develop the building blocks that students need to study mathematics successfully and to a high level.

Time is spent building, developing and extending strong number and algebra skills, enabling students to increase their understanding of mathematical structure, using a variety of representations to build fluency. These important core skills lay a solid foundation for more complex learning later.

Each block of knowledge is divided into a series of small learning steps. Together, these small steps cover all the curriculum content that students need to know. Students are encouraged to use visual methods to solve the problems posed to them – this may be by drawing a diagram or using manipulatives (counters, bead strings, Cuisenaire, multilink etc). Students are encouraged to use their calculators to support their ability to solve problems. By learning mathematics in small, related chunks, students will remember more and develop a greater depth of understanding.

Curriculum Implementation – What will my child will be learning?

Term 1	Half Term 1	**Graphs** Gradients & Lines, Non-Linear Graphs, Expanding and Factorising, Using Graphs
	Half Term 2	**Algebra** Changing the Subject, Functions
Term 2	Half Term 3	**Reasoning** Multiplicative, Geometric, Algebraic
	Half Term 4	**Communication** Transforming & Constructing, Listing & Describing, Show that…

Term 3	Half Term 5	**Revision**
	Half Term 6	**Revision**

Curriculum Impact – How will progress be assessed as I learn?

At the end of each topic, students will be set a topic assessment for homework. This can be completed on paper or digitally. The use of OneNote within Microsoft Teams is used to share and store these assessments, enabling personalised feedback to be given on each piece of work. Students without access to this at home will be able to use the school facilities to upload their paper copies and view feedback.
At the end of the first term, students will sit assessments (2 papers, one calculator based and one non-calculator based) in class. These will cover all topics since the beginning of the year (and a small amount of prior knowledge from previous years). This cumulative approach to testing will support deep learning, as topics will be revisited many times. They will be appropriate to the ability of the student. Students will receive detailed feedback on areas of strength and areas of development and given opportunities to improve. Students will also sit mock exams over the course of the year. These will consist of 3 papers (two calculator based and one non-calculator based) that will be graded in line with GCSE requirements.

Super-Curricular Opportunities – Support and Extending Learning

Useful study resources	If a student is really passionate about this subject...	As a parent/carer, I can assist my child in this subject by:
• Knowledge Organisers provided for each topic • Hegarty Maths (HegartyMaths) • Dr Frost (DrFrostMaths.com) • Corbett Maths (Videos and Worksheets – Corbettmaths) • Thursday after school revision	• Take part in the puzzle of the week (http://www.puzzleoftheweek.com/) • Attend maths club – Thurs revision • Attend maths club – GCSE to A Level Transition • Use the NRICH website (https://nrich.maths.org/14846) • Participate in UKMT Maths Challenge	• Ask them about their maths and how they are finding it, you don't need to be an expert •Encourage them to be actively involved in their learning by asking for additional support if they are finding a topic difficult • Support us in encouraging students to complete homework on time and to the best of their ability