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 an engaging 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 ensure the students can 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 'Maths 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, allowing 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 solvethe 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 tosolve 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	**Algebra, Graphs** Expanding & Factorising, Changing the Subject, Functions, Gradients & Lines
	Half Term 2	**Graphs** Non-linear Graphs, Using Graphs
Term 2	Half Term 3	**Reasoning** Multiplicative, Geometric, Algebraic, Exam paper practice throughout
	Half Term 4	**Communication** Transforming & Constructing, Listing & Describing, Show that…, Exam paper practice and revision throughout

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. This will usually be completed for homework as part of students independent study. The assessment will be shared on Show My Homework and students can either print it out to write on directly, or handwrite their work in their exercise books. *During both the Autumn and Spring term, students will sit 3 graded papers (two calculator based and one non-calculator based) that will be graded in line with GCSE requirements so that students are aware of their current achievement and progress. These will cover all topics that students need to study for the GCSE course, and detailed personalised feedback provided to each student after each assessment will help to identify areas of development as well as strength. Where appropriate, students will attempt both foundation and higher tier papers to ensure they are entered for the correct tier for them at the end of key stage 4.*

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 • MathsPad (MathsPad) • Dr Frost (DrFrostMaths.com) • Corbett Maths (Videos and Worksheets – Corbettmaths) • MathsWatch (https://vle.mathswatch.co.uk/vle/) • Thursday lunchtime and after schooldrop in sessions • After school masterclasses (by invite only) • Workbooks available on ParentPay	• Take part in the puzzle of the week (http://www.puzzleoftheweek.com/) • Use the NRICH website (https://nrich.maths.org/14846) • Participate in UKMT MathsChallenge	• 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