PLUME ACADEMY - LEARNING OVERVIEW

Year	9
Subject	Maths

Prior Learning

The Year 9 curriculum builds on a child's key stage two and earlier key stage three experience by developing understanding of previous concepts in new contexts and introducing some entirely new content to explore.

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 thebuilding 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.

Many people think they 'can't do Maths', but with exciting new teaching approaches, we're proving day by day that every child really can love and succeed in Maths!

Curriculum Implementation – What my child will be learning?

Term 1	Half Term 1	**Reasoning with Number** Numbers **Reasoning with Algebra** Straight Line Graphs Forming and Solving Equations
	Half Term 2	**Shape** Three Dimensional Shapes Congruency Enlargement and Similarity
Term 2	Half Term 3	**Number** Using Percentages Maths and Money **Reasoning with Geometry** Rotation and Translation

	Half Term 4	**Reasoning with Geometry** Pythagoras' Theorem **Reasoning with Proportion** Solving ratio and proportion problems
Term 3	Half Term 5	**Reasoning with Proportion** Solving Ratio and Proportion Problems (continued) Rates **Representations and Using Number** Probability
	Half Term 6	**Representations and Using Number** Non-calculator methods Algebraic Representation

Curriculum Impact – How will progress be assessed?

At the end of each topic, students will be set a topic assessment. This will either be completed in class or for homework. 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.
At the end of every 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.
At the end of Year 9, students will sit a foundation GCSE paper, in order to help determine setting for Year 10.

Super-Curricular Opportunities – Extending Learning

Useful study resources:	If a student is really passionate about this subject, they could:	As a parent/carer, I can assist my child in this subject by:
• Knowledge Organisers provided for each topic Sparx Independent learning • Dr Frost (DrFrostMaths.com) • Corbett Maths (Videos and Worksheets – Corbettmaths)	• Use the NRICH website (https://nrich.maths.org/14846) • Earn extra XP points in Sparx	• 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