PLUME ACADEMY - LEARNING OVERVIEW

Year	7
Subject	Mathematics

Prior Learning

The Year 7 programme of study in Mathematics builds on a child's key stage two experience by developing understanding of previous concepts in new contexts and introducing some entirely new content to explore. Students complete a baseline test in the early stages of Year 7 and are then placed in groups relative to their ability. A differentiated approach is then taken to the Year 7 Programme of Study, to ensure that all students are provided with the opportunity to make progress within the topic being studied relative to their starting points.

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 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 my child will be learning?

Term 1	Half Term 1	**Algebraic Thinking** Sequences Understand and use algebraic notation Equality and equivalence
	Half Term 2	**Place Value and Proportion** Place value and ordering integers and decimals Fraction, decimal and percentage equivalence
Term 2	Half Term 3	**Application of Number** Solving problems with addition and subtraction Solving problems with multiplication and division Fractions and percentages of amounts **Directed Number** Operations and equations with directed number

	Half Term 4	**Directed Number** Operations and equations with directed number (continued) **Fractional Thinking** Addition and subtraction of fractions
Term 3	Half Term 5	**Lines and Angles** Constructing, measuring and using geometric notation Developing geometric reasoning
	Half Term 6	**Reasoning with Number** Sets and probability Primes and proof Developing number sense

Curriculum Impact – How will progress be assessed?

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.

Super-Curricular Opportunities – Extending Learning

Useful supporting 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