

Curriculum Intent, Implementation and Impact 2019-20

Subject (include exam board if examination subject): Mathematics

Year group: 8

Periods per fortnight: 8

INTENT:

The intent in the curriculum of mathematics at the Buckingham school aims to train students to become mathematicians, that are confident, resilient, and equipped with spatial reasoning and problem solving skill that allows for connecting different mathematical concepts together. Our students will be curious in their approach of this course, as they will be challenged through the different questions/ concepts that are suitable and appropriate for their individual level. This could be seen not only in our lessons but also in the form of extending students' knowledge to think outside of the box through UKMT questions, as well as supporting our groups in numeracy through the use of Numicon techniques. All of which are driven by the intent of challenging our students to become ambitious individuals that will be successful in their approach that alongside will be respectful of other's opinions and will be able to empathise with others. By the end of the year, the students will be able to demonstrate their knowledge in transformations of shapes, ratios and proportions, forming and solving equations including sequences and inequalities, constructing different algebraic graphs, perimeter and area of different shapes, constructions/ loci and bearings with angles, and understanding similarity as well as congruency and the studies of vectors.

IMPLEMENTATION:

Term	Topics studied Add dates and any assessments included	Extended learning opportunities (homework, controlled assessments, field work, trips etc.)	How parents could support students
Autumn Term	<ul style="list-style-type: none"> ▪ Transformations of shapes ▪ Algebra ▪ Angles 	Maths Pixl app Google classroom - With extended learning opportunities such as PRET homework Summative assessments to take place at the end of each chapter	Engage in Pixl app with their child Ensure that all homework is cross referenced and completed on google classroom Encourage and help with your child in remember the key terms from the PRET homework
Spring Term	<ul style="list-style-type: none"> ▪ Constructions, loci and bearings with angles ▪ Equations, inequalities, and sequences ▪ Similarity and congruency of different shapes 	Maths Pixl app Google classroom - With extended learning opportunities such as PRET homework Summative assessments to take place at the end of each chapter	Engage in Pixl app with their child Ensure that all homework is cross referenced and completed on google classroom Encourage and help with your child in remember the key terms from the PRET homework

Summer Term	<ul style="list-style-type: none"> ▪ Perimeter and area of different shapes ▪ Graphs of different algebraic shapes 	<p>Maths Pixl app Google classroom - With extended learning opportunities such as PRET homework</p> <p>Summative assessments to take place at the end of each chapter</p>	<p>Engage in Pixl app with their child</p> <p>Ensure that all homework is cross referenced and completed on google classroom</p> <p>Encourage and help with your child in remember the key terms from the PRET homework</p>
-------------	--	---	---

IMPACT:

The impact of the course is measured through our ongoing formative in lessons, and our summative assessments. Formative assessments will allow students to practice skills before the termly summative assessments at the end of each unit of study whilst also allowing teachers to address any misconceptions and areas of weakness. These are opportunities that allows for the student to demonstrate their mathematical knowledge and understanding along the seven key virtues of the Buckingham school. Strengths and weaknesses will be seen in the form of the mastery statements in 4 different categories: Geometry, Number (Ratio and proportion), Algebra, and statistics, reasoning and connectives. Our goal at the end is to ensure our students will be able to confidently think, process that allows them to make sound judgements that is backed by mathematical evidence and knowledge.