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	Fertile Question	Focus	Enrichment
	Does speaking a different language mean that we count differently?	Critical thinking unit, based on the idea that speaking a different language influence the way you could see the world. Because mathematics is the same all over the world, a phrase or formula has the same meaning, regardless of another language that accompanies it.	Explore different cultures and languages, including Maths
7 Jr	Are there numbers big enough and small enough to measure everything?	Exploring the accuracy of the numerical system with the accuracy needed to measure objects in real life. Understand the amount of information we need to describe the same object in different context.	
Year	Could a world without algebra survive? Are there equations without solutions?	Investigate the importance of maths in everyday life. Students explore how abstract mathematical ideas can be used in technology, medicine, science, music and geography.	Research the History of algebra
	How can 2D shapes help us learn about 3D shapes?	Exploring the concept of dimension and how 3D objects are made using 2D shapes. Understanding the world and applications in everyday life.	Explore home projects and various careers, like architecture.
8 .	What is the world's most useful shape?	This unit focus on the way of creating questions. Students should learn to ask specific questions, focused on particular topics and context.	Explore designs in Design technology
Year	Does Randomness truly exist?	Critical thinking unit focussed on the idea that randomness must be defined as the absence of structure or pattern. Students can explore how different sequences of events which look random are only apparently random as a pattern has been found or it will be found.	Link to Philosophy, Physics

# **Mathematics**

### **KS3 Curriculum Map**



		Fertile Question Focus		Enrichment
		Can we live without "zero"?  This unit explore the idea of nothing being something. We describe how pretty much anything changes – from the move of the car over time to the dispersal of medicine through our Without the concept of zero as a number, none of this would possible.		
		Why do honeybees love "hexagon"?	Investigate the most efficient way to fill a space with the least amount of material. Exploring the concept of tessellation to ensures that there's neither wasted space nor wasted energy.	Encourage exploration using different shapes to tessellate a surface.
		What is so special about prime numbers?	Introduction unit to Prime numbers. Students explore how prime numbers are the building blocks of whole numbers and how most modern computer cryptography works by using the prime factors of large numbers.	Engage with exploring if any integer bigger than 1 can be made by multiply two prime numbers.
Year 8		Is the Universe made of Maths?	Investigate the observation that nature is full of patterns, such as the Fibonacci sequence which describe the flowering of an artichoke with the distance between each petal and the next matching the ratio of the numbers in the sequence.  The non-living world also behaves in a mathematical way, planets and other astrophysical bodies follow elliptical orbits.	Investigate natural pattern like, number of petals in flowers.
		Is Mathematics a language?	Exploring the way in which any language is composed: vocabulary, meaning must be attached to the words or symbols, grammar, syntax, narrative and a group of people who use and understand the symbols.	

# **Mathematics**

### **KS3 Curriculum Map**



