Year 7

Subject: Mathematics

Intent for the Year

In Year 7 pupils will broaden their understanding of the basic mathematical concepts that they were taught in Key Stage 2. They will have opportunities to develop a conceptual understanding through application and problem solving including real-life concepts. In addition, the introduction of new topics including algebra, graphs and statistics, will strengthen their skills in reasoning and interpretation. Year 7 pupils will independently model mathematical situations and start to make connections between different areas of mathematics alongside their other subjects. Pupils will begin to become confident in their use of mathematical language to reason in number, geometry and algebra problems.

Topics Covered

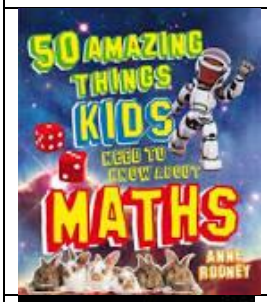
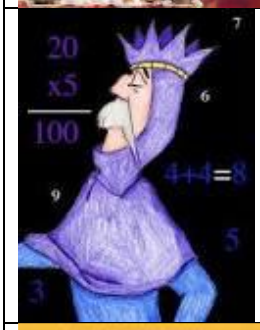
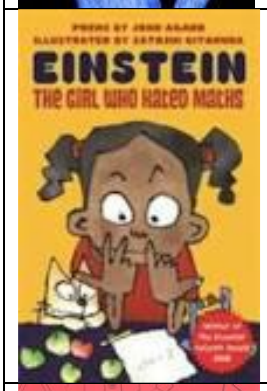
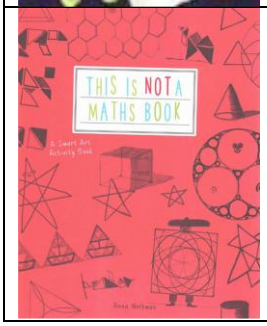
Algebraic Thinking – Sequences, Understanding and use algebraic notation, Equality and equivalence.
Place Value and Proportion - Place value and ordering integers and decimals, Fraction, decimal and percentage equivalence.
Application of number - Solving problems with addition & subtraction, Solving problems with multiplication and division, Fractions & percentages of amounts.
Directed Number- Operations and equations with directed number.
Fractional Thinking - Addition and subtraction of fractions.
Lines and Angles - Constructing, measuring and using geometric notation, Developing geometric reasoning.
Reasoning with Number - Developing number sense, Sets and probability, Prime numbers and proof.

Parents/Carers can help by…

- Ensuring that your child has the correct equipment for every lesson including the Casio FX991 scientific calculator.
- Supporting your child with their weekly Hegarty Maths and knowledge organiser activities.
- Attending parent's evenings to discuss your child's progress in their maths learning.
- Talk about and embrace the maths that surrounds us in everyday life.

Useful Websites

https://www.sparxmaths.uk/
https://hegartymaths.com/
https://www.mymaths.co.uk/
https://www.mathscareers.org.uk/sport/
https://wonderopolis.org
https://wild.maths.org
https://explore-math.weebly.com
https://www.mathsisfun.com

Recommended Reading		
Book Title	**Author**	**Brief Reasoning**
	50 Amazing Things Kids Need to Know About Maths by Anne Rooney	Have you ever wondered why you need to study math? Does it bore you? What good are fractions, decimals, and angles anyway? 50 Amazing Things Kids Need to Know about Math is the book that makes math cool! It will help you realize that math is important and fascinating.
	The King Mathemagician by Reyelene	A mathemagician is a mathematician who is also a magician. The name "mathemagician" was probably first applied to Martin Gardner, but has since been used to describe many mathematician/magicians,
	Einstein, The Girl Who Hated Maths by Satoshi Kitamura	From the mysterious power of the decimal point to the oddity of odd numbers, fun and wonder are the essence of these remarkable poems. The winner of the Queen's Gold Medal for Poetry takes us through the delight and silliness maths has to offer
	This is Not a Maths Book: A Smart Art Activity Book by Anna Weltman	Discover how maths can be artistic and art can be mathematical with this awesome activity book, full of fun drawing challenges with a mathematical basis