Theme	Information
	At Killigrew, we believe that mathematics is a powerful universal language and an essential tool needed for everyday life and understanding our world. Our curriculum enables the development of our pupils' natural fascination for mathematical concepts and enhances their ability to think logically and creatively. We teach the National Curriculum statutory objectives and extend these to offer additional challenge to all children regardless of their starting point. This is evident in our detailed progression documents covering all the strands of mathematical learning.
Times tables	Being fluent with times tables allows children to work out maths problems in their heads and helps with all aspects of maths including fractions, percentages, decimals, ratio and proportion.
	In year 3 and Year 4, the children have a times table lesson each week to learn and become fluent in their times tables.
	Links to reinforce times tables
	Times Tables Rockstars https://play.ttrockstars.com/auth/school/student
	Maths frame https://mathsframe.co.uk/en/resources/resource/477/Multiplication-Tables-Check
	https://mathsframe.co.uk/en/resources/category/7/multiplication-and-division
	Games to play at home to support fluency of times tables
	1. Roll two dice and multiply the numbers together or focus on one particular times table. This can also be played using a pack of cards.
	<ol> <li>Times tables bingo – pick a focus times table and create a grid with one person being the caller.</li> </ol>
	3. Flash cards: create flash cards to build fluency with different times tables.
	4. Rock, Paper, Scissors: Just like rock, paper, scissors except on the third lowering of your fist, you reveal a number with your fingers. For example, one player may hold up 7 fingers and the other may hold up 2. The calculation that needs to be solved is 7 x 2. The first player to get the correct answer remains playing another opponent or wins a point.
Developing reasoning	At Killigrew, we believe that spoken language and mathematical reasoning are essential for our children to be confident and efficient mathematicians. Please see our question starters and sentence stems document that you could use at home to aid mathematical talk and develop reasoning skills.
	Developing reasoning
	<u>Nrich</u> Nrich is a website that focuses on developing children's reasoning and offers an excellent range of problems for children to apply their learning further. It is used throughout our curriculum to enhance and develop children's reasoning but can also be used at home. <u>https://nrich.maths.org/primary</u>

Books	<ul> <li>In maths, one of our key drivers is promoting mathematical talk. Here are some book recommendations that cover some key themes of the mathematics curriculum and will develop children's mathematical understanding and vocabulary.</li> <li>EYFS <ul> <li>365 Penguins by Jean-Luc Fromental and Joelle Jolivet</li> <li>How Many Lets? By Kes Gray and Jim Field</li> <li>Shape Trilogy (Triangle, Square and Circle) by Mac Barnett and Jon Klassen</li> <li>Fruits: A Caribbean Counting Poem by Valerie Bloom and David Axtell</li> </ul> </li> </ul>
	<ul> <li>KS1</li> <li>How Many Jelly Beans? By Andrea Menotti and Yancey Labat</li> <li>How Much Does a Ladybird Weigh? By Alison Limentani</li> <li>Shaping Up Summer by Lizann Flatt and Ashley Barron</li> <li>Have You Seen My Dragon? By Steve Light</li> <li>Centipede's 100 Shoes by Tony Ross</li> </ul>
	<ul> <li>KS2</li> <li>Just A Second by Steve Jenkins</li> <li>Actual Size by Steve Jenkins</li> </ul>
Trips	At Killigrew, we believe that children should be able to make connections with maths in the real world. Below are some suggestions of trips that look at professions, experiences and how maths has shaped our history.
	<ol> <li>Bank of England Museum, London <u>https://www.bankofengland.co.uk/museum</u></li> <li>Royal Observatory, Greenwich <u>https://www.rmg.co.uk/royal-observatory</u></li> <li>Bletchley Park, Milton Keynes <u>https://bletchleypark.org.uk/</u></li> </ol>
Additional links	Here are some additional links that we feel support children's enrichment and passion for maths.
	EYFS https://www.topmarks.co.uk/maths-games/3-5-years/counting Interactive games to develop number and counting. https://home.oxfordowl.co.uk/kids-activities/fun-maths-games-and-activities/#maths-5-7 Useful handouts that can be printed to support children's understanding of patterns.
	KS1 https://www.topmarks.co.uk/maths-games/5-7-years/counting Interactive activities to consolidate counting and developing understanding of number. https://www.bbc.co.uk/bitesize/subjects/zjxhfg8 https://www.ictgames.com/mobilePage/index.html Interactive games to support number and place value. https://nrich.maths.org/9412 http://www.crickweb.co.uk/ks1numeracy.html
	KS2 https://www.topmarks.co.uk/maths-games/7-11-years/ordering-and-sequencing 'Hit the Button' is particularly useful for developing number fluency and recall. https://nrich.maths.org/9413 https://mathsframe.co.uk/an/massurges/satagan/aa/masst.panular
	https://mathsframe.co.uk/en/resources/category/22/most-popular https://www.bbc.co.uk/bitesize/subjects/z826n39

Ways to incorporate maths in daily lives	<ul> <li>We believe that making wider connections and applying key learning in everyday life is a vital skill and fundamental to understanding. We want children at Killigrew to be inquisitive and make their own mathematical links. To develop this further, here is a list of ideas that could be completed at home to promote real-life application of maths and support deepening children's understanding of mathematical language.</li> <li>Share recipes and cooking experiences - encouraging children to use scales to weigh ingredients</li> <li>Having clocks at home and sharing the time together e.g. bath time is at 7 o'clock. We need to leave for school in 10 minutes - what will the time be?</li> <li>Play board games that involve dice throwing, counting and mathematical talk e.g. 'go back 5 spaces or move forward 3'</li> <li>Construction - use a variety of materials to construct different geometric shapes</li> <li>Complete shape hunts and pattern finding in the local environment</li> <li>Involve children in home improvement projects e.g. ask children to measure for a set of curtains.</li> <li>For children who enjoy watching live sport, encourage them to review the statistics</li> </ul>
	• For children who enjoy watching live sport, encourage them to review the statistics after a live game and share their findings (BBC Sport website).