KS2 Mathematics Workshop for Parents and Carers 2022

WHAT DOES MATHS LOOK LIKE AT HOLLYDALE?

In this presentation you will find:

- What Maths look like within each year group at Hollydale

- How to help your child learn their Times Tables, including why this is so important – daily practise will help your child become fluent and confident in this area.

- Examples of resources to use at home.

WHAT DOES MATHS LEARNING LOOK LIKE AT HOLLYDALE?

ON THE NEXT FEW SLIDES, YOU WILL SEE AN EXAMPLE OF A CHILD'S PIECE OF LEARNING WHO IS WORKING AT AGE RELATED EXPECTATIONS WITHIN EACH YEAR GROUP.

YOU WILL ALSO NOTICE A SELECTION OF THE KEY FOCUS AREAS WITHIN EACH YEAR GROUP AROUND THE OUTSIDE OF PIECE OF WORK. THESE ARE NOT A FULL LIST OF OBJECTIVES BUT JUST A FEW KEY ELEMENTS WITHIN THIS YEAR GROUP.

WE FEEL IT'S IMPORTANT TO SHARE THIS WITH YOU SO YOU HAVE A CLEAR UNDERSTANDING OF THE EXPECTATIONS YOUR CHILD WILL BE WORKING TO ACHIEVE WITHIN EACH YEAR GROUP IN MATHS.

* What does Maths look like in Year 3?

To recognise the place value of each digit in a three-digit number (hundreds, tens and ones).

To read and write numbers up to 1,000 in numerals and in words

To add and subtract mentally including a three-digit number and ones; a three-digit number and tens; a three-digit number and hundreds.

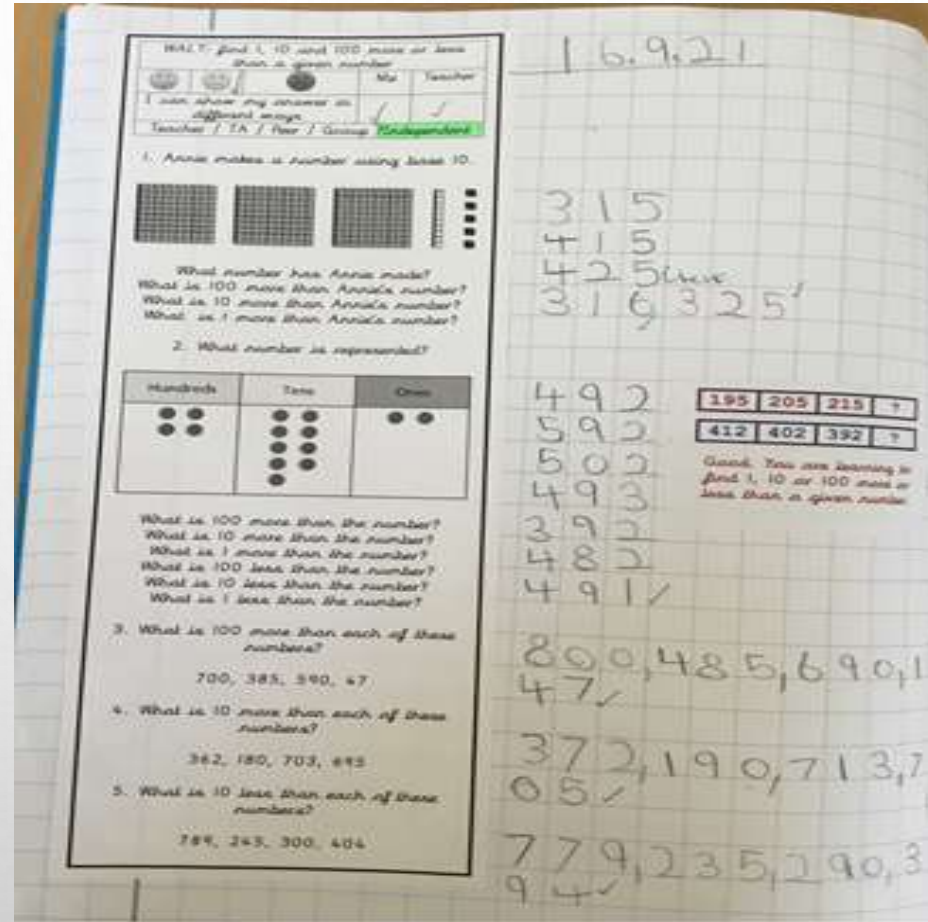To understand the inverse relationship between add and subtract

To solve number and practical problems, including reasoning using my number knowledge.

To use choose strategies to help me answer questions such as partitioning, number lines, counting on, counting back, bar models and eventually formal methods such as the column method.

To recognise, find and write fractions of a discrete set of objects.

To identify angles greater than or less than a right angle

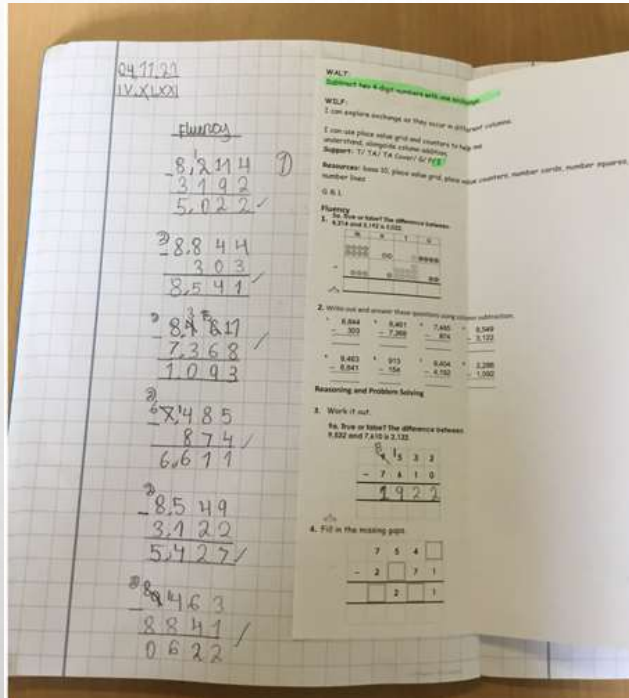To recall my 2, 5, 10s, 3, 4 and 8 times tables and related division facts.

What does Maths look like in Year 4?

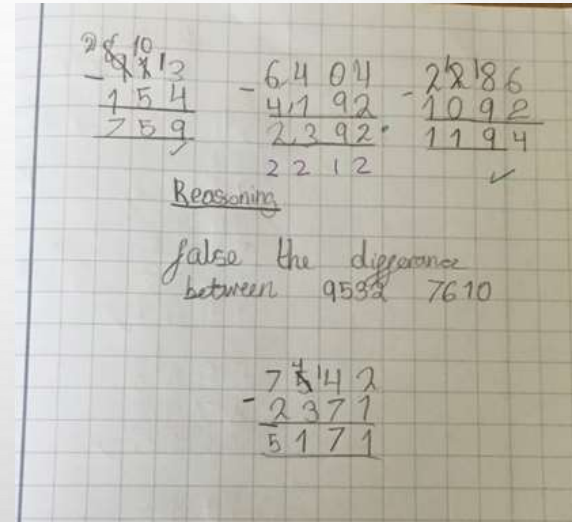Find the perimeter of regular and irregular polygons

Convert mixed numbers to improper fractions and vice versa

Add and subtract numbers with up to four-digits using the formal written methods of columnar addition and subtraction.

Solve addition and subtraction two-step problems deciding which operations and methods to use and why.

Have a secure understanding of number: confidently identifying the value of each digit in a 4 digit number E.g. 2378 the 3 represents 300.

Recognise common groups of equivalent fractions and finding the corresponding decimal.

To solve practical and number problems using reasoning to justify answers.

Multiply two-digit and three-digit numbers by a one-digit number using formal written layout

To confidently and securely know times tables facts, including the inverse up to 12x12
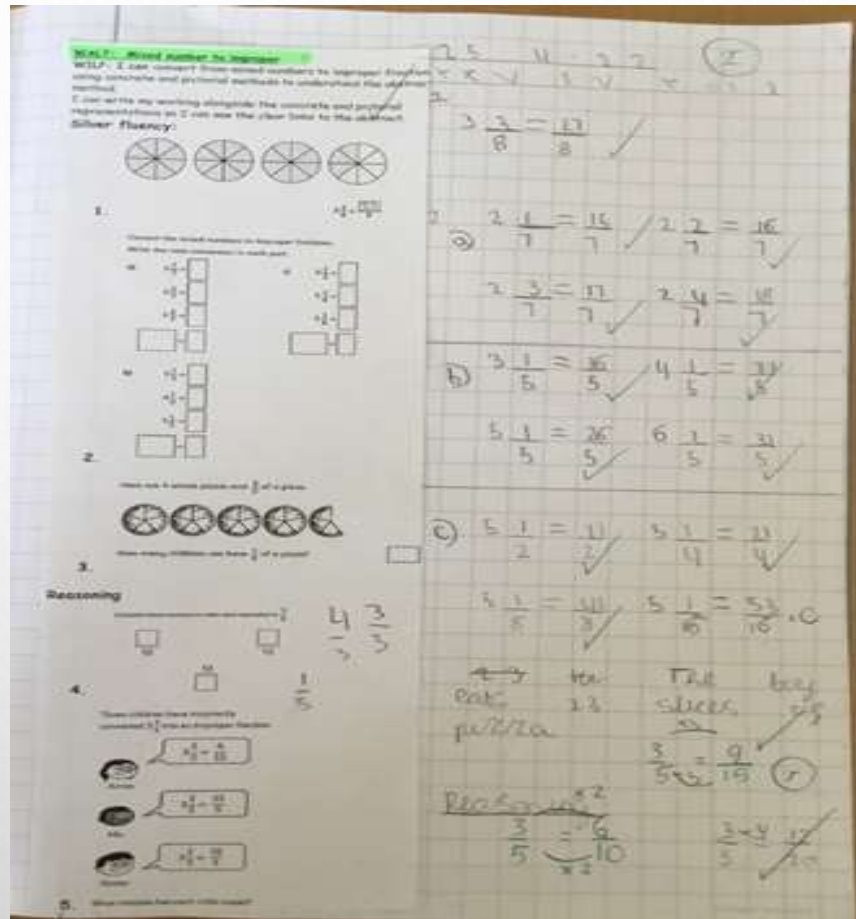
What does Maths look like in Year 5?

Recognise the place value of each digit in numbers with up to 2 decimal places

To use the formal written methods for all four operations (addition, subtraction, division and multiplication)

Rapid and accurate recall of **ALL** times tables and related division facts

Draw upon a variety of mental maths strategies to support arithmetic skills

To solve number problems using reasoning to justify my answers and to prove and disprove.

Measure angles in degrees (°) and draw angles of a given size.

Secure understanding of fractions including simplifying, equivalent fractions and calculating with fractions (+ - and x by integers)

Convert between units of measure e.g. grams to kilograms

Recognise mixed numbers and improper fractions.

What does Maths look like in Year 6?

Rapid and accurate recall of **ALL** times tables

Draw, compose and decompose shapes according to given properties, including dimensions, angles and area

Find equivalent fractions, decimals and percentages

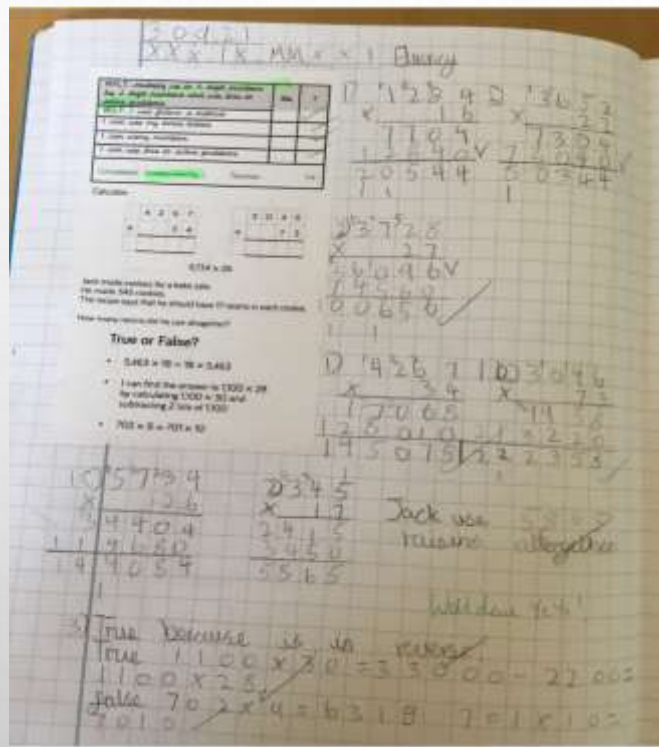Solve problems involving ratio relationships

Solve multi-step word problems

Recognise the place value of each digit in numbers up to 10 million, including decimal fractions
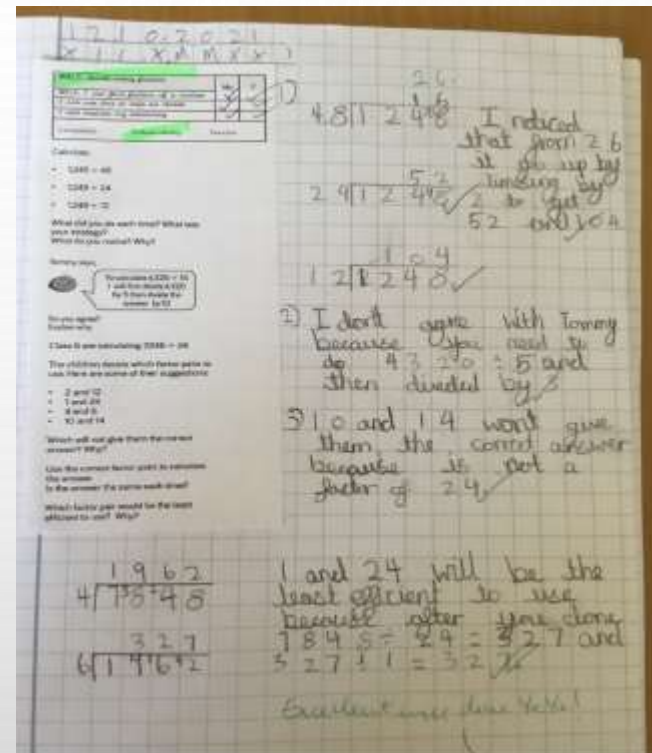
Algebra

To consolidate the formal written methods and use alongside efficient mental strategies

Use common factors and multiples to simplify fractions. To securely use all four operations when calculating with fractions (+ - x ÷)

Working with numbers beyond 6 and 7 digits

Systematic and methodical workings

Draw upon a variety of mental maths strategies to support arithmetic skills

WHAT WILL MY CHILD BE LEARNING?

The link below will take you to the programmes of study for each year group. This shows you what your child will be learning when at school and what a child of that age is expected to achieve by the end of the year (Age Related Expectations).
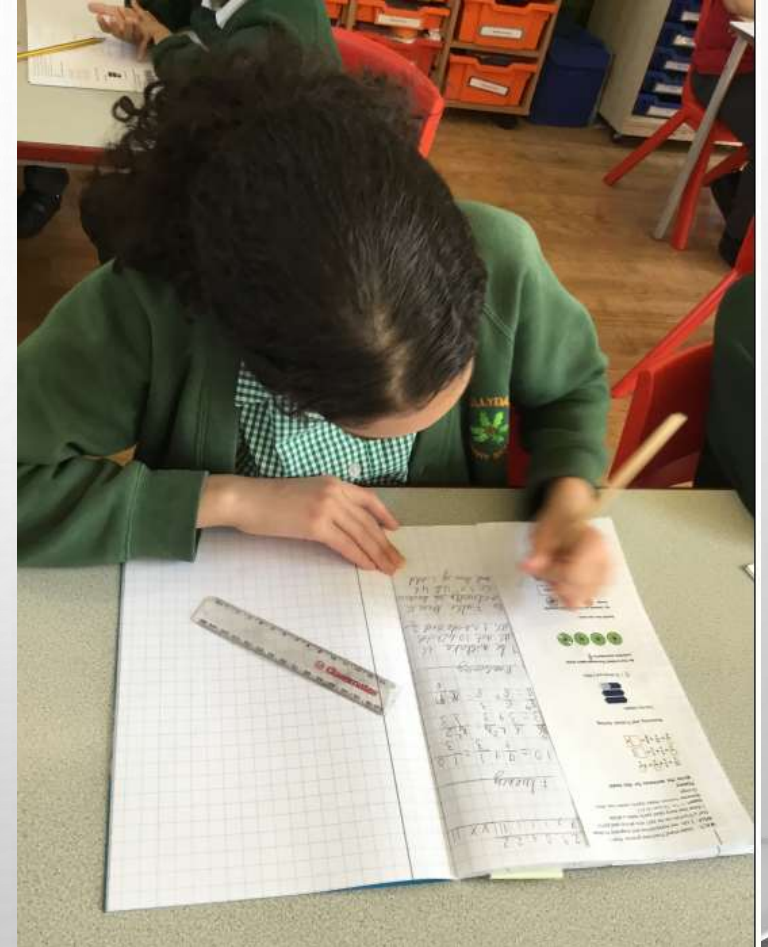
[National Curriculum Programmes of Study for Key Stage 1 and Key Stage 2](#)

Each year group will also re-visit teaching from previous year groups to ensure knowledge is consolidated and secure.

A CLOSER LOOK AT THE NATIONAL CURRICULUM AND HOW THESE OBJECTIVES WILL BE TAUGHT TO MY CHILD

Our calculation policy has been written in line with the programmes of study taken from the National Curriculum for Mathematics (2014). It is designed to be challenging, focussing on essential core subject knowledge and skills. This document guides you through the **appropriate calculation methods within each year group** and the **progression** of skills **throughout the school**. The content of this document is set out in year group blocks under the following headings: **addition, subtraction, multiplication and division.**

https://hollydale.continio.co.uk/wp-content/uploads/2021/12/Calculation-Policy-1.pdf

MATHS AT HOLLYDALE

As a school, we follow the White Rose Maths scheme of learning. Alongside this, we use additional learning resources to support the children with their learning, for example: Times Table Rock Stars, Numbots and Sumdog. By using a variety of resources, we aim to help deepen and consolidate children's mathematical understanding.

We would encourage your child to practise their times tables and basic number skills using Times Table Rock Stars, Numbots and Sumdog for at least ten minutes each day, increasing this steadily as your child progresses through the school.

- TAKE AWAY THEIR FEAR.

- REASSURE AND PRAISE WHENEVER POSSIBLE. POSITIVE MINDSET…

- LET THEM SEE YOU USING MATHS IN YOUR EVERYDAY ROUTINES

- PLAY WITH NUMBERS AND SHAPES THROUGH GAMES.

- SEEING MISTAKES AS AN OPPORTUNITY TO LEARN AND USING THEM AS A DISCUSSION POINT.

- RECOGNISING THE **IMPORTANCE** AND VALUE OF MATHS IN OUR EVERYDAY LIVES E.G. MANAGING MONEY AND TELLING THE TIME.

Why are Times Tables important?

- Times tables are the foundation of mathematical learning and are building blocks upon which other mathematical thinking is built.

- Helping your child to memorise their times tables ensures that working out maths problems become quicker and easier for your child to solve

- Memorising times tables will assist your child when solving, addition, subtraction and division problems – along with multiplication questions

- Times tables begin to unlock the relation that exists between numbers.

- They also help to build knowledge of important mathematical concepts such as patterns and sequences, fractions, percentages and even shape.

- Successful recall of times tables will increase your child's confidence in maths exponentially.

Help! How to I help my child learn their Times Tables?

Start small – set a target to learn one set of times table – don't be overwhelmed by learning them all at once;

First Step: Learning to count in 2's
This allows children to begin to see the **pattern** that multiplication is **repeated addition** (KS1)

Second Step: Beginning the memorisation process
When beginning to memorise, start with the times tables facts for **1 x 2, 5 x 2 then 10 x 2**. Starting with these each time helps build confidence
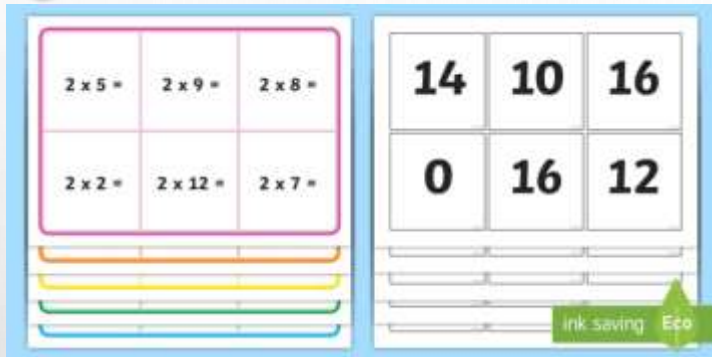
Third Step: Building up
Start building up the memorisation of the times tables, can you spot a **relationship** between the numbers? **2 x 2 and 4 x 2**? Does that make working out **8 x 2 easier** to work out/memorise?

Fourth Step: Practice
Start by practising them in order, progressing to out of order. Play games to help build fluency and soon your child's confidence will follow.
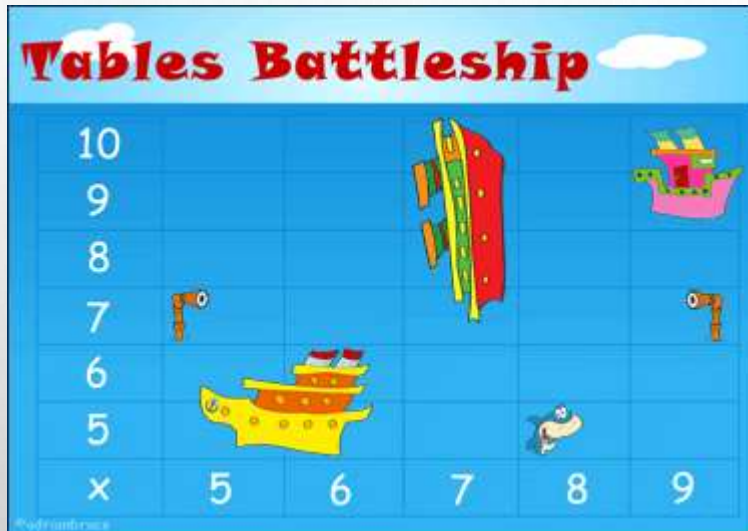
Games to play

Times Tables Bingo

- Choose a times table to play (For example 5 times table)
- Draw a grid of 6 numbers
- Choose 6 multiples from the 5 times tables
- The person calling the numbers asks them a times table calculation – (For example 2x5)
- Children cross off the answers (10)
- The first person to cross off all 6 numbers wins
- Play the opposite way around – write down the calculations, caller gives the answers.

Games

Tables Battleship

Times Tables Battleships

- Set up a grid using any times tables
- Plot your ships (agree the size and how many squares they should measure)
- Take turns to call out an answer – 25 for your opponent
- To work out that is 5 x 5 and a hit

A quick guide to everyday Maths opportunities for your child

- PRACTISE SPOTTING AND RECOGNISING NUMBERS IN THE ENVIRONMENT. ADD/MULTIPLY/SUBTRACT/DIVIDE DOOR NUMBERS, NUMBERS ON CAR REGISTRATION PLATES, ROAD SIGNS AND AT THE SHOP.

- FLICKING THROUGH THE TV GUIDE? ASK YOUR CHILD TO CALCULATE THE LENGTH OF THEIR FAVOURITE PROGRAMMES. HOW LONG IS IT UNTIL THE NEXT PROGRAMME?

- USE FOOD PACKAGING TO DISCUSS 2D AND 3D SHAPES. WHAT ARE THE PROPERTIES OF THESE SHAPES E.G. HOW MANY FACES, SIDES, VERTICES? FLATTEN THE PACKAGING OUT TO FIND THE NET OF THE 3D SHAPE TOO.

- MEASURING UP FOR NEW FURNITURE? WANT TO MAKE SURE THE CHRISTMAS TREE WILL FIT IN YOUR LIVING ROOM? THESE ARE REALLY GOOD OPPORTUNITIES TO ENCOURAGE YOUR CHILD TO SEE THE VALUE OF CAREFUL MEASURING SKILLS IN EVERYDAY LIFE.

- PRACTISE TELLING THE TIME WITH YOUR CHILD. CAN THEY READ BOTH THE DIGITAL AND ANALOGUE CLOCK? CAN THEY READILY CONVERT BETWEEN THE TWO AND USE THE 24 HOUR CLOCK? CAN THEY ALSO RECOGNISE ROMAN NUMERAL REPRESENTATIONS OF THE TIME TOO?

- BOARD GAMES SUPPLY ENDLESS OPPORTUNITIES FOR MATHS – SNAKES AND LADDERS, MONOPOLY, BINGO, CONNECT FOUR, BATTLE SHIPS ETC
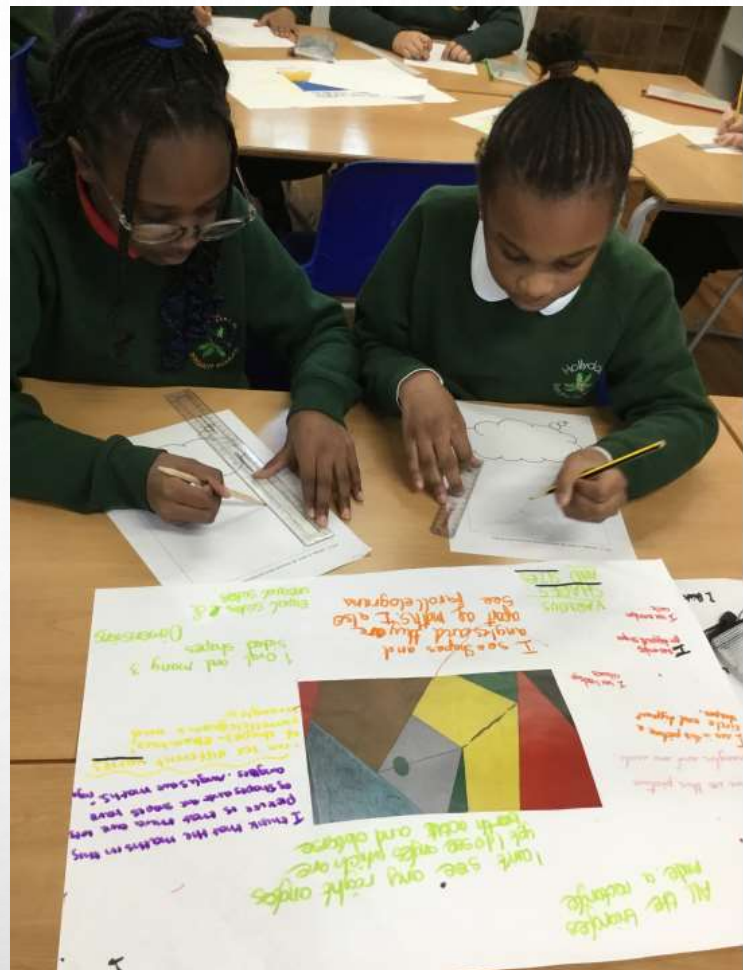
Websites to support children's Maths skills

- CBeebies have lots of fun and interactive games and activities to help get our younger children excited about Maths
- I See Maths – a useful site with a plethora of ideas for fun games that all the family
- Primary Games Arena - It is a free website that encourages children to play online maths games linked to their home learning. It breaks the games down into concepts which is really helpful.
- Hit the Button – children love this game as it helps to increase confidence through practising times tables and number bonds.
- Maths Zone – this site is jam-packed with fun ways to learn more about maths.
- BBC Bitesize – lots of information alongside short videos help to make the learning enjoyable and accessible for all children.