Maths Parent Workshop

Welcome

Aims:

- To understand the White Rose Maths (WRM) approach to teaching maths at Buttsbury p schools
- To explore how strategies and approaches progress through the school
- To explore the importance of multiplication facts

White Rose Approach

- **Units are blocked:** WRM organises the NC strands into blocks varying from 1-5 weeks long.

- **Small steps:** Each strand is broken into small steps to allow breadth of a subject to be learnt and mastered.

- **Number heavy:** Children have plenty of opportunity to understand the value of numbers, investigate the relationship between numbers, number operations and application – just as they would in the 'real world'.

White Rose Approach

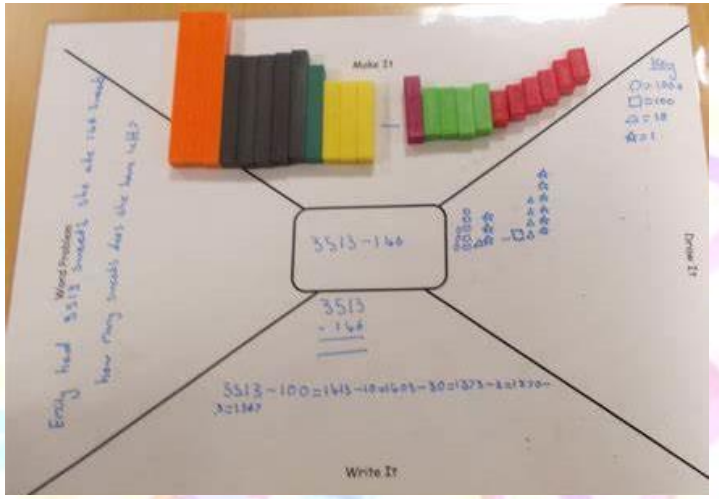
- **Varied fluency:** developing number sense and being able to choose the most appropriate method for the task at hand.

- **Expose to range of reasoning, application and problem solving:** ability to apply logical thinking to find a correct problem solving strategy. Application of knowledge to find the answer to unfamiliar types of problems.

- **CPA:** development of conceptual understanding, processes and methods through concrete and pictorial representations, alongside and/or prior to abstract methods.

What is CPA?

Concrete ⟷ **Pictorial** ⟷ **Abstract**



Reasoning

Children can use all stages of the CPA to prove and explain their reasoning.

EYFS

- Counting
- Organising our thinking
- Working systematically
- Sorting and comparing

Y1

- Counting in 2's, 5's and 10's

- Use the language of: equal to, more than, less than (fewer), most, least

- Represent and use number bonds and related subtraction facts within 20

Y2

- Counting in 2's, 3's and 5's
- Multiplication and division facts for 2, 5 and 10 tables
- Compare and order numbers from 0 up to 100; use <, > and = signs
- Show that addition of 2 numbers can be done in any order (commutative) and subtraction of 1 number from another cannot
- Find $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of quantities

Y3

- Counting in 4's and 8's
- Multiplication and division facts for 3, 4 and 8 tables
- Add and subtract using the column method with up to 3 digits
- Find and recognise unit and non-unit fractions with small denominators

Y4

- Counting in 6, 7 and 9s
- Multiplication and division facts up to 12 x 12
- Recognise place value of each digit in a four-digit number
- Find and recognise unit and non-unit fractions with larger denominators
- Identify the value of digits when divided by 10 and 100

Y5

- Read, write, order and compare numbers to 1,000,000
- Find all factor pairs of a number
- Recognise prime numbers
- Square numbers

Y6

- Divide by 10, 100 and 1,000 to 3d.p

- Use part of a whole to find a whole

- Solve problems involving the relative sizes of 2 quantities

Year Group Stations

EYFS – Mrs Coombs and Mrs N. Robinson (Kestrels)

Y1/2 – Mrs Harris and Miss Pretty (Woodpeckers)

Y3/4 – Mrs Cattini, Miss Hall and Miss Watson (Robins)

Y5/6 – Miss Roe, Mr Graves and Mrs Pretlove (Owls)

Multiplication Facts National Curriculum requirements

End of Year 2

Children recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables.

End of Year 3

Children recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.

End of Year 4

Children recall multiplication and division facts for multiplication tables up to 12 × 12.

Knowing Multiplication Facts Doesn't Stop in Year 4

- Fractions
- Percentages
- Factor pairs
- Decimals
- Square/cube numbers
- Problem solving
- Reasoning
- Scaling
- Comparing data
- Ratio and proportion
- Area and perimeter
- Secondary school progress
- Life!

How can we practise our multiplication facts?

5

5, 10

5, 10, 15

- In order e.g. 1 x 5, 2 x 5, 3 x 5, …
- Chant e.g. 5, 10, 15, …
- Pyramids
- Give the answer, what is the question? 5 = 1 x 5, 10 = 5 x , etc…
- Random order 6 x 5, 9 x 5, …
- Make commutative links e.g. 3 x 5 = 5 x 3
- Sorting cards
- Apps – TTRS and Hit the Button
- Around the clock
- Card games
- Posters
- Make it competitive

TTRS:

- 12 x 12
- Multiples of 10
- Teen numbers

Maths National Assessment Points

EYFS

-Baseline on entry to BIS

-GLD on exit of EYFS

Year 2

-KS1 non-statutory SATs - arithmetic x1, reasoning x1

Year 4

-MTC

Year 6

-KS2 SATs – arithmetic x1, reasoning x2

Thank you for joining us this evening.

Are there any questions?