## White

 Rese Maths
## Key Stage 2 Maths Parent Workshop

MATHS Х

## Agenda:

Expectations of Euening:

- Understanding what maths mastery is and how to show depth of mathematical knowledge.
- How can you support at home?
- Structure of Maths No Problem lessons
- How to solve a problem in multiple ways
- Experiencing a maths lesson


## What is maths mastery?

Teaching maths for mastery offers all pupils access to the full maths curriculum. This inclusive approach and its emphasis on promoting multiple methods of solving a single problem builds self-confidence and resilience in pupils.
It is better to solve one problem five different ways, than to solve five problems one way.
With a mastery approach, the whole class moves through topics at broadly the same pace. Each topic is studied in depth and the teacher doesn't move to the next stage until all children demonstrate a secure understanding of mathematical concepts.
Traditionally, the goal for teachers has been to accelerate pupils into the next level as quickly as possible. The result was rapid advancement with superficial learning and insufficient depth.

## Explore Task

## Explore

Sam planted some rows of seedlings.
Can you use multiplication to find out the number of seedlings he planted?

Sentence starters:
-7 groups of 3 is equal to $\qquad$ $\times$ $\qquad$ .

LO: To be able to solve word problems involving multiplication.

## Master

(1) There are 3 seedlings in each row.


There are 7 rows of 3 seedlings.
$7 \times 3=21$
Sam planted 21 seedlings.

You can represent the times table by drawing it, writing the calculation, or through repeated addition.

| $8$ | $1 \times 3=3$ | Count in threes. | 3 |
| :---: | :---: | :---: | :---: |
|  | $2 \times 3=6$ |  | $3+3=6$ |
|  | $3 \times 3=9$ |  | $3+3+3=9$ |
|  | $4 \times 3=12$ |  | $3+3+3+3=12$ |
|  | $5 \times 3=15$ |  | $3+3+3+3+3=15$ |
|  | $6 \times 3=18$ |  | $3+3+3+3+3+3=18$ |
|  | $7 \times 3=21$ |  | $3+3+3+3+3+3+3=21$ |
|  | $8 \times 3=24$ |  | $3+3+3+3+3+3+3+3=24$ |
|  | $9 \times 3=27$ | means there are 9 groups of | $3+3+3+3+3+3+3+3+3=27$ |
|  | $10 \times 3=30$ |  | $3+3+3+3+3+3+3+3+3+3=30$ |
|  | $11 \times 3=33$ |  | $3+3+3+3+3+3+3+3+3+3+3=33$ |
|  | $12 \times 3=36$ |  | $3+3+3+3+3+3+3+3+3+3+3+3=36$ |

Different ways of answering the explore:


## Deepening understanding

## As shown on previous slide:

- Commutative law
- Fact families
- Arrays
- Bar models
- Cherry models
- Maths Story


## Additional ways of deepening understanding:

- Unfamiliar times tables $-7 \times 7=5 \times 7+2 \times 7=$
- Journalling sheet
- Variation
- What do you notice? Why?
- Oracy


## How can you support at home?

Develop fluency skills: number bonds, powers of 10, multiples of 25, 50, 100, times tables, division facts linked to tables,

Timetables:
-TT Rockstars

- Times tables cards (fluency maps)


## Year 6:

- SATs books for Year 6
- Morning maths breakfast for Year 6

$$
\begin{aligned}
& 7 \times 3=21 \\
& 21 \div 3=7
\end{aligned}
$$

## Maths at Home



## Maths at Home



## Maths at Home

ABOUT US
CHOOL NEWS

## MATHS CURRICULUM

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## Curriculum documents below:



We are now moving into classrooms to have a go at Guided Practice question.

In this time, you will explore a multiplication problem with your child and work out the problem in multiple ways.

## Guided Practice:

The Guided Practice is where the children will apply the skills that they have learnt in the Master to answer the Guided Practice question before moving on to Independent Work.

## Guided Practice

Solve the word problems.

1) A tricycle has 3 wheels.

How many wheels are on 6 tricycles?
$\square$
$\square$
$\square$


2 There are 7 chairs.
Each chair has 4 legs.
How many legs are there altogether?


How you may have solved the Guided Practice:

(3)


$$
\begin{array}{ll}
3 \times 6=18 & 6 \times 3=18 \\
3+3+3+3+3+3=18 \\
6+6+6=18 \\
080 & 00000 \\
000 & 3 \times 6=18 \\
000000 \\
000 & 6 \times 3=18 \\
000 & 0.0
\end{array}
$$



How you may have solved the Guided Practice:


There are 4 legs on each chair. There are 7 chairs. There are 7 groups of 4 legs. There are not 4 groups of 7 legs.

## Year 3/4:

## Year Group Expectations:

- By the end of year 3, children should be:
- fluent in their number bonds within 10, 20 and 100,
- fluent in counting in steps of 50 and 100
- By the end of year 4, children should be:
- fluent in their times tables up to $12 \times 12$,
- fluent in counting in steps of 25,100 and 1000 , using numbers up to 10,000 .


## Multiplication Check:

- In June
- 25 questions
- On the iPad- similar format, which can be practised using TTRockstars.


## Year 5/6:

Year Group Expectations: all from the previous slide, plus:

- By the end of year 5, children should be able to:
- Multiplying by 10,100 and 1000.
- Decimals- number bonds to 1
- Number bonds to 1,000,000
- Using fact families to answer arithmetic questions e.g. if you know $4 \times 8$ is 32 , you should know $4 \times 80$ is 320 .
- Adding and subtracting in powers of 10.
- By the end of year 6, children should be able to do all previously mentioned, and this year is recapping previous skills learnt.


## SATS:

- Week beginning May $13^{\text {th }}$.
- Mock SATS- September, January and March
- 6 Papers: 3 maths (arithmetic and $2 x$ reasoning), 1 reading, 1 grammar and 1 spelling.


## Maths Breakfast:

- Every Wednesday morning 7:45am for breakfast, or 7:55am without breakfast.
- Recapping areas of learning that children share they are least confident in.

