# Welcome to Year 4 

Meet the Teacher
Maths Workshop

## Aims

- Identify the staff who are supporting your child this year
- Be clear on the daily/ weekly routines of Year 4
- Be clear on expectations of Year 4
- Understand the expectations on Reading and Home learning
- Dates of events for Year 4
- Maths Workshop on the focus of mental methods.


## Staffing

| Class Teacher and <br> Teaching Assistants | Miss Ditchfield (Class Teacher) <br> Mrs Sullivan (Teaching Assistants) |
| :---: | :--- |
| Arts | Mrs Woodward |
| Computing | Miss Ditchfield |
| History and <br> Geography | Mrs Kirkup |
| Science | Ms Wilde |
| PE | Mr Sawyer and Mrs King Heath |

## Daily Routines

|  | Monday | Tuesday | Wednesday | Thursday | Friday |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Group 1 | Zone <br> of <br> Regulation | Breathing <br> Exercises | Reading <br> for <br> Enjoyment | Calming <br> Colouring | Gratitude <br> Journal |
| Group 2 | Calming <br> Colouring | Zone <br> of <br> Regulation | Gratitude <br> Journal | Reading <br> for <br> Enjoyment | Breathing <br> Exercises |
| Group 3 | Gratitude <br> Journal | Calming <br> Colouring | Zone <br> of <br> Regulation | Breathing <br> Exercises | Reading <br> for <br> Enjoyment |
| Group 4 | Breathing <br> Exercises | Reading <br> for <br> Enjoyment | Gratitude <br> Journal | Zone <br> of <br> Regulation | Calming <br> Colouring |

The children enter the classroom from 8.45 am and complete a rolling register activity with their classmates. This helps the children to settle in before their lessons start. The class register and food order is taken at 9 am .

## Class Timetable

SACRED HEART RC PRIMARY SCHOOL

|  | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 8.45-9:00 | $\begin{gathered} \hline \begin{array}{c} \text { Registration/ Moming } \\ \text { activities } \end{array} \\ \hline \end{gathered}$ | Registration/Moming activities | Registration/Moming activities | $\begin{gathered} \text { Registration/ Moming } \\ \text { activities } \end{gathered}$ | Registration/Moming activities |
| 9.00-09.20 | Liturgy and Singing. | cW | cW | cW | Whole School cw (30 mios) |
| 9:20-10:20 | Maths (60mins) Gap Tasks and TTRS TTRS | Maths (60mins) | Maths (60mins) | Maths (60mins) | Maths ( 50 mins ) 99 club/times tables lesson |
|  | BREAK |  |  |  |  |
| 10.35-11:32 | Word of the Weaker English Handwriting (30mins) Spelling test (10mins) Teaching of spellings ( 15 mins ) Qrace ( 15 minutes) | English Genre (45mins) | English Genre (45mins) | English Genre (45mins) | Cracking Comprehension. Extended Writing SPAG |
| 11:25-11:45 |  | Whole Class Reading Predict, Ind Reading, Sentence stems, oral comprehension ( 25 mins ) | Whole Class Reading Predict, Ind Reading, Sentence stems, oral comprehension ( 25 mins ) | Whole Class Reading Predict, Ind Reading, Sentence stems, oral comprehension ( $25 \operatorname{mins}$ ) | Year 4-Arithmetic - Fast recall of multiplication facts. |
| 11:45-12:45 | Dinner |  |  |  |  |
| 12:45-13:50 | $\begin{aligned} & \text { Whole Class Guided Reading } \\ & \text { (30imns) } \\ & \text { and } \\ & \text { Religious Education (30 mins) } \end{aligned}$ | Religious Education (60mins) | Religious Education (60mins) | PSHE (45mins) Beat it and Click. (15 mins) | French (45mins) Welcome to school And fast recall of times table game (15mins) |
|  | BREAK |  |  |  |  |
| 14.00-15.15 | Humanities | Science | Computing | Arts | PE/Svining |
|  | Home time 15:15-15:30 |  |  |  |  |

* Fridays are the Y4 PE/Swimming days so they are asked on this day to come into school wearing the school PE kit.


## Expectations of Year 4 Reading

- Read daily for a minimum of 20 minutes.
- Children should write a short comment and sign their reading record each time. Parents should sign the children's record at least once per week to verify that the children are reading.
- Once a child has completed their book they will then be issued with a new book.
- Children that are accessing books from the Bubble will complete a short comprehension quiz based on their book and the percentage score will be written in their reading record.
- Reading records will be checked every Monday.


## Home Learning

- Home Learning will be set using the Google Classroom account every Monday to be returned for the following Monday.
- The children will be asked to learn spellings based on the high frequency words or a given spelling pattern.
- They will be provided with a Maths and English task which will have a particular focus. For example recalling times table facts, including related division facts. All English and Maths home learning tasks are provided to consolidating prior learning.
- Additionally there will be a foundation home learning activity assigned each half term to compliment the focus of learning or as a consolidation of prior learning.

Set one activity per half term for the year group listed.

|  | The Arts <br> Set by Mrs <br> Woodward | Science <br> Set by Mrs <br> Delargy | Computing <br> Set by Miss <br> Ditchfield | History and <br> Geography <br> Set by Mrs <br> Kirkup |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Aut 1 | Y6 | Y5 | Y4 | Y3 |  |  |  |  |  |
| Aut 2 | Y3 | Y6 | Y5 | Y4 |  |  |  |  |  |
| Spr 1 | Y4 | Y3 | Y6 | Y5 |  |  |  |  |  |
| Spring 2 | French - Set by Class Teacher |  |  |  |  |  |  |  |  |
| Sum 1 | Y5 | Y4 |  |  |  |  |  | Y3 | Y6 |
| Sum 2 | Religious Education - Set by Class Teacher |  |  |  |  |  |  |  |  |


| Dear Parent/Carer, |
| :--- | :--- |
| RE: Home Learning Alert |
| This is a reminder that your child is not regularly completing their heme learning tasks on Google |
| Classoom. Home learning tasks are set to practise and consolidary School. Atherton |
| child's learning and must be completed. Should this continue, you will be invited into class to speak |
| with your child's teacher. |
| Thank you |

Sacred Heart Catholic Primary School, Atherton

Dear Parent/Carer,
RE: Home Learning Alert
This is a reminder that your child is not regularly completing their home learning tasks on Google Classroom. Home learning tasks are set to practise and consolidate learning - they are vital to your with your child's teacher

Thank you

## Key Dates

## AUTUMN TERM

04 ${ }^{\text {th }}$ October Year 4 rejoice
$23^{\text {rd }}-27^{\text {th }}$ October Half Term
Monday $30^{\text {th }}$ October INSET Day
Wednesday $1^{\text {st }}$ November Parents Evening
Thursday $14^{\text {th }}$ December Christmas Lunch
Thursday $21^{\text {st }}$ December Key Stage Two Carol Service (Time TBC)
Friday $22^{\text {nd }}$ December Christmas Mass (9.30 am)

# Maths Workshop 

Focus: Mental Methods

## Why Are Mental Maths Strategies Important?

Mental strategies are the foundations for most of the areas of mathematics that use numbers and the foundation of any written or formal method.

Without this, children can often struggle to quickly and fluently calculate.

## What is 'true' fluency in mathematics

'children being able to confidently use and apply their knowledge of number relationship, number facts and our number system in order to calculate and solve problems.'

```
Fluency in maths is not simply being able to 'recall' known facts, it is how
children can use and apply these facts, including through a range of mental maths
strategies, that are important.
"Low achievers are often low achievers not because they know less, but because
they don't use numbers flexibly." - Jo Boaler
```


## Developing Number Sense.

A solid foundation in number properties is central to pupils' success in developing and applying mental maths strategies.

In Key stage 1 children explore the development of number properties as prerequisites for the development of mental maths strategies.
i.e. they develop 'Number Sense'

Number sense is a person's ability to understand, relate, and connect numbers.

Children with strong number sense think flexibly and fluently about numbers.

Associative Property

$$
[\bigcirc 0+\bigcirc]+\bigcirc=0000000000000000
$$

$$
(6+4)+5=15
$$

$$
00+[00+60]=00000000
$$

$$
6+(4+5)=
$$

| Tens Frame |  |  |  | Part Part Whole | Related Equation |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 0 0 $\square$  <br> 0 0   <br> 0 0   <br> 0 0   <br> 0 0   <br>     |  |  |  |  |  |
|  |  |  |  | 14 | $10+4=14$ |
|  |  |  |  |  | $4+10=14$ |
|  |  |  |  |  | $14-10=4$ |
|  |  |  |  |  | 14-4 = 10 |

## Why focus on Number Sense?

Students who struggle in maths often lack number sense.

Number sense is the foundational building block for all strands of mathematics.
As students build their number sense, mathematics takes on greater meaning.

With strong number sense, children become more apt to attempt problems and make sense of mathematics.

## What is Number Sense?

## Students with strong number sense have:

- A sense of what numbers mean. For example, they can visualize in their heads how much 100 is or can "see" what looks like (such as one slice of a pie cut into quarters)
- An ability to look at the world in terms of quantity and numbers.(i.e. When is 100 a lot? When is it not very much?)
- An ability to make comparisons among quantities. For example, they know that 300 is 400 away from 700 by using a mental number line, or know that there is a bigger difference between 50 and 150 than between 1,000 and 1,050.


## Using Mental Strategies In The SATs Arithmetic Test

- Mental maths appears six times in the content domain breakdowns for the KS2 Mathematics test framework and is one of the factors the national assessments are trying to assess.
- Efficient mental calculation strategies are key to success in the KS2 SATs Paper 1- Arithmetic.
- In the Arithmetic paper, over $80 \%$ of questions are designed to be able to be solved mentally, or through jottings.
- The children are expected to answer 36 questions in 30 minutes. Less than a minute per question! Having a bank of mental calculation strategies would help the children to answer some of these questions with speed and fluency.

There are several important mental calculation strategies that need introducing from Year 1. These include:
-Partitioning and recombining leading to sequencing (keeping one number whole and partitioning the second, for example $245+165=245+100+60+5$ )


## Now keep one number the same $345+232=$

Give it a go with...

654+ 234=

Bridging though ten. For example, 78 add 34 , I can partition 34 into 32 and 2, add 2 to 78 to make 80 and then add the remaining 32.

$$
7+5=
$$



$$
42-7=35
$$



$$
700-70=630
$$



$$
50-8=42
$$



Give it a go with: $56+25=$
-Doubling and near doubling. For example, if I know that double 250 is 500 then $250+260$ will double 250 add 10 .

$$
4+4=8
$$



$$
4+5=9
$$

$$
30+30=60
$$

$$
30+35=
$$

Now try... $300+310=$
-Using number pairs to $\mathbf{1 , 1 0 , 1 0 0}$ etc. For example, $136+214$, I know 6 add 4 equals 10 , so I can add the tens and then the hundreds.

$$
248+322=
$$

## $30+\underline{7} \underline{0}=100$


$8+2+$
$80+20=$
$800+200=$

$$
\begin{gathered}
8+2=10 \\
80+20=100 \\
800+200=1,000
\end{gathered}
$$

Now try...
$345+425=$

-Adding near multiples of ten and adjusting. For example, to subtract 1998 from 3456 , it would be efficient to subtract 2000 and add 2.


$$
55-29=26
$$

$550-290=260$

Now try...<br>$2345+2999=$<br>$3456-1999=$

-Using known number facts. For example, if I know that 8 multiplied by 7 equals 56 , I can work out eight multiplied by 70 and eight multiplied by 35 .
-Use relationships between operations. For example, if I know that three multiplied by 4 equals 12 , I also know that 4 multiplied by 3 equals 12,12 divided by 3 equals 4 and 12 divided by 4 equals 3 .


Now try... $9 \times 4=$ $90 \times 4=$

- $9 \times 7=63$
$\underline{7 \times 9}=63$
$63 \div 9=7$
$63 \div 7=9$


| $6 \times 5=$ | $30 / 5=$ |
| :--- | :--- |
| $6 \times 50=$ | $300 / 5=$ | $60 \times 5=$

$$
11 \times 10=110
$$

| $H$ | $T$ | 0 |
| :---: | :---: | :---: |
|  | 1 | 1 |
| 1 | 1 | 0 |

How do we multiply by $10 ?$
Slide to the left, by one column!

|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $1 \times 1$ | 2×1 | $3 \times 1$ | $4 \times 1$ | $5 \times 1$ | $6 \times 1$ | $7 \times 1$ | $8 \times 1$ | $9 \times 1$ | 10x1 | 11×1 | 12×1 |
| 2 | $1 \times 2$ | $2 \times 2$ | $3 \times 2$ | $4 \times 2$ | $5 \times 2$ | 6x2 | 7×2 | $8 \times 2$ | $9 \times 2$ | 10x2 | $11 \times 2$ | 12×2 |
| 3 | 1×3 | 2×3 | $3 \times 3$ | $4 \times 3$ | $5 \times 3$ | 6x3 | 7×3 | $8 \times 3$ | $9 \times 3$ | $10 \times 3$ | 11×3 | 12x3 |
| 4 | $1 \times 4$ | $2 \times 4$ | $3 \times 4$ | $4 \times 4$ | $5 \times 4$ | 6x4 | $7 \times 4$ | $8 \times 4$ | $9 \times 4$ | $10 \times 4$ | $11 \times 4$ | $12 \times 4$ |
| 5 | $1 \times 5$ | $2 \times 5$ | $3 \times 5$ | $4 \times 5$ | $5 \times 5$ | $6 \times 5$ | 7×5 | $8 \times 5$ | $9 \times 5$ | 10x5 | 11×5 | 12×5 |
| 6 | $1 \times 6$ | $2 \times 6$ | $3 \times 6$ | 4×6 | $5 \times 6$ | 6x6 | 7×6 | $8 \times 6$ | $9 \times 6$ | 10x6 | 11×6 | 12x6 |
| 7 | $1 \times 7$ | $2 \times 7$ | $3 \times 7$ | $4 \times 7$ | $5 \times 7$ | 6x7 | $7 \times 7$ | $8 \times 7$ | $9 \times 7$ | 10x7 | $11 \times 7$ | 12x7 |
| 8 | 1×8 | $2 \times 8$ | $3 \times 8$ | 4×8 | $5 \times 8$ | $6 \times 8$ | 7×8 | $8 \times 8$ | $9 \times 8$ | 10x8 | $11 \times 8$ | 12x8 |
| 9 | 1×9 | $2 \times 9$ | $3 \times 9$ | $4 \times 9$ | $5 \times 9$ | 6x9 | 7x9 | $8 \times 9$ | $9 \times 9$ | 10x9 | 11x9 | 12x9 |
| 10 | $1 \times 10$ | 2×10 | $3 \times 10$ | $4 \times 10$ | $5 \times 10$ | $6 \times 10$ | $7 \times 10$ | $8 \times 10$ | $9 \times 10$ | $10 \times 10$ | $11 \times 10$ | $12 \times 10$ |
| 11 | $1 \times 11$ | $2 \times 11$ | 3×11 | $4 \times 11$ | 5×11 | 6×11 | $7 \times 11$ | $8 \times 11$ | $9 \times 11$ | $10 \times 11$ | 11×11 | $12 \times 11$ |
| for pipa | ticom... | 2×12 | $3 \times 12$ | $4 \times 12$ | $5 \times 12$ | $6 \times 12$ | $7 \times 12$ | $8 \times 12$ | $9 \times 12$ | $10 \times 12$ | $11 \times 12$ | 12× 12 |

The 38 new multiplication (and division) facts that children need to know by the end of Year 4.
multiplication and division.

## $2 \times 50 x$ _ $=500$

|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $1 \times 1$ | $2 \times 1$ | $3 \times 1$ | $4 \times 1$ | $5 \times 1$ | $6 \times 1$ | $7 \times 1$ | $8 \times 1$ | $9 \times 1$ | $10 \times 1$ |  |  |
| 2 | $1 \times 2$ | $2 \times 2$ | $3 \times 2$ | $4 \times 2$ | $5 \times 2$ | $6 \times 2$ | $7 \times 2$ | $8 \times 2$ | $9 \times 2$ | $10 \times 2$ |  |  |
| 3 | $1 \times 3$ | $2 \times 3$ | $3 \times 3$ | $4 \times 3$ | $5 \times 3$ | $6 \times 3$ | $7 \times 3$ | $8 \times 3$ | $9 \times 3$ | $10 \times 3$ |  |  |
| 4 | $1 \times 4$ | $2 \times 4$ | $3 \times 4$ | $4 \times 4$ | $5 \times 4$ | $6 \times 4$ |  | $8 \times 4$ |  | $10 \times 4$ |  |  |
| 5 | $1 \times 5$ | $2 \times 5$ | $3 \times 5$ | $4 \times 5$ | $5 \times 5$ | $6 \times 5$ | $7 \times 5$ | $8 \times 5$ | $9 \times 5$ | $10 \times 5$ |  |  |
| 6 | $1 \times 6$ | $2 \times 6$ | $3 \times 6$ | $4 \times 6$ | $5 \times 6$ | $6 \times 6$ |  | $8 \times 6$ |  | $10 \times 6$ |  |  |
| 7 | $1 \times 7$ | $2 \times 7$ | $3 \times 7$ | $4 \times 7$ | $5 \times 7$ | $6 \times 7$ |  | $8 \times 7$ |  | $10 \times 7$ |  |  |
| 8 | $1 \times 8$ | $2 \times 8$ | $3 \times 8$ | $4 \times 8$ | $5 \times 8$ | $6 \times 8$ |  | $8 \times 8$ |  | $10 \times 8$ |  |  |
| 9 | $1 \times 9$ | $2 \times 9$ | $3 \times 9$ | $4 \times 9$ | $5 \times 9$ | $6 \times 9$ |  | $8 \times 9$ |  | $10 \times 9$ |  |  |
| 10 | $1 \times 10$ | $2 \times 10$ | $3 \times 10$ | $4 \times 10$ | $5 \times 10$ | $6 \times 10$ | $7 \times 10$ | $8 \times 10$ | $9 \times 10$ | $10 \times 10$ |  |  |
| 11 | $1 \times 11$ | $2 \times 11$ | $3 \times 11$ | $4 \times 11$ | $5 \times 11$ | $6 \times 11$ |  | $8 \times 11$ |  | $10 \times 11$ |  |  |
| 12 | $1 \times 12$ | $2 \times 12$ | $3 \times 12$ | $4 \times 12$ | $5 \times 12$ | $6 \times 12$ |  | $8 \times 12$ |  | $10 \times 12$ |  |  |

Any Questions?

