Year 5 and 6 maths parents workshop

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Aims of the session

- Overview of Year 5 and 6 maths

- Go through the methods that are used in Year 5 and 6

- How you can support your child in maths at home

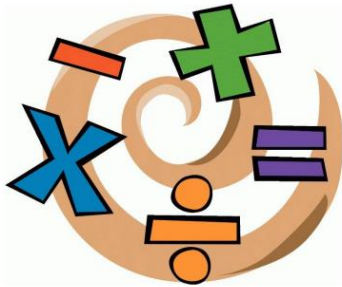*Embed   Enrich   Excite*

Our curriculum

Written Calculation Methods
Middleton Primary School

ADDITION   SUBTRACTION

MULTIPLICATION   DIVISION

Our curriculum is mapped out and sequenced to ensure that all children cover the national curriculum objectives. We follow our calculation policy and the skills progression document (both of which can be found on the website)

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Our curriculum

Our curriculum is split into two parts: fluency and reasoning. Throughout all of this, we link our maths back to real-life.

22 $3445 \div 53$

Show your method

	1	3	3	4	4	5

1. Here are some bags of fruit sold in a supermarket.
   Calculate the cost and weight of each item of fruit.

5 bananas 1kg 80p
8 clementines 640g 72p
4 pears 600g £1.60
4 strawberries 320g £2.00
6 apples 600g 90p

16

potatoes £1.50 per kg
carrots £1.80 per kg

Jack buys $1\frac{1}{2}$ kg of potatoes and $\frac{1}{2}$ kg of carrots.

How much **change** does he get from £5?

Show your method

£

2 marks

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Year 6 SATs

2018 national curriculum tests
Key stage 2

Mathematics
Paper 1: arithmetic

First name	
Middle name	
Last name	
Date of birth	Day	Month	Year
School name	
DfE number	

National curriculum tests
Key stage 2

Mathematics
Paper 2: reasoning

First name	
Middle name	
Last name	
Date of birth	Day	Month	Year
School name	

SAMPLE BOOKLET
Published July 2015

This sample test indicates how the national curriculum will be assessed from 2016.
Further information is available on GOV.UK at www.gov.uk/sta

2018 national curriculum tests
Key stage 2

Mathematics
Paper 3: reasoning

First name	
Middle name	
Last name	
Date of birth	Day	Month	Year
School name	
DfE number	

At the end of KS2 the maths SATs comprise of an arithmetic paper and 2 reasoning papers.

These can test the knowledge of anything from Year 3-6.

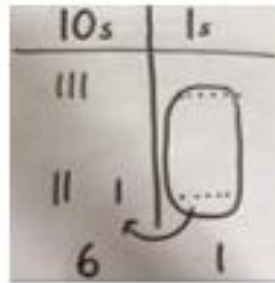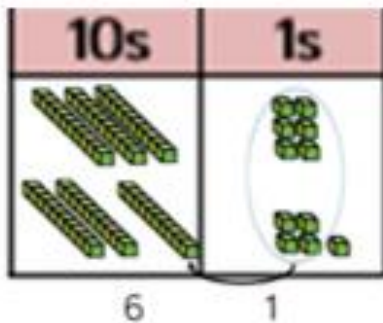There is a meeting next half term to talk through Year 6 SATs.

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Addition

Step 5
Understanding why we
"carry the one"
Column addition

Step 6
Column addition including
decimals
Addition up to 6 digits

Use shorter column method

```
 1499
+1123
 2622
  11
```

```
 1628.9
+ 117.25
 1746.15
   1 1
```

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Subtraction

Step 5
Using the "borrowing" method

```
    2   4   3  ³A̶  ¹6
-   1   2   3   2   7
─────────────────────
    1   2   0   1   9
```

Step 6
Continue to use this method
Including decimals

1628,90 – 117,25 = 1511,65

```
    1   6   2   8 . ⁸9̶  ¹0
-       1   1   7 .  2   5
──────────────────────────
    1   5   1   1 .  6   5
```

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Multiplication

Step 5
Counter method
Grid method

$24 \times 3 = 72$
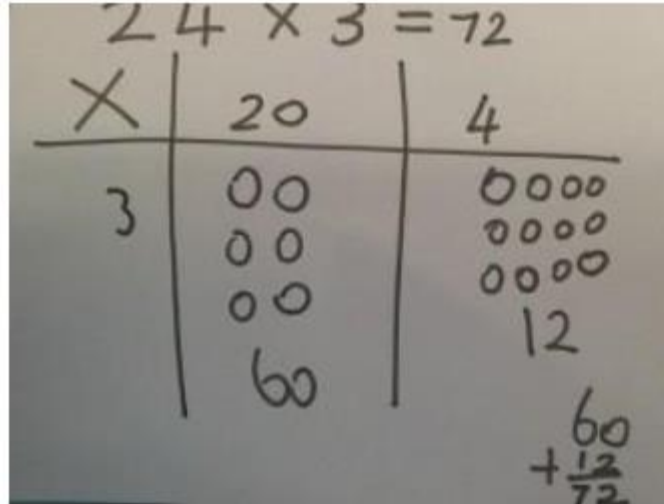
Abstract

×	30	5
7	210	35

$210 + 35 = 245$

X	1000	300	40	2
10	10000	3000	400	20
8	8000	2400	320	16

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Multiplication

Step 6
Column method
Including decimals

```
      1   6   3   2
  ×               7
  1   1   4   2   4
        4   2   1
```

```
      1   6   3   2
  ×           8   7
  1   1   4   2   4
        4   2   1

  1   3   0   5   6   0
        5   2   1

  1   4   1   9   8   4
```

```
      3  .  2   6
  ×               3
      9  .  7   8
                  1
```

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Division

Step 5
Bus stop method
Up to dividing by 12

Begin with calculations with no remainders.

$$\begin{array}{r} 2\ \ 1\ \ 8 \\[2pt] {}^{}3 \\ \hline 4\,|\,8\ \ 7\ \ 2 \end{array}$$

Move onto calculations with remainders.

$$\begin{array}{r} 8\ \ 6 \quad r\ \ 2 \\[2pt] {}^{}3 \\ \hline 5\,|\,4\ \ 3\ \ 2 \end{array}$$

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Division

Step 6
Bus stop method (up to 12)
Written as a fraction
Decimal
Long division

Division

Step 6
Bus stop method (up to 12)
Written as a fraction
Decimal
Long division

BODMAS

Order of Operations

B	Brackets	$10 \times (4 + 2) = 10 \times 6 = 60$
O	Order	$5 + 2^2 = 5 + 4 = 9$
D	Division	$10 + 6 \div 2 = 10 + 3 = 13$
M	Multiplication	$10 - 4 \times 2 = 10 - 8 = 2$
A	Addition	$10 \times 4 + 7 = 40 + 7 = 47$
S	Subtraction	$10 \div 2 - 3 = 5 - 3 = 2$

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Fractions

Adding and subtracting fractions

$$\frac{2}{9} + \frac{5}{9} = \frac{7}{9}$$

$$\frac{2}{3} + \frac{1}{6} =$$

$$\times 2 \rightarrow$$

$$\frac{4}{6} + \frac{1}{6} = \frac{5}{6}$$

$$\frac{1}{4} + \frac{2}{6} =$$

$$\times 3 \qquad \times 2$$

$$\frac{3}{12} + \frac{4}{12} = \frac{5}{12}.$$

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Fractions

Multiply fractions

$$\frac{2}{3} \times \frac{1}{6} = \frac{2 \times 1}{3 \times 6}$$

$$= \frac{2}{18}$$

$$= \frac{1}{9}$$

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Fractions

Divide fractions

Keep it, change it, flip it

$$\frac{2}{5} \div \frac{1}{4} = \frac{2}{5} \times \frac{4}{1}$$

$$= \frac{2 \times 4}{5 \times 1}$$

$$= \frac{8}{5}$$

$$= 1\frac{3}{5}$$

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Fractions

Mixed and improper fractions

Percentages

Splitting it

Divide by 100
X by top

15% of 120 =

10% = 120 ÷ 10 = 12.
5% = 12 ÷ 2 = 6
_____
18.

15% of 120

$\frac{15}{100}$ of 120 =

(120 ÷ 100) × 15
1.2 × 15 = 18.

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What can I do to support my child?

- Times Tables practice and recall

- Maths in real life

- Get them to talk you through it

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