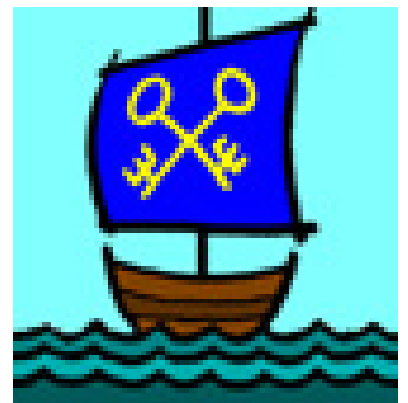# Year Five

Helping Your Child at Home

St Peter's Catholic Primary School

By the end of Year 5, most children should be able to...

Read, write and order numbers to 1,000,000 identifying the value of each digit.

Using your tables and related division facts, multiply and divide numbers in your head.

Order numbers with up to three decimal places and be able to solve associated problems.

Count forwards/backwards in steps of 1000, 10,000 and 1,000,000 from any number.

Using short division, divide up to four digits by one digit and be able to explain any remainders.

Recognise %. Match equivalent percentages, fractions and decimals. Solve related problems.

Be able to count forwards and backwards through zero and use negative numbers in simple calculations.

Use understanding of place value to multiply and divide whole and decimal numbers by 10, 100 and 1,000.

Be familiar with square and cube numbers and use correct notation.

Round any number up to 1,000,000 to nearest 10, 100, 1,000, 10,000 or 100,000.

Compare/order fractions where denominators are multiples of the same number.

When measuring, be able to convert from metric to imperial units. Be able to give the rough equivalent.

Demonstrate knowledge of Roman numerals to 1000 and be able to read years written in this way.

Find equivalent fractions. Recognise mixed numbers / improper fractions and be able to convert from one to the other.

With measures, estimate volume and capacity. Use all four operations and decimal notation correctly.

Using standard column methods, add and subtract numbers with more than four digits.

Add/ subtract fractions with a common denominator. Use this knowledge to solve problems.

Solve problems that involve converting between units of time.

Practice working mentally to add and subtract increasingly large numbers.

Show that you can multiply proper fractions and mixed numbers by a whole number.

Find perimeter of composite shapes. Find area of squares and rectangles and estimate area of irregular shapes.

When solving multi-step problems choose the correct operations and explain your methods.

Know that decimals are another way to write fractions. Read / write decimal numbers as fractions.

Use a protractor to draw/measure angles. Calculate missing angles and lengths. Know that 360° is a whole turn.

Understand the terms factor, factor pairs, prime and multiple.

Say, read and write decimal fractions and related tenths, hundredths and thousandths correctly.

Match a net to a 3D shape. Describe the position of a shape following a reflection or translation.

Use a written method to multiply 4-digit numbers by 1 and 2-digit numbers.

Round decimals with two decimal places to the nearest whole number and also to 1 decimal place.

Solve problems using data presented in line graphs. Construct and read pie charts and tables, including timetables.

About the Targets

These show the end of year expectations for an average Year 5 child. The box surrounding each expectation relates to the area of mathematics as shown below:

**NUMBER**   **MEASUREMENT**   **GEOMETRY**   **STATISTICS**

Calculations

At St Peters we have devised a progression in calculation document for each of the four operations: addition, subtraction, multiplication and division.

The progression of written methods for each calculation for Year 5 is on the page that follows. These show what methods your child will be using in relation to their age. The methods used are typical of an average child in that year group. These are the methods that the children will be learning in class and using when calculating.

It is important to talk to your child and ask them to share the method they are using in school if you are unsure. Alternatively, discuss the methods that your child is using with their class teacher.

When faced with a calculation problem encourage your child to ask...

- ❖ Can I do this in my head?
- ❖ Could I do this in my head using drawing or jotting to help me?
- ❖ Do I need to use a written method?
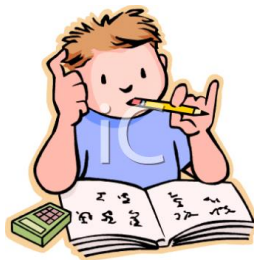
Also help your child to estimate and check the answer. Encourage them to ask...

- ❖ Is the answer sensible?
- ❖ When solving a problem, have I put my answer into context?

Year Five

Addition

Compact column method for numbers with more than 4-digits

```
  3 9 5 0 2
+   8 7 9 4
-----------
  4 8 2 9 6
      1 1
```

```
  2 3 4 8 1
+   1 3 6 2
-----------
  2 4 8 4 3
```

Column method to add any decimals with up to 2 decimal places

```
  £ 2 3 . 5 9
+ £   7 . 5 5
-------------
  £ 3 1 . 1 4
      1
```

```
  £ 4 2 . 5 9
+ £   7 . 6 7
-------------
  £ 5 0 . 2 6
    1   1
```

Subtraction

Compact column method with at least 4-digit numbers

```
  ² ⁹ ¹¹ ⁹ ¹³
  2 9 0 4 7
-     4 1 5 8
-----------
  2 7 8 8 9
```

Column method for decimals- with the same amount of decimal places

```
  ⁶ ⁷ ¹⁰ ⁹ ¹
  7 8 9 . 0
- 3 7 2 . 5
-----------
  6 7 9 6 . 5
```

```
  ⁷ ⁸ ¹⁰ ¹⁶ ⁸ ⁹ ¹⁰
  7 9 0 7 . 0
-   4 7 3 . 5
-----------
  7 6 9 5 . 5
```

Multiplication

Short multiplication 4-digit x 1-digit

```
    3 1 9 3 4
  x       3
```

Long Multiplication 4-digit x 2-digit

```
    4 5 6 2
  x       7
```

```
      1 3 2 4
  x       1 6
  ---------
      7 9 4 4
  + 1 3 2 4 0
  ---------
    2 1 1 8 4
```

Division

Division using arrays (Place value counters)

656 ÷ 5 = 131 r1

5

Short Division

4935 ÷ 8 = 616 r7

```
    0 6 1 6 r 7
  8 ) 4 ⁴9 ¹3 ⁵5
```

Useful Websites

Visit these useful websites to help your children to practice their maths skills in a fun and engaging way. These websites include different games and songs to support your child with their maths learning at home.

Times Table Rockstars

A fun, interactive programme which allows children to rehearse their times tables

https://ttrockstars.com/

Numbots

Play games to learn efficient mental calculation strategies to add and subtract two-digit numbers, so that you they can leave counting on your fingers behind!

https://numbots.com

Supermovers

Videos, songs and even movement routines to help you learn about different areas of mathematics.

https://www.bbc.co.uk/teach/supermovers/ks2-maths-collection/z7frpg8

Percy Parker

Sing and rap your way to learning all of your times tables with these ease using Percy Parker.

www.youtube.com
search for "Percy Parker times tables"