St Raphael's

Year 3

'Our Objectives'

A guide to what you should focus on when helping your child at home.'

Read, write and order numbers from 0 – 1000

Writing a selection of these numbers on scrap bits of paper and jumbling them up for you and your child to order will help reinforce this key skill.

An idea!

Use playing cards and select 3 cards (discard anything 10 or higher) and see what numbers you can make using those.

E.g. 3 spades, 5 hearts, 7 clubs can be made into 357, 375. 537, 573, 735, 753.

Find the highest, lowest and order them.

Count on and back in 1's, 10's and 100's from any number under 1000

When you come across a number (maybe a house number or miles on a road sign) ask your child to count on or back from this starting point.

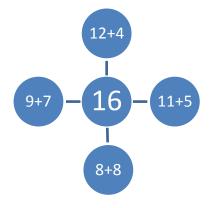## Know by heart multiplication and division facts for 2,3,4,5,6 and 10 times tables.

(division fact means that once your child knows that 2 x 4 = 8 they can use this to answer 8 ÷ 2 = 4)

$$2 \times 4 = 8$$
$$4 \times 2 = 8$$

This is called an array.

Know number facts for numbers to 20

Examples of some number facts for 16

```
        ┌──────┐
        │ 12+4 │
        └──────┘
            │
┌─────┐  ┌──────┐  ┌──────┐
│ 9+7 │──│  16  │──│ 11+5 │
└─────┘  └──────┘  └──────┘
            │
        ┌──────┐
        │ 8+8  │
        └──────┘
```

Know and use number pairs to 100

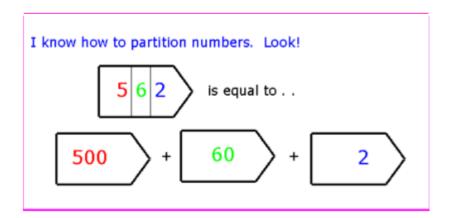### Build on number bonds knowledge to help.

$$64 + ? = 100$$

Encourage your child to look at the 4 and think of the number bond to 10 (so the answer MUST end in a 6.)

This will take them to the next 'ten' after 60 which is 70. They should know that 70+30 =100 (if not remind them of 7+3 =10 on fingers)

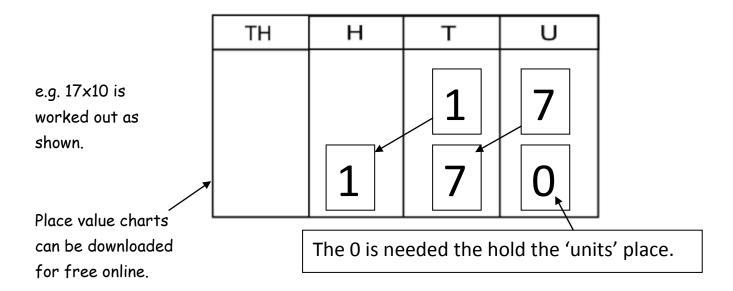Combine these to get to the answer of 36!

Explain the value of digits to 1000

I know how to partition numbers. Look!

5 6 2   is equal to . .

500 + 60 + 2

Multiply 1 and 2 digit numbers by 10 and 100

We don't encourage the children to 'just add zero's' as this causes problems for a lot of children when they move up to higher Key Stage 2 and they have to calculate using decimals.

Instead use a place value chart and move the digits to the left <u>once when x10</u> or <u>twice when x100</u>

TH	H	T	U
		1	7
	1	7	0

e.g. 17x10 is worked out as shown.

Place value charts can be downloaded for free online.

The 0 is needed the hold the 'units' place.

Multiply 2 digit by 1 digit numbers

Your child will be introduced to using grid method during this year; here is an example of what this looks like.

Grid method:

TU x U

23 x 7 is approximately 20 x 10 = 200

23 x 7 = 161

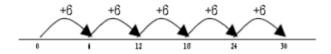| x	T 20	U 3
7	140	21

140 + 21 = 161

Divide 2 digit numbers practically

Your child will begin to divide using a number line to help before going on to do these mentally. This will also include division with remainders that require **very secure times tables facts.**
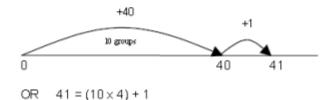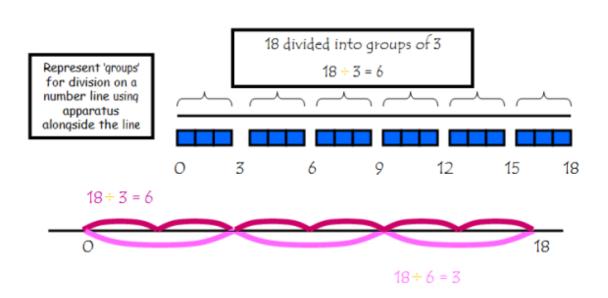
Sharing and grouping

$30 \div 6$ can be modelled as:

grouping – groups of 6 taken away and the number of groups counted e.g:

+6   +6   +6   +6   +6

0   6   12   18   24   30

sharing – sharing among 4, the number given to each person

$41 \div 4 = 10\,r1$

+40

10 groups

+1

0   40   41

OR $41 = (10 \times 4) + 1$

Represent 'groups' for division on a number line using apparatus alongside the line

18 divided into groups of 3

$18 \div 3 = 6$

O   3   6   9   12   15   18

$18 \div 3 = 6$

O   18

$18 \div 6 = 3$

To subtract using 3 digit numbers

This method requires knowledge of number pairs to 100 and counting on in 100's. All skills mentioned earlier.

Complementary addition:

$754 - 86 = 668$

+14   +600   +54

86   100   700   754