

### INSTANT RECALL TARGETS

### Overview

Fluency is at the centre of the updated National Curriculum for maths. At St Mary's, we want to ensure that children can count fluently and know key mathematical facts so that calculation is more efficient. Rapid recall of key facts reduces the extraneous cognitive load when children are tackling complex calculations and problems. It is widely acknowledged that practice, drill and memorisation are essential if children are to become mathematically fluent.

### We believe that children should learn these facts by rote, including chanting.

All of these assume that conceptual teaching which underpins it. Children should be able to represent and derive this knowledge using a range of concrete apparatus and pictorial images such as, number lines, arrays, counting objects etc.

### Nursery

## Counting

Count forwards and backwards to 10 beginning with 0 or 1, or from any given number.

Count with one to one correspondence.

#### **Numerals**

Read all numerals to 9.

#### **Number facts**

Know value of any number up to 9.

Say 1 more than any given number up to 9.

#### Time

Know today, yesterday and tomorrow.

### Reception

### Counting

Count forwards and backwards to 20 beginning with 0 or 1, or from any given number.

### **Numerals**

Read all numerals to 20.

### Number facts

Know place value of any number up to 21.

Say 1 more or less than any given number up to 20.

Recall number bonds and related subtraction facts within 5. (eg 2 + 3 = 5)

Recall doubles up to 5 and recall halves from 10, excluding half numbers.

# Time

Know morning, afternoon and evening.

### Year 1

### Counting

Count forwards and backwards to and across 100 beginning with 0 or 1, or from any given number.

Count from 0 in multiples of 2 to 24, 5 to 60 and 10 to 120.

# **Number facts**

Know place value of any number up to 51.

Say 1 more or less than any given number up to 120.

Recall number bonds and related subtraction facts within 20. (eg 6 + 7 = 13)

Recall doubles up to 10 and recall halves from 20, excluding odd numbers.

#### Time

Know days of week and months of the year.

### Year 2

### Counting

Count forwards and backwards to and across 120 from any given number.

Count from 0 in multiples of 2, 5 and 10 to 120.

Count from any number in multiples of 2, 5 and 10 to 120.

Count in ½ and ¼ to 10.

#### **Number facts**

Know place value of any number up to 101.

Say 10 more or less than any given number up to 120.

Recall number bonds and related subtraction facts within 100. (eg 23 + 7 = 30 and 30 + 70 = 100 and 50 + 30 = 80 and 25 + 3 = 28)

Recall multiple of 10 number bonds and related subtraction facts to 120 (eg 60 + 30 = 90).

Recall multiplication and division facts for the 2, 5 and 10 multiplication tables up to 12 times.

Chant 2, 5, 10 times tables, up to 12 times.

Recall doubles up to 15 and recall halves from 30, excluding odd numbers.

### Money

Name all coins and notes.

# Year 3

#### Counting

Count forwards and backwards to and across 1200 from any given number.

Count from 0 in multiples of 4, 8.

Count from 0 in multiples of 50 and 100.

Count forwards and backwards in tenths within 10 (crossing the whole).

### **Number facts**

Know place value of any number up to 1001.

Say 10 more or less than any given number up to 1200.

Say 100 more or less than any given number up to 1200.

Recall multiplication and division facts for the 3, 4 and 8 multiplication tables up to 12 times.

Recall multiplication and division facts for multiples of 10 (eg 20 x 4 = 80).

Chant 2, 3, 4, 5, 8, 10 times tables, up to 12 times.

Recall halves from 20, including odd numbers.

### Time

Read time to nearest minute.

Know how many seconds in a minute, minutes in an hour, hours in a day, days in each month, days in a year.

Count in 15s up to 60.

### Measure

Know some simple equivalent measures: 1m = 100cm; 1kg = 1000g; 1l = 1000ml; 1km = 1000m.

### Year 4

## Counting

Count from 0 in multiples of 6, 7, 9.

Count from 0 in multiples of 20, 25 and 1000.

Count backwards through zero to include negative numbers.

Count forwards and backwards in hundredths within 10 (crossing the whole).

#### **Number facts**

Know place value of any number up to 10001.

Say 1000 more or less than any given number.

Recall multiplication and division facts for the 6, 7 and 9 multiplication tables up to 12 times.

Use associated multiplication and division facts for multiples o 10 and 100 (eg 200 x 6 = 1200).

Chant all times tables, up to 12 times.

### **Fractions**

Know common equivalent fractions: 5/10 = 4/8 = 2/4 = 1/2; 2/8 = 1/4)

Know decimal equivalents for simple fractions:  $\frac{1}{2}=0.25$ ;  $\frac{1}{2}=0.5$ ;  $\frac{1}{2}=0.75$ ;  $\frac{1}{10}=0.1$ ;  $\frac{1}{1}=1.0$ .

# Year 5

### Counting

Count forwards and backwards, including negative whole numbers through zero, from any given number.

#### Number facts

Know place value of any number up to 1,000,001.

Say 10,000 more or less than any given number.

Say 100,000 more or less than any given number.

Recall prime numbers up to 19.

Recall square numbers to 25 (5 x 5) and cubed numbers to 125 (5 x 5 x 5).

Know simple decimal, percentage and fraction equivalents:  $\frac{1}{4} = 0.25 = 25\%$ ;  $\frac{1}{4} = 0.5 = 50\%$ ;  $\frac{1}{4} = 0.75 = 75\%$ ,  $\frac{1}{10} = 0.1 = 10\%$ ;  $\frac{1}{1} = 1.0 = 100\%$ .

### Year 6

### **Number facts**

Know place value of any number up to 10 000 001.