

All Saints C.E (VC) Primary School & Nursery, Ranton

# Expectations in Mathematics

Year Two



# Number and Place Value

What does my child need to be able to do?

Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward.

What does this mean?

Your child can count in steps of 2, e.g. 0, 2, 4, 6, 8, 10.

## What does this look like in context?

Yes or no	
I start with 4, and I count on in 3s, I will say 13.	
Yes or No	
l start with 7, and I count in 5s, I will say 19.	
Yes or No	
I start with 9, and I count in 10s, I will say 39.	
Yes or No	
I start with 8, and I count in 3s, I will say 31.	
Yes or No	

# Number and Place Value

What does my child need to be able to do?

Recognise the place value of each digit in a two-digit number (tens and ones).

What does this mean?

Your child knows the value of the number in the tens and ones column, e.g. in the number 86 there are 8 tens and 6 ones.

## What does this look like in context?

What is the value of 2 in the following numbers?

12	
25	
32	
42	
28	

# Number and Place Value

What does my child need to be able to do?

Identify, represent and estimate numbers using different representations, including the number line.

What does this mean?

Your child can estimate number on an unmarked number line in a range of 1-100.

## What does this look like in context?

Where would the number 80 be on this number line?

0 100

Where would the number 65 be on this number line?

0 100

# Number and Place Value

What does my child need to be able to do?

Compare and order numbers from 0 up to 100; use <, > and = signs.

What does this mean?

Your child can use the greater and less than signs.

## What does this look like in context?

Here are some signs.



Write the correct sign in each box.

# Number and Place Value

# What does my child need to be able to do?

Read and write numbers to at least 100 in numerals and in words.

#### What does this mean?

Your child, when shown a 2 digit number, can say what the number is. Your child can write the number in words.

## What does this look like in context?

What's the number? 24 17 87 99
Write the number 24 in words - twenty four
Write the number forty one in digits - 41

## What does my child need to be able to do?

Solve problems with addition and subtraction: using concrete objects and pictorial representations; applying their increasing knowledge of mental and written methods.

#### What does this mean?

I can add and subtract using materials and then by imaging.

## What does this look like in context?

Check these number sentences using a 100 square or a number line. Can you add the tens and ones in your head?

Yes or no	
73 + 40 = 113	Yes or No
98 – 18 = 70	Yes or No
46 + 77 = 123	Yes or No
92 – 67 = 35	Yes or No

## What does my child need to be able to do?

Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.

#### What does this mean?

Your child knows basic facts to 20 for addition and subtraction. They know that 50 + 40 can be solved by adding 5 + 4.

## What does this look like in context?

On a trip to the seaside I wanted to buy an ice cream for 15p; a bucket for 28p and a flag for 10p. I had 50p in my pocket. Did I have enough to buy all of these things?

What could I have bought with my 50p?

# If I Know This...

If I know that 6 + 4 = 10, this helps me know lots of other facts too. For example:

4 + 6 = 10	10 - 6 = 4	10 - 4 = 6	60 + 40 = 100
16 + 4 = 20	14 + 6 = 20	26 + 4 = 30	34 + 6 = 40
100 - 60 = 40	20 - 6 = 14	50 - 6 = 44	100 - 40 = 60

Write down as many facts as you can to go with each of these number sentences:

5 + 5 = 10	9 + 1 = 10

#### What does my child need to be able to do?

Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: a 2-digit number and 1s or 10s; two 2-digit numbers; adding three 1-digit numbers.

#### What does this mean?

I can add and subtract numbers up to and beyond 100.

## What does this look like in context?

2 + 4 + 6 =

24 + 6 =

24 + 16 =

# **Addition and Subtraction**

## What does my child need to be able to do?

Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.

#### What does this mean?

Your child can add knowing that either number can go first. They can subtract knowing the biggest number goes first.

## What does this look like in context?

14 + 5 =

27 - 9 =

5 + 14 =

## What does my child need to be able to do?

Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems.

#### What does this mean?

Your child can use their addition knowledge to check their answers to subtraction questions and vice versa.

#### What does this look like in context?

I think of a number. I take away 7 and add 2. My answer is 15. What is my number?

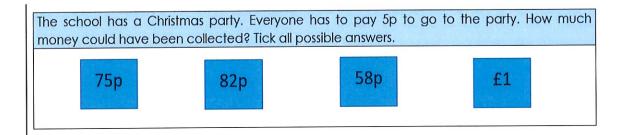
# **Multiplication and Division**

#### What does my child need to be able to do?

Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.

#### What does this mean?

Your child knows that multiplication means lots of and division means to share.



# Multiplication and Division

#### What does my child need to be able to do?

Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication  $(\times)$ , division  $(\div)$  and equals (=) signs.

#### What does this mean?

Your child can use 3 numbers and write them in a number sentence using x and  $\div$ .

#### What does this look like in context?

Write 4 number sentences to link the numbers: 4, 3 and 12.

# **Multiplication and Division**

## What does my child need to be able to do?

Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.

## What does this mean?

Your child knows that in a multiplication sentence the numbers can be in any order. In a division sentence they know that the biggest number has to go first.

## What does this look like in context?

 $3 \times 5 = 15$  and  $5 \times 3 = 15$ 25 ÷ 5 = 5

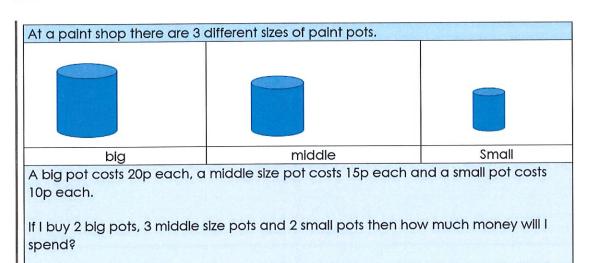
# **Multiplication and Division**

## What does my child need to be able to do?

Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.

#### What does this mean?

Your child can use different strategies to solve multiplication and division problems.



# **Fractions**

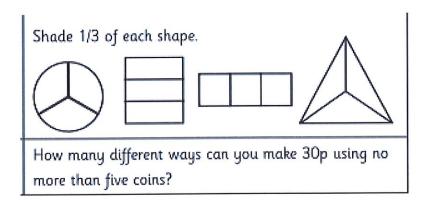
## What does my child need to be able to do?

Recognise/find/name/write fractions 1/3, 1/4, 2/4, 3/4 of a length, shape, set of objects or quantity.

#### What does this mean?

Your child can recognise that the top part of a fraction is called a numerator and is the amount received; they also recognise that the bottom part is called a denominator and is the total amount available.

#### What does this look like in context?



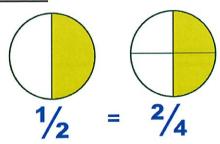
# **Fractions**

## What does my child need to be able to do?

Write simple fractions e.g.  $\frac{1}{2}$  of 6 = 3 and recognise the equivalence of  $\frac{1}{2}$  and  $\frac{2}{4}$ .

## What does this mean?

Your child can find fractions from given amounts for  $\frac{1}{2}$ ,  $\frac{1}{3}$ ,  $\frac{2}{4}$  and  $\frac{3}{4}$ .



# <u>Measurement</u>

#### What does my child need to be able to do?

Choose/use appropriate standardised units to estimate/measure length/height (m/cm); mass (kg/g); temp (°C); cap (litres/ml) to nearest unit, using rulers, scales, thermometers and measuring vessels.

#### What does this mean?

Your child can guess a measurement and then check their estimation using the appropriate equipment.

They can read scales in divisions of ones, twos, fives and tens in a practical situation.

LENGTH
Estimate and measure the length of the line. Draw one line that is 5cm long
and another that is 6cm longer.
Draw one line that is 5cm long and another that is 6cm longer.

#### What does my child need to be able to do?

Compare and order lengths, mass, volume/capacity and record the results using >, < and =.

#### What does this mean?

Your child can order measures using the great and less and equal symbols.

#### What does this look like in context?

Write some statements using the <> = symbols. For example: 11.3cm > 15.2cm	
Put the objects from longest to shortest.	

# Measurement

## What does my child need to be able to do?

Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value.

Find different combinations of coins that equal the same amounts of money.

## What does this mean?

Your child can make the same value with different coins. They can identify the value of coins and add them together.

## What does this look like in context?

#### MONEY

Show 3 ways in which you can make 67p using only 50p, 20p, 10p and 1p coins.

# <u>Measurement</u>

## What does my child need to be able to do?

Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.

#### What does this mean?

Your child can add up amounts and then use subtraction to give the change.

#### What does this look like in context?

Coins	Total	Change from £1
50 SO		

# Measurement

## What does my child need to be able to do?

Compare and sequence intervals of time. Know the number of minutes in an hour and the number of hours in a day.

## What does this mean?

They can put events in order and know that there are 60 minutes in an hour and 12 hours in a day.

## What does this look like in context?

Put these in order from shortest to longest.

3 weeks 36 hours

18 days 20 minutes

7 days 3 days

What does my child need to be able to do?

Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times.

What does this mean?

Your child can read time on a clock to the nearest 5 minutes. They can say what the time would be earlier or later.

#### What does this look like in context?

Show twenty past four on the clock.

What was the time ten minutes earlier?

What will it be ten minutes later?

# Measurement

What does my child need to be able to do?

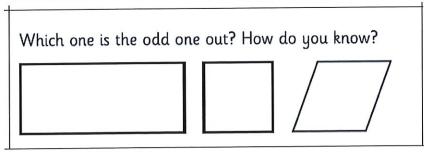
Identify and describe the properties of 2D shapes, including the number of sides and symmetry in a vertical line.

What does this mean?

Your child can name 2D shapes by the number of sides, vertices and faces from a group of shapes or from pictures of shapes. They can identify shapes with a line of symmetry.

## What does this look like in context?

A shape has straight sides and all its sides are the same length. Name 2 possible 2D shapes that fit this description.



#### What does my child need to be able to do?

Identify and describe the properties of 3D shapes, including the number of edges, vertices and faces.

#### What does this mean?

Your child can identify a range of 3D shapes like cuboids, cubes, pyramids, and spheres by their properties.

#### What does this look like in context?

This cylinder only has one circular face.

Agree or disagree? Explain your answer.



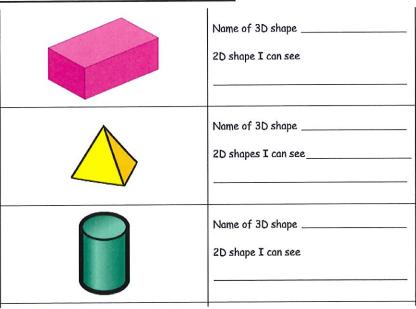
# <u>Measurement</u>

## What does my child need to be able to do?

Identify 2D shapes on the surface of 3D shapes, e.g. circle on a cylinder; a triangle on a pyramid.

## What does this mean?

Your child can see 2D shapes when looking at the properties of 3D shapes.



## What does my child need to be able to do?

Compare and sort common 2D and 3D shapes and everyday objects.

#### What does this mean?

Your child can sort shapes and objects into different sets.

#### What does this look like in context?

2D Shape	Total Number of edges	Number of straight edges	Number of curved edges	Number of vertices
<u></u>				

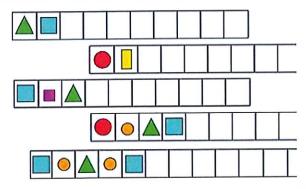
# <u>Measurement</u>

## What does my child need to be able to do?

Order and arrange combinations of mathematical objects in patterns and sequences.

## What does this mean?

Your child can continue a repeating pattern involving colour and shape. Your child can estimate a certain position in the sequence.



## What does my child need to be able to do?

Use maths vocabulary to describe position, direction and movement including movement in a straight line and distinguishing rotation as a turn and in terms of right angles for  $\frac{1}{4}$ ,  $\frac{1}{2}$ , and  $\frac{3}{4}$  turns (clock/anticlockwise).

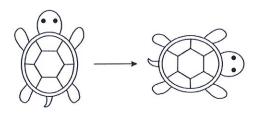
#### What does this mean?

Your child can move an object and use the correct mathematical vocabulary to describe the movement the object has made.

#### What does this look like in context?

#### Position

If I face forwards and turn three quarter turns clockwise then a quarter turn anti-clockwise describe my finishing position.



How much is the turtle rotated?

Circle your answer.

quarter half three-quarter full turn turn turn

# **Statistics**

What does my child need to be able to do?

Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.

What does this mean?

Your child can record information in different ways. They can answer questions about the information they have presented.

# What does this look like in context?

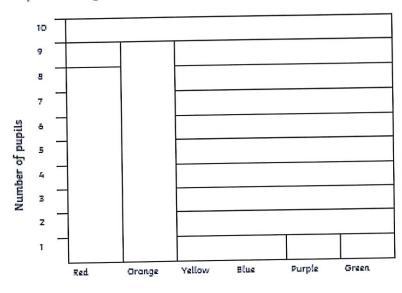
# Favourite Colour Activity

Here is a tally chart of what the favourite colour of pupils in a class were:

Number of Pupils

Red	III III	8
Orange	im mi	9
Yellow		5
Blue		2
Purple		1
Green		7

Complete the tally chart and bar charts.



# **Statistics**

#### What does my child need to be able to do?

Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity; ask and answer questions about totalling and comparing categorical data.

#### What does this mean?

Your child can collect and interpret data using their understanding of amounts and categories. They can make some comparisons such as most popular and least popular.

#### What does this look like in context?

In a class children are asked to vote for their favourite subject. 10 voted for PE, 6 voted for maths, 5 for history, 4 for art, 2 for geography and 1 for reading. Use the table below to show how everyone voted, putting the most popular subject first (the first has been done for you).

Subject	Votes
PE	10