YEAR 2

## My Maths Booklet

## 10 Meth Payground

## Bitesize



## Topmarks



At St Chad's, key mathematical skills are a shared priority and responsibility between home and school. It is essential children master these key skills in order to access maths teaching in school. At St Chad's. we follow the 'White Rose' scheme for teaching maths. Children spend longer on a strand of maths to ensure knowledge and understanding is embedded.


In this booklet are all of the key mathematical skills your child needs to know by the end of Year 2.
We have produced this booklet to help you support your child's maths at home. Please work through the booklet regularly with your child. A 'little and often approach' will help your child lots: 15 minutes, 5 times a week, will make such a difference to your child's learning.
If you need any help with supporting your child's maths at home, please speak with your child's class teacher.


The only way
to leam
mathematics
is to do
mathematics.

## Counting to 100

By the end of Year One, children are expected to be able to count forwards and backwards across 100. This means accurately counting:

- From 0 to 100 (counting forwards).
- From 100 to 0 (counting backwards).
- From any number and counting forwards.
- From any number and counting backwards.
- $\quad$ Count in 10 s from any number (using the columns e.g. 2, 12, 22) It is important to continue practicing this regularly when your child is in Year 2.


## 100 Number Square

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

## Columns

 go down. When counting in 10s we go down the columns.Rows go across. When counting in 1 s we go across the rows.

## Money

Your child must be able to recognise and name all British coins. They must use these coins to create amounts.


## Top Tips for recognising coins!

- Talk about the coins and what they look like (colour, size, shape)
- Use real money to help children recognise the money in 'real life contexts'.
- Talk about the change you receive when out shopping.


## Making Amounts

Once your child can recognise each of these coins they need to use them to make amounts.


## Telling the Time

It is important your child can tell the time and read a clock face, when it is o' clock, half past, quarter past and quarter to.



7 o' clock


Half past 7


Quarter to 6


## Top Tips!

- Make a clock face with your child and talk about the numbers.
- Make the clock hands to emphasise the minute hand is long and the hour hand is short.
- Talk about time regularly. "At 5 o' clock we are... .
- Follow the 'little and often' approach so your child is regularly telling the time.
- Only work on o' clock, half past, quarter to and quarter past.


## Write numbers to 100

In Year 2, it is important that your child can write all numbers to 100 accurately.

This can be practiced through turning it into a game. You say a number and see how quickly they can write it down and hold it up.

100 Number Square

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |

Common mistakes that children can make are writing digits backwards or whole numbers backwards.
For example, when writing 42 they write 24 . This should always be corrected.

## Number Bonds to 20

Number bonds are two numbers that go together to make another number.
Children need to be able to recall their number bonds to 20 quickly, and accurately. This helps them with addition and subtraction.


Children will be encouraged to see the pattern with number bonds to 10 .
For example,
If I know $3+7=10$.
I know $13+7=10$.

A fantastic game on the TopMarks website is 'Hit the Button'. It ensures children are able to recall the bonds quickly and accurately (whilst having fun!).


Shapes
Children need to name and describe a variety of 2D (flat) and 3dD (fat) shapes.
2D SHAPES: know their names, amount of sides and amount of vertices. Vertices are when two sides meet (corners of the shape).

| Name | Sides | Vertices |
| :--- | :---: | :---: |
| triangle | 3 | 3 |
| circle | 1 | 0 |
| square | 4 | 4 |
| rectangle | 4 | 4 |
| pentagon | 5 | 5 |
| hexagon | 6 | 6 |

3D SHAPES: know their names, describe surfaces (are they flat or curved), amount go edges and amount of vertices.

| Name | Surfaces |  | Edges |  | Vertices | Picture |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Flat | Curved | Flat | Curved |  |  |
| sphere | 0 | 1 | 0 | 0 | 0 |  |
| cube | 6 | 0 | 12 | 0 | 8 | $\square$ |
| cuboid | 6 | 0 | 12 | 0 | 8 | $\square$ |
| cone | 1 | 1 | 0 | 1 | 0 | $\square$ |
| cylinder | 2 | 1 | 0 | 2 | 0 | $\square$ |
| square-based <br> pyramid | 5 | 0 | 8 | 0 | 5 | $\square$ |

## Counting in 2s, 5s, $\mathbf{3 s}$ and 10 s

In Year 2 children continue to develop their skills of counting in 2s, $\mathbf{5 s}$ and 10 s . This year they also learn to count in 3s. In school we do this through the use of 'Rolling Numbers'. Videos of this can be found on your child's Class Dojo page.

During this year no other times tables are required.


## Counting in 2s.

$$
2,4,6,8,10,12,14,16,18
$$



## Counting in 5 s .

$5,10,15,20,25,30,35,40,45$,

## Counting in 10s.

$10,20,30,40,50,60,70,80,90,100$

## Counting in 3s.

$3,6,9,12,15,18,21,24,27,30$

Children now need to use this counting to answer multiplication (x) questions. Last year, they received a log in for the app 'TTRockstars'.


From January they should be accessing this app/ website $3 x$ a week. If you require your log in details again please ask your class teacher.

## Place Value to 100

At the beginning of Year 2 children consolidate their place value understanding of 2-digit numbers. This means they know how many tens and ones make up the number. We do this through the use of dienes.


These are dienes. The stick represents 10 and the small cubes represent 1 .
These help children 'see' how many tens and ones are in a number.

Here is an example:


When following the 'little and often' approach of writing numbers to 100, talk to your child about how many tens/ ones the number has. Ask them to draw this (sticks to represent 10/ squares to represent ones).

To explain this further there is an excellent video on the White Rose website:
https://whiterosemaths.com/homelearning/year-2/week-1/tens and ones

## Addition

In Year 2 children need to be able to add within 100.
They need to:

- 2 digit +1 digit
- $\quad 2$ digit + tens number
- 2 digit +2 digit

Below is an example of the methods we use in school to solve these questions. It is important the same methods are used at home, in order for children to not become confused.

$$
42+3=45
$$


$42+20: 62$
$62+3=65$

1. Put the first number in your head.
2. Count on in 1s,
3. Write the answer.
4. Draw the first number (tens and ones).
5. Draw the second number (tens).
6. Count the dienes to find the answer.
7. Partition the second number
8. Add the tens to the first number (counting in 10s).
9. Add the ones to the new number (counting in 1 s ).

## Subtraction

In Year 2 children need to be able to subtract within 100.
They need to:

- 2 digit - 1 digit
- 2 digit - tens number
- 2 digit -2 digit

Below is an example of the methods we use in school to solve these questions. It is important the same methods are used at home, in order for children to not become confused.

$$
65-2=63
$$

$$
[63-30=33
$$



## $56-31=25$ <br> 

1. Put the first number in your head.
2. Count back in 1 s
3. Write the answer.
4. Draw the first number (tens and ones).
5. Cross out the value of the second number.
6. Count the remaining dienes to find the answer.
7. Write down the first number on an empty number line.
8. Partition the second number.
9. Subtract the tens from the first number (counting back in 10s).
10. Subtract the ones from the new number (counting in 1s).
