



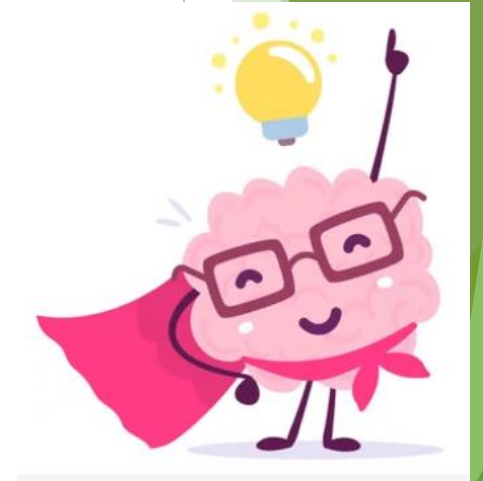
# PARENTS MATHS WORKSHOP

## Year 2



# Aims of the Session:

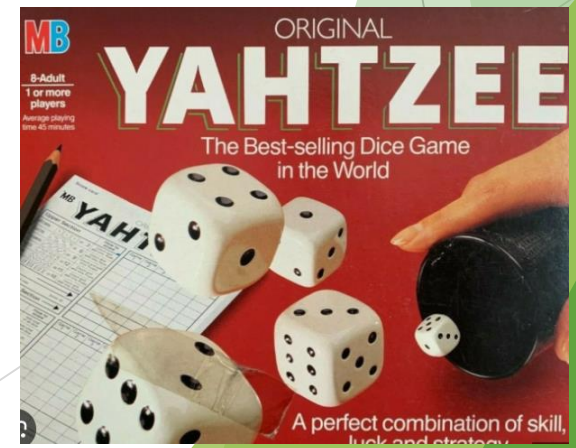
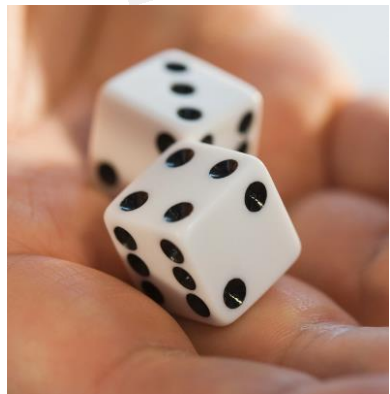
- Share with you some of the things your child will be learning in school
- Improve your confidence in helping your child with maths
- Explore some games and activities you can play with your child at home to help them develop fluency and become more automatic with number facts.



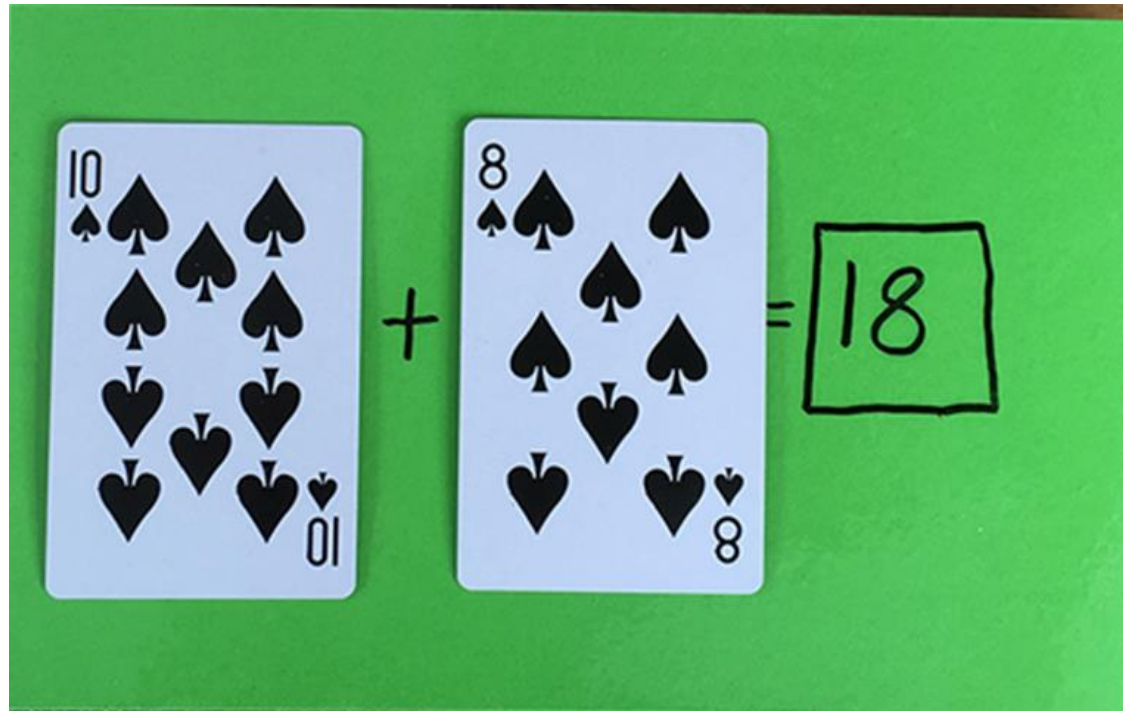
## Why engage with your child's learning?

Research evidence suggests that when parents are engaged in their children's learning, outcomes for children can be improved.

# Games you can play at home!



# Card Games:



## Playing Card Games:

### Bonds to 10

You will need: A pack of playing cards but remove the face cards. Ace is 1.

Work as a team to find all the bonds to 10. Lay out all cards face up. How many different ways can they make 10?

### Bonds to 20

You will need: A pack of playing cards but remove the face cards. Ace is 1.

Work as a team to find all the bonds to 20. Lay out all cards face up. How many different ways can they make 20?

### Pick 3

You will need: A pack of playing cards but remove the face cards. Ace is 1.

Put all of the cards face down in the centre of the table. Each player takes it in turns to turn over 3 cards. If they can make a number sentence using add or subtract, they can keep the cards. If they cannot make a number sentence, they turn the cards back over. The winner is the player who has the most cards at the end of the game.

### Closest To

You will need: A pack of playing cards but remove the face cards. Ace is 1.

Choose a target number below 20. Put the cards in a pile. Each player takes two cards and adds them up. Whoever gets the closest to the target number wins.

### Choose 2

You will need: A pack of playing cards but remove the face cards. Ace is 1.

Put the playing cards in a pile face down. Each player chooses two cards from the top of the pile. Add the cards together. Whoever has the highest number wins a point.

### Go Fish Bonds to 10

You will need: A pack of playing cards but remove the face cards. Ace is 1.

Give each player 7 cards. Put the rest of the cards in a pile face down. If a player has any bonds to 10, they put them down in a separate pile next to them.

Each player takes it in turns to ask another player for cards. For example, "Pavel, have you got any tens?" Pavel then must give all of his tens to the player, if he doesn't have any tens he says, "Go Fish" and the player takes a card from the pile. If the player makes a number bond to 10, they put it in the separate pile.

The game is over when a player runs out of cards. The winner is the player who gets as many number bonds to ten as possible.

### Add or Subtract?

You will need: A pack of playing cards but remove the face cards. Ace is 1.

Put the playing cards in a pile face down. Each player starts with 10 points. Take turns to pick a card. If it is red, they add the number on the card to their total. If it is black, they take one away. The player with the highest number at the end of the game wins.

### Turn and Subtract

You will need: A pack of playing cards, remove the face cards. Ace is 1.

Split the pack of playing cards in half. Put them face down. In pairs, after three, take it in turns to turn over the card on the top of the pile. Whoever subtracts them the quickest wins a point. Remember to subtract the smallest number from the largest number.

# Mastering Number Programme...

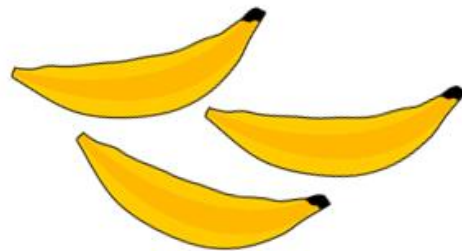
In Reception, Year 1 and Year 2 we follow a mastering number programme.

This will help your child to develop good number sense.

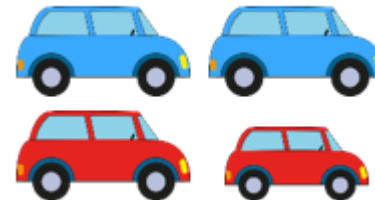
Some of the things they will learn includes:



Counting



Recognising small numbers of objects and making their own collections



Know different ways to 'make' (compose) a number

## How do we develop good number sense?

Knowing how numbers are 'made' will help children later on with calculations.

I know that 6 is made of 4 and 2 so I will also know...



$$40 + 20$$

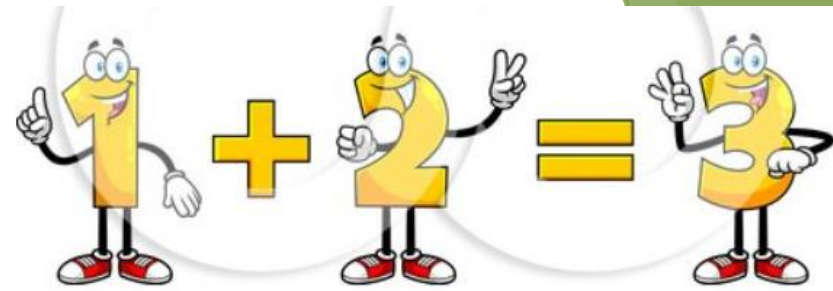
$$400 + 200$$

$$6 - 2$$

$$60 - 20$$

$$0.4 + 0.2$$

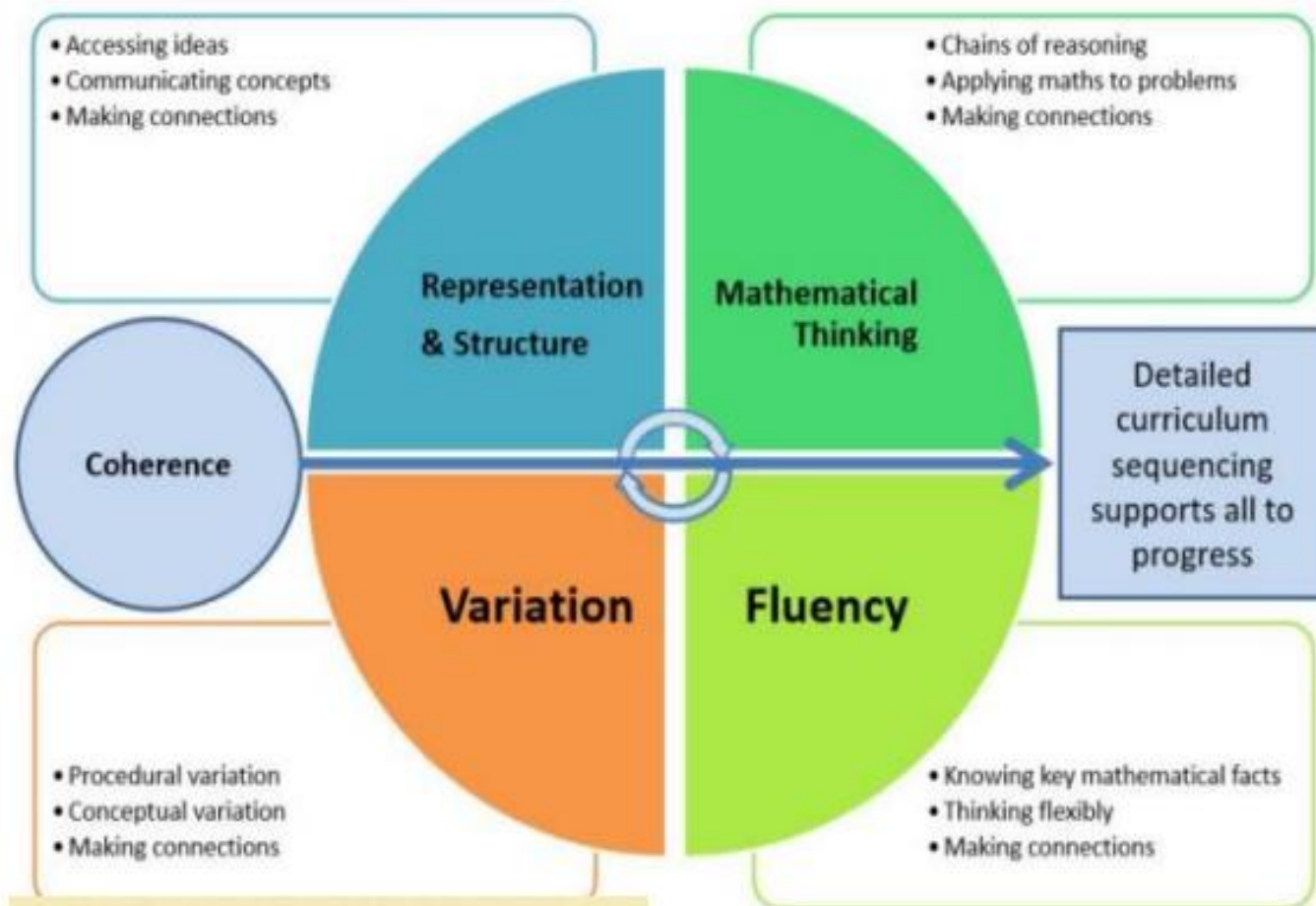
# Developing Fluency:



<b>Autumn</b>	<ul style="list-style-type: none"><li>* count in 2s, 3s, 5s and 10s.</li><li>* recognise even and odd numbers</li><li>* know my addition and subtraction bonds to 100 (multiples of 10 and within 100).</li><li>* recognising the place value of numbers (2-digit numbers).</li></ul>
<b>Spring</b>	<ul style="list-style-type: none"><li>* know my 10x table (multiplication and division facts).</li><li>* doubling and halving numbers to 20.</li><li>* count on and back in 2s, 5s and 10s from any 2-digit number</li><li>* count up in halves</li></ul>
<b>Summer</b>	<ul style="list-style-type: none"><li>* tell the time using half past, quarter past, quarter to.</li><li>* Count up in halves and quarters.</li><li>* know my 2, 5 and 10x table (multiplication and division facts).</li></ul>



## Teaching for Mastery



# Not racing up a ladder!

When the children learn a concept in maths, they need time to embed the skills.



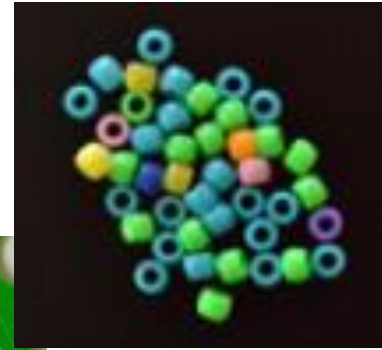
CPA - approach to maths!

**C**oncrete

**P**ictorial

**A**bstract

CPA - approach to maths!



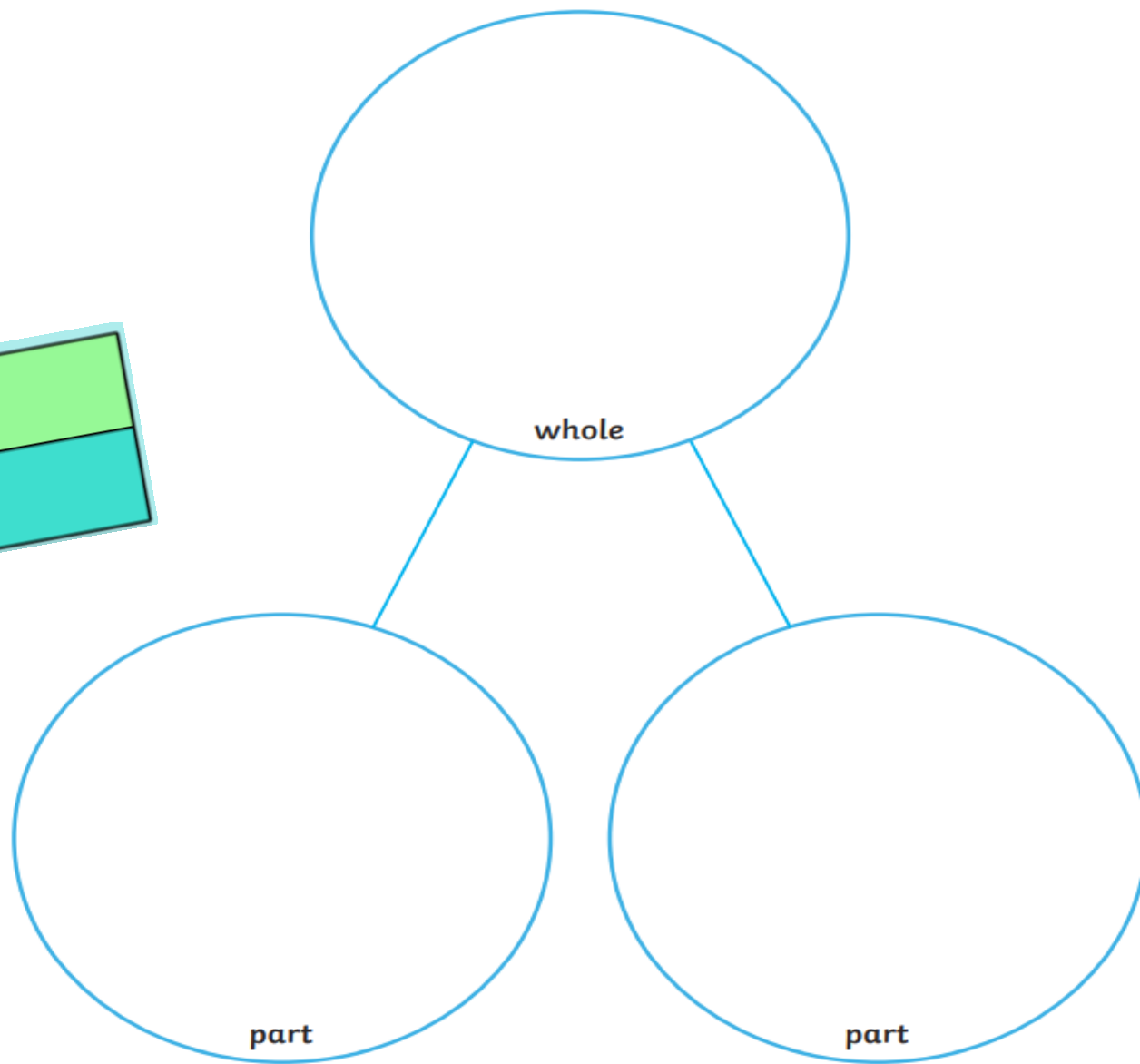
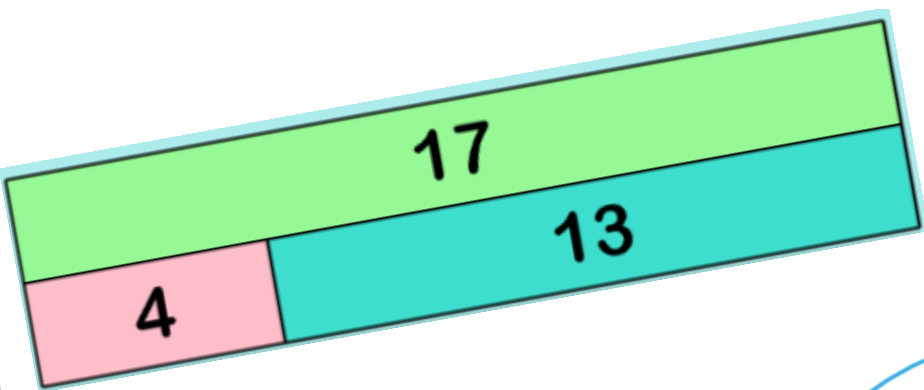
# Concrete



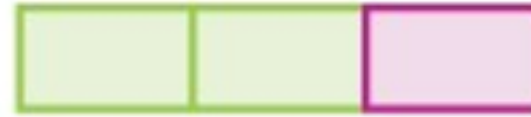
# 100 Square

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

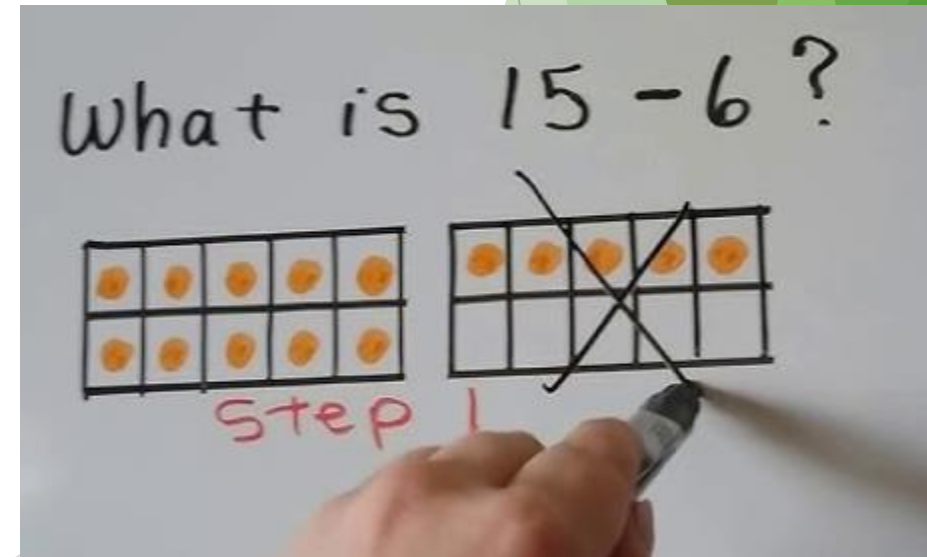
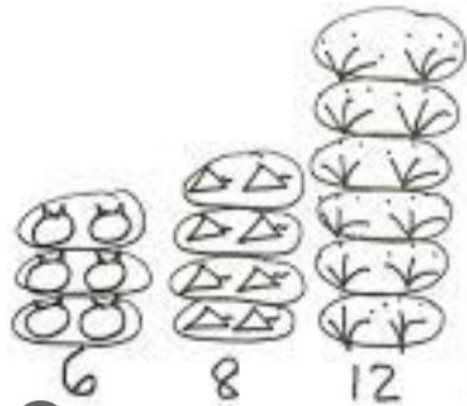
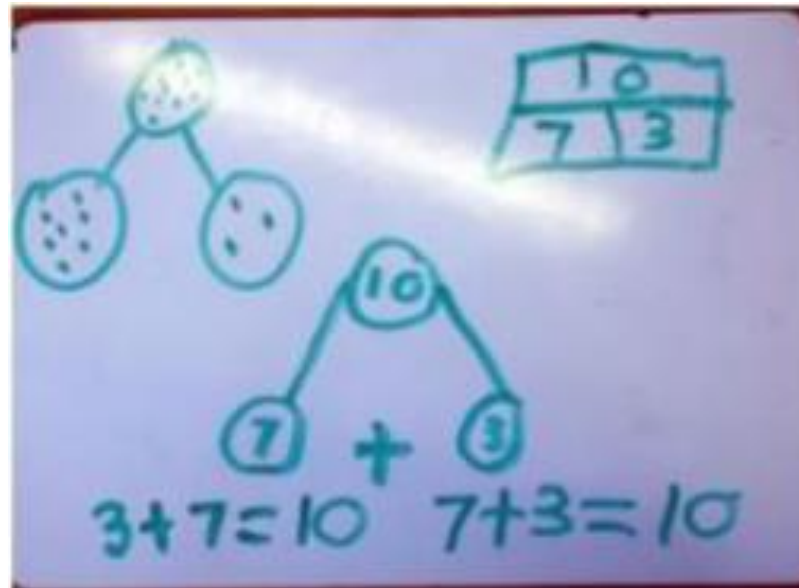
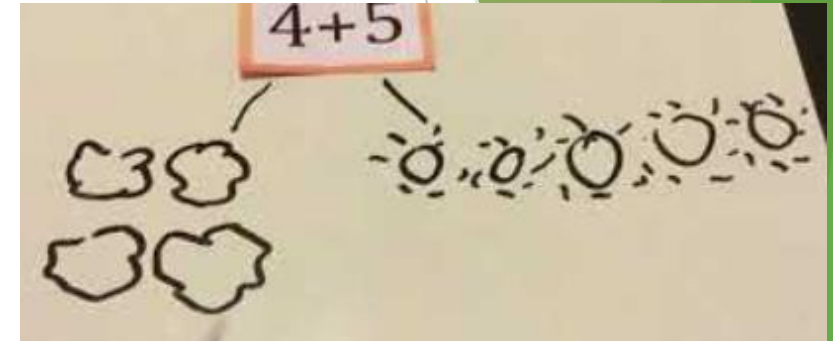
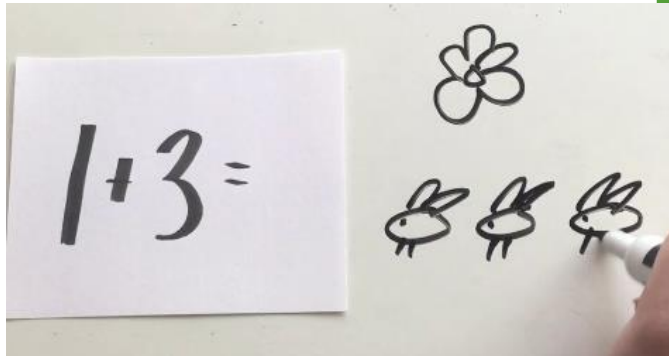

T	O
10 10	1



CPA - approach to maths!



# Pictorial



CPA - approach to maths!

**A**bstract

$$2 + 1 = 3$$

Let's do some maths with the children!

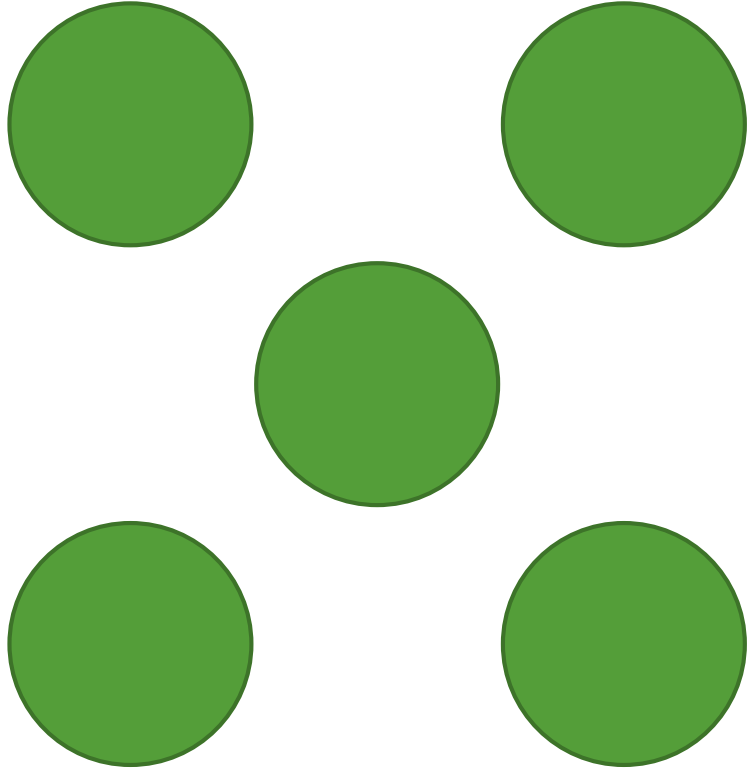


Look out for when you can use your subitising skills! Get those fast eyes ready!

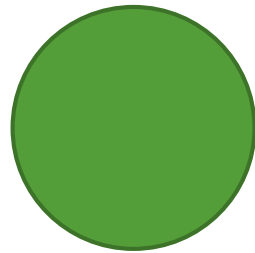
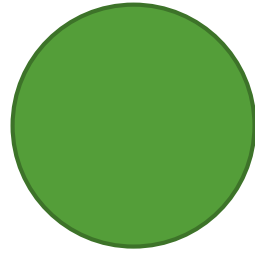
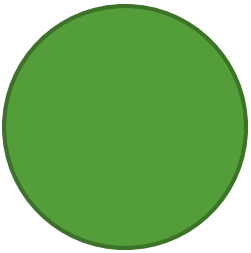
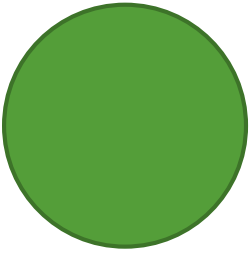
# Subitising

Subitising is the ability to recognise a *small quantity* of objects *without the need to count*.

It helps the children to understand the composition of number.





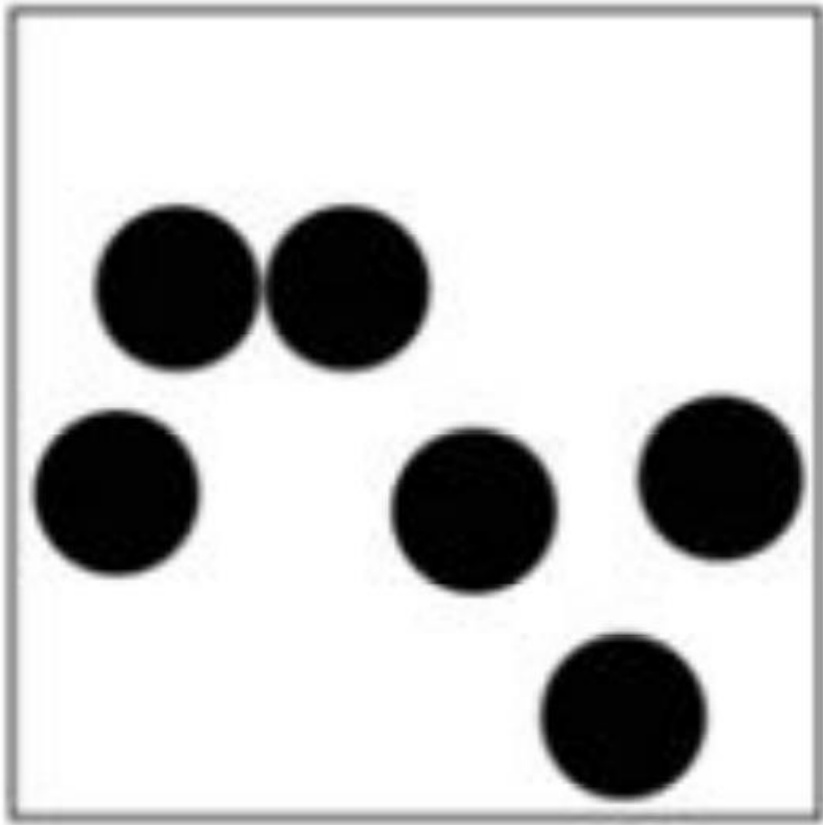


# Subitising

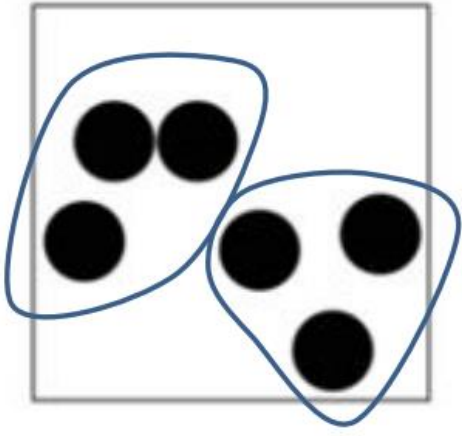
Sometimes when we subitise we can see two groups at once; if we know that 3 can be 'made' of 2 and 1, then we know how many there are altogether without counting.



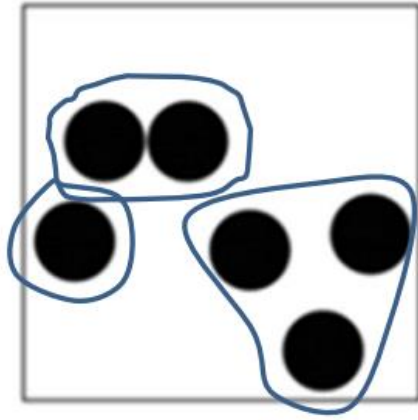
# How did you see the number?



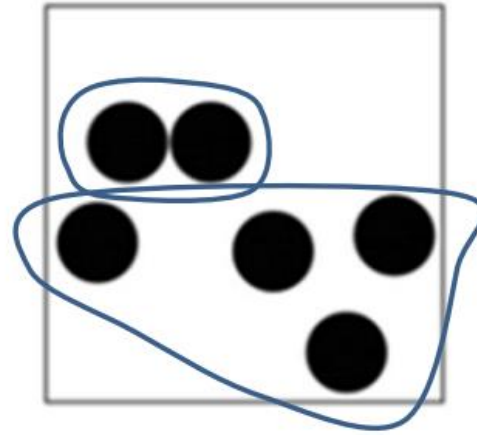
What  
numbers can  
you see  
hidden?



**3 and 3**



**2 and 1  
and 3**



**2 and 4**

There are more ways to recognise 6. By asking the children to investigate images and talk about what they can see helps children develop their understanding of different numbers.



I know 1 and 3  
makes 4.

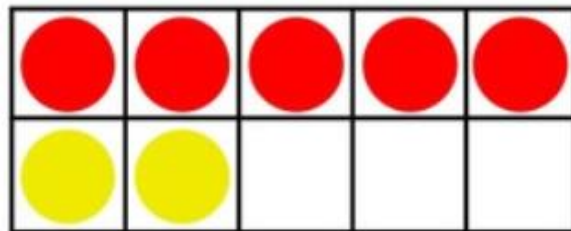
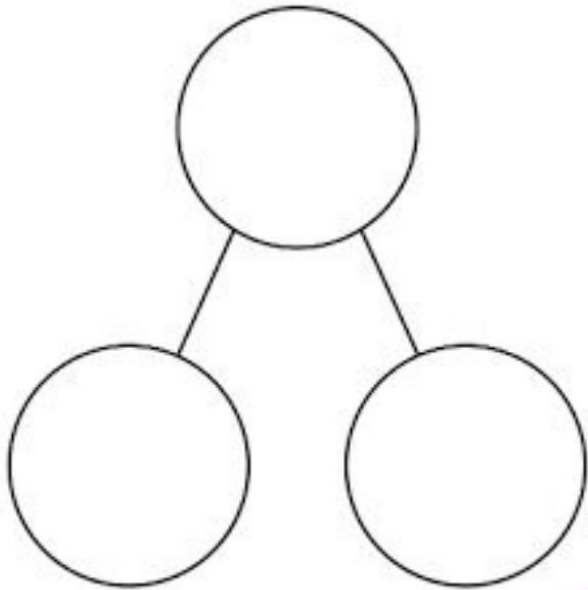
2 more than 4 is 6

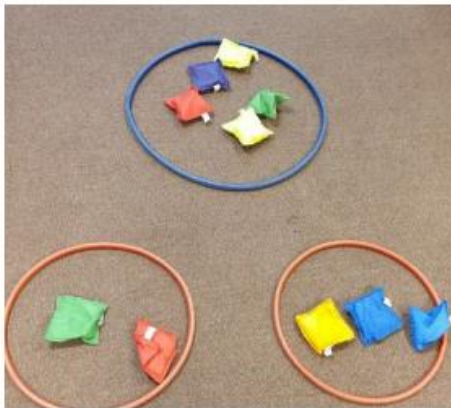
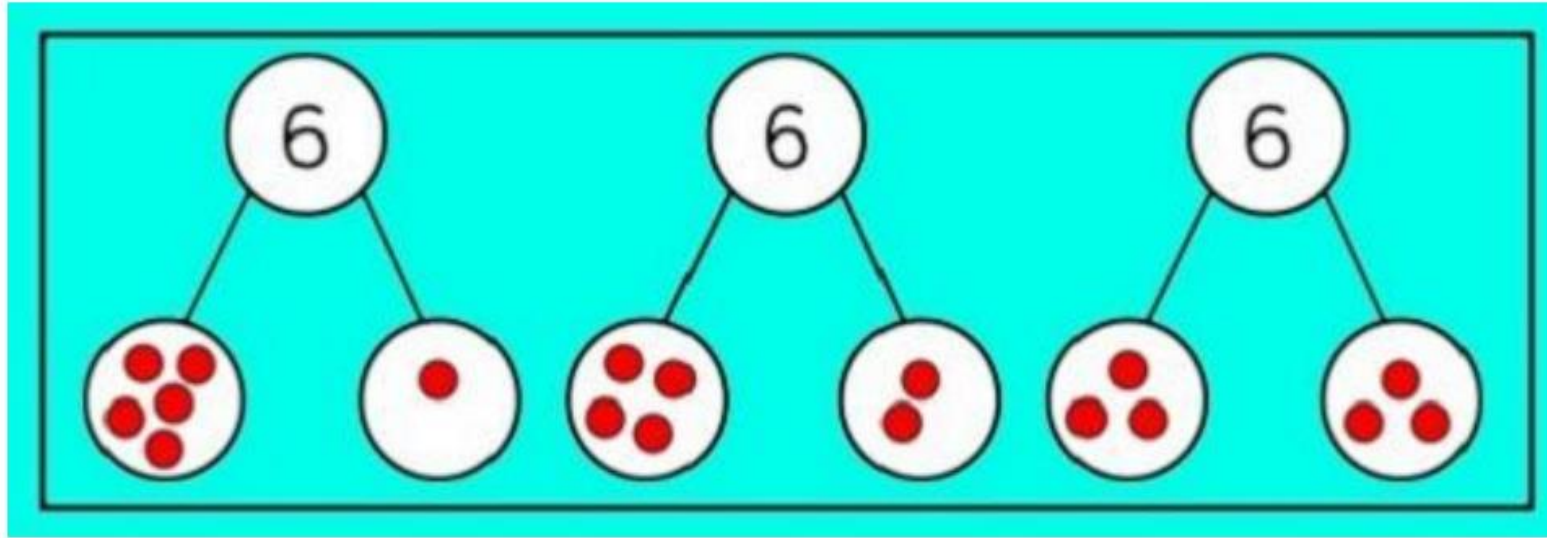
# Composition of number

We teach the children about the composition of number.

Numbers are composed of smaller numbers

- Numbers can be made of 2 parts
- Numbers can be made of more than 2 parts
- Numbers can be made of equal parts
- Numbers can be made of unequal parts

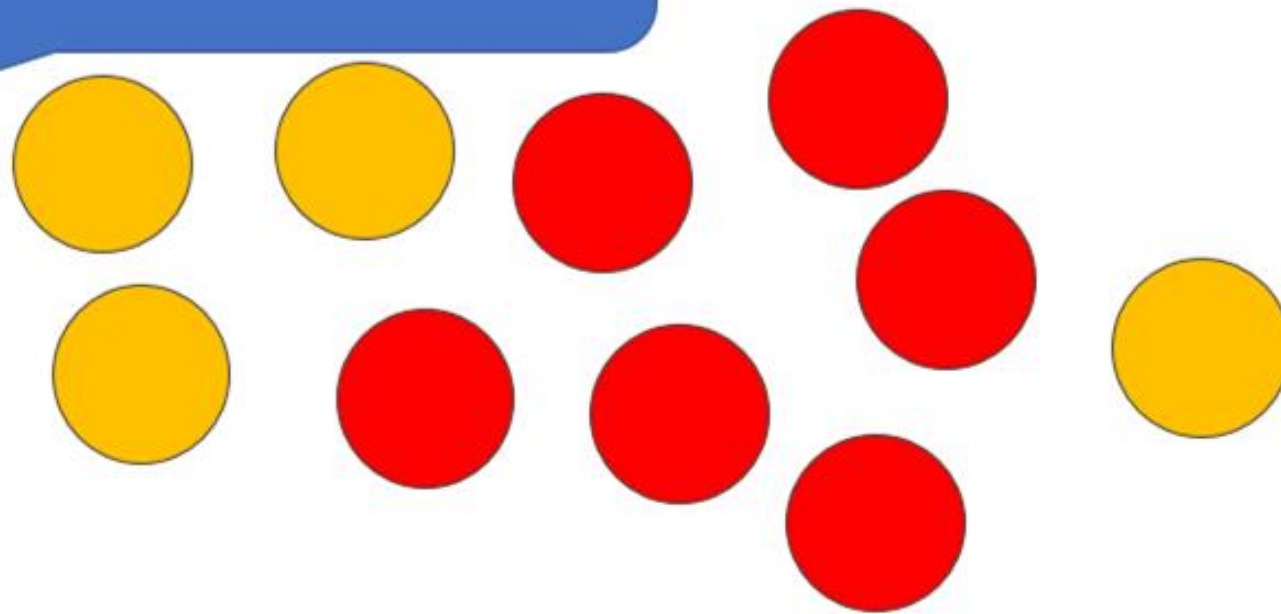




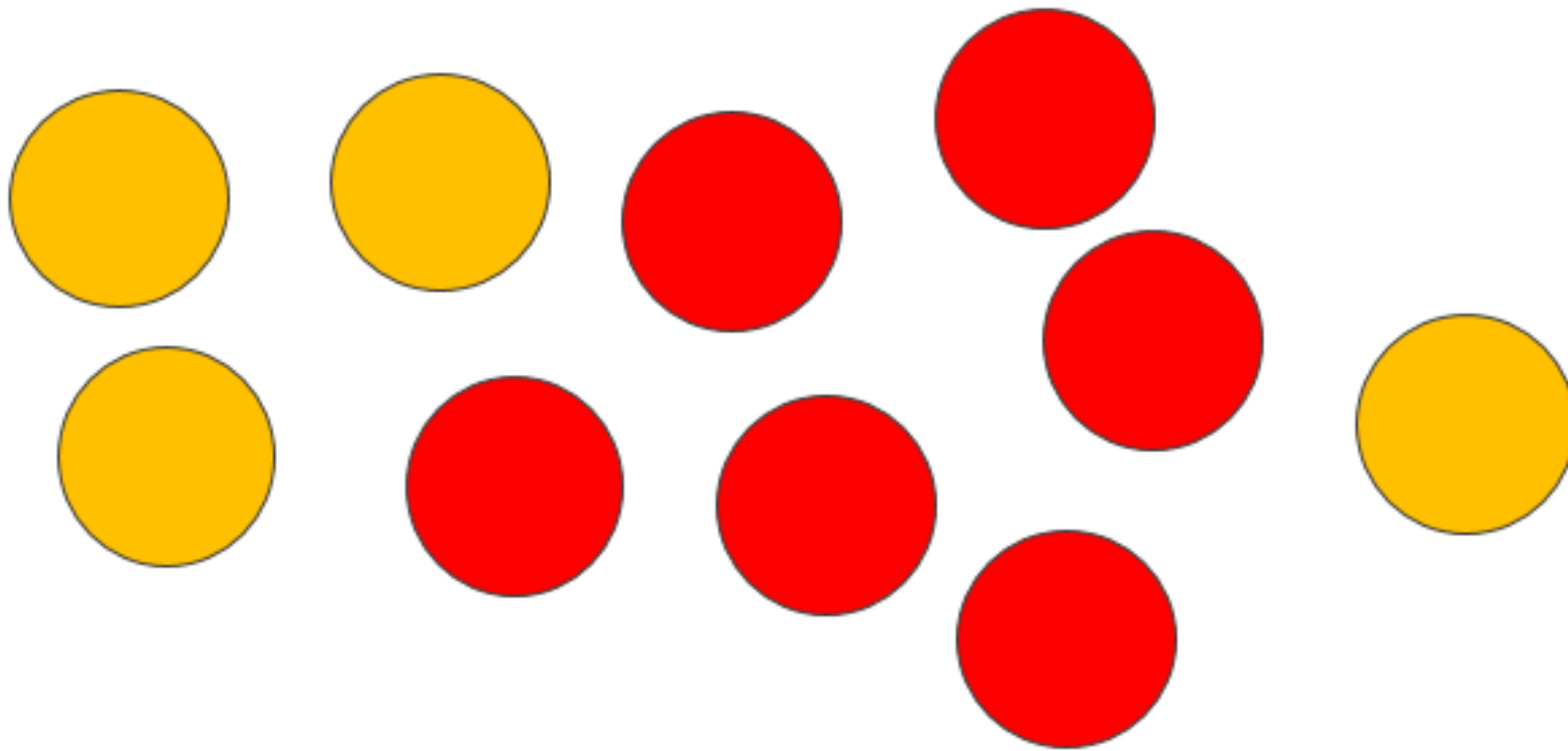
# Drop the Counters!

You need 10  
counters!

How many of each colour?  
Are the parts odd or even?

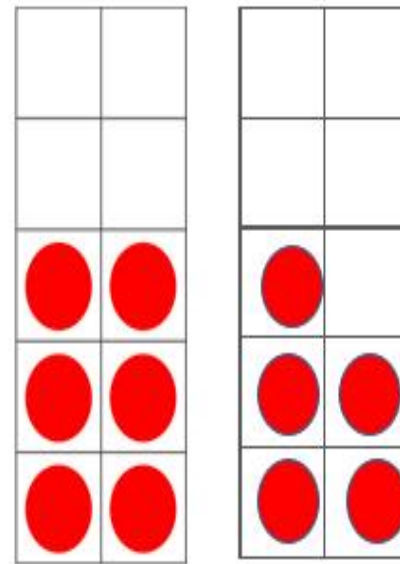
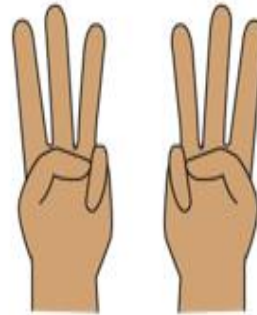
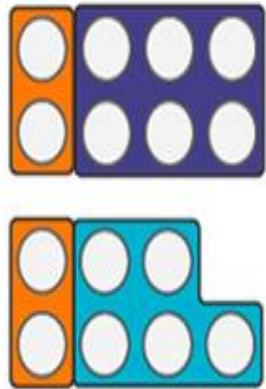


10 is made up of ..... and .....  
..... and ..... make 10!



# Knowing Odd & Even Numbers

Let's think about the odd and even *parts* of numbers.



# Addition Games

- One more/ 10 more

## 4-in-a-Row!

2	5	10	8	3
4	11	6	4	10
5	7	2	12	8
11	6	4	9	5
12	3	8	6	9

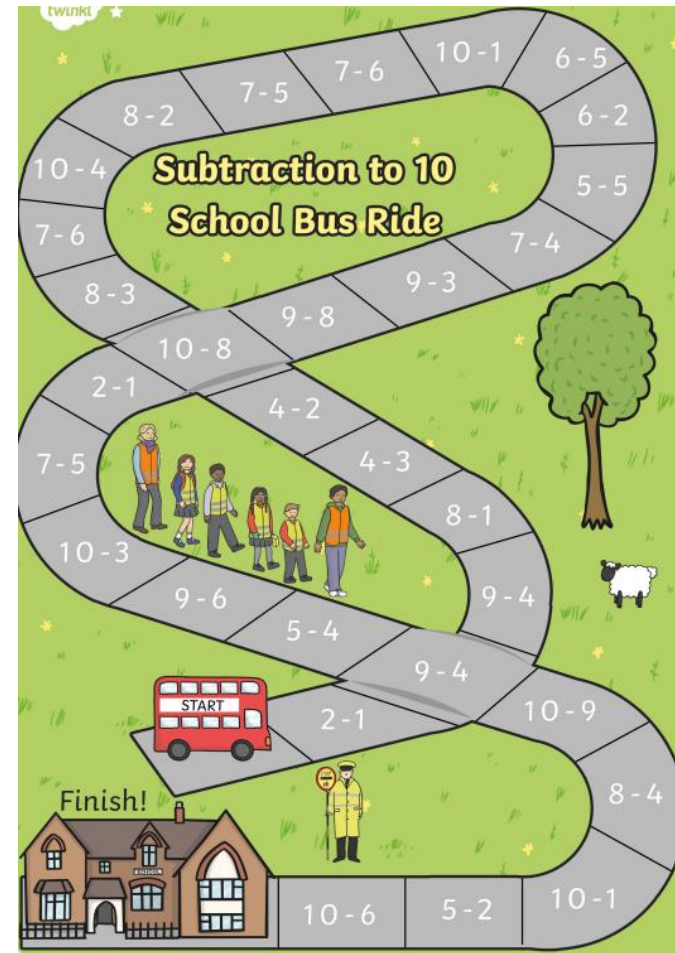


1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

# Subtraction Games

- Counting backwards
- One less/ ten less

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



# Recognising tens and ones

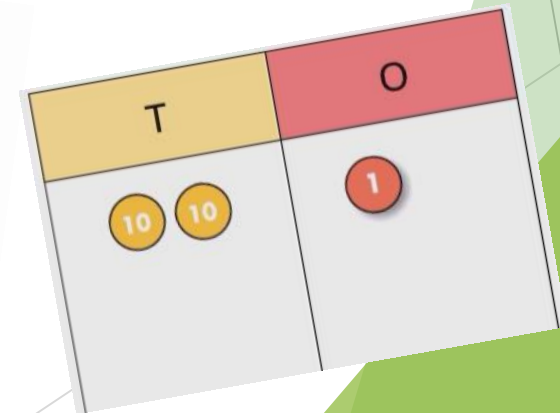
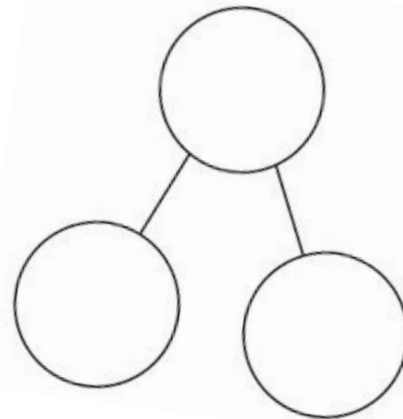
10s and 1s to 100



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

## Base Ten Place Value

Roll a dice to move around the board. Use the blocks to name the numbers. The first player to reach the finish line wins!



# Doubling and Halving

























**Doubling and Halving Game**

The game board consists of a path of blue hexagons with the following math problems:

- Start
- double 2
- halve 2
- double 3
- halve 4
- double 4
- halve 6
- double 5
- halve 8
- double 6
- halve 10
- double 1
- double 9
- double 3
- double 8
- double 7
- halve 20
- halve 8
- halve 12
- halve 6
- halve 4
- double 6
- halve 14
- double 5
- double 3
- double 7
- double 10
- halve 16
- halve 18
- halve 4
- halve 12
- Finish

twinkl.com

# Telling the Time

Start		Miss a turn				End
						
						
						
Miss a turn						Miss a turn
		Miss a turn				
				Miss a turn		

# Snakes and Ladders!



## Snakes and Ladders!

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

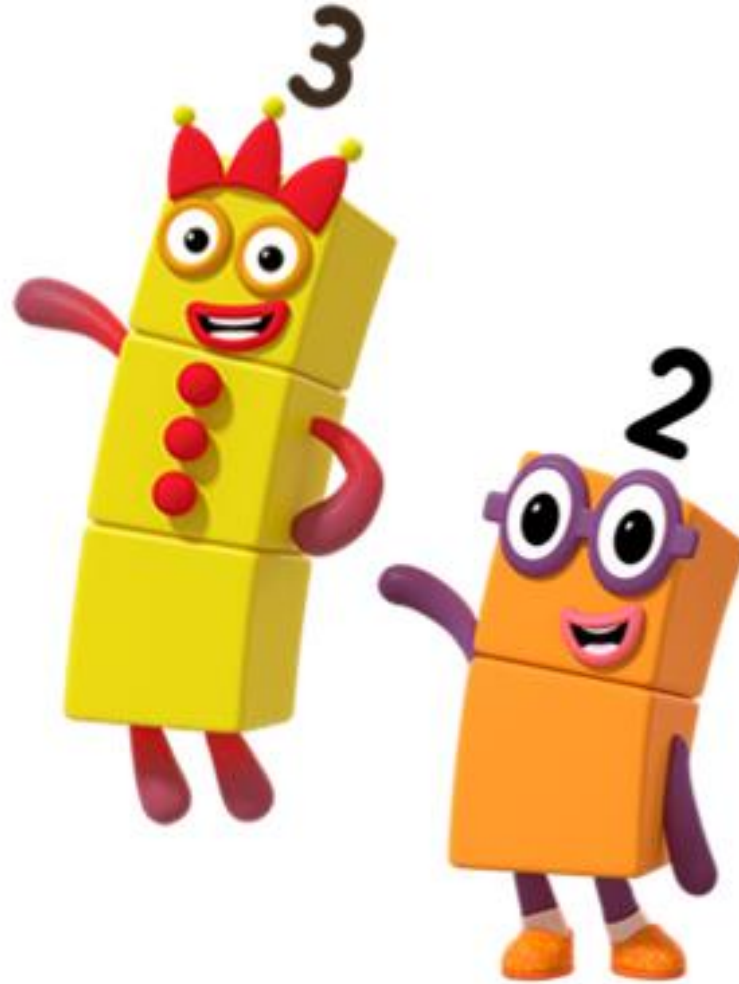
20	21	22	23	Finish
19	18	17	16	15
10	11	12	13	14
9	8	7	6	5
Start	1	2	3	4

# NUMBER FORMATION

0 1 2 3 4 5 6 7 8 9 10

The image shows a row of numbers from 0 to 10. Each number is rendered in a light gray font. Small green arrows and red dots are placed on the numbers to indicate the correct stroke order and starting points for writing. For example, the number 0 has a red dot at the top and a green arrow pointing clockwise. The number 1 has a red dot at the bottom and a green arrow pointing upwards. The number 2 has a red dot at the bottom right and a green arrow pointing left. The number 3 has a red dot at the bottom left and a green arrow pointing right. The number 4 has a red dot at the bottom right and a green arrow pointing left. The number 5 has a red dot at the bottom left and a green arrow pointing right. The number 6 has a red dot at the bottom left and a green arrow pointing right. The number 7 has a red dot at the bottom left and a green arrow pointing right. The number 8 has a red dot at the bottom left and a green arrow pointing right. The number 9 has a red dot at the bottom left and a green arrow pointing right. The number 10 has a red dot at the bottom left and a green arrow pointing right. The numbers 9 and 10 are highlighted with a white background.

# Number Blocks!



# Doodle Maths



doodlemaths

# Numbots

COMING  
SOON



THANK YOU