Trewirgie Infant School Maths Policy

Area of Maths = Addition

Definition: Addition is to join two or more numbers (addends) or quantities to get one number called the sum or total. *Jenny Eather AMDFK*	**Vocabulary:** add, plus, combine, total, sum, join, increase, addend, more than, greater than **Basic structure:** addend + addend = sum / total Sum / total = addend + addend

Year 1

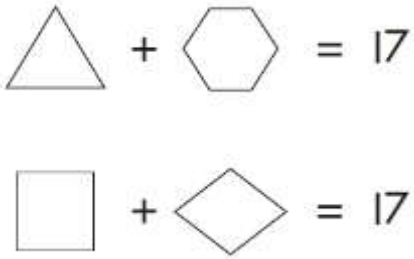
Year group	NC L.O.	Practical	Pictorial	Abstract	Problem Solving	Reasoning
		Make it! **SAY IT**	**Show it/Draw it!** **SAY IT**	**Read/Write it!** **SAY IT**		
1	Recall at least four of the six number bonds for 10 and reason about associated facts (e.g. 6 + 4 = 10 , therefore 4 + 6 = 10 and 10 – 6 = 4) A few discrete lessons and then drip through the year. *Solve one-step problems that involve addition*	Tens frames Double-sided counters Dienes Coins (1p to make 10p)	Pictorial representations of tens frams, numicon, coins, dienes	0 + ? = 10 1+ ? = 10 2 + ? = 10		

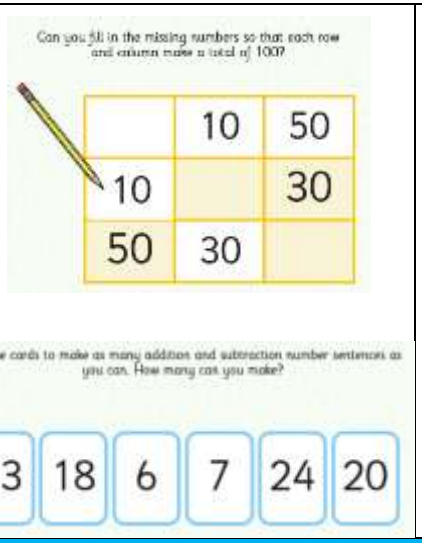
	using concrete objects and pictorial representations, and missing number problems such as 7 = ? - 9.					
1	2020 Guidance	1AS–1 Compose numbers to 10 from 2 parts, and partition numbers to 10 into parts, including recognising odd and even numbers. Year 1 document – Pages 23 – 28 **This will run through all of the Y1 addition and subtraction objectives and will also be part of morning maths.**				
1	Key Represent and use number bonds within 20. Start small e.g. Number bonds to 5. Then build up. *Solve one-step problems that involve addition using concrete objects and pictorial representations, and missing number problems such as 7 = ? - 9.*	Objects Fingers (for 10s, partners for 20s) Coins (1p and 10p) Dienes Unifix cubes Bar model with cubes / dienes Hoops and Bean bags for Part Part Whole Remember to Move the equals sign	Number line with numbers on 20 rectangle (a hundred square cut) Images Ruler/Counting stick Chn draw Add facts table Remember to Move the equals sign	Counting on (to get to 10 or 20) Abstract bar models, just numbers. Part, Part, Whole Diagrams Missing number problems Remember to Move the equals sign Fluency - Patterns Number fans	How many different ways can you make 5? How many different ways can I represent the number 7 using my fingers (different fingers on each hand)? Fingerprints Here's a set of Numicon from 1 to 10, how many Numicon pairs can you put together to make 10? (Number bond sandwich) Spot patterns in Add facts table e.g., colour all then numbers that make 9, can you see a pattern? Record them in a sequence. Can you record that with objects (Bar model)?	I think there are 8 different ways of making the number 4 using addition, am I correct? Do some of your calculations look similar? Touch on commutative law during reasoning. Miss Tonkin thinks there is only 2 ways to record this no. sentence: 8 + 2 = 10 2 + 8 = 10 True or False? Prove it! (False 10 = 2 + 8 and 10 = 8 + 2)
1	2020 guidance	1NF–1 Develop fluency in addition and subtraction facts within 10. Year 1 document - Pages 17 - 23				
1	Read, write and interpret mathematical	Objects	Number line with numbers on.	One more than…	Here are two additions, which gives you the bigger answer? (INTERPRET)	Mark my work. (Explain the errors verbally.)

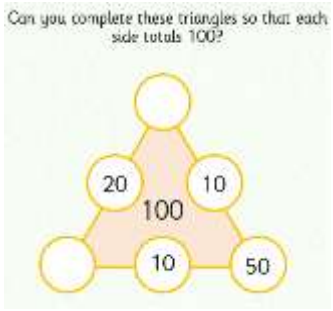
	statements involving addition (+) and equals (=) signs. *Solve one-step problems that involve addition using concrete objects and pictorial representations, and missing number problems such as 7 = ? - 9.*	Fingers Coins (1p) Dienes Unifix cubes Bar model with cubes / dienes Shapes Remember to move the equals sign	20 rectangle (a hundred square cut) Images Ruler/Counting stick Chn draw Add facts table Pictorial bar models Remember to move the equals sign	Abstract representations e.g. 3 + 5 = (READ + WRITE) Counting on Missing number problems Abstract bar models, just numbers. Remember to move the equals sign	Missing symbol calculations e.g. Use an addition and equals sign to make this correct / balance: 7 □ 2 □ 9 Calculate groups of addition and then compare and order. I have 5 apples and I add 8 more, represent this using cubes / Numicon / counters / drawing. I have a 2 pence coin and a 5 pence coin. How much money do I have altogether?	7 + 2 = 10, explain why this is wrong. I think the following is true: 9 + 7 = 2 Is this correct? Can you fix the calculation? Mr Moore says: I can swap two numbers around in an addition and it will give the same answer, is this always, sometimes or never true?
1	2020 Guidance	1AS–2 Read, write and interpret equations containing addition (+), subtraction (-) and equals (=) symbols, and relate additive expressions and equations to real-life contexts. Year 1 document - Pages 29 - 35				

1	Add one-digit and two-digit numbers to 20, including zero. Start small e.g. adding 1 to numbers. Then build up. *Solve one-step problems that involve addition using concrete objects and pictorial representations, and missing number problems such as 7 = ? - 9.*	Fingers (for 10s, partners for 20s) Coins (1p, 10p, 20p) Dienes Unifix cubes Bar model with cubes / dienes Remember to Move the equals sign	Number line with numbers on 20 rectangle (a hundred square cut) Images Ruler/Counting stick Chn draw Add facts table Remember to Move the equals sign	Counting on Abstract bar models, just numbers. Missing number problems Part Part Whole model Recording of addition Remember to Move the equals sign	Adding calculations and ordering groups of calculations. Mark my work Contextual problems e.g. I have 8 eggs, how many more do I need to fill an egg box with twelve spaces. Missing digit problems e.g. 1□ + 4 = 17 with resources to help. Use these 3 number cards to make an addition number sentence. How many ways are there?	I have some number cards: 3, 5, 2, 0, 7 Which two number cards sum to a number greater than 10? James says: If I add any of the two cards together I will get a number larger than the number on either card. Is he correct? Why? I can't make a number greater than 18 by adding two single-digit numbers. True or false? Prove it! Could I make a number greater than 18 if I had three digits to add together? Give three examples.
1	Demonstrate an understanding of the commutative law (e.g. 3 + 2 = 5, therefore 2 + 3 = 5).					
1	Solve one-step problems that involve addition and missing numbers using concrete objects and pictorial representations.					

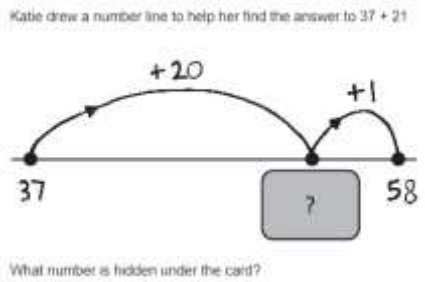
Year 2

Year group	NC L.O.	Practical	Pictorial	Abstract	Problem Solving	Reasoning
		Make it! **SAY IT**	**Show it/Draw it!** **SAY IT**	**Read/Write it!** **SAY IT**		
2	[EXS] [KEY] Recall all number bonds to and within 10 and use these to reason with and calculate bonds to and within 20, recognising other associated additive relationships (e.g. If 7+3=10, then 17+3=20; if 7-3=4, then 17-3=14; leading to if 14+3=17, then 3=14=17, 17-14=3 and 17-3=14.) ↳ GD objective: Solve problems with addition and subtraction rapidly recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up	Fingers (for 10s, partners for 20s) Coins (1p, 10p, 20p) Dienes Unifix cubes Bar model with cubes / dienes Remember to Move the equals sign	Number line with numbers on 20 rectangle (a hundred square cut) Images Ruler/Counting stick Chn draw Add facts table Remember to Move the equals sign	Counting on Abstract bar models, just numbers. Missing number problems Recording of addition Part Part Whole model Remember to Move the equals sign	Write four different numbers to make these correct: 	True or False? If you add two even numbers together it will always make an even number. True or false? Show me how you know! If you add three odd numbers together it will always make an odd number. True or false? Show me how you know!

	to 100. Recap addition facts to 20 and then start to derive and use related facts to 100. (Mainly covered in Fluency work.)					
2	2020 Guidance	2NF–1 Secure fluency in addition and subtraction facts within 10, through continued practice. Year 2 document – Pages 16 - 17				
2	Add numbers using concrete objects, pictorial representations and mentally, including a two-digit number and ones. Solve problems with addition using concrete objects and pictorial representations including those involving numbers, quantities and measures. Solve problems with addition	Fingers Coins up to £1 Dienes Unifix cubes Bar model with cubes / dienes Remember to move the equals sign	Blank Number line 100 square Abacus PV chart Metre ruler Images Ruler/Counting stick Chn draw Arrow cards Remember to move the equals sign	Counting on Abstract bar models, just numbers. Missing number problems Part Part Whole model Recording of addition no. sentences Remember to move the equals sign	Word and contextual problems Missing number in different forms, bar, objects, column Calculations that include greater than and less than symbols Money questions, cost of multiple items	I think, prove it. Odd / Even reasoning e.g. and odd plus an odd will sum to an odd; always, sometimes, never true? Adding two consecutive numbers will always give me an odd number; always, sometimes, never true?

	applying their increasing knowledge of mental and written methods. Show that addition of two numbers can be done in any order (commutative)			Column method for layout only!		
2	2020 Guidance	2AS–3 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract only ones or only tens to/from a two-digit number. Year 2 document - Pages 23 - 26				
2	Add numbers using concrete objects, pictorial representations and mentally, including a two-digit number and tens Solve problems with addition using concrete objects and pictorial representations including those involving numbers, quantities and measures. Solve problems with addition and applying their increasing knowledge of mental and	Fingers Coins up to £1 (Particularly 10ps) Dienes Unifix cubes Bar model with cubes / dienes Remember to move the equals sign	Blank Number line 100 square Abacus PV chart Metre ruler Images Ruler/Counting stick Chn draw Arrow cards Remember to move the equals sign	Counting on Abstract bar models, just numbers. Missing number problems Recording of addition no. sentences Part Part Whole model Remember to move the equals sign Column method for layout only!	Word and contextual problems  Missing number in different forms, bar, objects, column, on a hundred square. Calculations that include greater than and less than symbols Money questions, multiples of 10 more than a number e.g. an apple cost 45p, a banana costs 20p more, how much does a banana cost?	Caitlyn says: If you add 10 to a two-digit number you'll always get a two-digit total. Is Caitlyn always, sometimes or never correct? Explain your answer. Miss Tonkin thinks when you add multiples of 10 the ones always stay the same. Is she correct? How do you know?

	written methods. Show that addition of two numbers can be done in any order (commutative)				Write numbers in the shapes to make this correct.  Mr Moore says we can have 10 more minutes for golden time. We usually have 15 minutes, how long will we get today?	
2	2020 Guidance	2AS–3 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract only ones or only tens to/from a two-digit number. Year 2 document - Pages 23 - 26				
2	Add numbers using concrete objects, pictorial representations and mentally, including two two-digit numbers. Solve problems with addition using concrete objects and pictorial representations including those involving numbers, quantities and measures. Solve problems with addition and applying their increasing knowledge of mental and written methods.	Fingers Coins up to £1 Dienes Unifix cubes Bar model with cubes / dienes Remember to move the equals sign	Blank Number line 100 square Abacus PV chart Metre ruler Images Ruler/Counting stick Chn draw Arrow cards Remember to move the equals sign	Counting on Abstract bar models, just numbers. Missing number problems Part Part Whole model Recording of addition no. sentences Remember to move the equals sign Column method for layout only!	Spot the odd one out from different representations Missing digit calculations with different representations Contextual problems e.g. lengths of objects, Calculations that include greater than and less than symbols Money questions e.g. an apple cost 45p and a banana costs 28p. How much do the cost together? Here are 4 number cards 4, 6, 7, 3 Using the following boxes find the combination that will give you a. The largest total b. The smallest total	If I add two two-digit numbers together they will always sum to a two-digit number. Always/Sometimes/Never What's the same? What's different? 20 + 20 = 40 40 = 20 + 20 20 + 21 = 41 41 = 21 + 20 20 + 22 = 42 42 = 22 + 20 20 + 23 = 43 43 = 23 + 20 20 + 24 = 44 44 = 24 + 20 20 + 25 = 45 45 = 25 + 20 Look at each number sentence Put a tick (✓) if it is correct. Put a cross (X) if it is **not** correct. 8 × 2 = 8 + 8 ☐ 3 × 10 = 3 + 3 + 3 ☐ 5 × 4 = 5 + 5 + 5 + 5 ☐

	Show that addition of two numbers can be done in any order (commutative)				□□ + □□ You can only use each card once	
2	2020 Guidance	2AS–4 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract any 2 two-digit numbers. Year 2 document - Pages 27 - 29				
2	[EXS] [KEY] Add any 2 two-digit numbers using an efficient strategy, explaining their method verbally, in pictures or using apparatus (e.g. 48+35). Solve problems with addition using concrete objects and pictorial representations including those involving numbers, quantities and measures. Solve problems with addition and applying their increasing knowledge of mental and written methods. Show that addition of two numbers can	Dienes Unifix cubes Bar model with cubes / dienes Remember to move the equals sign	Number lines Hundred square	Missing number problems Part Part Whole model Recording of addition no. sentences Bar model		Use these signs: — + = You can use each sign more than once. Write signs in the boxes to make these correct. 25 ☐ 19 ☐ 6 15 ☐ 15 ☐ 0

	be done in any order (commutative)					
2	2020 Guidance	2AS–4 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract any 2 two-digit numbers. Year 2 document - Pages 27 - 29				
2	Add numbers using concrete objects, pictorial representations and mentally, including adding three one-digit numbers Solve problems with addition using concrete objects and pictorial representations including those involving numbers, quantities and measures. Solve problems with addition and applying their increasing knowledge of mental and written methods. Show that addition of two numbers can be done in any order (commutative)	Fingers Coins up to £1 Dienes Unifix cubes Bar model with cubes / dienes Remember to move the equals sign	Blank Number line 100 square Abacus PV chart Metre ruler Images Ruler/Counting stick Chn draw Arrow cards Remember to move the equals sign	Counting on Abstract bar models, just numbers. Missing number problems Recording of addition no. sentences Remember to move the equals sign Column method for layout only!	Adding value of coins (1p 2p 5p) Find out how many different ways of making 10 using 3 digits. You **may/may not** use the same digit more than once. Context questions e.g. Sarah had 2 cats, 3 dogs and 9 fish. How many pets did she have altogether? Write two numbers to make this calculation correct. □ + □ = 19 Now write three numbers to make this calculation correct. □ + □ + □ = 19	Adding 3 consecutive numbers will always give you an even number; always, sometimes, never true? Adding 3 odd numbers together will always give you an even number; always, sometimes, never true?

Area of Maths = Subtraction

Definition: Subtraction is to take one quantity away from another.

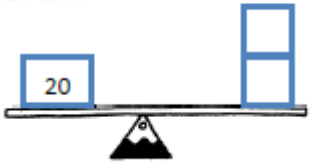
Jenny Eather AMDFK

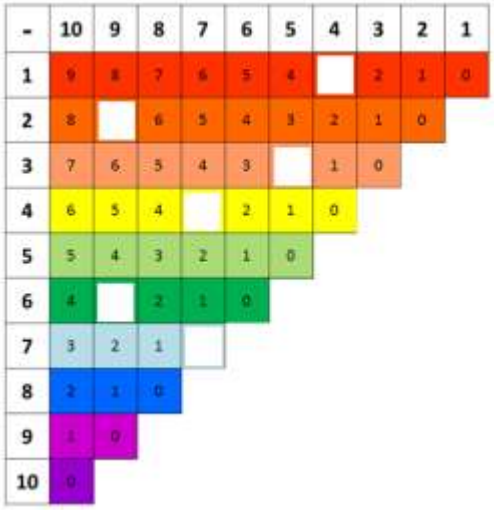
Vocabulary: subtract, take away, decrease, remove, find the difference.

Basic structure: minuend – subtrahend = difference (KS2 only)

Year 1

Year group:	NC L.O.	Practical	Pictorial	Abstract	Problem Solving	Reasoning
		Make it! **SAY IT**	**Show it/Draw it!** **SAY IT**	**Read/Write it!** **SAY IT**		
1	Read, write and interpret mathematical statements involving subtraction (-) and equals (=) signs. *Solve one-step problems that involve subtraction using concrete objects and pictorial representations, and missing number problems such as 11 = ? + 9.*	Objects Fingers Coins (1p) Dienes Unifix cubes Bar model with cubes / dienes Remember to move the equals sign	Number line with numbers on. 20 rectangle (a hundred square cut) Images Ruler/Counting stick Chn draw Add facts table Shapes	One less than… abstract representations e.g. 6 - 2 = Counting back Missing number problems Abstract bar models, just numbers. Remember to move the equals sign	Here are two subtractions, which gives you the bigger answer? Missing symbol calculations e.g. Use a subtraction and equals sign to make this correct / balance 12 □ 20 □ 8 Calculate groups of subtraction and then compare and order I have 10 rabbits and I take away 3. How many do I have left? Represent this using cubes / Numicon / counters.	Mark my work, explain the errors 11 – 2 = 10, explain why this is wrong I think the following is true: 15 – 4 = 11 Is this correct? Prove your answer using resources? If you know this, 6 + 3 = 9 What other facts do you know? Mr Moore says:

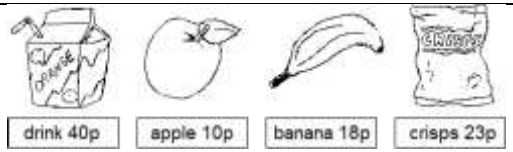
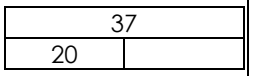
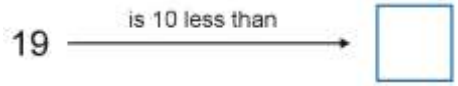
			Pictorial bar models			I can swap two numbers around in a subtraction and it will give the same answer, is this always, sometimes or never true?
1	2020 Guidance	1AS–2 Read, write and interpret equations containing addition (+), subtraction (-) and equals (=) symbols, and relate additive expressions and equations to real-life contexts. Year 1 document - Pages 29 - 35				
1	Key Represent and use number bonds and related subtraction facts within 20. *Solve one-step problems that involve subtraction using concrete objects and pictorial representations, and missing number problems such as 11 = ? + 9.*	Objects Fingers (for 10s, partners for 20s) Coins (1p and 10p) Dienes Unifix cubes Bar model with cubes / dienes Hoops and Bean bags for Part Part Whole Remember to Move the equals sign	Number line with numbers on 20 rectangle (a hundred square cut) Images Ruler/Counting stick Chn draw Add facts table Remember to Move the equals sign	Counting back (to get to 0 or 10) Abstract bar models, just numbers. Missing number problems Moving the equals sign	How many different ways can you make 10 using subtraction? Procedural variation: 20 – 10 = 10 19 – 9 = 10 18 – 8 = 10 Here's a set of Numicon. Make the numbers 14, 17 and 20. What do you need to take away from these to get to ten? Can you write these as calculations? Look at the numbers. 15 7 16 8 Use two of these numbers to make this correct. □ – □ = 7	Fill in the missing numbers. 11 + □ = 20 20 - □ = 11 Can you make two more number sentences using the same three numbers? How many ways can you complete the see-saw?  Touch on commutative law during reasoning

1	Subtract one-digit and two-digit numbers within 20, including zero. *Solve one-step problems that involve subtraction using concrete objects and pictorial representations, and missing number problems such as 11 = ? + 9.*	Objects Fingers (for 10s, partners for 20s) Coins (1p and 10p) Dienes Unifix cubes Bar model with cubes / dienes Hoops and Bean bags for Part Part Whole Remember to Move the equals sign	Number line with numbers on 20 rectangle (a hundred square cut) Images Ruler/Counting stick Chn draw Add facts table Remember to Move the equals sign	Counting on Abstract bar models, just numbers. Missing number problems Recording of subtraction Moving the equals sign	Subtracting and ordering groups of calculations. Mark my work Contextual problems e.g. I have 8 eggs, how many more do I need to fill an egg box with twelve spaces. Missing digit problems e.g. 1□ + 4 = 17 with resources to help Complete this subtraction table:  	I have some number cards: 3, 5, 2, 0, 7 Which two number cards have a difference of 4? James says: If I subtract any one of the cards from another I will get a number smaller than the number on either card. Is he correct? Try it with counters to prove your answer. If I subtract an odd number from another odd number I will always get an odd number. Is this statement true? Prove your answer using resources. .

Year 2

Year group:	NC L.O.	Practical	Pictorial	Abstract	Problem Solving	Reasoning
2		**Make it!** **SAY IT**	**Show it/Draw it!** **SAY IT**	**Read/Write it!** **SAY IT**		
2	[EXS] [KEY] Recall all number bonds to and within 10 and use these to reason with and calculate bonds to and within 20, recognising other associated additive relationships (e.g. If 7+3=10, then 17+3=20; if 7-3=4, then 17-3=14; leading to if 14+3=17, then 3=14=17, 17-14=3 and 17-3=14.) ↳ GD objective: Solve problems with addition and subtraction rapidly recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100.	Fingers (for 10s, partners for 20s) Coins (1p, 10p, 20p) Dienes Unifix cubes Bar model with cubes / dienes Remember to Move the equals sign	Number line with numbers on 20 rectangle (a hundred square cut) Images Ruler/Counting stick Chn draw Add facts table Remember to Move the equals sign	Counting on Abstract bar models, just numbers. Missing number problems Recording of addition Part Part Whole model Remember to move the equals sign	There are 20 balloons. 7 balloons fly away. How many balloons are left?  Look at the numbers in this addition. 9 + 5 = 14 Use the same numbers to make these correct. __ – __ = 9 __ – 9 = __	Spot the mistake in the calculations below: 18 – 9 = 9 16 – 9 = 8 14 – 9 = 5 Complete the calculation below: 17 - __ = 15 - 6

	Recap addition facts to 20 and then start to derive and use related facts to 100. (Mainly covered in Fluency work.)					
2	2020 Guidance	2NF–1 Secure fluency in addition and subtraction facts within 10, through continued practice. Year 2 document – Pages 16 - 17				
2	Subtract numbers using concrete objects, pictorial representations, and mentally, including a two-digit number and ones. Solve problems with subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures. Solve problems with subtraction applying their increasing knowledge of	Fingers Coins up to £1 Dienes Unifix cubes Bar model with cubes / dienes Remember to move the equals sign	Blank Number line 100 square Abacus PV chart Metre ruler Images Ruler/Counting stick Chn draw Arrow cards Remember to move the equals sign	Counting on Abstract bar models, just numbers. <table><tr><td colspan="2">25</td></tr><tr><td>7</td><td></td></tr></table> Missing number problems Recording of subtraction Column method (just for layout.) Moving the equals sign	There are 20 balloons. 7 balloons fly away. How many balloons are left? Ben puts 15 buttons on a table. He hides some of them under his hand. How many buttons is Ben hiding?  Bethan has 6p. She wants to buy a drink.	Odd / Even reasoning e.g. an odd number subtract another odd number will have an even difference; always, sometimes, never true? “The difference between two even numbers will always be odd” True or false? I am thinking of a two digit number, if I subtract ones from it, I will only need to change the ones digit. True or false? Explain your answer.

	mental and written methods. Show that subtraction of one number from another **cannot** be done in any order (non-commutative)				 How much more money does she need?	
2	2020 Guidance	2AS–3 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract only ones or only tens to/from a two-digit number. Year 2 document - Pages 23 - 26				
2	Subtract numbers using concrete objects, pictorial representations, and mentally, including a two-digit number and tens Solve problems with subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures Solve problems with subtraction applying their increasing knowledge of mental and written methods.	Fingers Remember to move the equals sign	Tens Frames Remember to move the equals sign	Counting on Abstract bar models, just numbers.  Missing number problems Recording of subtraction Column method (just for layout.) Moving the equals sign	Word and contextual problems Missing number in different forms, bar, objects, column, on a hundred square.  Calculations that include greater than and less than symbols Money questions, multiples of 10 more than a number e.g. an apple cost 45p, a banana costs 20p less, how much does a banana cost?	Harry says "I have 45 pence in my pocket. If I give out 10p to each of my friends eventually my pocket will be empty" Do you agree with Harry? Explain your answer.

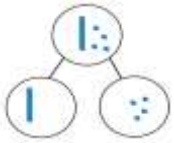
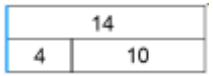
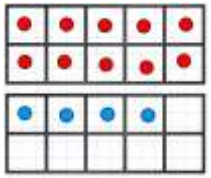
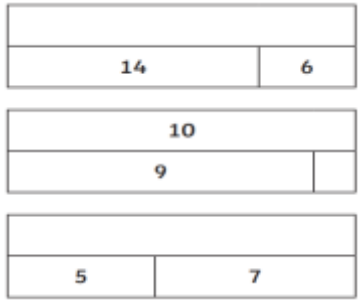
	Show that subtraction of one number from another **cannot** be done in any order (non-commutative)					
2	2020 Guidance	2AS–3 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract only ones or only tens to/from a two-digit number. Year 2 document - Pages 23 - 26				
2	[Key] Subtract numbers using concrete objects, pictorial representations, and mentally, including two two-digit numbers. Solve problems with subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures Solve problems with subtraction applying their increasing knowledge of mental and written methods. Show that subtraction of one number from another **cannot** be done in any order	Fingers Coins up to £1 Dienes Tens Frames Remember to move the equals sign	Tens Frames Remember to move the equals sign	Counting on Abstract bar models, just numbers. 44 / 23 Missing number problems	The strawberry weighs **24** grams.  The strawberry and tomato together weigh **69** grams.  What does the tomato weigh?	If I subtract one two-digit number from another the difference will always be a two-digit number. Always/Sometimes/Never Ben works out the answer to this 57 – 16 = Ben gets the answer 11. Ben thinks he is incorrect. Can you check his answer and explain where he went wrong?

	(non-commutative)					
2	2020 Guidance	2AS–4 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract any 2 two-digit numbers. Year 2 document - Pages 27 - 29				
2	[EXS] [KEY] Subtract any 2 two-digit numbers using an efficient strategy, explaining their method verbally, in pictures or using apparatus (e.g. 72-17). Solve problems with addition using concrete objects and pictorial representations including those involving numbers, quantities and measures. Solve problems with addition and applying their increasing knowledge of mental and written methods. Show that addition of two numbers can be done in any order (commutative)	Dienes Unifix cubes Tens Frames Bar Model Part Whole Model Remember to move the equals sign	Number lines Hundred square	Missing number problems Part Part Whole model Recording of addition no. sentences Bar model	Ben has £19 A game costs £25 How much more money does Ben need to buy the game?  There are 100g of chocolate chips in the bag. Sita uses 25g. Ben uses 35g. How many grams of chocolate chips are left in the bag? 	Use these signs: − + = You can use each sign more than once. Write signs in the boxes to make these correct. 25 ☐ 19 ☐ 6 15 ☐ 15 ☐ 0
2	2020 Guidance	2AS–4 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract any 2 two-digit numbers. Year 2 document - Pages 27 - 29				

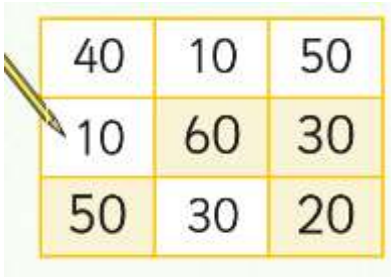
2	Subtract numbers using concrete objects, pictorial representations, and mentally, including subtracting three one-digit numbers Solve problems with subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures Solve problems with subtraction applying their increasing knowledge of mental and written methods. Show that subtraction of one number from another **cannot** be done in any order (non-commutative)	Fingers Coins up to £1 Dienes Unifix cubes Bar model with cubes / dienes Remember to move the equals sign	Blank Number line 100 square Abacus PV chart Metre ruler Images Ruler/Counting stick Chn draw Arrow cards Remember to move the equals sign	Counting on Abstract bar models, just numbers. Missing number problems Recording of subtraction Column method (just for layout.) Moving the equals sign	9 children are on a bus. 3 children get off the bus. Then 4 more children get off the bus. How many children are left on the bus?	I have 10p. I then give away 5p, then 2p, then 1p. How much money have I got left? If I give the away 5p, 2p and 1p in a different order will I be left with a different amount? Why/Why not?

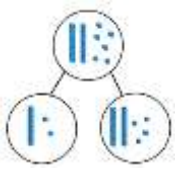
Area of Maths = Addition and Subtraction combined

Year 1

Year group:	NC L.O.	Practical	Pictorial	Abstract	Problem Solving	Reasoning
		Make it! **SAY IT**	**Show it/Draw it!** **SAY IT**	**Read/Write it!** **SAY IT**		
1	Demonstrate an understanding of inverse relationships involving addition and subtraction. (e.g. if 3 + 2 = 5, then 5 - 2 = 3). (Addition and Subtraction)	Coins Dienes Tens frames Move the equals sign	Drawing more counters / crossing out counters. Part-Whole Models  Bar Models  Filling tens frames. 	 		

Year 2

Year group:	NC L.O.	Practical	Pictorial	Abstract	Problem Solving	Reasoning
		Make it! **SAY IT**	**Show it/Draw it!** **SAY IT**	**Read/Write it!** **SAY IT**		
2	Solve problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures.	Coins Dienes Move the equals sign Unifix Numicon	Blank Number line 100 square Abacus PV chart Arrow Cards Bar Model Metre ruler Images Ruler/Counting stick Chn draw Move the equals sign	Missing Number problems. Pattern finding E.g. 2 + 6 = 8 and 20 + 60 = 80 Move the equals sign Greater than less than signs	Make 100 and/or tricky triangles.  How many ways can you split a bar model to make 20: (Example below is with a different number.)  There are 76 cars in the car park. 18 more cars go into the car park. Then 35 cars go out. How many cars are in the car park now?	Kim says, If I know that 3 + 7 = 10. I know 30 + 70 = 100. True or False. Prove it!
2	[Key] Recognise and use the inverse relationship between addition and subtraction and	Coins Dienes	Blank Number line Bar Model	Missing number calculations. Fact families	Mark my Work (Use the inverse to check.) I think of a number…. What was my number to start?	Charlie says: To work out a missing number you just do the inverse operation. E.g.

	use this to check calculations and solve missing number problems.	Move the equals sign 46 = 12 + 24 46 – 24 = 12 	100 square Abacus PV chart Arrow Cards Metre ruler Images Ruler/Counting stick Chn draw Move the equals sign	Move the equals sign	Addition and Subtraction pyramids	For 23 + ? = 30 you would do 30 x 23 = ? True or False – How do you know?