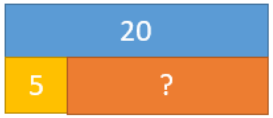
Mental Maths Policy

A good recall of maths facts is vital for children to be able to progress well across the mathematics curriculum; however not all children find facts easy so we need to ensure we are consistently teaching the same strategies to support these children and ensure they can quickly and effectively

General resources/strategies that must be used throughout the school

- Weekly Mental Maths Tests – these are to be used throughout the school to ensure basic knowledge is secure and should start when the foundation teacher believes a child has a good knowledge of numbers to 10 and understanding of addition and subtraction. These tests are then to continue throughout the whole school and movement between classes should be fluid with a child beginning where they finished in the previous year group.
- My Maths and Timestable Rockstar – these are websites that the school subscribe to and need to be encouraged and managed by teachers to ensure the full benefit had by all.
- Objectives that are not directly taught again further up the school need to be kept 'on the boil' using the same method or strategy outlined below, if it not please speak to others to ensure a consistent approach.
- Bar modelling to represent the four operations including fraction work, this needs to be taught from year 1 in concrete and pictorial form in order for children to confidently and independently as a strategy for solving problems.

	Question types	Model
Recall of number bonds to ten and addition and subtractions within 10.	• 0 + 3 = • 4 + 1 = • 6 + 5 = • 9 + 9 = • 9 + 6 = • 7 + 3 = • 10 + 8 =	Refer to the additional sheet about how these should be taught using one of the following strateigies: • Adding 1 and 2 • Bonds to 10 • Adding 10 • Bridging/compensating • Doubles • Adding 0 • Near doubles. Although this knowledge is meant to be secure by the end of year 1 and 2 these strategies should still be used in KS2
Recall of number bonds to twenty and addition and subtractions within 20	• 14 + ___ = 20 • 20 – ___ = 20 • 9 + 8 = ___ •	Bar models, numberlines and part/whole models. 

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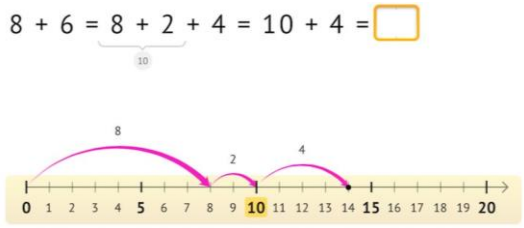
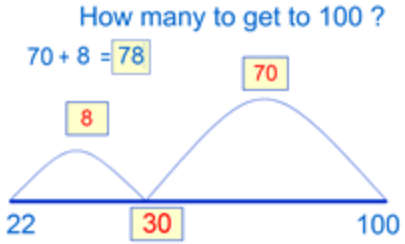
		Or subisizing 
Recall of numberbonds to 100	___ + 92 = 100 100 – 73 = ____ 47+ _____ = 100	Initially relate numberbonds to 10 to number bonds to 100. After counting on a numberline from the smallest number to the next ten and then in groups of a tens to hundred. 
Adding or subtracting one digit number, multiple of ten or hundred etc.	83 + 9 = 55 – 8 =	This is where knowledge of number bonds and how numbers are made in various ways is vital. e.g. 83 + 9 = 83 + 7 + 2 = 92 This enables a child to find the number to ten and then add the addition on. Similar when subtracting a single digit number. e.g. 55 – 8 = 55 – 5 – 3 = 47
Doubling	37 + 37 = 42 + 42 =	Doubling by partitioning. 37 + 37 = (30+30) + (7+7)= 60 + 14 =
Halving	Half of 90 50% of 72	Halving by halving the ten; e.g. 82 ÷ 2 = (80 ÷ 2) + (2÷2) = 40 + 1 = 41

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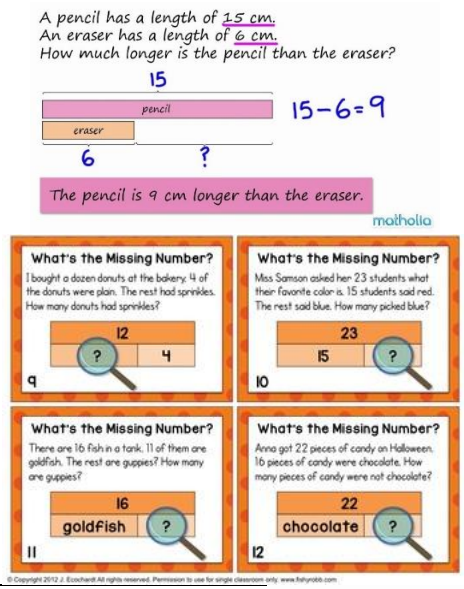
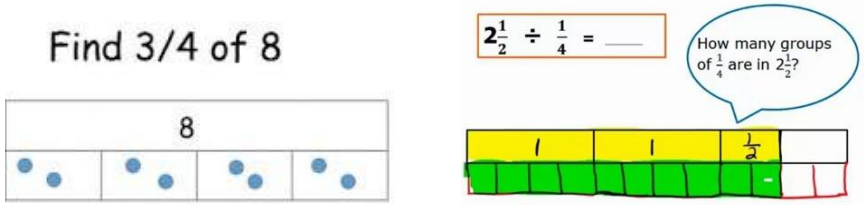
	58 ÷ 2 =	if there is an odd number of tens split the tens into and even and an odd, e.g. 90 ÷ 2 = (80÷2) + (10÷2) = 40 + 5 = 45
Solving number and word problems	Missing numbers ___ + 38 = 102 93 ÷ ___ = 3 A pencil has a length of 15cm, a rubber has a length of 6cm. How much longer is the pencil than the rubber?	Bar modelling 
Solving fraction problems	¾ of 8 =	

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Reviewed Spring 2022
To be reviewed Summer 2023