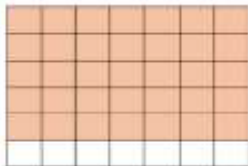
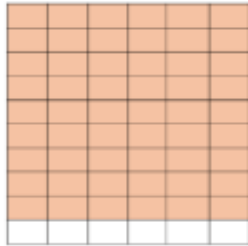

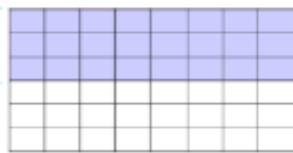


Mental maths parental guide – Year Two

Mental maths objectives - Year Two					
Learn the 2x table	Learn the 5x table	Learn the 10x table	Double numbers up to 40	Halve numbers up to 40	Mentally, add two or three single digit numbers

1) 2) 3) Learn the 2x, 5x, 10x table

- Accurately recall x2, x5, x10 table out of order.

<p>1. Adding or subtracting a group:</p> <div style="text-align: center;">  </div> <p>$5 \times 7 = 35$ $35 + 7 = 42$</p> <p style="text-align: center;">I don't know 6×7, but I can use 5×7 "I don't know 6×7, but I can use 5×7" *Use nearby 2, 5 and 10 facts</p> <div style="text-align: center;">  </div> <p>$10 \times 6 = 60$ $60 - 6 = 54$</p> <p>"I don't know 9×6 but I can use 10×6 and take away a six"</p>	<p>2. Halving and doubling</p> <div style="text-align: center;">  </div> <p>$8 \times 8 = 64$ Half of $64 = 32$</p> <p>"I don't know 4×8, but I can use 8×8 and halve it"</p> <div style="text-align: center;">  </div> <p>$3 \times 8 = 24$ Double $24 = 48$</p> <p>"I don't know 6×8, but I can use 3×8 and double it"</p>
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It is important to equip children with strategies which help regenerate a multiplication fact. Therefore, we teach children to apply one of these strategies to correctly recall a multiplication fact. This involves: adding or subtracting a group, and halving or doubling.

We believe in You!

2) Double numbers up to 40

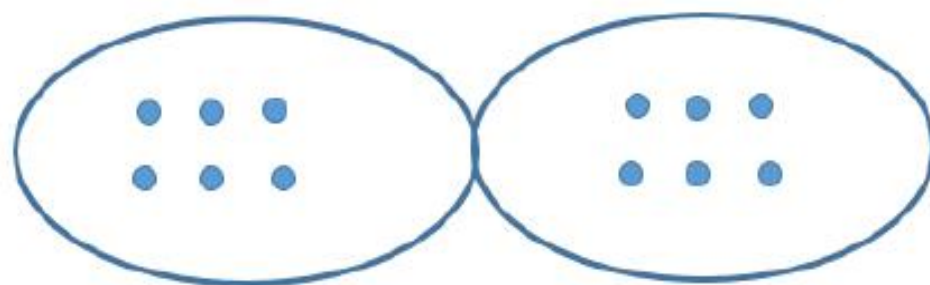
- Accurately double numbers up to 40, including odd and even numbers



Tens	Ones
1 	2 
1 	2 
=2 	4 

3) Halve numbers up to 40

- Accurately halve even numbers to 40



Make the **whole** (any even number within 40) using objects, such as pasta, spoons or anything else you might have handy, and halve it between two hoops.

Children should move swiftly between using **concrete** and **pictorial** representations to gain an understanding of doubling. They should begin by using the tens and ones value chart to record their equation and find the whole. Using a mirror to demonstrate the process of doubling is also useful. As children continue to practise, they will become more confident to develop a mental strategy to double a given number without using concrete manipulatives or pictorial jottings.

4) Mentally, add two or three single digit numbers by 'making ten'

-To achieve this objective, children need to be confident in applying their number bonds to ten to add three-single digit numbers. Below you will find examples of Year Twi SATS questions and a run-down of how these should be approached using the 'make ten' strategy:

17 $3 + \square + 6 = 16$

"6 and 4 equals to 10, 3 is one less than 4 so I need to 'hold' 1 in my head to give me 10 and add the remaining 6 to get to 16. So the answer must be 7"

1 mark

6 $20 + 30 + 50 = \square$

"I know 2+3 equals to 5. 5 add 5 is 10, therefore 20 + 30 equals to 50. 50 +50 = 100"

1 mark

The questions on the left are taken from KS1 SATS past paper (arithmetic, paper 1: 2017). Both of these questions rely on children applying their knowledge of number bonds to solve and answer these questions.

5) Subtract any pair of 2-digit numbers by counting back in tens and ones

-To achieve this objective, children need to be confident to determine which digit is going to be affected by their question, for example: $45-30= \dots$ - children need to look at the tens digit and subtract three groups of ten.]

4 $18 - 8 = \square$

"18 consists of one group of ten and eight ones, so I need to remove the eight ones to end up with ten (one group of ten)"

1 mark

20 $59 - 15 = \square$

"This equation relies on subtracting tens and ones; I need to partition my subtrahend into tens and ones, so I will take away a group of ten from my whole ($59-10=49$) and five ones ($49-5=44$) to get the answer 44"

1 mark

The questions on the left are taken from KS1 SATS past paper (arithmetic, paper 1: 2018). Both of these questions rely on children applying their knowledge of subtracting by counting back in tens and ones to solve these question.