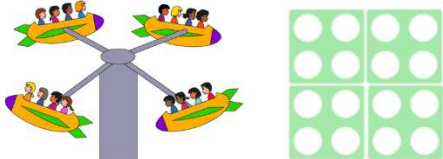
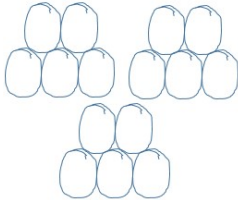
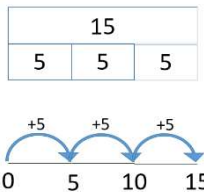
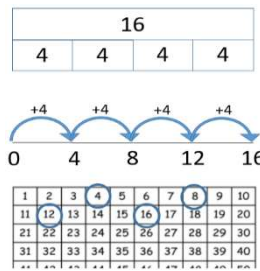
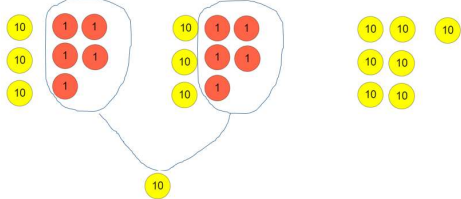
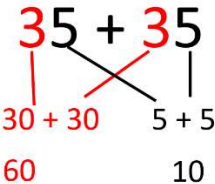


Primary Calculation Policy

Year 2 Multiplication

	Mental Strategies	Concrete	Pictorial	Abstract	Vocabulary	Models, Images and resources
Year 2	Practise to become fluent in recall and use of multiplication facts for the 2, 5 and 10 multiplication tables, (connect the 10x table to place value, and the 5x table to the divisions on the clock face) Double any multiple of 5 up to 50, eg. double 35 Find the total number of objects when they are organised into groups of 2, 5 or 10 Recognise odd and even numbers	<u>Fluent in the recall and calculations of 2, 5 and 10 multiplication tables</u> See Year 1 Here is one example  3 equal groups of 5 equals 15 eggs <u>Using arrays</u> Please see the guidance for Year 1 and using arrays below <u>Recognising Multiplication with other factors</u>  four groups of four children Numicon can be used too.	<u>Fluent in the recall and calculations of 2, 5 and 10 multiplication tables</u> See Year 1 Here is one example – hand drawn  <u>Using arrays</u> Please see the guidance for Year 1 and using arrays below <u>Recognising Multiplication with other factors</u>  four groups of four children	<u>Fluent in the recall and calculations of 2, 5 and 10 multiplication tables</u> See Year 1  Introduce the multiplication symbol $5 + 5 + 5 = 5 \times 3 = 15$ <u>Using arrays</u> Please see the guidance for Year 1 and using arrays below <u>Recognising Multiplication with other factors</u>  $4 + 4 + 4 + 4 = 4 \times 4$	Lots of Groups of Times Repeated addition Double Sets Groups, Pairs Array symbol x times as big ...as wide ...as long	100 square Number lines Number tracks Bead strings (for children) Bead bar Tens Frame Numicon Place Value Disks Cuisenaire Base hundreds tens and ones Arrow Cards

Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot. Introduce the symbol for multiplication	Doubling See Y1. Children need to double multiples of 10 to 100, then double multiples of 5 to 100 E.g. 35 doubled – use counters – 	Doubling See Y1. Children need to double multiples of 10 to 100, then double multiples of 5 to 100 E.g. 35 doubled Can be drawn 	Doubling See Y1. Children need to double multiples of 10 to 100, then double multiples of 5 to 100 E.g. 35 doubled 		
	Calculate mathematical statements and write them using the multiplication (×) and equals (=) signs Solve one-step x problems using materials, arrays, repeated addition and x facts, include problems in contexts. Understand multiplication as repeated addition Begin recording subtraction in columns to support understanding of place value and prepare for efficient written methods				
Useful IWB links for manipulatives	https://www.coolmath4kids.com/manipulatives/base-ten-blocks https://mathsbot.com/manipulatives/placeValueCounters https://mathsbot.com/manipulatives/bar https://classroomsecrets.co.uk/free-year-1-part-whole-model-iwb-addition-and-subtraction-activity/ https://www.nctm.org/Classroom-Resources/Illuminations/Interactives/Ten-Frame/ http://www.ictgames.com/mobilePage/tenFrame/index.html				