John Randall Primary School and Nursery
Division Key Stage 1 Calculation Policy

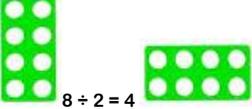|	
EYFS **Appendix 2:** Pupil target grids	**Reception: ELG 2018** Numbers to 20: place them in order and say which number is one more or one less than a given number. Using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer. They solve problems, including doubling, **halving and sharing.** **Exceeding:** Estimation and checking quantities by counting up to 20. **Combining groups of 2, 5 or 10 or sharing into equal groups.**

Year	1	2
Layers of vocabulary **Appendix 1a** Beck's Tiers of Vocabulary **Appendix 1b:** Vocabulary book	**Basic to subject specific (Beck's Tiers):** count in ones, twos… tens… share, groups of, equal groups, dividend, divisor, odd, even **Instructional vocabulary:** count out, share out, left, left over **Language of tests and questions** match, tick, draw, complete, write, circle, share, jumps, count on, use a ruler	**Basic to subject specific (Beck's Tiers):** share, share equally, one each, two each, three each… group in pairs, threes… tens equal groups of ÷, divide, divided by, divided into left, left over, dividend, divisor **Instructional vocabulary:** tell me, describe, name, pick out, discuss, talk about, explain, explain your method, explain how you got your answer, give an example of… show how you… **Language of tests and questions** tick, match, count, tick two, circle, write, draw, complete, use these numbers, shade, write, make, choose, circle the three, complete, write, tick all, complete the number sentence, put a digit, How many?
NC 2014	Solve one-step problems involving multiplication and division, by	Calculate mathematical statements for multiplication and division within the

	calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.		multiplication tables and write them using the multiplication (x), division (÷) and equals (=) signs.	

Developing Conceptual/ Procedural Understanding	**Grouping/Sharing models** Using practical contexts and cross-curricular links (PE) such as socks and shoes; animals in the ark to get into groups. Sharing models such as sharing pieces of fruit. **Sharing** into equal groups 6 frogs shared equally between 2 lily pads gives 3 frogs on each lily pad. **or** **Grouping** in equal groups 6 frogs grouped in 2s need 3 lily pads to sit on. **GROUPING ITP** How many twos?	**Arrays – dividend - the answer from the multiplication calculation** (rectangular arrangements to show equal groups) **Arrays – dividend - the answer from the multiplication calculation** How many groups of the divisor are in the dividend? **E.g** How many groups of 5 are there in 10? **5 x 2 = 10** **10 ÷ 5 = 2** **Decision making** How many different ways can you arrange 12 buttons in equal groups?	**Grouping/Sharing models** Introduce the ÷ symbol 15 frogs shared equally between three lily pads 15 ÷ 3 = 5 or 15 frogs grouped in 5s need 3 lily pads to sit on 15 ÷ 5 = 3 15 ÷ 3 = 5 groups of 3 (grouping) 15 ÷ 3 = 5 5 hops in 15. How big is each hop? 20 ÷ 2 = 10 There are 7 cakes and 2 children. How many cakes will they get each? (Leftovers/remainders introduced) 7 ÷ 2 = 3r1	**Arrays** 8 ÷ 2 = 4 and 8 ÷ 4 = 2 **Repeated addition (to reach a given target)** There are 20 sweets in a bag. How many children can have 5 each? +5 +5 +5 +5 O 5 10 15 20 **Repeated subtraction (from a given quantity)** -5 -5 -5 -5 0 5 10 15 20 **Links to tables** Use language of division linked to tables using counting stick **Representing problems** Jane has 30 cakes. She wants to share them equally between 5 boxes. How many cakes should go in each box? 30 ? ? ? ? ? 30 ÷ 5 = 6 Number of cakes in each box = 6
Known facts	Count in multiples of twos, fives and tens.		Recall and use x and ÷ facts for the 2, 5 and 10 x tables, including recognising odd and even numbers.	
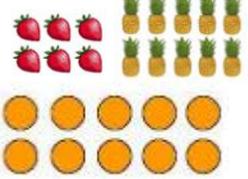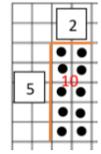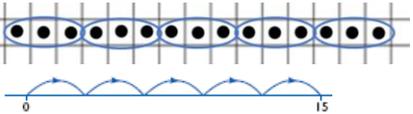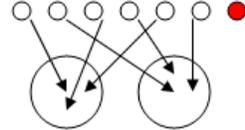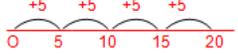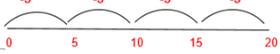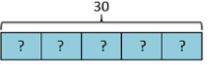
Essential Knowledge	Count back in 2s	Halves up to 10	Division facts (2 x table)	Halves up to 20
	Count back in 10s	Halve multiples of 10	Division facts (10 x table)	Review division facts (2 x, 5 x, 10 x tables)
	Count back in 5s	How many 2s? 5s? 10s?	Division facts (5 x table)	Count back in 3s