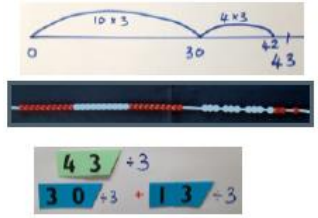
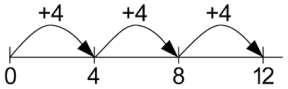
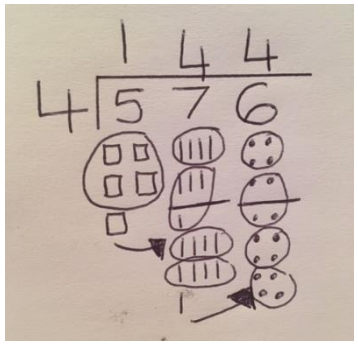
Hatch Warren Junior School Calculation Policy - Division

End of year expectations	Year 3 Write and calculate mathematical statements for ÷ using the x tables they know progressing to formal written methods.	Year 4	Year 5 Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context	Year 6 Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context
Developing written methods (conceptual understanding) Grouping using partitioning 43 ÷ 3 If I know 10 x 3 …  	1. Understanding division as grouping. 15 ÷ 3 = 5 groups of 3 (grouping)  2. Understanding division as repeated addition: 12 ÷ 4 = 3  3. Division using partitioning: 42 ÷ 3 = 30 ÷ 3 = 10 12 ÷ 3 = 4 14 30 | 12 4. Children need to recognise when to use multiples of 10 to solve a problem:	1. Method moving towards standard written method using dienes images to support:  2. Begin to move towards formal short division method with carrying when ready: 1 4 7 | 9 8 Answer: 14	1. Use Y4 method if children need support with understanding. 2. Use formal short division method, interpreting remainders in context. 432 ÷ 5 becomes 8 6 r 2 5 | 4 3 2 Answer: 86 remainder 2 Remainders should be recorded as a fraction: 4 5 r 1 1 1 | 4 9 6 Answer: $45\frac{1}{11}$ 3. Introduce decimal remainders: 142 ÷ 4 = 35·5 035·5 4 | 142·20 4. Move higher ability on to Y6 long division method in summer term if ready.	1. Revise Y5 short division method with fraction and decimal remainders. 2. Teach formal long division method for up to four digits by two digits. Start with no remainders. Then move to fraction remainders before decimal remainders. Children should be encouraged to write out the times tables as a 'What I know' box before they start: 432 ÷ 15 becomes 28·8 15 | 432·0 30 132 120 120 0 15 30 45 60 75 90 105 120 Answer: 28·8

	72 ÷ 3 = What I know: 10 x 3 = 30 60 ÷ 3 = 20 20 x 3 = 60 12 ÷ 3 = 4 30 x 3 = 90 24			