

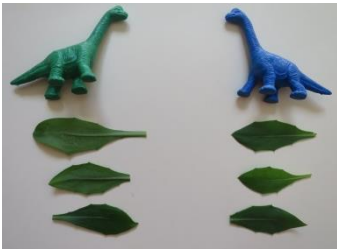

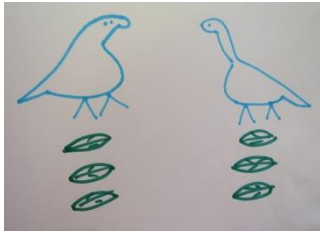
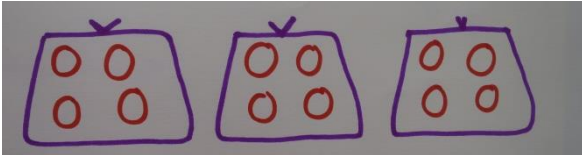
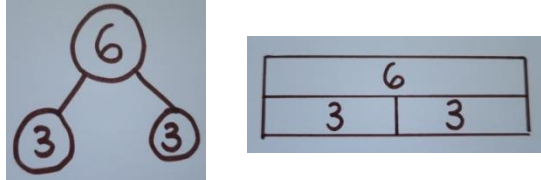
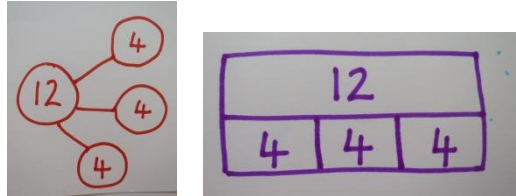

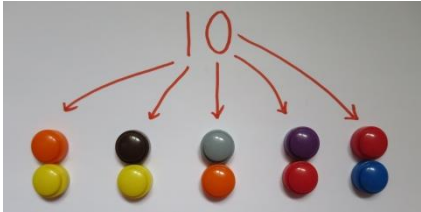


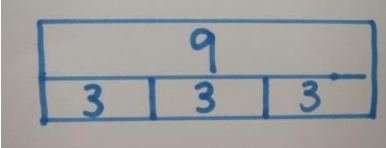
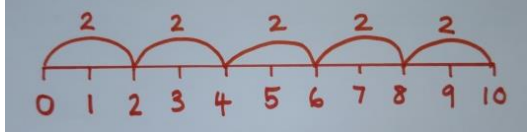


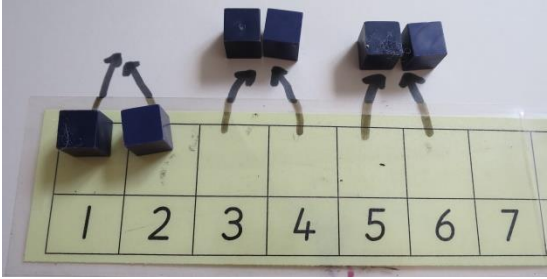

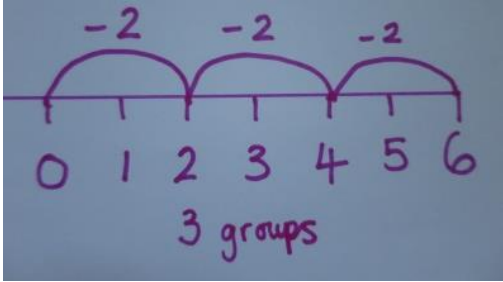


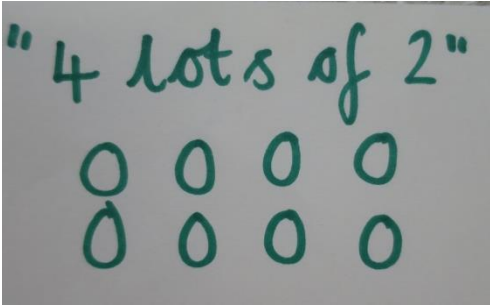
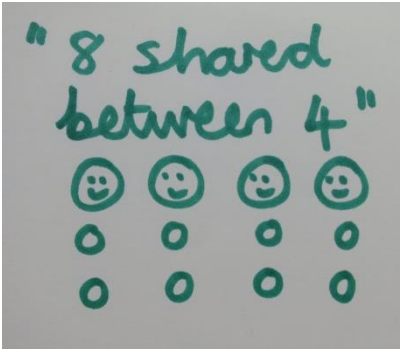
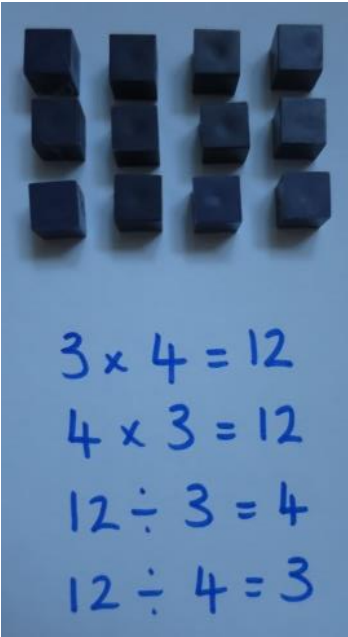
The Oaks CE Learning Federation
 Mathematics Calculation Policy
Division Progression - using a CPA Approach


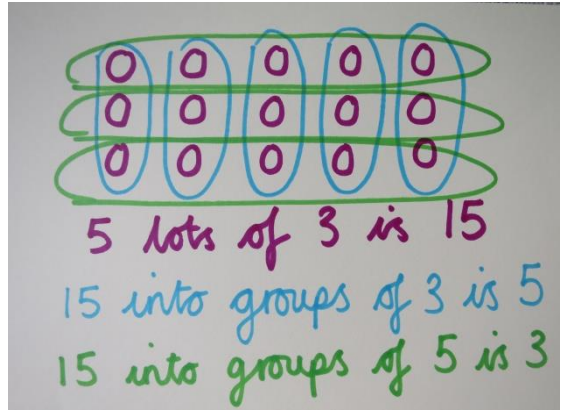


EYFS Framework	<p>ELG Numerical Patterns: Children at the expected level of development will:</p> <ul style="list-style-type: none"> Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.
National Curriculum Year 1	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher
National Curriculum Year 2	<p>Pupils should be taught to:</p> <ul style="list-style-type: none"> recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals ($=$) signs show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in context.

<p>Key Language: share, group, divide, divided by, half, repeated subtraction</p>
<p>Key Apparatus: Numicon, interlocking cubes, objects, coins, number tracks, number lines</p>

	Concrete	Pictorial <i>(Most applicable to EYFS / Y1)</i>	Abstract
<p>Step 1- Sharing objects into groups</p> <p>“Share 6 leaves between 2 dinosaurs”</p> <p>“Share 12 coins between 3 purses.”</p>	<p>We encourage the use of objects from the natural world and common everyday objects as well as school resources.</p>  	<p>Children draw pictures and/ or use symbols to represent objects.</p>  	<p>Children use their concrete and pictorial representations to help them transfer their thinking into the abstract</p>  
<p>Step 2- Division as grouping</p> <p>“Put 9 shells into groups of 3.”</p> <p>“Put 10 counters into groups of 2”</p>	 	 	 

	Concrete	Pictorial <i>(Most applicable to Y1/Y2)</i>	Abstract
<p>Step 3- Repeated subtraction</p> <p>$6 \div 2 = 3$</p> <p>"6 take away 2, take away 2, take away 2"</p>			
	<i>(Most applicable to Y2)</i>		
<p>Step 4- Division with arrays- linking to multiplication</p>	 	 	

	Concrete	Pictorial	Abstract
<p>Step 5- Recall division facts- linking to multiplication (2, 5 and 10)</p>	 <p>"3 lots of 5 is 15" "15 shared between 3 is 5"</p>	 <p>5 lots of 3 is 15 15 into groups of 3 is 5 15 into groups of 5 is 3</p>	<p>Mental Recall</p> <p>"If I know... I also know..."</p> <p>$3 \times 5 = 15$ $5 \times 3 = 15$ $15 \div 3 = 5$ $15 \div 5 = 3$</p>