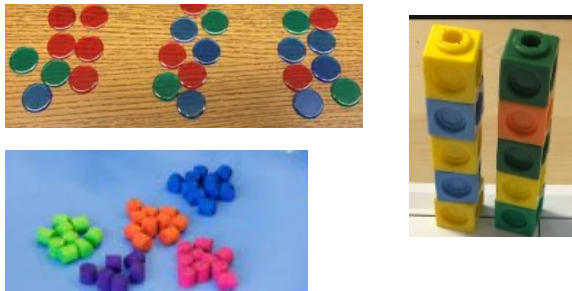
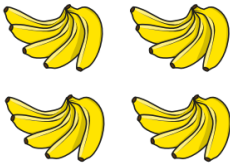
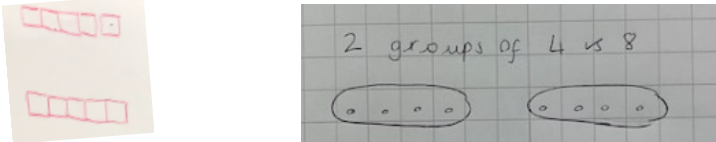
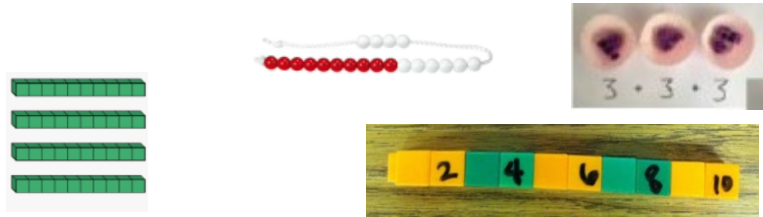
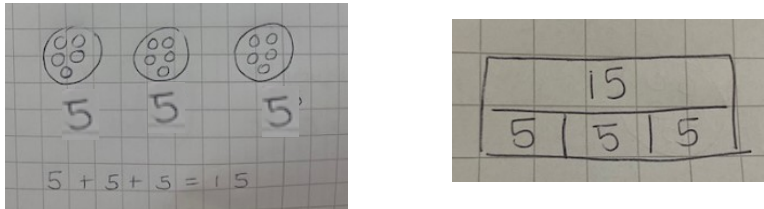
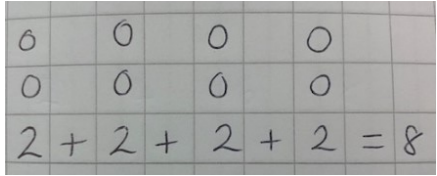
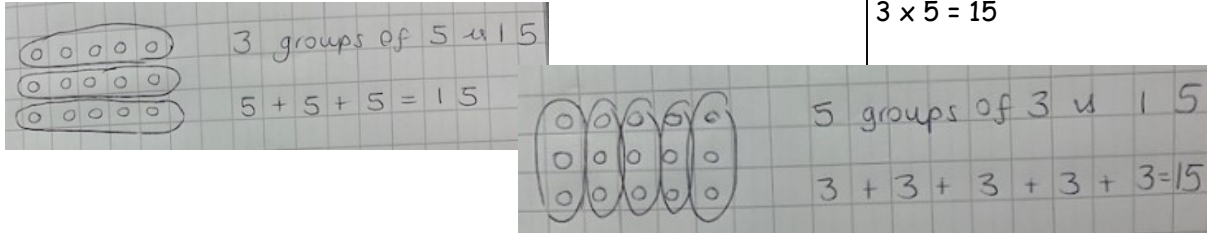
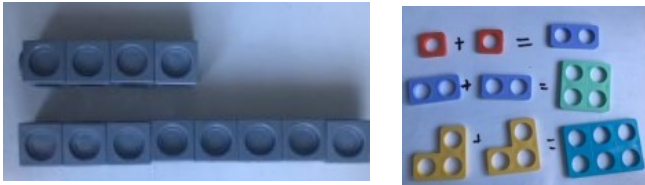
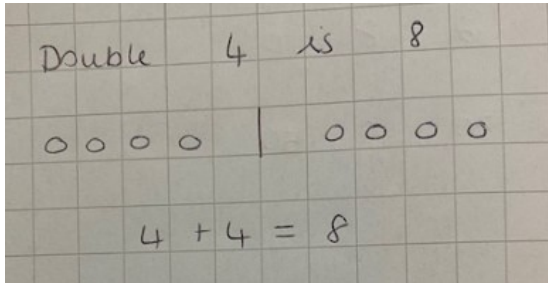


The Discovery School Calculation Policy - Year 1 Multiplication



National Curriculum Objectives
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.

Objective	Concrete	Pictorial	Abstract
Grouping objects into equal groups	Children should start by physically placing objects into equal groups. Objects could be mathematical (e.g. counters/Numicon) or others such as leaves/rock etc. 	Children could have pictures presented to them to interpret. 4 groups of 5.  3 groups of 4  They could also represent the groups themselves in their books. 	5 equal groups of 3 3 equal groups of 5 4 equal groups of 6 2 equal groups of 10
Repeated addition	Use concrete objects to count in 2s, 5s and 10s (children would not be expected to count in groups of other quantities at this stage). Children should be encourage to write the quantities underneath. 	Use pictorial representations alongside number lines or bar models to solve problems. <i>There are 5 apples in each bag. How many altogether?</i>  Allow children time to explore this alongside the bar model.	<i>Recognising that counting in 5s will help.</i> $5 + 5 + 5 + 5 + 5 =$  
Using an array	Allow children time to create arrays using practical objects particularly peg boards. Also look at real life arrays. 	Encourage children to draw their own arrays alongside the abstract. 	$5 \times 3 = 15$ $3 \times 5 = 15$
Doubling	Use practical resources including cubes and Numicon to demonstrate doubling. Children could attempt to create calculations. 	Children could draw this alongside the abstract calculation. 	$4 + 4 = 8$ Double 4 is 8