


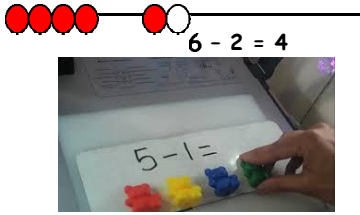


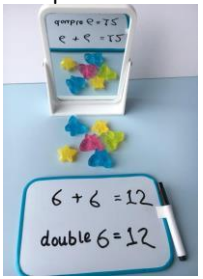
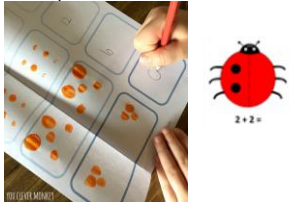
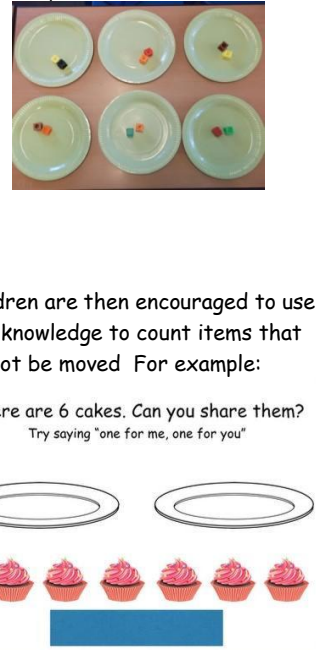
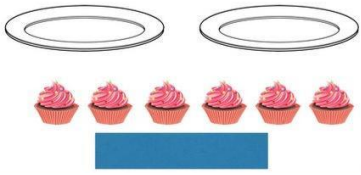




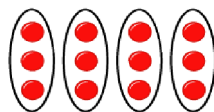
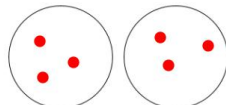
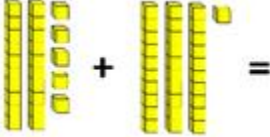

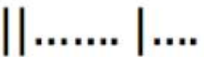



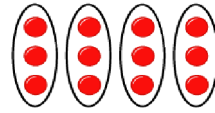
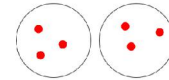



Suffield Park Infant and Nursery School Calculation Policy updated May 2024

This policy shows the methods used to teach addition, subtraction, multiplication and division at Suffield Park. It follows the concrete, pictorial, abstract (CPA) approach adopted by our school. It has been written to ensure consistency and progression throughout the school and reflects a whole school agreement.

	Addition	Subtraction	Multiplication	Division
Rec	<p>Children are encouraged to explore addition using practical resources which can be manipulated e.g. counters, multilink, numicon, counting bears, bead string. Children are supported by using sentence stems e.g. First there were... Then I added... Now there are There are ___ altogether/There are ___ left. Here are some examples:</p>  <p>Children are then encouraged to solve addition problems by counting items that cannot be moved. For example:</p>  <p>Some children may begin to use pictures to show addition e.g. drawing dots on a ladybird, drawing pictures to solve problems etc. Here are some examples:</p> 	<p>Children are encouraged to explore subtraction using practical resources which can be manipulated. These could be counters, multilink, numicon counting bears, bead string etc. Children are supported by using sentence stem e.g. First there were... Then I took ___ away... Now there are ___ left. Here are some examples:</p>  <p>Children are then encouraged to solve subtraction problems by counting items that cannot be moved. For example:</p>  <p>Some children may use to use pictures to show subtraction. For example:</p> 	<p>Children are encouraged to use practical resources to count repeated groups of the same size. They will solve problems including doubling. For example</p>  <p>Children are then encouraged to use this knowledge to count items that cannot be moved. For example:</p> 	<p>Children will use practical resources to solve problems, including halving and sharing. They will share objects into equal groups and count how many in each group. We explore equal as fair and unequal as unfair sharing. We also explore sharing odd and even numbers. Children use sentence stems such as: It is fair/not fair because.. For example:</p>  <p>Children are then encouraged to use this knowledge to count items that cannot be moved For example:</p> <p>There are 6 cakes. Can you share them? Try saying "one for me, one for you"</p> 

Y1	<p>Children are encouraged to use practical resources which can be manipulated to explore addition. These could be counters, multilink blocks, bead strings etc.</p> <p>Children are then encouraged to solve addition problems by counting items that cannot be moved. For example:</p>  <p>Once they have a secure understanding of addition using practical resources and pictures, children are taught to draw their own representation of the number. For example:</p> $4 + 5 = 9$ <p>.... ..</p>	<p>Children are encouraged to use practical resources which can be manipulated to explore subtraction. These could be counters, multilink blocks, bead strings etc.</p> <p>Children are then encouraged to solve subtraction problems by counting items that cannot be moved. For example:</p>  <p>Once they have a secure understanding of subtraction using practical resources and pictures, children are taught to draw their own representation of the number. For example:</p> $7 - 5 = 2$ 	<p>Children will use practical items (counters, multilink blocks, counting elephants etc.) to create an array. E.g. $3 \times 6 = 18$</p>  <p>Children may begin to draw an array using their own representations.</p> $3 \times 6 = 18$ <p>1 2 3</p>	<p>Children will understand equal groups and share items out in play and problem solving. For example grouping 12 cupcakes into 2's or sharing 12 cupcakes between 2.</p> <p>Children will be taught to draw a representation of 'grouping' to solve division. e.g. $12 \div 3 = 4$</p>  <p>Children will be taught to draw a representation of 'sharing' to solve division. e.g. $12 \div 3 = 4$</p> 

Y2	<p>Children will use practical items such as base ten to solve addition calculations. Children are taught to count the tens first and then the ones to find the answer.</p>  <p>Children are then encouraged to draw a representation of the tens and ones in a number. The children count the tens first and then the ones. For example:</p> $21 + 34 = 55$  <p>This process remains the same when crossing the tens boundary. For example:</p> $27 + 14 = 41$ 	<p>Children will use practical items such as base ten to solve subtraction calculations. Children are taught to count the tens first and then the ones to find the answer. When crossing the ten barrier (e.g. 50-27 =) children will exchange a ten stick for ten ones.</p> <p>Children are then encouraged to draw a representation of the tens and ones for the first number. The children will then 'take away' (cross out) the correct number of tens and ones. For example:</p> $34 - 12 = 22$  <p>When crossing the ten boundary, children will exchange one ten for ten ones. For example:</p> $51 - 19 = 32$ 	<p>Children will use practical items (counters, multilink blocks, counting elephants etc.) to create an array. E.g. $3 \times 6 = 18$</p>  <p>Children are then taught to draw an array.</p> $3 \times 6 = 18$ <ol style="list-style-type: none"> 1. 2. 3. <p>Children will be encouraged to count in the pattern to 2, 5, 10 and 3 to solve multiplication calculations. For example to solve 3×10 the children will count in 10s three times. They may need to draw something to support this e.g.</p> <ol style="list-style-type: none"> 1. 10 2. 10 3. 10 	<p>Children will understand equal groups and share items out in play and problem solving. For example grouping 12 cupcakes into 2's or sharing 12 cupcakes between 2.</p> <p>Children will be taught to draw a representation of 'grouping' to solve division.</p> <p>e.g. $12 \div 3 = 4$</p>  <p>Children will be taught to draw a representation of 'sharing' to solve division.</p> <p>e.g. $12 \div 3 = 4$</p>  <p>Children will be encouraged to count in the pattern of 2, 5, 10 and 3 to solve division calculations. For example so solve $6 \div 2$, the children will count in 2's until 6. They may need to draw something to support this e.g.</p> 

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