

Year 3 – Block B

The models, images and practical resources detailed below will support the teaching of this Block. The text in italics relates directly to the learning overview of each Unit in the Block – this is accessed using the planning tab in the Framework. Select Planning–Year group–Block then click on the Unit tabs.

$17 = 13 + 4$ $4 + 13 = 17$
 $17 - 4 = 13$ $17 - 13 = 4$

*Children strengthen their recall of number facts, recalling facts quickly and applying them accurately. They develop strategies to enable them to **derive quickly all addition and subtraction facts for each number to 20** and sums and differences of multiples of 10.*

Primary National Strategy

*Children count from zero in steps of 2, 3, 4, 5, 6 and 10 and use the sequences generated to **establish multiplication and division facts**. They recite these times tables, begin to locate a fact from the relevant table and start to recognise multiples of 3, 4 and 6. They identify numbers to 1 000 that are multiples of 2, 5 or 10. They sort a set of numbers using criteria such as ‘These numbers are multiples of 5’, or ‘These numbers are in the 6 times table.’*

0	4	8	12
16	20	24	28
32	36	40	44
48	52	56	60
64	68	72	76

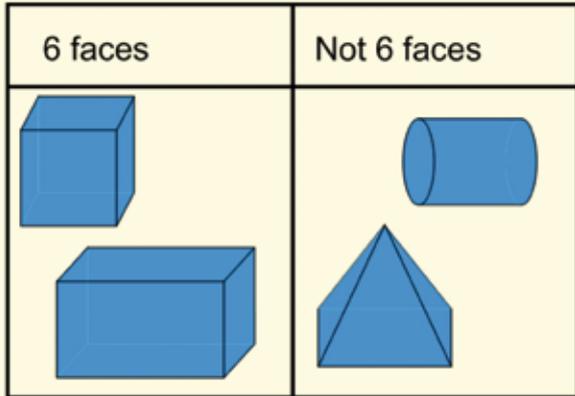
Number grid interactive teaching program. Increasing number grid spreadsheet and Decreasing number grid spreadsheet are flexible resources. The start number and column size can be changed. The spreadsheet resources allow you to change the step size. They can be found in the library section of the Primary Framework.

Number grid interactive teaching program

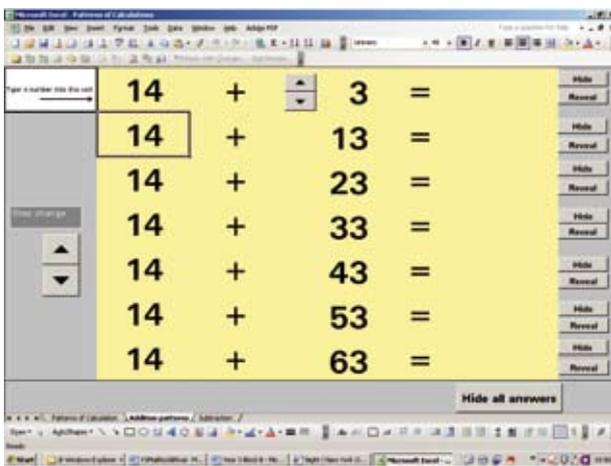
Primary National Strategy



Children **use their knowledge of number pairs** for 10 and 20 to **add and subtract efficiently**. For example, to calculate $48 + 7$ they add 2 to bridge through 50 then add the remaining 5.



They **sort 3-D shapes using criteria such as the number of vertices, edges or faces**.



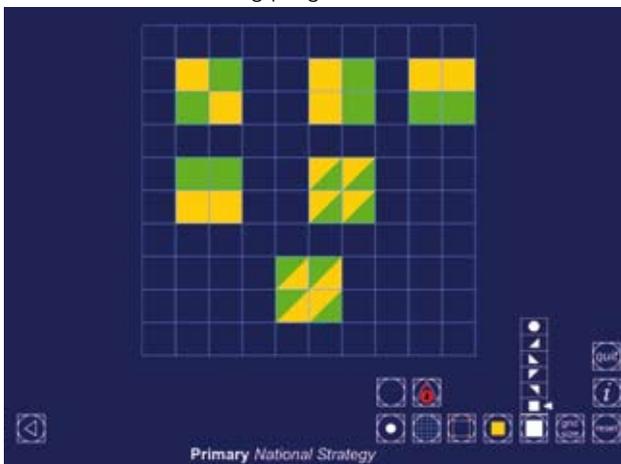
Children **recall number facts** quickly and apply them accurately in a range of situations. They **recognise and generate patterns** of similar calculations, such as $14 + 3 = 17$, $14 + 13 = 27$, $14 + 23 = 37$ and articulate what is the same and what is different about such related calculations. They use the patterns in such sequences to add and subtract one- and two-digit numbers. For example, they use the fact that $9 - 7 = 2$ to work out that $19 - 7 = 12$ or $89 - 7 = 82$.



Children apply their knowledge of multiplication and division to **solve missing-number problems**, such as $\square \div 3 = 6$.

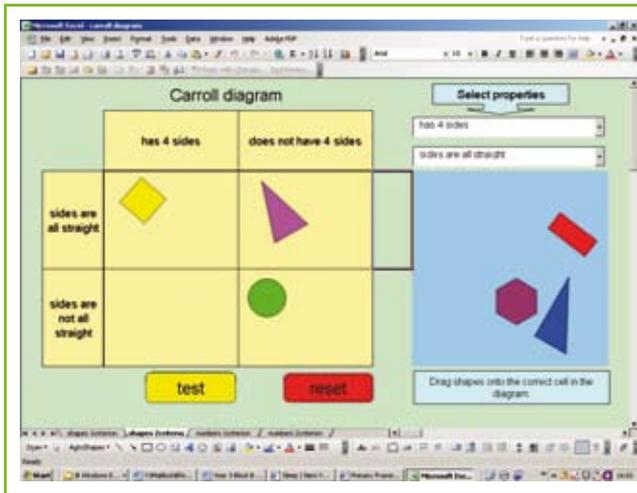
Missing-number spreadsheets can be found in the library section of the Primary Framework.

Area interactive teaching program



Children **find halves and quarters of shapes** by folding. They appreciate that finding $\frac{1}{2}$ of a shape involves dividing it into two equal pieces and finding $\frac{1}{4}$ of a shape involves dividing it into four equal pieces. Through practical experience, they appreciate that $\frac{2}{4}$ is equivalent to $\frac{1}{2}$. They investigate which shapes can easily be divided into halves or quarters and which cannot. They find alternative ways of dividing squares and rectangles in half and into quarters.

Area interactive teaching program – find in the library section of the Framework.



Children extend their knowledge of shape properties. They use appropriate mathematical vocabulary to **describe the features** of common 2-D and 3-D shapes including semicircles, hemispheres and prisms.

They record their classifications on **Venn and Carroll diagrams**, including diagrams involving more than one criterion.

Carroll diagram spreadsheet – find in the library section of the Framework. Alternatively use practical equipment.