

Question Bank: Answers and diagnostic information

Answers	Common problems	Diagnostic follow-up activity	Options for next steps								
<p align="center">Question Bank FI.1a</p> <p>This child has sorted pictures into groups. Ring the pictures which are in the wrong group.</p> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px; width: 45%;"> <p align="center">Half</p> </div> <div style="border: 1px solid black; padding: 5px; width: 45%;"> <p align="center">Not half</p> </div> </div> <p>Complete these calculations.</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td>$\frac{1}{2}$ of 10 = 5</td> <td>$\frac{1}{2}$ of 60 = 30</td> </tr> <tr> <td>$\frac{1}{2}$ of 22 = 11</td> <td>$\frac{1}{2}$ of 19 = 9 r 1</td> </tr> <tr> <td>$\frac{1}{2}$ of 18 = 9</td> <td>$\frac{1}{2}$ of 21 = 10 r 1</td> </tr> <tr> <td>$\frac{1}{2}$ of 48 = 24</td> <td>$\frac{1}{2}$ of 25 = 12 r 1</td> </tr> </table>	$\frac{1}{2}$ of 10 = 5	$\frac{1}{2}$ of 60 = 30	$\frac{1}{2}$ of 22 = 11	$\frac{1}{2}$ of 19 = 9 r 1	$\frac{1}{2}$ of 18 = 9	$\frac{1}{2}$ of 21 = 10 r 1	$\frac{1}{2}$ of 48 = 24	$\frac{1}{2}$ of 25 = 12 r 1	<p>If children ring the triangle they may not realise that a half must be one of two equal parts.</p> <p>Look to see how they deal with the shapes which have two of four equal parts coloured and whether they recognise this as half of the overall shape.</p> <p>In the calculations, check whether they make errors only in the examples with remainders.</p>	<p>Half a strip squared paper</p> <p>The child makes strips from squared paper using an even number of squares. They start with rows of one square but progress to more rows if you wish. They draw their strip, fold it in half and then count the squares that are in one of the halves. Initially you might want them to count both halves to reinforce that each side is the same but they should then move on to knowing that each is the same. They can stick down their shape and record beside it the calculation, e.g. <i>half of 24 = 12</i>.</p>	<p>Introducing the concepts</p> <p>Developing understanding Folding pictures, Sorting shapes</p> <p>Group active learning Cross the board, Hiding halves</p>
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<p align="center">Question Bank FI.1b</p> <p>Draw a line to match the fractions.</p> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>7 halves</p> <p>$3\frac{1}{2}$</p> <p>4 halves</p> <p>5 halves</p> </div> <div style="width: 45%;"> <p>$2\frac{1}{2}$</p> <p>One and a half</p> </div> </div> <p>Complete this number line.</p>	<p>Check that children have correctly matched all representations of fractions.</p> <p>Make sure children label the number line using mixed numbers and convert to mixed numbers where appropriate and do not get confused counting on, e.g. $1\frac{1}{2}$, $1\frac{2}{2}$, $1\frac{3}{2}$, etc</p>	<p>Matching game small pieces of paper or cards</p> <p>Give the child a mixed number involving $\frac{1}{2}$, e.g. $4\frac{1}{2}$. Give them three small pieces of paper on which they record their fraction in three ways: as a written fraction; as the number of halves; and as a picture. Repeat for several different fractions then put all the pieces of paper together, shuffle them and lay them out on the table. The child sorts the cards into matching trios.</p>	<p>Introducing the concepts</p> <p>Developing understanding Make a number line, Two colour towers</p> <p>Group active learning Spin a fraction, Question cards, Cross the board</p>								