

Addition, Subtraction, Multiplication and Division: Pyramid Puzzles

Aim: Use their knowledge of the order of operations to carry out calculations involving the four operations. I can add and subtract numbers using a formal written method.	Success Criteria: I can add and subtract numbers with decimals. I can add and subtract increasingly larger numbers. I can use a formal written method.	Resources: Lesson Pack Scissors Glue
	Key/New Words: Add, addition, more, plus, increase, sum, total, altogether, decimal, subtract, different, take away, minus, number sentence, written method.	Preparation: Differentiated Pyramid Puzzles Activity Sheet - 1 per child Extra Challenge Activity Sheet - as required

Prior Learning: It will be helpful if children understand place value prior to the lesson. Also, it will be helpful if children know pairs of numbers to make 10 and 100.

Learning Sequence

	Which Method? Ask children to think of an example of an addition, subtraction, multiplication or division calculation (involving decimals) that they would work out mentally and one they would do on paper. Ask children to explain their choice.				
	Building Blocks 1: Revise written strategies by talking through the information on the Lesson Presentation . Repeat with additional examples if necessary.				
	Building Blocks 2: Using the Lesson Presentation , the children find out the missing numbers by performing a written calculation. <i>Can the children explain how they completed the calculation? Which calculation method did they choose? Did the children check their answer?</i>				
	Pyramid Puzzles: Explain to the children that they will be completing a range of questions that will require them to perform calculations using the strategies demonstrated earlier in the lesson. Remind children to check their answers once the calculations have been completed. <table style="width: 100%; margin-top: 10px;"> <tr> <td style="width: 33%; text-align: center;"> <p>Individually, the children complete the missing calculations on the differentiated Pyramid Puzzles Activity Sheet by selecting and using an appropriate written calculation method to answer the large whole number questions (up to 200 000).</p> </td> <td style="width: 33%; text-align: center;"> <p>Individually, the children complete the missing calculations on the differentiated Pyramid Puzzles Activity Sheet by selecting and using an appropriate written calculation method to answer the increasingly large number questions.</p> </td> <td style="width: 33%; text-align: center;"> <p>Individually, the children sort the numbers on the sheet into the correct positions on the blank pyramids on the differentiated Pyramid Puzzles Activity Sheet by adding and subtracting mixed numbers using a formal written method. An Extra Challenge Activity Sheet is provided as an extension activity if required.</p> </td> </tr> </table>	<p>Individually, the children complete the missing calculations on the differentiated Pyramid Puzzles Activity Sheet by selecting and using an appropriate written calculation method to answer the large whole number questions (up to 200 000).</p>	<p>Individually, the children complete the missing calculations on the differentiated Pyramid Puzzles Activity Sheet by selecting and using an appropriate written calculation method to answer the increasingly large number questions.</p>	<p>Individually, the children sort the numbers on the sheet into the correct positions on the blank pyramids on the differentiated Pyramid Puzzles Activity Sheet by adding and subtracting mixed numbers using a formal written method. An Extra Challenge Activity Sheet is provided as an extension activity if required.</p>	
<p>Individually, the children complete the missing calculations on the differentiated Pyramid Puzzles Activity Sheet by selecting and using an appropriate written calculation method to answer the large whole number questions (up to 200 000).</p>	<p>Individually, the children complete the missing calculations on the differentiated Pyramid Puzzles Activity Sheet by selecting and using an appropriate written calculation method to answer the increasingly large number questions.</p>	<p>Individually, the children sort the numbers on the sheet into the correct positions on the blank pyramids on the differentiated Pyramid Puzzles Activity Sheet by adding and subtracting mixed numbers using a formal written method. An Extra Challenge Activity Sheet is provided as an extension activity if required.</p>			
	Hard Hieroglyphs: Working through the slides from the Lesson Presentation , the children write mathematical calculations using hieroglyphs that would provide the answers shown on the slides.				

Masterit

Practiseit: Let your children practise their addition and subtraction skills using this fabulous [Missing 6-Digit Numbers Differentiated Activity Sheet](#).

Reasonit: Children use their reasoning skills to complete the [Calculating Change](#) task.