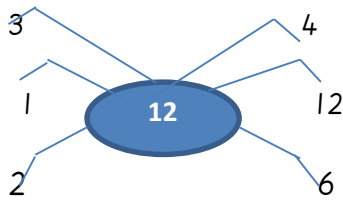
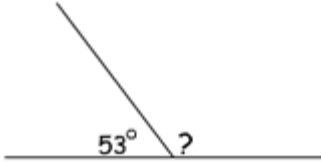
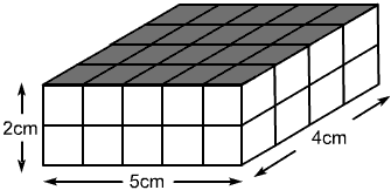




Help at Home- Year 6



Target	Example Questions	Ideas to try:
Read, write, order and compare numbers to at least 10,000,000 and determine the value of each digit.	<ul style="list-style-type: none"> Write the following as a number: Ninety-nine million, ninety four thousand, two hundred and twenty. What does the 9 represent in 8.895? What is the value of the digit 3 in the number 7 236 456? 	<p>Think about the number 34567800.</p> <p>Say this number aloud. Round this number to the nearest million.</p> <p>What does the digit '8' represent? What does the digit '7' represent?</p> <p>Divide this number by 100 and say your answer aloud. Divide this number by 1000 and say your answer aloud.</p>
Solve addition and subtraction multi-step problems, deciding which operations and methods to use and why.	<ul style="list-style-type: none"> Mars is 206,670,000km from the Sun and Earth is 147,100,000km from the Sun. What is the difference between these distances? At the 2006 Census, England's population consisted of 27,606,760 males and 23,156,140 females. What was the total population? 	<p>Try adding up items on the shopping list at home and working out the change.</p> <p>Try weighing out ingredients and adding up the total mass to create the final product.</p> <p>Working out the difference in mass between objects around the house.</p>
Identify common factors, common multiples and prime numbers	<ul style="list-style-type: none"> List 3 factors of 32. Write the common factors of 32 and 124. What is the next multiple of 4 in this sequence: 4, 8, 12, , 20, 24 	<p>Factor bugs!</p>  <p>Search online for the sieve of Eratosthenes.</p>
Multiply numbers up to 4 digits by a two-digit number using a written method. Multiply up to two place decimals by a whole number.	<ul style="list-style-type: none"> $3825 \times 27 =$ $493 \times 28 =$ $3 \times 0.4 =$ $15 \times 7.34 =$ 	$\begin{array}{r} 3825 \\ \times 27 \\ \hline 26775 \\ + 76500 \\ \hline 103275 \end{array}$ $\begin{array}{r} 23.47 \\ \times 6.00 \\ \hline 1.4082 \end{array}$
Divide numbers with up four digits by a two digit number.	<ul style="list-style-type: none"> $3825 \div 11 =$ $468 \div 4 =$ $9536 \div 8 =$ 	$\begin{array}{r} 307 \text{ r}10 \\ 12 \overline{)3694} \end{array}$

<p>Perform mental calculations, including with mixed operations and large numbers.</p>	<ul style="list-style-type: none"> • $32 + 65 =$ • $46 + 29 =$ • $58 - 19 =$ 	<p>Children can add 9 by adding on 10 then subtracting one, and similarly children can subtract 9 by subtracting 10 and adding one.</p> <p>Calculate $36 \div 2 + 19 \div 8$</p> <ul style="list-style-type: none"> ■ with a formal written column method ■ with a mental method, explaining your reasoning. 																									
<p>Use simple formulae (algebra)</p>	<ul style="list-style-type: none"> • $n + 5 = 10$ What is the value of n? • $6h - 4 = 12$ What is the value of h? 	<p>Start by substituting numbers for symbols:</p> <p>Each shape stands for a number.</p> <p>The numbers shown are the totals of the line of four numbers in the row or column.</p> <table border="1" data-bbox="1384 470 1594 667"> <tbody> <tr> <td>▲</td> <td>♣</td> <td>▲</td> <td>○</td> <td><input type="text"/></td> </tr> <tr> <td>♣</td> <td>○</td> <td>♣</td> <td>▲</td> <td>25</td> </tr> <tr> <td>○</td> <td>○</td> <td>○</td> <td>○</td> <td>20</td> </tr> <tr> <td>▲</td> <td>♣</td> <td>♣</td> <td>▲</td> <td><input type="text"/></td> </tr> <tr> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td><input type="text"/></td> <td>26</td> </tr> </tbody> </table> <p>Find the remaining totals.</p>	▲	♣	▲	○	<input type="text"/>	♣	○	♣	▲	25	○	○	○	○	20	▲	♣	♣	▲	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	26
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<p>Recognise angles where they are on a straight line, or are vertically opposite, and find missing angles.</p>	 <p>$180 - 53 = \underline{\quad}$</p>	<p>Invest in a pocket protractor. Ask the children to help with small DIY projects (if you're brave!)</p> <p>(On a long car journey) "How many acute / obtuse / right angles can you see?" "How many angles bigger/smaller than 90° can you see?"</p>																									
<p>Calculate, estimate and compare volume of cubes and cuboids.</p>	<p>Find the volume of this cuboid:</p> 	<p>Volume = length x width x height.</p> <p>Find the volume of household objects.</p>																									

In addition to this, please support your child in recalling the 6, 7, 8 and 9 times tables and their corresponding division facts.