

## Level 4 Maths

As parents, you will wish to know how your child is getting on in maths, and some of you may wish to support your child with extra practice at home. This handout shows some of the key skills for **level 4** in the strands of 'counting and understanding numbers' and 'knowing and using number facts', along with examples of questions your child may be expected to answer. You could discuss the questions with your child at home, and help them to understand and practise similar questions in any areas where they have difficulty. However, we would stress the following points:



- **This is only a sample of the skills children need to develop. Even these skills will be applied in a wider range of contexts.**
- **Children develop at different speeds.** Making steady progress is more important than achieving a particular level by a certain age.
- **We want children to enjoy maths!** Practising regularly for short periods may be better than one long session! Maths skills can be developed through games, or involvement in real life situations (e.g. shopping).

Skills	Examples of how the skill may be assessed	Answers/Tips
I can recognise and describe number patterns.	<p>Fill in the missing numbers in this sequence.</p> <p>___, 2.1, 2.3, 2.5, 2.7, ___, ___</p> <p>How did you work it out?</p> <p>If you continue, will 22.4 be in the sequence? How do you know?</p> <p>Here is a sequence where every number is double the previous number. What are the missing numbers?</p> <p>___, ___, 6, 12, 24, 48, ___</p>	<p><b>1.9, 2.1, 2.3, 2.5, 2.7, 2.9, 3.1</b></p> <p>Encourage your child to describe how they know by discussing the rule for the sequence (e.g. This sequence increases in steps of 0.2). They can also notice patterns such as the tenths digit always being odd, which means that 22.4 will not be in the sequence.</p> <p><b>1.5, 3, 6, 12, 24, 48, 96</b></p>
I can recognise and describe number relationships including multiple, factor and square.	<p>Here are 4 digits.</p> <p style="text-align: center;"><b>3   6   1   5</b></p> <p>Can you use them to make the following 2 digit numbers?</p> <p style="text-align: center;">A multiple of 7</p> <p style="text-align: center;">A square number</p> <p style="text-align: center;">A factor of 32</p>	<p><b>Possible answers could be:</b></p> <p>A multiple of 7: <b>35, 56 or 63</b></p> <p>A square number: <b>16 or 36</b></p> <p>A factor of 32: <b>16</b></p> <p><i>Children may find it helpful to make lists of, for example, the multiples of 7, to help them see the possibilities. They should be encouraged to describe how they recognised the answers.</i></p>
I can use place value to multiply and divide whole numbers by 10 or 100.	<p>1. Write in the missing numbers:</p> <p style="text-align: center;"><math>2700 \div 100 = \square</math></p> <p style="text-align: center;"><math>340 = \square \times 10</math></p> <p>2. Write what the missing digits could be:</p> <p style="text-align: center;"><math>\square\square \div 10 = 4\square</math></p>	<p>1. <math>2700 \div 100 = 27</math></p> <p style="text-align: center;"><math>340 = 34 \times 10</math></p> <p>2. There are several possible answers, e.g.</p> <p style="text-align: center;"><math>400 \div 10 = 40</math></p> <p style="text-align: center;"><math>410 \div 10 = 41</math></p>

I can recognise approximate proportions of a whole and use simple fractions and percentages to describe these.	<p style="text-align: center;">Shade 10% of this grid</p> <table border="1" style="margin: auto;"> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td></tr> </table>																					10% of the grid can be worked out by finding $\frac{1}{10}$ of the grid, or $20 \div 10$ . Therefore two parts should be shaded.
I can order decimals to three decimal places.	<p style="text-align: center;">Order these decimals from smallest to largest.</p> <p style="text-align: center;">2.134 2.119 1.897 2.008 2.576</p>	<p>1.897 2.008 2.119 2.134 2.576</p> <p>Encourage your child to look at the most significant digits first, ie. Units, then tenths, then hundredths etc</p>																				
I can use inverse operations.	<p>Use a calculator to find the missing number.</p> <p style="text-align: center;"><math>23.6 \times \square = 295</math></p> <p>Find the missing number.</p> <p style="text-align: center;"><math>16 + \square = 100 \div 5</math></p>	<p style="text-align: center;"><math>23.6 \times 12.5 = 295</math></p> <p>This can be found by using the inverse operation, <math>295 \div 23.6</math></p> <p style="text-align: center;"><math>16 + 4 = 100 \div 5</math></p>																				
I can use a range of mental methods of computation with all operations.	<p>Quickly work out complements to 1000, e.g. <math>887 + \square = 1000</math></p> <p>Mentally work out calculations such as:</p> <p style="text-align: center;"><math>0.4 \times 8</math>  <math>3.6 \div 6</math>  <math>6 - 0.25</math></p>	<p>The numbers in these calculations are carefully chosen so as to be easy to work with mentally.</p> <p>e.g.  If you know <math>4 \times 8 = 32</math> it may be easy to work out that <math>0.4 \times 8 = 3.2</math></p> <p><math>36 \div 6 = 6</math>, and so <math>3.6 \div 6 = 0.6</math></p>																				
I can recall multiplication facts up to $10 \times 10$ and quickly derive corresponding division facts.	<p>Use the knowledge of these tables facts and place value to solve calculations with multiples of 10, such as:</p> <p style="text-align: center;"><math>40 \times 7</math>  <math>50 \times 4</math>  <math>120 \div 3</math>  <math>270 \div 9</math></p>	<p><math>4 \times 7 = 28</math>, so <math>40 \times 7 = 280</math></p> <p><math>5 \times 4 = 20</math>, so <math>50 \times 4 = 200</math></p> <p><math>12 \div 3 = 4</math>, so <math>120 \div 3 = 40</math></p> <p><math>27 \div 9 = 3</math>, so <math>270 \div 9 = 30</math></p>																				
I can use efficient methods of addition and subtraction and of multiplication and division.	<p style="text-align: center;"><math>1203 + 55 + 367</math></p> <p style="text-align: center;"><math>1025 - 345</math></p>	<p>For information about calculation methods, do an internet search for 'MathsWeb'. Then navigate via 'Primary Teachers' to the Leicestershire Calculation Policy. Look at the policy for Years 5 and 6. MathsWeb also has a 'Parents' section with other helpful advice.</p>																				
I can multiply a simple decimal by a single digit.	<p style="text-align: center;"><math>35.6 \times 8</math></p>	<table border="1" style="margin: auto;"> <tr> <td style="text-align: center;">x</td> <td style="text-align: center;">30</td> <td style="text-align: center;">5</td> <td style="text-align: center;">0.6</td> </tr> <tr> <td style="text-align: center;">8</td> <td style="text-align: center;">240</td> <td style="text-align: center;">40</td> <td style="text-align: center;">4.8</td> </tr> </table> <p style="text-align: center;">Then mentally add,  <math>240 + 40 + 4.8 = 284.8</math></p>	x	30	5	0.6	8	240	40	4.8												
x	30	5	0.6																			
8	240	40	4.8																			

Reference: <http://www.standards.dfes.gov.uk/primaryframework> including APP materials and 'pitch and expectations' (QCA)