### Level 2 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 practise at home. This handout shows some of the key assessment criteria for level 2 in the area of 'number', along with examples of questions your child may be expected to answer in this area. 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:

- Children develop at different speeds. Making steady progress is more important than achieving a particular level by a certain age.
- This is only a sample of the skills children are assessed on.
- We want children to enjoy maths! Practising regularly for short periods may be better than one long session! Often maths skills can be developed effectively through games, or involvement in real life situations like shopping.

<table>
<thead>
<tr>
<th>Skill</th>
<th>Examples of how the skill may be assessed</th>
<th>Answers/Tips</th>
</tr>
</thead>
</table>
| **I know that addition and subtraction are opposites (inverses)** | Here are three numbers: 12, 17 and 5. Use these three numbers to make 4 number sentences | 12 + 5 = 17  
5 + 12 = 17  
17 - 5 = 12  
17 - 12 = 5 |
| **I understand the place value of digits in numbers to 100 and can use this to order numbers to 100.** | Put these numbers in order, starting with the smallest. 43 12 20 78 21 | 12 20 21 43 78 |
| **I can work out halves of even numbers to 20 and begin to remember them.** | What is half of 18? Half of 16? Half of 10? I think of a number and double it. The answer is 18. What was my number? | Remind the children that doubling and halving are opposites. |
| **I can remember and use the addition and subtraction facts to 10.** | What are the missing numbers?  
_ + 6 = 15  
8 + _ = 11  
20 - 15 = _  
16 - _ = 5  
Can you find all the addition pairs to 19?  
Give any two numbers with a difference of 3. (e.g. 15 and 18) | Encourage children to use their knowledge of inverses to solve missing number questions.  
Encourage systematic working. E.g.  
0 + 19 = 19  
1 + 18 = 19  
2 + 17 = 19  
3 + 16 = 19  
... etc |
| **I can decide if I should add or subtract when solving problems.** | Decide what calculation is needed to solve problems like:  
- 23 slugs entered the slug race. 7 got lost. How many slugs were left?  
- Aabid has 20p and Claudia has 41p. How much do they have altogether? | 23 - 7  
20 + 41  
50 - 24  
32 - 18 |
| I can use repeated addition to solve multiplication problems | 6 football teams enter a five-a-side tournament. How many players are in the tournament?  
A regular hexagon has sides of 2 cm each. What is the distance all the way around? | $6 \times 5 = 5 + 5 + 5 + 5 + 5 + 5 = 30$  
$6 \times 2 \text{cm} = 2 + 2 + 2 + 2 + 2 = 12 \text{cm}$ |
|---|---|---|
| I can recognise number sequences, including odd and even numbers. | Write the missing numbers in these sequences.  
2, 4, 6, __, 10, 12, __, __, 21, 19, 17, __, 13, 11, __, 10, 15, 20, __, 30  
Can you make up a number sequence that increases in steps of 3? Or of 10? | Encourage children to ask themselves whether the sequence is going up or down. Then see whether they can identify the size of each step. 
Use vocabulary such as 'increases', 'less than' and 'more than'. |
| I can write the numbers to 100 accurately | Write these numbers in figures:  
Seventy eight  
Fifty  
Ninety two  
One hundred | 78  
50  
92  
100 |
| I can count sets of objects reliably | Count in twos, fives or tens, from 0 to 100. |  
| I can solve number problems involving money or measures. | George had 56p. He spent 9p. How much did he have left?  
Praveen saves 44p. Then her friend gives her 21p. How much does she have now?  
Graham the grub travels 27 cm. Lily the ladybird crawls 34 cm. How much further does Lily travel than George? | Children could be encouraged to draw pictures to help them think about word problems, or to represent the problem on a blank number line.  
E.g.  
Draw own jumps before copying |
**Level 3 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 practise at home. This handout shows some of the key assessment criteria for level 3 in the area of 'number', along with examples of questions your child may be expected to answer in this area. 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:

- Children develop at different speeds. Making steady progress is more important than achieving a particular level by a certain age.
- This is only a sample of the skills children are assessed on.
- We want children to enjoy maths! Practising regularly for short periods may be better than one long session! Often maths skills can be developed effectively through games, or involvement in real life situations like shopping.

<table>
<thead>
<tr>
<th>Skill</th>
<th>Examples of how the skill may be assessed</th>
<th>Answers/Tips</th>
</tr>
</thead>
<tbody>
<tr>
<td>I understand the place value of digits in numbers to 1000.</td>
<td>Fill in the missing numbers: 200 + ___ + 7 = 267 488 = ___ + 80 + 8 How many tens are there in 530?</td>
<td>200 + 60 + 7 = 267 488 = 400 + 80 + 8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>There are 53 tens in 530.</td>
</tr>
<tr>
<td>I can order decimals with one decimal place.</td>
<td>Put these decimal numbers in order, starting with the smallest: 3.8 1.8 1.4 0.9 4.7</td>
<td>0.9 1.4 1.8 3.8 4.7</td>
</tr>
<tr>
<td>I can compare numbers to 1000 e.g. &lt; less than, &gt; greater than</td>
<td>Use the correct symbol in each place: &lt; , &gt; or = 343 ___ 434 980 ___ 899 50 + 60 ___ 110 3 x 99 ___ 250</td>
<td>343 &lt; 434 980 &gt; 899 50 + 60 = 110 3 x 99 &gt; 250</td>
</tr>
<tr>
<td>I can add and subtract two-digit numbers mentally</td>
<td>45 + 34 = 56 + 27 = 93 - 88 = 68 - 21 =</td>
<td>Children should use the most appropriate mental strategy. For example, for 93 - 88 they may add on to find the difference, as the numbers are close together. For 68 - 21 it is more appropriate to subtract 20 and then 1.</td>
</tr>
<tr>
<td>I can add and subtract three digit numbers using written methods</td>
<td>435 + 482</td>
<td>435 482 7 110 800 217</td>
</tr>
</tbody>
</table>
| I know the multiplication facts and use them to work out division facts. | Learn the $2\times$, $3\times$, $4\times$, $5\times$ and $10\times$ tables.  
What is $32$ divided by $4$ | I know that $4 \times 8 = 32$, so I also know that $32$ divided by $4$ is $8$. |
|---|---|---|
| I can find missing whole numbers using inverses. | Fill in the missing numbers:  
$\_ - 2 = 6$  
$9 = 36 - \_ $  
$3 \times \_ = 21$ | Matthew was thinking of $70$. |
| I can solve whole number multiplication and division problems. | One length of the swimming pool is $25$ metres.  
Jane swims $5$ lengths of the pool.  
How far does Jane swim altogether?  
Paul swims $225$ metres in the pool.  
How many lengths does he swim?  
(Adapted from Primary Framework for Maths) | Encourage discussion about how the problems could be solved. Does it help to draw a picture or use a blank number line?  
e.g.  
Draw your jumps before copying |
| I can solve whole number division problems involving remainders, rounding up or down depending on the context. | Mr Bloggs the baker packs cakes in boxes of $4$. He bakes $35$ cakes. How many boxes can he fill? Or, how many boxes does he need to pack all the cakes? | Notice that the answer is $8$ boxes or $9$ boxes, depending on which question you are answering. This rounding up or down depending on the context is a skill children need to develop. |
| I can continue whole number sequences forwards or backwards. | Fill in the gaps in these sequences.  
$3$, $6$, $9$, $12$, $\_$, $\_$.  
$202$, $192$, $182$, $172$, $\_$, $\_$.  
$\_$, $9$, $14$, $19$, $24$, $29$, $34$, $\_$. $\_$. | $3$, $6$, $9$, $12$, $15$, $18$  
$202$, $192$, $182$, $172$, $162$, $152$  
$4$, $9$, $14$, $19$, $24$, $29$, $34$, $39$, $44$ |
**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).

<table>
<thead>
<tr>
<th>Skills</th>
<th>Examples of how the skill may be assessed</th>
<th>Answers/Tips</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can recognise and describe number patterns.</td>
<td>Fill in the missing numbers in this sequence. ___ 2.1, 2.3, 2.5, 2.7, ___ How did you work it out?</td>
<td>1.9, 2.1, 2.3, 2.5, 2.7, 2.9, 3.1 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. <strong>1.5, 3, 6, 12, 24, 48, 96</strong></td>
</tr>
<tr>
<td>I can recognise and describe number relationships including multiple, factor and square.</td>
<td>Here are 4 digits. 3 6 1 5 Can you use them to make the following 2 digit numbers? A multiple of 7 A square number A factor of 32</td>
<td>Possible answers could be: A multiple of 7: 35, 56 or 63 A square number: 16 or 36 A factor of 32: 16 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.</td>
</tr>
<tr>
<td>I can use place value to multiply and divide whole numbers by 10 or 100.</td>
<td>1. Write in the missing numbers: 2700 ÷ 100 = □ 340 = □ × 10 2. Write what the missing digits could be: □□□ ÷ 10 = 4□</td>
<td>1. 2700 ÷ 100 = 27 340 = 34 × 10 2. There are several possible answers, e.g. 400 ÷ 10 = 40 410 ÷ 10 = 41</td>
</tr>
<tr>
<td>I can order decimals to three decimal places.</td>
<td>Order these decimals from smallest to largest.</td>
<td>1.897  2.008  2.119  2.134  2.576</td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>-----------------------------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>I can use inverse operations.</td>
<td>Use a calculator to find the missing number.</td>
<td>23.6 × 12.5 = 295</td>
</tr>
<tr>
<td>I can use a range of mental methods of computation with all operations.</td>
<td>Quickly work out complements to 1000, e.g. 887 + □ = 1000</td>
<td>16 + □ = 100 ÷ 5</td>
</tr>
<tr>
<td></td>
<td>Mentally work out calculations such as:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.4 × 8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.6 ÷ 6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6 ÷ 0.25</td>
<td></td>
</tr>
<tr>
<td>I can recall multiplication facts up to 10 × 10 and quickly derive corresponding division facts.</td>
<td>Use the knowledge of these tables facts and place value to solve calculations with multiples of 10, such as:</td>
<td>4 × 7 = 28, so 40 × 7 = 280</td>
</tr>
<tr>
<td></td>
<td>40 × 7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>50 × 4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>120 ÷ 3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>270 ÷ 9</td>
<td></td>
</tr>
<tr>
<td>I can use efficient methods of addition and subtraction and of multiplication and division.</td>
<td>1203 + 55 + 367</td>
<td>1203 + 55 + 367</td>
</tr>
<tr>
<td></td>
<td>1025 - 345</td>
<td>1025 - 345</td>
</tr>
<tr>
<td>I can multiply a simple decimal by a single digit.</td>
<td>35.6 × 8</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>x</th>
<th>30</th>
<th>5</th>
<th>0.6</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>240</td>
<td>40</td>
<td>4.8</td>
</tr>
</tbody>
</table>

Then mentally add, 240 + 40 + 4.8 = 284.8

Reference: [http://www.standards.dfes.gov.uk/primaryframework](http://www.standards.dfes.gov.uk/primaryframework) including APP materials and 'pitch and expectations' (QCA)
## Level 5 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 practise at home. This handout shows some of the key assessment criteria for level 5 in the area of 'number', along with examples of questions your child may be expected to answer in this area. 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 are assessed on! Achieving the examples set out below does not mean your child has achieved Level 5 overall. Even the skills below need to be applied in a wider range of contexts.
- We want children to enjoy maths! Practising regularly for short periods may be better than one long session! Often maths skills can be developed effectively through games, or involvement in real life situations like shopping.

<table>
<thead>
<tr>
<th>Skill</th>
<th>Examples of how the skill may be assessed</th>
<th>Answers/Tips</th>
</tr>
</thead>
</table>
| I can round decimals to the nearest decimal place | Round these decimals to the nearest tenth.  
1.21  3.39  2.091 | The decimals rounded to the nearest tenth are:  
1.2  3.4  2.1 |
|                                            | Circle the number closest in value to 0.2  
0.9  0.3  0.21  0.02  1.2 | The number closest in value to 0.2 is 0.21. (Note: 0.19 would also round to 0.2 and would be equally close) |
| I can recognise and use number patterns and relationships | The rule for this sequence of numbers is 'add 4 each time'.  
1, 5, 9, 13, 17, 21, Sophie says, "If you continue the sequence long enough, you will eventually come to a multiple of 4." Is she correct? Explain how you know.  
A similar question about the same sequence might be, "Will the number 401 be in the sequence? How do you know?"  
How many prime numbers can you find with 2-digits?  
Write the 3 prime numbers which multiply to make 231  
___ x ____ x ____ = 231 | Sophie is not correct. The explanation should be along these lines. Because the sequence starts at 1, rather than 0, each number in the sequence is one more than a multiple of 4. If you keep adding 4, this will always be the case.  
Prime numbers are only divisible by 1 and themselves. There are 21 with 2 digits. The first of these are 11 and 13.  
3 x 7 x 11 = 231. It would be good to discuss with your child how this puzzle can be solved, e.g. using estimation and 'trial and improvement'. |
| I can order fractions and decimals | Put these decimals in order:  
4.213  4.2  4.08  4  4.12 | 4  4.08  4.12  4.2  4.213  
When ordering decimals, look first at the whole numbers, then the tenths, then hundreds, etc |
|                                            | Order these fractions from smallest to largest.  
1/2  3/4  6/10  2/5  4/5 | 4/5  2/5  6/10  2/5  4/5  
When ordering fractions with different denominators, try to convert them to fractions with a common denominator (e.g. this set could be converted into 5/10, 8/20 etc) |
|                                            | Which is larger, 1/3 or 2/5? Explain how you know. |
| I can use known facts, place value and knowledge of operations to calculate | Calculating decimal complements to 10 or 100, for example:  
72.6 + □ = 100  
Calculating simple fractions or percentages of a quantity, for example:  
Find 3/8 of 400g  
Find 60% of £300 | ![Diagram](image)  
The number line shows that 72.6 + 7.4 = 100  
1/8 of 400g = 50, so 3/8 of 400g = 150g  
10% of 300 = 30, 30 × 6 = 180, so 60% of £300 = £180 |
|---|---|---|
| I can apply inverse operations | 1. 4 times a number is 2000. What is the number?  
2. 100 ÷ □ = 2.5 | **Answers:**  
1. 500  
2. 40  
For both of these questions it helps to know that multiplication is the inverse of division. For example, for number 2, children can apply the fact: 2.5 × 40 = 100. They may work this out by trial and improvement, or by working out that 2.5 × 10 = 25, and so 2.5 × 40 = 100. |
| I can add and subtract negative numbers in context | 1. The temperature is 7 degrees Celsius. It then falls by 21 degrees. What is the temperature now?  
2. Mr Smith, the teacher, gives his class a number sequence that starts at 100 and decreases by 35 each time. What are the first 2 numbers in the sequence which are lower than zero? | **Answers:**  
- 14 degrees  
- 5 and - 40  
**Tips:**  
It can be helpful to represent the numbers on a number line if children are struggling with the concept of negative numbers.  
Can you discuss other real life contexts where negative numbers are used? |
| I can use all four operations with decimals to two places | Add and subtract numbers that do not have the same number of decimal places.  
e.g. 235.34 + 354.9  
Multiply or divide decimal numbers by a single digit.  
e.g. 31.63 × 6 | 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 6 and 7. MathsWeb also has a 'Parents' section with other helpful advice. |

Reference: Pitch and Expectations - Primary Framework website (from QCA sources); APP materials