

# Level1opaedia

‘A level is a level’

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*Please note that Using and Applying assessment criteria are not included within the Levelopaedia*

## Numbers and the Number System

<b>Count up to 10 objects</b>	
<p>Count objects up to 10 physically, rather than simply reciting numbers,</p> <p>Estimate and check a number</p>	<p>Show me which pots have enough apples for 6 children</p> <p>What is the same and different about these two pots of objects? (These could have the word (four), the numeral (4), four of the same objects, 4 different objects)</p> <p>How can you change this pot so that it has enough apples for 7 children?</p>
<b>Read and write numbers up to 10</b>	
<p>Perhaps with some reversal</p>	<p>Show me (find/write) the number that is the same as e.g. spots on a dice, my fingers, this group of objects</p> <p>What is the same/different about these two numbers e.g. the same number written differently as on a computer keyboard or calculator or 3 and 8, 4 and 7</p> <p>Think of a number with a straight line in it? Can you write it in the air etc?</p>
<b>Order numbers to 10</b>	
<p>Say what number comes next, is one more/more less</p> <p>Count back to zero</p> <p>Place 1-10 in ascending order</p> <p>Point to first, second. Etc. in a line</p> <p>Begin to count in twos</p>	<p>7, 4, 9, 1 Can you order these numbers? How did you know which went first/last?</p> <p>What number is missing from this list: 5, 6, 7, 9 ?</p> <p>(Given an arrangement of four shapes in a row) which shape is second?</p> <p>Always/sometimes/never true: If I count in 2s, I'll say the number 8.</p>
<b>Begin to use the fraction one-half</b>	
<p>Halve shapes, including folding paper shapes, lengths of string</p> <p>Put water in a clear container so that it is about 'half-full'</p> <p>Halve an even number of objects (up to 20)</p>	<p>(Given a square with half shaded in) how much of this shape is shaded?</p> <p>I have 6 apples in this set. Can you cover/draw a ring around half of them?</p>

# Calculating

<b>Understand addition as finding the total of two or more sets of objects</b>	
Given a field of 4 cows and a field of 3, <b>combine</b> the two groups to find the total of 7 cows.	<p>What is the same/different: 3 buttons and 5 buttons, and 6 cubes and 2 cubes?</p> <p>How could you change a pile of 4 pencils and 5 pencils so that there are 10 pencils altogether?</p> <p>True/Never/Sometimes:</p> <ul style="list-style-type: none"> <li>▪ 5 counters and 3 counters: I can move counters between piles; there are always 8 counters.</li> <li>▪ 2 buttons and 3 buttons, and 2 cubes and 5 cubes: I can move buttons and cubes between piles, there always more cubes than buttons</li> </ul>
<b>Understand subtraction as 'taking away' objects from a set and finding how many are left</b>	
If I have a bag with 8 apples and <b>take away</b> 2, how many are left?	<p>What is the same/different: 5 cubes take away 1 cube, and 7 cubes take away 3 cubes</p> <p>How could you change: I have 8 pencils. I take away 3 and there are 5 left. How can I change this so there are 4 left?</p> <p>True/Never/Sometimes:</p> <ul style="list-style-type: none"> <li>▪ If I have 10 pennies, I can take away 4 pennies.</li> <li>▪ If I have 10 pennies, I can take away 12 pennies.</li> </ul>
<b>Add and subtract numbers of objects to 10</b>	
Begin to add by <b>counting on</b> from the number of objects in the first set	<p>Using cars, for example, show me an addition sentence with an answer of 6, and another ...</p> <p>I have 8 oranges. How many do I need to eat to leave 5?</p>
<b>Begin to know some addition facts</b>	
<p><b>Recall</b> number bonds to 10</p> <p>Doubles of numbers to double 5</p>	<p>How can I make 5?</p> <p>Convince me that <math>7 + 2 = 9</math></p> <p>What is the same and what is different about <math>4 + 2 = 6</math> and <math>3 + 3 = 6</math></p> <p>What will <math>4 + 4</math> make?</p>
<b>Solve addition/subtraction problems involving up to 10 objects</b>	
<p>Given a number work out 'how many more to make...'</p> <p>Choose which of given pairs of numbers add to a given total</p> <p>Solve measuring problems such as how many balance with</p> <p>Solve problems involving 1p or £1 coins</p>	<p>There are 4 apples in the box. How many more do I need to put in to make 9?</p> <p>I had 8 balloons and 4 burst. How many are left?</p> <p>Convince me that if I buy 3 balloons that cost 1p each and 4 lollies that cost 1p each, I will have spent 7p</p> <p>I need to put sweets 8 in my bag. Do I need <math>4 + 3</math> or <math>5 + 3</math>?</p>
<b>Record their work</b>	
<p>Record their work with objects, pictures or diagrams</p> <p>Begin to use the symbols '+', '-' and '=' to record additions</p>	<p>How else could you have drawn/written this?</p> <p>Is there another way to show this?</p>

## Shape, Space and Measures

### ***Use everyday language to describe properties of 2-D and 3-D shapes***

Classify shapes and say how they have selected them

Use properties such as large, small, triangles, roll, stack

Begin to refer to some features of shapes such as side and corner

Begin to name the shapes they use in the context of an activity

Show me a 2D (or 3D) shape with ... sides, (or straight sides, a curved side, corners, flat faces)

What is the same/different about:

- A square and a rectangle
- A circle and a semi-circle

How can you change this four-sided shape to make it a square? (using geoboard)

True/Never/Sometimes:

A shape with 4 straight sides is a square

### ***Use everyday language to describe positions of 2-D and 3-D shapes***

Respond to and use positional language e.g. 'behind', 'under', 'on top of', 'next to', 'in between'...

Respond to and use directional language e.g. 'forwards', 'backwards', 'turn'

Given a set of shapes – ask questions such as where is the triangle?

(Given a cuboid and a cylinder, for example) convince me that the cylinder is behind the cuboid.

### ***Measure and order objects using direct comparison***

Compare and order lengths

Respond to and use the language of comparison: longer, longest, shorter, shortest, more, less, heavier, lighter

Check which of two objects is heavier/lighter and begin to put three objects into order

Find objects that are longer/shorter than a metre, heavier/lighter than 500 grams, hold more/less than 1 litre

Show me two bottles and tell me which can hold the most water and which can hold the least

Show me two books and tell me which is heaviest and which is lightest

True/Never/Sometimes:

Bigger objects are heavier than smaller objects

Convince me that this bottle can hold more water

### ***Order events***

Order everyday events and describe the sequence

Use the vocabulary of time including days of the week

Read the time on an analogue clock at the hour and beginning to know the half hour

Tell me something you do before you go to school, something else, something else ... put them in order

Why are the prizes awarded after a race instead of before a race?

True/Never/Sometimes:

- I get dressed before I have my breakfast
- We have assembly after lunch

## Handling Data

### ***Sort and classify objects***

Sort using a given criterion or sort into disjoint sets using two simple criteria such as boy / girl or thick / thin

Sort objects (when given the criteria) into a given large scale Venn or Carroll diagram

Choose criteria to classify objects into sets/disjoint sets (e.g. boy/girl, thick/thin etc)

Classify objects into a given large scale Venn or Carroll diagram choosing the criteria to be used.

Show me how you could sort these objects into two groups and tell me how have you sorted them?  
Could you sort them another way?

How can you change this shape so it can go into this group of shapes? (making shapes on geoboards)

### ***Represent their work***

Use the objects they have sorted as a record

Use objects/ pictures to create simple block graphs

How could we show this to Class 2?

### ***Demonstrate the criterion they have used***

Respond to questions about how they have sorted objects and why each object belongs in a set

Talk about which set has most, for example 'most children stayed at school for lunch'

Talk about how they have represented their work

Why did you choose to put that there?

Why doesn't that go there?

Could you sort these in another way, and another...?