

Mathematics

# Learning and Progression Steps Planning for Progression

EYFS

$\frac{+}{-} = 1$	$\frac{\times}{\div} =$	$\frac{+}{-} = 2$	$\frac{\times}{\div} =$	$\frac{+}{-} = 3$	$\frac{\times}{\div} =$	$\frac{+}{-} = 4$	$\frac{\times}{\div} =$	$\frac{+}{-} = 5$	$\frac{\times}{\div} =$	$\frac{+}{-} = 6$	$\frac{\times}{\div} =$	$\frac{+}{-} = 7$	$\frac{\times}{\div} =$
$\frac{+}{-} = 8$	$\frac{\times}{\div} =$	$\frac{+}{-} = 9$	$\frac{\times}{\div} =$	$\frac{+}{-} = 10$	$\frac{\times}{\div} =$								

## EYFS Learning and Progression Steps for Mathematics

### What are Learning and Progression Steps (LAPS)?

The Learning and Progression Steps are designed to scaffold the learning required in order to support children in developing a secure understanding of early mathematics and will prepare children effectively for Year 1 of the National Curriculum. Statements in the Lancashire Key Learning for Mathematics document have been broken down into smaller steps to support teachers in planning appropriate learning opportunities. These key pieces of learning will support pupils in becoming fluent in the knowledge and skills of mathematics and ensure that the learning is effective and sustained.

The number of steps is dependent on the learning and do **not** constitute expectations for the end of each term. The colour coding is an approximate indicator of end of term expectations.

- Orange are the steps in learning for the autumn term of the Reception year.
- Green are the steps in learning for the spring term of the Reception year.
- Yellow are the steps in learning for the summer term and incorporate the end of Reception year expectations.

Some key learning objectives are not taught in every term, and in some cases not in the summer term. This means that end of year expectations may need to be met before the end of the summer term.

The final step in the progression for each strand of learning is the end of year expectation.

The steps are **not** of equal size and different amounts of time may be required for children to move between individual steps.

Some learning within the same end of year expectation has been split and designed to run concurrently alongside each other. For example,

Rote count from 1	Understand and use the term 'after' in a practical context, e.g. with a line of children one behind the other	Understand and use the term 'after' in a time context, e.g. what are we doing after playtime?	Know what number comes before or after a given number
Rote count from 1	Understand and use the term 'before' in a practical context, e.g. with a line of children one behind the other	Understand and use the term 'before' in a time context, e.g. what did we do before lunch time?	

Some LAPS may need to be completed before another can be started.

### Where have they come from?

The Learning and Progression Steps (LAPS) have been derived from the Lancashire Key Learning in Mathematics statements, identified from Development Matters, the Early Learning Goals for Mathematics and necessary prior knowledge and skills for the Year 1 National Curriculum.

### How are they different from the Key Learning Statements?

The Learning and Progression Steps (LAPS) are smaller, progressive steps which support learning towards the Key Learning in Mathematics expectations.

### **How might Learning and Progression Steps (LAPS) in Mathematics be useful?**

Learning and Progression Steps (LAPS) may be used in a number of ways. When planning, it may be appropriate to use LAPS statements to inform the next steps for individuals or groups. Learning and Progression Steps (LAPS) in Mathematics should be selected according to the learning needs of the individual or group. Emphasis however, should always be on developing breadth and depth of learning to ensure skills, knowledge and understanding are sufficiently embedded before moving on. The LAPS should **not** be used as an assessment tool, but they can inform teachers about children's progress towards the end of year expectations at the end of each term.

### **Are LAPS consistent with the other resources from the Lancashire Mathematics Team?**

Yes, the LAPS are related to the content of the Progression Towards Written Calculation Policies and the Progression in Mental Calculation Strategies.

These can be found on the website:

[www.lancsngfl.ac.uk/curriculum/primarymaths](http://www.lancsngfl.ac.uk/curriculum/primarymaths)

## Key Learning in Mathematics – EYFS

Number – counting	Number – number sense	Measurement
<p><b>Rote counting</b></p> <ul style="list-style-type: none"> <li>Rote count from 1</li> <li>Rote count on from a given number between 1 and 20</li> <li>Rote count back from 20 to 0</li> <li>Rote count back from a given number between 0 and 20</li> <li>Know what number comes before or after a given number</li> <li>Say a number between two given numbers</li> </ul> <p><b>Counting objects</b></p> <ul style="list-style-type: none"> <li>Understand that counting is to find out how many</li> <li>Use one to one correspondence when counting</li> <li>Understand the last number said is the number in the set</li> <li>Count up to 20 objects, pictures, sounds and actions</li> <li>Understand and use conservation of number</li> <li>Use the word ‘zero’ to represent ‘none’</li> <li>Compare two sets of different objects saying which set is more, fewer, same, equal</li> <li>Order three or more sets of objects</li> <li>State without counting (subitise) quantities within 5</li> <li>Make a sensible guess of quantities within 10</li> </ul> <p><b>Count reliably with numbers from 1 to 20.</b></p>	<ul style="list-style-type: none"> <li>Partition a set of objects in different ways using the terminology part - part - whole</li> <li>Understand that ‘teen’ numbers are a group of 10 plus another number</li> <li>Understand 20 is the same as two groups of 10</li> <li>Recognise repeating patterns in the counting sequence i.e. 6, 7, 8, 9 and 16, 17, 18, 19</li> </ul> <p><b>Number – number recognition</b></p> <ul style="list-style-type: none"> <li>Recognise and identify numerals 0 to 20</li> <li>Select the numeral that represents a set of objects</li> <li>Order numerals 0 to 20</li> </ul> <p><b>Count reliably with numbers from 1 to 20, place them in order.</b></p> <p><b>Number – graphics</b></p> <ul style="list-style-type: none"> <li>Represent amounts in their own ways, explaining what they mean</li> <li>Represent and explain their thinking in their own ways</li> <li>Write numerals 0 to 20</li> </ul>	<p><b>Distance</b></p> <ul style="list-style-type: none"> <li>Understand that measures of distance can have different names including length, width, height</li> <li>Understand and use language to compare two objects of different length/width, e.g. longer / shorter; wider / narrower</li> <li>Understand and use language to compare two objects of different height, e.g. taller / shorter</li> <li>Understand and use language of comparison when ordering three objects of different lengths/widths/heights, e.g. longest / shortest; widest / narrowest; tallest / shortest</li> <li>Find an object of similar length/width/height</li> <li>Understand the concept of the conservation of length/width/height</li> <li>Use uniform non-standard units to measure length/width/height</li> </ul> <p><b>Weight</b></p> <ul style="list-style-type: none"> <li>Understand the measurement of weight (heavy/light)</li> <li>Understand and use language to compare two objects of different weight, e.g. heavier/lighter</li> <li>Understand the concept of conservation of weight</li> <li>Use uniform non-standard units to measure weight</li> </ul> <p><b>Volume/capacity</b></p> <ul style="list-style-type: none"> <li>Understand the measurement of volume/capacity (empty/full/nearly)</li> <li>Understand and use language to compare two of the same container holding different amounts, e.g. more/less</li> <li>Understand and use the language of comparison when ordering three of the same container holding different amounts, e.g. most/least</li> <li>Understand the concept of the conservation of volume/capacity</li> <li>Use uniform non-standard units to measure volume/capacity</li> </ul> <p><b>Money</b></p> <ul style="list-style-type: none"> <li>Understand that we need to pay for goods</li> <li>Talk about things they want to spend their money on</li> <li>Talk about different ways we can pay for things</li> <li>Recognise that there are different coins</li> <li>Recognise 1p coin</li> <li>Use 1p coins to pay for objects</li> </ul> <p><b>Time</b></p> <ul style="list-style-type: none"> <li>Talk about significant times of the day, e.g. home time, lunch time, snack time, bed time, etc.</li> <li>Understand and use language – before, after, yesterday, today, tomorrow</li> <li>Use the language of comparison when talking about time, e.g. longer/ shorter; faster/slower</li> <li>Sequence two or three familiar events and describe the sequence</li> <li>Know the names of the days of the week</li> <li>Say the names of the days of the week in order</li> </ul> <p><b>Use everyday language to talk about size, weight, capacity, distance, time and money to compare quantities and objects and to solve problems.</b></p>
<p><b>Number – calculating</b></p> <ul style="list-style-type: none"> <li>Understand the concept of addition by practically combining sets of objects to find how many and use the terminology part – part – whole</li> <li>Understand the concept of subtraction by practically removing one amount from within another to find how many are left and use the terminology part – part – whole</li> <li>Relate subtraction to addition in practical situations using the terminology part – part – whole</li> <li>Identify one more and one less than a given number</li> <li>Identify two more and two less than a given number</li> <li>Add two single-digit numbers totalling up to 10, using practical equipment</li> <li>Add two single-digit numbers totalling greater than 10, using practical equipment</li> <li>Subtract a single-digit number from a number up to 10, using practical equipment.</li> <li>Subtract a single-digit number from a number greater than 10, using practical equipment</li> </ul> <p><b>Say which number is one more or one less than a given number. Using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer. They solve problems involving doubling, halving and sharing.</b></p>	<p><b>Shape</b></p> <ul style="list-style-type: none"> <li>Use everyday language to talk about shapes in the environment</li> <li>Know that shapes can appear in different ways and be different sizes</li> <li>Build and make models with 3-D shapes</li> <li>Create patterns and pictures with 2-D shapes</li> <li>Name common 2-D shapes (circle, triangle, square, rectangle, oblong)</li> <li>Name common 3-D shapes (sphere, cube, cuboid, cone)</li> <li>Talk about shapes using mathematical language (straight, curved, sides, flat, solid)</li> <li>Sort shapes according to their own criteria</li> </ul> <p><b>Explore characteristics of everyday objects and shapes and use mathematical language to describe them.</b></p> <p><b>Space</b></p> <ul style="list-style-type: none"> <li>Understand and use positional language in everyday situations</li> <li>Understand and use ordinal numbers when describing position</li> <li>Understand and use the language of movement/direction</li> <li>Describe and recognise patterns made of objects, numbers and shapes</li> <li>Create patterns made of objects, numbers and shapes</li> </ul> <p><b>Use everyday language to talk about position. They recognise, create and describe patterns.</b></p>	
<p><b>Number – fractions</b></p> <ul style="list-style-type: none"> <li>Understand that sharing is splitting an amount into equal parts</li> <li>Understand that halving is sharing into two equal parts</li> <li>Understand that doubling is adding the same number to itself</li> </ul> <p><b>They solve problems, including doubling, halving and sharing.</b></p>	<p><b>Statistics</b></p> <ul style="list-style-type: none"> <li>Sort objects and say what features they have in common</li> </ul>	

## EYFS Learning and Progression Steps for Mathematics

Learning and Progression Statements								Key Learning	Link to Early Learning Goal
<b>ELG 11 – Numbers</b>									
Children count reliably with numbers from one to 20, place them in order and say which number is one more or one less than a given number. Using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer. They solve problems, including doubling, halving and sharing.									
<b>Rote counting</b>									
<b>Number - counting</b>	Join in with number rhymes	Know that some of the words in number rhymes are numbers	Join in with rote counting from 1 to 5	Rote count from 1 to 5	Join in with rote counting from 1 to 10	Rote count from 1 to a given number up to 10, stopping at the correct place	Join in with rote counting from 1 to 20	Rote count from 1 to a given number up to 20, stopping at the correct place	<b>Rote count from 1</b>
	Rote count from 1 to 5	Know that rote counting can start at numbers other than 1	Join in with rote counting up to 10 from a number other than 1	Rote count from one number to another within 10, starting and stopping at the correct place	Join in with rote counting up to 20 from a number other than 1	Rote count from one number to another within 20, starting and stopping at the correct place			<b>Rote count on from a given number between 1 and 20</b>
	Rote count from 1 to 5	Join in with rote counting back from 5 to 0	Rote count from 5 to 0	Join in with rote counting from 10 to 0	Rote count from 10 to 0	Join in with rote counting from 20 to 0			<b>Rote count back from 20 to 0</b>
	Rote count back from 20 to 0	Join in with rote counting back from 10 to a number other than 0	Rote count back from one number to another within 10, starting and stopping at the correct place	Join in with rote counting back from 20 to a number other than 0	Rote count back from one number to another within 20, starting and stopping at the correct place				<b>Rote count back from a given number between 0 and 20</b>
	Rote count from 1	Understand and use the term 'after' in a practical context, e.g. with a line of children one behind the other			Understand and use the term 'after' in a time context, e.g. what are we doing after playtime?				<b>Know what number comes before or after a given number</b>
	Rote count from 1	Understand and use the term 'before' in a practical context, e.g. with a line of children one behind the other			Understand and use the term 'before' in a time context, e.g. what did we do before lunch time?				
	Rote count from a given number between 1 and 10	Understand and use the term 'between' in a practical context, e.g. with a line of children one behind the other	Understand and use the term 'between' in a time context, e.g. what do you do between going home and going to bed?	Know what number comes before or after a given number	Say the number between two given numbers within 10 e.g. what number is between 5 and 7?	Say the number between two given numbers within 20 e.g. what number is between 12 and 14?	Say a number between two given numbers within 10 e.g. tell me a number between 4 and 8		<b>Say a number between two given numbers</b>

Count reliably with numbers from 1 to 20

Counting objects									
<p><i>There are no steps towards this expectation. Children need to be provided with situations in which finding a quantity is a meaningful task, e.g. There are only six people allowed at the painting table, how many are there now?</i></p>									Understand that counting is to find how many
Rote count from 1 to 5		Know the number names in order and distinguish each one		Understand that each object in the set requires a different number name		Synchronise the counting sequence with touching each object (one number name per object)		Use one to one correspondence when counting	
Use one to one correspondence when counting				Count up to 5 objects emphasising the last number said <i>(if children understand this concept with numbers up to 5 they will be able to use it with numbers up to 20)</i>				Understand the last number said is the number in the set	
Counting objects	Use one to one correspondence when counting and understand the last number said is the number in the set	Count up to 5 objects (including different sized objects), <b>moving</b> each as they are counted	Know that in the counting sequence each consecutive number represents an additional object within the set	Understand that objects can be counted in any order and the amount will be the same	Count up to 10 objects (including different sized objects), <b>moving</b> each as they are counted	Count out a given amount up to 10 (identified either verbally or written) from a greater set, e.g. 3 oranges from 7 in the snack bowl	Count up to 20 objects (including different sized objects), <b>moving</b> each as they are counted	Count out a given amount (identified either verbally or written) from a greater set, e.g. 4 apples from 20 in the snack bowl	Count up to 20 objects, pictures, sounds and actions
	Count up to 5 objects, <b>moving</b> each as they are counted		Count up to 5 pictures, <b>marking</b> each as they are counted		Count up to 10 pictures, <b>marking</b> each as they are counted		Count up to 20 pictures, <b>marking</b> each as they are counted	Count up to 20 pictures without marking using a strategy such as starting at one side, ensuring that all pictures are included and that none have been counted more than once	
	Counting sounds / actions		Count up to 5 objects or pictures, keeping track of each as they are counted		Count up to 5 sounds or actions, keeping track of each as they are counted		Count up to 10 sounds or actions, keeping track of each as they are counted		
Understand the last number said is the number in the set		Understand that objects can be counted in any order and the amount will be the same	Know that objects in a group can be rearranged without affecting the total	Place a given number of counters on a ten frame in different ways		Know that when objects arranged in a line are spread out the total remains the same	Know that when a group of objects is moved to a different location (seen or unseen) the total remains the same		Understand and use conservation of number
Know that when there are no objects this is represented by the word 'zero'									Use the word 'zero' to represent 'none'
Recognise familiar arrangements for numbers up to 5 when on a dice or domino		Identify quantities of objects up to 5 when placed in a dice or domino arrangement		Identify quantities of objects from 1 to 3 when arranged randomly		Explore arrangements of quantities within 5 using a ten frame		State without counting (subitise) quantities within 5	
State without counting (subitise) quantities within 5		Identify, without counting, whether a group has more than or fewer than 5 objects	Know what 10 of different sets of the same object look like		When shown a group within 10 (quick reveal), identify whether it is closer to 5 or 10		When shown two groups within 10 (quick reveal), identify which is the best match for a given number		Make a sensible guess of quantities within 10
									Count reliably with numbers from 1 to 20
									There is no reference to this learning in the ELG





	Compare two groups of the same object by matching objects together	Use the word 'more' to indicate the greater amount Use the word 'fewer' to indicate the lesser amount	Understand the relationship between 'more' and 'fewer', e.g. 4 is more than 3 so 3 is fewer than 4	Identify when groups of the same object have the same amount after objects have been matched	Use the words 'same' and 'equal' to indicate equivalence	Compare groups by counting the objects	Know that bigger objects do not indicate greater amounts, e.g. 2 footballs is a lesser amount than 4 tennis balls	Compare two sets of different objects saying which set is more, fewer, same, equal	Count reliably with numbers from 1 to 20, place them in order
	Compare two groups of the same object by matching objects together	Compare three groups of the same object by matching objects together	Use the word 'most' to indicate the greatest amount Use the word 'fewest' to indicate the least amount	Compare three groups by counting the objects	Know that bigger objects do not indicate greater amounts, e.g. 2 footballs is a lesser amount than 4 tennis balls	Understand that ordering can go from most to fewest or from fewest to most	Order three or more sets of objects		
Number – number sense	Understand and use conservation of number	Use the word 'whole' to describe a set of objects, e.g. in a group of 6 biscuits, the 'whole' is 6	Partition the 'whole' set of objects between two groups, e.g. 6 biscuits with 4 on one plate and 2 on another	Use the word 'part' to describe each partitioned set of objects, e.g. 6 biscuits with 4 on one plate and 2 on another, the parts are 4 and 2	Partition a set of objects in different ways using the terminology part – part – whole			<i>There is no reference to this learning in the ELG</i>	
	Count up to 10 objects, moving each as they are counted	Count out a group of 10 objects from a greater set	Place 10 objects in a specified container and recognise that it holds 10, e.g. 10 pencils in a pot; 10 biscuits in a box	Recognise that when a ten frame is full this represents 10	Arrange a group of 11 to 19 objects into 1 group of 10 plus another group	Use structured equipment number such as bundles of art straws, Unifix (tower of 10), ten frame with counters to create a group of 10 plus another group	Understand that 'teen' numbers are a group of 10 plus another number	<i>There is no reference to this learning in the ELG</i>	
	Arrange a group of 20 objects into 2 groups of 10		Recognise that when two ten frames are full this represents 20		Understand 20 is the same as two groups of 10				
	Use structured equipment such as bundles of art straws, Unifix (tower of 10), ten frames with counters to represent the full counting sequence from 1 to 20		Understand the numbers 11 to 19 as 10 and 1, 10 and 2, 10 and 3 etc.		Recognise repeating patterns in the counting sequence i.e. 6, 7, 8, 9 and 16, 17, 18, 19			<i>There is no reference to this learning in the ELG</i>	


Number – number recognition	Recognise numerals 0 to 5		Identify a given number from a selection within the range 0 to 5		Recognise numerals 6 to 9		Identify a given number from a selection within the range 0 to 9		Recognise numerals 10 to 15		Identify a given number from a selection within the range 0 to 15		Recognise and identify numerals 0 to 20	Count reliably with numbers from 1 to 20, place them in order
	Count objects moving each as they are counted	Label the amounts from 0 to 5 when in order	Label the amounts from 0 to 5 when randomly arranged	Label the amounts from a selection within 0 to 5, e.g. 3, 2 and 5	Label the amounts from 0 to 9 when in order	Label the amounts from 0 to 9 when randomly arranged	Label the amounts from a selection within 0 to 9, e.g. 8, 5 and 7	Label the amounts from 0 to 15 when in order	Label the amounts from 0 to 15 when randomly arranged	Label the amounts from a selection within 0 to 20, e.g. 16, 6 and 14	Select the numeral that represents a set of objects		There is no reference to this learning in the ELG	
	Recognise and identify numerals 0 to 9		Put the numerals 0 to 5 in order when all are given	Put the numerals 0 to 9 in order when all are given	Put the numerals 0 to 20 in order when all are given	Find the numeral that comes before or after a given numeral	Find the numeral between two given numerals, e.g. 13 and 11	Find a numeral between two given numerals, e.g. 11 and 17	Order a random set of numerals within the range 0 to 20		Order numerals 0 to 20		Count reliably with numbers from 1 to 20, place them in order	
Number - graphics	Represent a given amount up to 9 using objects		Represent a given amount up to 9 using own marks and symbols		Explain what their marks and symbols represent		Represent a given amount up to 20 using objects		Represent a given amount up to 20 using own marks and symbols		Explain what their marks and symbols represent		Represent amounts in their own ways, explaining what they mean	There is no reference to this learning in the ELG
	Talk about their mathematical play, e.g. my tower is taller now because I put more bricks on				Draw a picture/jotting to represent their mathematics, e.g. ○○○ ○○-----○○○○○				Explain the mathematical processes used in their picture/jotting, e.g. 'If I have three oranges and I do this (crosses one out) I have two left.'				Represent and explain their thinking in their own ways	There is no reference to this learning in the ELG
	Understand that amounts can be represented by symbols	Represent a given amount using own marks and symbols	Recognise and identify numerals 0 to 20	Write numerals 0 to 5 for a given purpose	Write numerals 6 to 9 for a given purpose	Understand that 'teen' numbers are a group of 10 plus another number	Write numerals 11 to 20 for a given purpose		Write numerals 0 to 20		There is no reference to this learning in the ELG			



Number - calculating	Count up to 5 objects, <b>moving</b> each as they are counted	Combine two groups of objects (total within 5) counting how many are there	Recognise that when the groups are combined the number of objects is more than either of the individual groups	Label the individual groups as <b>parts</b>	Label the combined group of objects as the <b>whole</b>	Understand the concept of addition by practically combining sets of objects to find how many and use the terminology <b>part – part – whole</b>	Using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer	
	Count up to 5 objects, <b>moving</b> each as they are counted	Count out up to 10 objects from a greater set (the whole)	Remove a given amount from a greater set (the whole) counting to identify how many are left	Recognise that when an amount of objects is removed the number in the set is fewer than they started with	Label the original set of objects as the <b>whole</b>	Label the removed group of objects and those that are left as <b>parts</b> when these are easy to distinguish from one another		Understand the concept of subtraction by practically removing one amount from within another to find how many are left and use the terminology <b>part – part – whole</b>
	In practical situations, understand that when <b>two parts</b> are combined they make the <b>whole</b>		In practical situations, understand that when <b>one part</b> is removed from the <b>whole</b> it leaves another <b>part</b>		In practical situations, recognise that when two parts are combined to make a whole, removing one of those parts leaves the other part, e.g. 3 blue pens ( <b>part</b> ) and 4 red pens ( <b>part</b> ) makes a group of 7 pens ( <b>whole</b> ) and when the 3 blue pens are taken away, the 4 red pens are left		Relate subtraction to addition in practical situations using the terminology <b>part – part – whole</b>	<i>There is no reference to this learning in the ELG</i>
	Count up to 5 objects, <b>moving</b> each as they are counted	Understand the concept of addition as combining sets of objects	Know that one more is found by adding one object to an existing group of objects		Recognise that one more is the next number in the counting sequence (when counting in ones)		Identify one more and one less than a given number	Say which number is one more or one less than a given number
	Count up to 5 objects, <b>moving</b> each as they are counted	Understand the concept of subtraction as removing one amount from within another	Know that one fewer is found by removing/taking away one object from an existing group	Know that fewer and less mean the same thing but fewer is used when counting objects	Recognise that one less is the next number in the counting sequence when counting back (in ones)			
	Understand the concept of addition as combining sets of objects	Know that two more is found by adding two objects to an existing group of objects		Understand that two can be made by adding one and another one	Recognise that two more is one more and another one more		Identify two more and two less than a given number	Using quantities and objects, they add and subtract two single-digit numbers and count on or back to find the answer
	Understand the concept of subtraction as removing one amount from within another	Know that two fewer is found by removing/taking away two objects from an existing group		Understand that two can be made by adding one and another one	Recognise that two fewer is one fewer and another one fewer			
	Understand the concept of addition as combining sets of objects	Understand that the terms add, total, altogether relate to combining groups of objects		Combine two groups of objects (total within 5) counting how many are there	Combine two groups of objects (total within 10) counting how many are there		Add two single-digit numbers totalling up to 10, using practical equipment	

	Combine two groups of objects (total within 10) counting how many are there		Place each of two amounts on separate ten frames and explore how they can be combined to find the total		Add two single-digit numbers totalling greater than 10, using practical equipment		
	Understand the concept of subtraction as removing one amount from within another	Understand that the terms subtract and take away relate to removal of one group from another	Remove a given amount from a greater set (with a whole of up to 5) counting to identify how many are left	Remove a given amount from a greater set (with a whole of up to 10) counting to identify how many are left	Subtract a single-digit number from a number up to 10 using practical equipment		
	Remove a given amount from a greater set up to 10 (the whole) counting to identify how many are left		Remove a given amount from a greater set (with a whole of up to 20) counting to identify how many are left		Subtract a single-digit number from a number greater than 10 using practical equipment		
Number - fractions	Understand that when an amount has been shared equally all parts are the same		Recognise, by counting, whether an amount has been shared equally or not		In real life contexts, use practical equipment to share an amount into equal parts	Understand that sharing is splitting an amount into equal parts	They solve problems, including doubling, halving and sharing
	Understand that when an amount has been shared equally between two, both parts are the same	Recognise, by counting, whether an amount has been shared equally between two or not	In real life contexts, use practical equipment and equal sharing to find one half of an even amount of objects	Understand that the terms halving and sharing between two relate to splitting into two equal sized parts	Understand that halving is sharing into two equal parts		
	Understand that doubling is adding the same number to itself		In real life contexts, use practical equipment to identify the doubles of numbers up to 5		Understand that doubling is adding the same number to itself		

Learning and Progression Statements										Key Learning	Link to Early Learning Goal	
<b>ELG 12 – Shape, space and measures</b> Children use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems. They recognise, create and describe patterns. They explore characteristics of everyday objects and shapes and use mathematical language to describe them.												
Understand and use the terms 'straight', 'flat', 'curved', 'solid' and 'round'			Understand and use the term 'side' and 'face'			Understand and use the terms 'sharp', 'point(ed)', 'corner'			Use everyday language to talk about shapes in the environment		Explore characteristics of everyday objects and shapes and use mathematical language to describe them	
Find pairs of shapes that are identical (same shape, size and orientation), e.g.		Find pairs of shapes that are the same despite being different sizes, e.g.		Find pairs of shapes that are the same despite being in different orientations, e.g.		Find pairs of shapes that are the same despite being different sizes or in different orientations, e.g.		Know that shapes can appear in different ways and be different sizes				
												
Recognise that some shapes roll and some do not			Understand that shapes such as cubes and cuboids are better for building than spheres, cones and pyramids			Understand that cylinders can be used for building if placed in the correct orientation			Build and make models with 3-D shapes			
Create pictures with 2-D shapes		Create pictures with 2-D shapes, naming some of the shapes used			Continue a repeating pattern			Create a repeating pattern from a given description, e.g. make me a pattern that is circle, square, circle, square...		Create patterns and pictures with 2-D shapes		
Recognise and name circle	Identify a circle from a selection of 2-D shapes	Recognise and name square	Identify a square from a selection of 2-D shapes	Recognise and name triangle as any shape with three straight sides	Identify different triangles from a selection of 2-D shapes	Recognise and name rectangles/oblongs	Identify different rectangles/oblongs from a selection of 2-D shapes	Use the terms 'rectangle' and 'oblong' for the same shape	Name common 2-D shapes (circle, triangle, square, rectangle, oblong)			
Recognise and name sphere	Identify a sphere from a selection of 3-D shapes	Recognise and name cube	Identify a cube from a selection of 3-D shapes	Recognise and name cuboid	Identify different cuboids from a selection of 3-D shapes	Recognise and name cone	Identify a cone from a selection of 3-D shapes	Name common 3-D shapes (sphere, cube, cuboid, cone)				
Understand and use the terms 'straight', 'flat', 'curved', 'solid' and 'round'		Understand that 'side' refers to 2-D shapes and 'face' refers to 3-D shapes		Understand and use the terms 'side' and 'face'		Understand that 'vertex' is the mathematical word for 'corner'		Understand and use the terms 'sharp', 'point(ed)', 'vertex'		Talk about shapes using mathematical language (straight, curved, sides, flat, solid)		
Say what is the same about a given group of objects		Say what is the same about a given group of shapes		When given one criterion, identify the objects that match		When given one criterion, identify the shapes that match		Sort shapes according to their own criteria		There is no reference to this learning in the ELG		

Space	In everyday situations, understand and use the terms on top, under(neath)	In everyday situations, understand and use the terms in front of, behind, next to	In everyday situations, understand and use the terms above, below	Understand and use positional language in everyday situations	Use everyday language to talk about position.
	Understand and use the terms first and last to describe position in a line	Understand and use the terms second, third, fourth and fifth to describe position in a line	Understand and use the full range of ordinal numbers	Understand and use ordinal numbers when describing position	
	In everyday situations, understand and use the terms forwards, backwards	In everyday situations, understand and use the terms up, down, turn		Understand and use the language of movement/direction	
	Recognise where a set of objects is arranged in a repeating pattern and where it is not	Identify and describe the part of a pattern being repeated, e.g.  <i>It is always red, blue then red, blue again</i>		Describe and recognise patterns made of objects, numbers and shapes	They recognise, create and describe patterns.
	Continue a repeating pattern	Create a repeating pattern from a given description, e.g. make me a pattern that is circle, square, circle, square...		Create patterns made of objects, numbers and shapes	
Statistics	Say what is the same about a given group of objects	When given one criterion, identify the objects that match		Sort objects and say what features they have in common	<i>There is no reference to this learning in the ELG</i>

Learning and Progression Statements		Minimum end of EYFS expectation	Progression			
<b>ELG 12 – Shape, space and measures</b> Children use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems. They recognise, create and describe patterns. They explore characteristics of everyday objects and shapes and use mathematical language to describe them.						
Understand that length refers to how long or short an item is ( <i>this normally refers to the longer dimension of an object</i> )		Understand that measures of distance can have different names including length, width, height	<i>There is no reference to this learning in the ELG</i>			
Understand that width refers to how wide or narrow an item is ( <i>this normally refers to the shorter dimension of an object</i> )						
Understand that height refers to how tall or short an item is ( <i>this refers to the vertical dimension of an object</i> )						
Understand that to compare the length/width of objects they need to be pointing in the same direction	Understand that comparing the length/width of objects is easier if they line up at one end	Compare the lengths of two items and use the terms longer and shorter	Compare the widths of two items and use the terms wider and narrower	Understand and use language to compare two objects of different length/width, e.g. longer / shorter; wider / narrower	Use everyday language to talk about size and distance, to compare quantities and objects and to solve problems	
Understand that comparing the height of objects is easier if they are near to each other		Understand that comparing the height of objects is easier if their bases are on the same level	Compare the heights of two items and use the terms taller and shorter			
Compare the length/width/height of two items	Use a systematic approach to compare each item against the others	Order a set of three items from longest to shortest / widest to narrowest / tallest to shortest	Order a set of three items from shortest to longest / narrowest to widest / shortest to tallest	Understand and use the language of comparison when ordering three objects of different lengths / widths / heights e.g. longest/shortest; widest/narrowest; tallest/shortest		
Compare the length / width / height of two items				Find an object of similar length/width/height		
Recognise that the length / width / height of an item does not change when the item is moved to another place		Recognise that the length / width / height of an item does not change when its orientation changes, e.g. the length of a pencil does not change when you stand it up vertically		Understand the concept of the conservation of length/width/height		<i>There is no reference to this learning in the ELG</i>
Understand that the length / width / height of an item can be represented by a number	Use non-standard units which are <b>not</b> uniform (such as pine cones) to measure length / width / height to recognise that different results may be obtained when measuring the same item	Recognise that the number of uniform non-standard items (such as Multilink cubes) must span from one end of the dimension being measured to the other with no gaps between the non-standard items		Use uniform non-standard units to measure length/width/height		Use everyday language to talk about size and distance, to compare quantities and objects and to solve problems

Measurement - weight	Understand that weight refers to how heavy or light an item is			Understand the measurement of weight (heavy/light)	Use everyday language to talk about weight, to compare quantities and objects and to solve problems	
	Explore what happens when two objects are placed on each side of a balance scale	Use a balance scale to compare the weights of two objects understanding that the lower side contains the heavier object and the higher side contains the lighter object	Understand that if the balance scale is level, the objects being compared are equal in weight	Understand and use language to compare two objects of different weight, e.g. heavier / lighter		
	Recognise that the weight of an item does not change when the item is moved to another place		Recognise that the weight of an item does not change when its orientation changes		Understand the concept of the conservation of weight	<i>There is no reference to this learning in the ELG</i>
	Understand that the weight of an item can be represented by a number	Understand that to measure the weight of an object using a balance scale, the object needs to be placed on one side and counting items placed on the other side until the balance is level	Use non-standard units which are <b>not</b> uniform (such as pine cones) to measure weight to recognise that different results may be obtained when measuring the same item		Use uniform non-standard units to measure weight	Use everyday language to talk about weight, to compare quantities and objects and to solve problems
Measurement – volume/capacity	Understand that volume refers to how much liquid is in a container	Use the terms full and empty to describe volume / capacity		Use the terms nearly full and nearly empty to describe volume	Understand the measurement of volume/capacity (empty/full/nearly)	
	Understand that capacity refers to how much a container can hold when it is full					
	Understand that comparing the volume of two of the same container holding different amounts is easier if they are near to each other	Understand that comparing the volume of two of the same container holding different amounts is easier if their bases are on the same level		Compare the volumes of two of the same container holding different amounts and use the terms more and less	Understand and use language to compare two of the same container holding different amounts, e.g. more, less	Use everyday language to talk about capacity, to compare quantities and objects and to solve problems
	Compare the volume of two of the same container holding different amounts	Use a systematic approach to compare each identical container against the others	Order a set of three identical container from most full to least full	Order a set of three identical container from least full to most full	Understand and use the language of comparison when ordering three of the same container holding different amounts, e.g. most / least	
	Recognise that the volume / capacity of an item does not change when the item is moved to another place		Recognise that the weight of an item does not change when its orientation changes		Understand the concept of the conservation of volume/capacity	
Understand that the capacity of a container can be represented by a number		Understand that to measure the capacity of a container it needs to be filled by repeatedly using a smaller container, e.g. filling a jug with tea cups		Use uniform non-standard units to measure capacity	Use everyday language to talk about capacity, to compare quantities and objects and to solve problems	

Measurement - money	In role play, exchange goods for coins				Understand that we need to pay for goods	There is no reference to this learning in the ELG
	Understand that we need to pay for goods		Understand that items can have different prices		Talk about things they want to spend their money on	
	Understand that we need to pay for goods	Understand that money is used to pay for items	Understand that money can be in the form of coins and notes	Understand that money can be paid in other ways such as a plastic card or using the internet	Talk about different ways we can pay for things	Use everyday language to talk about money, to compare quantities and objects and to solve problems
	Sort coins into sets, e.g. all 1p coins, all 2p coins etc.				Recognise that there are different coins	
	Recognise that there are different coins		Identify the properties of a 1p coin, e.g. brown/copper, round, small	Select the 1p coin(s) from a larger group of mixed coins	Recognise 1p coin	
	Recognise 1p coin	Select a set of objects to match a given numeral (price)	Recognise that prices may involve 'p' which represents pence	Understand that the number of 1p coins needs to match the number on the price tag	Use 1p coins to pay for objects	
Measurement - time	There are no steps towards this end of stage expectation				Talk about significant times of the day, e.g. home time, lunch time, snack time, bed time etc.	Use everyday language to talk about time and to solve problems
	Understand that we can compare the order of events using words such as 'before' and 'after'	Use the word 'before', understanding that it refers to preceding a particular event or item	Use the word 'today', understanding that it refers to the current day	Use the word 'yesterday', understanding that it refers to the day before today	Understand and use language – before, after, yesterday, today, tomorrow	
		Use the word 'after', understanding that it refers to following a particular event or item		Use the word 'tomorrow', understanding that it refers to the day after today		

Understand that we can compare time durations using words such as 'longer' and 'shorter'	Use the word 'longer' to compare two events, understanding that it refers to the event which takes more time	Understand that we can compare speeds using words such as 'faster' and 'slower'	Use the word 'faster' to compare two speeds, e.g. The hare runs <b>faster</b> than the tortoise.	Understand the word 'faster' can refer to an event that takes less time, e.g. Lily is faster at drinking her milk than eating her banana.	Use the language of comparison when talking about time, e.g. longer/shorter; faster/slower
	Use the word 'shorter' to compare two events, understanding that it refers to the event which takes less time		Use the word 'slower' to compare two speeds, e.g. The tortoise runs <b>slower</b> than the hare.	Understand the word 'slower' can refer to an event that takes more time, e.g. Lily is slower at eating her banana than drinking her milk.	
Understand and use the words 'before' and 'after' when describing the order of two events	Use the word 'between', understanding that it refers to the middle, or second of three events		Understand and use the words 'before', 'after' and 'between' when describing the order of three events		Sequence two or three familiar events and describe the sequence
Join in with rhymes for the days of the week in order	Know that some of the words in days of the week rhymes are days		Name the days of the week (not necessarily in order)		Know the names of the days of the week
Names the days of the week (not necessarily in order)		Join in with rote recital of the days of the week in order			Say the names of the days of the week in order