## 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 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' <br> in a practical context, | Understand and use the term 'after' <br> in a time context, |  |
| :---: | :---: | :---: | :---: |
| Rote count from 1 | Know what <br> e.g. with a line of children one behind the other | Understand and use the term 'before' <br> in a practical context, <br> e.g. what are we doing after playtime? | Understand and use the term 'before' <br> in a time comes after a <br> given number |

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

## Key Learning in Mathematics - EYFS

## Number - counting

## Rote counting

- Rote count from 1
- Rote count on from a given number between I and 20
- Rote count back from 20 to 0
- Rote count back from a given number between 0 and 20
- Know what number comes before or after a given number
- Say a number between two given numbers


## Counting objects

- Understand that counting is to find out how many
- Use one to one correspondence when counting
- Understand the last number said is the number in the set
- Count up to 20 objects, pictures, sounds and actions
- Understand and use conservation of number
- Use the word 'zero' to represent 'none'
- Compare two sets of different objects saying which set is more, fewer, same, equal
- Order three or more sets of objects
- State without counting (subitise) quantities within 5
- Make a sensible guess of quantities within 10

Count reliably with numbers from 1 to 20.

## Number - calculating

- Understand the concept of addition by practically combining sets of objects to find how many and use the terminology part - part - whole
- 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
- Relate subtraction to addition in practical situations using the terminology part - part - whole
- Identify one more and one less than a given number
- Identify two more and two less than a given number
- Add two single-digit numbers totalling up to 10 , using practical equipment
- Add two single-digit numbers totalling greater than IO, using practical equipment
- Subtract a single-digit number from a number up to 10 , using practical equipment.
- Subtract a single-digit number from a number greater than 10 , using practical equipment
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.
Number - fractions
- Understand that sharing is splitting an amount into equal parts
- Understand that halving is sharing into two equal parts
- Understand that doubling is adding the same number to itself

They solve problems, including doubling, halving and sharing.

Number - number sense

- Partition a set of objects in different ways using the terminology part - part whole
- Understand that 'teen' numbers are a group of 10 plus another number
- Understand 20 is the same as two groups of 10
- Recognise repeating patterns in the counting sequence i.e. 6, 7, 8, 9 and 16, 17, 18, 19

Number - number recognition

- Recognise and identify numerals 0 to 20
- Select the numeral that represents a set of objects
- Order numerals 0 to 20

Count reliably with numbers from $I$ to 20 , place them in order.
Number - graphics

- Represent amounts in their own ways, explaining what they mean
- Represent and explain their thinking in their own ways
- Write numerals 0 to 20


## Shape

- Use everyday language to talk about shapes in the environment
- Know that shapes can appear in different ways and be different sizes
- Build and make models with 3-D shapes
- Create patterns and pictures with 2-D shapes
- Name common 2-D shapes (circle, triangle, square, rectangle, oblong)
- Name common 3-D shapes (sphere, cube, cuboid, cone)
- Talk about shapes using mathematical language (straight, curved, sides, flat, solid)
- Sort shapes according to their own criteria

Explore characteristics of everyday objects and shapes and use

## mathematical language to describe them.

## Space

- Understand and use positional language in everyday situations
- Understand and use ordinal numbers when describing position
- Understand and use the language of movement/direction
- Describe and recognise patterns made of objects, numbers and shapes
- Create patterns made of objects, numbers and shapes

Use everyday language to talk about position. They recognise, create and describe patterns.

## Statistics

- Sort objects and say what features they have in common


## Measurement

## Distance

- Understand that measures of distance can have different names including length, width, height
- Understand and use language to compare two objects of different length/width, e.g. longer / shorter; wider / narrower
- Understand and use language to compare two objects of different height, e.g. taller / shorter
- Understand and use language of comparison when ordering three objects of different lengths/widths/heights, e.g. longest / shortest; widest / narrowest; tallest / shortest
- Find an object of similar length/width/height
- Understand the concept of the conservation of length/width/height
- Use uniform non-standard units to measure length/width/height


## Weight

- Understand the measurement of weight (heavylight)
- Understand and use language to compare two objects of different weight, e.g. heavierllighter
- Understand the concept of conservation of weight
- Use uniform non-standard units to measure weight Volume/capacity
- Understand the measurement of volume/capacity (empty/full/nearly)
- Understand and use language to compare two of the same container holding different amounts, e.g. more/less
- Understand and use the language of comparison when ordering three of the same container holding different amounts, e.g. most/least
- Understand the concept of the conservation of volume/capacity
- Use uniform non-standard units to measure volume/capacity


## Money

- Understand that we need to pay for goods
- Talk about things they want to spend their money on
- Talk about different ways we can pay for things
- Recognise that there are different coins
- Recognise Ip coin
- Use Ip coins to pay for objects

Time

- Talk about significant times of the day, e.g. home time, lunch time, snack time, bed time, etc.
- Understand and use language - before, after, yesterday, today, tomorrow
- Use the language of comparison when talking about time, e.g. longer/ shorter; faster/slower
- Sequence two or three familiar events and describe the sequence
- Know the names of the days of the week
- Say the names of the days of the week in order

Use everyday language to talk about size, weight, capacity, distance, time and money to compare quantities and objects and to solve problems.

## ELG 11 - Numbers

 single-digit numbers and count on or back to find the answer. They solve problems, including doubling, halving and sharing.


| Counting objects |  |  |  |  |  |  |  |  |  |  |  |  | Count reliably with numbers from 1 to 20 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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? |  |  |  |  |  |  |  |  |  |  |  | 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 (if children understand this concept with numbers up to 5 they will be able to use it with numbers up to 20) |  |  |  |  |  | Understand the last number said is the number in the set |  |
|  | Use one to one correspondenc e when counting and understand the last number said is the number in the set | Count up to 5 objects (including different sized objects), moving 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), moving 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), moving 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, moving each as they are counted |  | Count up to 5 pictures, marking each as they are counted |  | Count up to 10 pictures, marking each as they are counted |  |  | Count up to 20 pictures, marking 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 |  |  |  |
|  | 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 |  |  | Count up to 20 sounds or actions, keeping track of each as they are counted |  |  |  |  |
| Unders numbe numb | and the last said is the 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 |  |  | w that when a p of objects is d to a different ation (seen or een) the total ains 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' |  |
| Recognis numbe | familiar arrangem up to 5 when on or domino | ments for n a dice | 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 | There is no reference to this learning in the ELG |
| 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 |  |





| 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 amou greater set (with a whol counting to identify are left | from a <br> up to 5) <br> many | 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 |  |
|  | 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 |  |

ELG 12 - Shape, space and measures
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.


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 patterns and pictures with 2-D shapes

Name common 2-D shapes (circle, triangle, square, rectangle, oblong) Name common 3-D shapes (sphere, cube, cuboid, cone)
Talk about shape using mathematical language (straight, curved, sides, flat, solid)

Sort shapes
according to their own criteria

Explore characteristics of everyday objects and shapes and use mathematical language to describe them

There is no reference to this learning in the ELG

|  | In everyday situations, understand and use the terms on top, under(neath) | In everyday situation terms in front | rstand and use the ind, 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. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { ષ } \\ & \text { N } \\ & \text { in } \end{aligned}$ | 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. <br> It is always red, blue then red, blue again |  | 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 |  |
| 第 | 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 | There is no reference to this learning in the ELG |


|  | Learning and Progression Statements |  |  |  |  |  | Minimum end of EYFS expectation | Progression |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | ELG 12 - Shape, space and measures <br> 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 (this normally refers to the longer dimension of an object) |  |  |  |  |  | Understand that measures of distance can have different names including length, width, height | There is no reference to this learning in the ELG |
|  | Understand that width refers to how wide or narrow an item is (this normally refers to the shorter dimension of an object) |  |  |  |  |  |  |  |
|  | Understand that height refers to how tall or short an item is (this refers to the vertical dimension of an object) |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | Use everyday language to talk about size and |
|  |  |  |  |  |  |  |  | distance, to compare quantities and objects and to solve problems |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | There is no reference to this learning in the ELG |
|  |  |  |  |  |  |  |  | Use everyday language to talk about size and distance, to compare quantities and objects and to solve problems |



|  | In role play, exchange goods for coins |  |  |  | Understand that we need to pay | 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 |  |
|  | Sort coins into sets, e.g. all 1 p coins, all 2 p coins etc. |  |  |  | Recognise that there are different coins | Use everyday |
|  | Recognise that there are different coins | Identify the properties of a 1 p coin, e.g. brown/copper, round, small |  | Select the 1 p coin(s) from a larger group of mixed coins | Recognise 1p coin | about money, to compare quantities |
|  | Recognise 1 p 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 $1 p$ coins needs to match the number on the price tag | Use 1p coins to pay for objects | and objects and to solve problems |
|  | 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 faster 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 slower 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 word when describing the ord | 'before' and 'after' 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 (not | days of the week essarily 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 |

