Reception Key Learning and Progression Steps for Mathematics

(in line with the 2021 Statutory Framework for the Early Years Foundation Stage and Development Matters documentation)

What is Key Learning?

The Key Learning is designed as a programme of study to develop a broad range of mathematical knowledge, skills and understanding. The objectives are in line with the principles of the educational programme for mathematics within the statutory framework for EYFS:

> "Developing a strong grounding in number is essential so that all children develop the necessary building blocks to excel mathematically. Children should be able to count confidently, develop a deep understanding of the numbers to 10, the relationships between them and the patterns within those numbers. By providing frequent and varied opportunities to build and apply this understanding - such as using manipulatives, including small pebbles and tens frames for organising counting - children will develop a secure base of knowledge and vocabulary from which mastery of mathematics is built. In addition, it is important that the curriculum includes rich opportunities for children to develop their spatial reasoning skills across all areas of mathematics including shape, space and measures. It is important that children develop positive attitudes and interests in mathematics, look for patterns and relationships, spot connections, 'have a go', talk to adults and peers about what they notice and not be afraid to make mistakes."
>
> *Statutory Framework for the Early Years Foundation Stage, September 2021 page 10*

To develop this broad range of knowledge, skills and understanding, the statutory elements have been supplemented with additional content to assist children in making links and assist practitioners in exemplifying the essential learning.

What are Learning and Progression Steps (LAPS)?

The Learning and Progression Steps (LAPS) have been derived from the Lancashire Key Learning in Mathematics statements but are smaller, sequential steps which will support teachers in planning appropriate learning opportunities to ensure progression towards the Key Learning in Mathematics expectations. They can be used to scaffold the learning required in order to support children in becoming fluent in essential knowledge and skills, developing a secure understanding of early mathematics and preparing them effectively for the learning requirements of the National Curriculum in Year One.

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

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.

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

The colour coding is an approximate indicator of end of term expectations.

- White are the steps in learning for 3 and 4 year olds, which may need covering during the Reception year.
- Orange are the steps in learning for the autumn term of the Reception year (covered through Number Land context and daily routines).
- Green are the steps in learning for the spring term of the Reception year (the week reference in the LAPS refers to the Sequence of Learning documentation).
- Yellow are the steps in learning for the summer term and incorporate the end of Reception year expectations (the week reference in the LAPS refers to the Sequence of Learning documentation).

Some objectives within the Key Learning 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 as the final step in the progression for each strand of learning is the end of year expectation.

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 have been placed into a sequence of learning to support which can be found here:

http://www.lancsngfl.ac.uk/curriculum/primarymaths/index.php?category_id=1198

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.

How will these support children in achieving the Early Learning Goals?

A curriculum based around these statements is broad and balanced and will give sufficient depth of understanding to ensure children are well-positioned to access Year One learning from the beginning of that year. The Early Learning Goals are a narrow snapshot of expected achievements by the end of the Early Years Foundation Stage and all of the elements of the Early Learning Goals for Number and Numerical Patterns are covered within the LAPS.

ELG – Number

Children at the expected level of development will:

- Have a deep understanding of number to 10, including the composition of each number;
- Subitise (recognise without counting) up to 5;
- Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.

ELG – Numerical Patterns

Children at the expected level of development will:

- Verbally count beyond 20, recognising the pattern of the counting system;
- Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity;
- Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.

Key Learning in Mathematics – Reception

Number – counting

Rote counting

- *Rote count from 1*
- *Rote count on from a given number between 1 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*
- *Rote count beyond 20*

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, greater, fewer, less, same, equal*
- *Order three or more sets of objects*
- *State without counting (subitise) quantities within 5*
- *Make a sensible guess of quantities within 10*

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 10, 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*
- *Automatically recall addition and subtraction facts up to 5 and some addition and subtraction facts to 10*

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*
- *Automatically recall double facts to double 5*

Number – number sense

- *Partition a set of objects in different ways using the terminology part - part - whole*
- *Explore and represent the patterns in odd and even numbers*
- *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 and 26, 27, 28, 29 etc.*

Number – number recognition

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

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

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

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*

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 the length/width of two objects*
- *Understand and use language to compare the height of two objects*
- *Understand and use language of comparison when ordering three objects of different lengths/widths/heights*
- *Understand the concept of the conservation of length/width/height*

Weight/mass

- *Understand the measurement of weight/mass (heavy/light)*
- *Understand and use language to compare the weight/mass of two objects*
- *Understand the concept of conservation of weight/mass*

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*
- *Understand and use the language of comparison when ordering three of the same container holding different amounts*
- *Understand the concept of the conservation of 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 1p coin*
- *Use 1p 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*

Reception Learning and Progression Steps for Mathematics

Number - counting

Learning and Progression Statements								Key Learning
Rote counting								
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 *Wk 3*	Rote count from 1 to a given number up to 20, stopping at the correct place *Wk 3*	**Rote count from 1 *Wk 3***
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 *Wk 3*	Rote count from one number to another within 20, starting and stopping at the correct place *Wks 1 and 10*		**Rote count on from a given number between 1 and 20 *Wks 1 and 10***
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 *Wks 1 and 10*		**Rote count back from 20 to 0 *Wks 1 and 10***
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	Rote count back from 20 to 0 *Wks 1 and 10*		Join in with rote counting back from 20 to a number other than 0 *Wks 1 and 10*		Rote count back from one number to another within 20, starting and stopping at the correct place *Wks 1 and 10*		**Rote count back from a given number between 0 and 20 *Wks 1 and 10***
Rote count from 1		Understand and use 'after' in a practical context, e.g. with a line of children one behind the other		Understand and use 'after' in a time context, e.g. what are we doing after playtime?				**Know what number comes before or after a given number *Wks 1 and 10***
Rote count from 1		Understand and use 'before' in a practical context, e.g. with a line of children one behind the other		Understand and use '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 'between' in a practical context, e.g. with a line of children one behind the other	Understand and use '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? *Wks 1 and 10*	Say a number between two given numbers within 10 e.g. tell me a number between 4 and 8 *Wks 1 and 10*		**Say a number between two given numbers *Wks 1 and 10***
Rote count from 1 to 20		Join in with counting beyond 20		Recognise the pattern of the ones digits when counting beyond 20				**Rote count beyond 20**

	Counting objects				
	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**

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), **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 *Wk 4*	Count out a given amount (identified either verbally or written) from a greater set, e.g. 4 apples from 20 in the snack bowl *Wk 4*	**Count up to 20 objects, pictures, sounds and actions *Wks 1 and 10***
Counting pictures	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 *Wk 4*	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 *Wks 1 and 10*	
Counting sounds / actions	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 *Wk 4*	

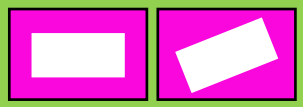
Understand the last number said is the number in the set	Understand that objects can be counted in any order and the amount will be the same	Know that objects in a group can be rearranged without affecting the total	Place a given number of counters on a ten frame in different ways	Know that when objects arranged in a line are spread out the total remains the same *Wks 2 and 10*	Know that when a group of objects is moved to a different location (seen or unseen) the total remains the same *Wks 2 and 10*	**Understand and use conservation of number *Wks 2 and 10***		
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 *Wks 1 and 10***
State without counting (subitise) some quantities within 5		Know what 10 of different sets of the same object look like		Identify, without counting, whether a group has more than or fewer than 5 objects *Wk 1*	When shown a group within 10 (quick reveal), identify whether it is closer to 5 or 10 *Wk 1*	When shown two groups within 10 (quick reveal), identify which is the best match for a given number *Wk 1*		**Make a sensible guess of quantities within 10 *Wks 1 and 10***
Compare two groups of the same object by matching objects together	Use 'more' and 'greater' to indicate the greater amount Use 'fewer' and 'less' to indicate the lesser amount	Understand the relationship between 'more/greater' and 'fewer/less', 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 '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, greater, fewer, less, same, equal *Wk 1***

	Compare two groups of the same object by matching objects together	Know that bigger objects do not indicate greater amounts, e.g. 2 footballs is a lesser amount than 4tennis balls	Compare three groups of the same object by matching objects together	Use 'most' to indicate the greatest amount *Wk 1* Use 'fewest' to indicate the least amount *Wk 1*	Compare three groups by counting the objects *Wk 1*	Understand that ordering can go from most to fewest or from fewest to most *Wk 1*	**Order three or more sets of objects *Wk 1***
Number – number sense	Understand and use conservation of number	Use '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 '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 *Wk 10***
	Count up to 10 objects, **moving** each as they are counted	Count out a group of 10 objects from a greater set	Recognise that when a ten frame is full this represents 10	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 *Wk 3*	Arrange a group of 11 to 19 objects into 1 group of 10 plus another group *Wk 3*	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 *Wk 3*	**Understand that 'teen' numbers are a group of 10 plus another number *Wk 10***
	Arrange a group of 20 objects into 2 groups of 10 *Wk 3*			Recognise that when two ten frames are full this represents 20 *Wk 3*			**Understand 20 is the same as two groups of 10 *Wk 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 *Wk 3*		Understand the numbers 11 to 19 as 10 and 1, 10 and 2, 10 and 3 etc. *Wk 3*		Recognise the pattern of the ones digits when counting beyond 20		**Recognise repeating patterns in the counting sequence i.e. 6, 7, 8, 9 and 16, 17, 18, 19 and 26, 27, 28, 29 etc. *Wks 1 and 10***
	Understand that halving is sharing into two equal parts or groups	Share a number of whole objects into two equal groups		Recognise that not all amounts of objects can be shared into two equal groups (where individual items are not split)	Understand that a number that can be shared into two equal whole number parts is called 'even' Understand that a number that cannot be shared into two equal whole number parts is called 'odd'		**Explore and represent the patterns in odd and even numbers**
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 *Wk 3*	Identify a given number from a selection within the range 0 to 15 *Wk 3*	**Recognise and identify numerals 0 to 20 *Wks 1 and 10***
	Count objects moving each as they are counted	Select the numeral to match amounts from 0 to 5 when in order	Select the numeral to match amounts from 0 to 5 when randomly arranged	Select the numeral to match amounts from a selection within 0 to 5, e.g. 3, 2 and 5	Select the numeral to match amounts from 0 to 9 when in order	Select the numeral to match amounts from 0 to 9 when randomly arranged	Select the numeral to match amounts from a selection within 0 to 9, e.g. 8, 5 and 7	Select the numeral to match amounts from 0 to 15 when in order *Wk 3*	Select the numeral to match amounts from 0 to 15 when randomly arranged *Wk 3*	Select the numeral to match amounts from a selection within 0 to 20, e.g. 16, 6 and 14 *Wk 10*	**Select the numeral that represents a set of objects *Wks 1 and 10***

	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	Find the numeral that comes before or after a given numeral up to 15 *Wk 3*	Put the numerals 0 to 20 in order when all are given *Wk 1*	Find the numeral between two given numerals, e.g. 13 and 11 *Wks 1 and 10*	Find a numeral between two given numerals, e.g. 11 and 17 *Wks 1 and 10*	Order a random set of numerals within the range 0 to 20 *Wk 1*	**Order numerals 0 to 20 *Wk 10***
Number - graphics	Represent a given amount up to 10 using objects	Represent a given amount up to 10 using own marks and symbols	Explain what their marks and symbols represent	Represent a given amount up to 20 using objects *Wk 3*	Represent a given amount up to 20 using own marks and symbols *Wk 3*	Explain what their marks and symbols represent *Wk 3*			**Represent amounts in their own ways, explaining what they mean**
	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 *Ongoing***
	Understand that amounts can be represented by symbols	Represent a given amount using own marks and symbols	Recognise and identify numerals 0 to 10	Write numerals 0 to 10 for a given purpose *Wk 2*	Recognise and identify numerals 11 to 20 *Wk 3*	Understand that 'teen' numbers are a group of 10 plus another number *Wk 3*	Write numerals 11 to 20 for a given purpose *Wk 10*		**Write numerals 0 to 20 *Wks 1 and 10 and ongoing***
Number - calculating	Count up to 5 objects, **moving** 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 **parts** *Wks 7, 8, 11 and 12*	Label the combined group of objects as the **whole** *Wks 7, 8, 11 and 12*				**Understand the concept of addition by practically combining sets of objects to find how many and use the terminology part – part – whole *Wks 2 and 11***
	Count up to 5 objects, **moving** 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 **whole** *Wks 7, 8, 11 and 12*	Label the removed group of objects and those that are left as **parts** when these are easy to distinguish from one another *Wks 8, 11 and 12*			**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 *Wks 2, 11 and 12***
	In practical situations, understand that when **two parts** are combined they make the **whole** *Wks 7, 8, 11 and 12*	In practical situations, understand that when one **part** is removed from the **whole** it leaves another **part** *Wks 7, 8, 11 and 12*			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 (**part**) and 4 red pens (**part**) makes a group of 7 pens (**whole**) and when the 3 blue pens are taken away, the 4 red pens are left *Wks 2, 11 and 12*			**Relate subtraction to addition in practical situations using the terminology part – part – whole *Wks 2, 11 and 12***

Count up to 5 objects, **moving** each as they are counted	Use concrete equipment to find one more than a given number up to 5	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** ***Wks 2, 11 and 12***
Count up to 5 objects, **moving** each as they are counted	Use concrete equipment to find one less than a given number up to 5	Know that one fewer is found by removing/taking away one object from an existing group *Wks 8 and 11*	Know that fewer and less mean the same thing but fewer is used when counting objects *Wks 8 and 11*	Recognise that one less is the next number in the counting sequence (when counting back (in ones) *Wks 8 and 11*	
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 *Wk 7 and 11*	Understand that two can be made by one and another one *Wk 7 and 11*	Recognise that two more is one more and another one more *Wk 7 and 11*		**Identify two more and two less than a given number** ***Wks 2, 11 and 12***
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 *Wk 8 and 11*	Understand that two can be made by one and another one *Wk 8 and 11*	Recognise that two fewer is one fewer and another one fewer *Wk 8 and 11*		
Understand the concept of addition as combining sets of objects	Understand that 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 *Wks 2 and 11*			**Add two single-digit numbers totalling greater than 10, using practical equipment** ***Wk 11***
Understand the concept of subtraction as removing one amount from within another	Understand that subtract and take away relate to removal of one group from within 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** ***Wk 8***
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 *Wks 2, 11 and 12*			**Subtract a single-digit number from a number greater than 10 using practical equipment** ***Wks 2, 11 and 12***
Use concrete equipment to represent numbers up to 5	Practically partition a number up to 5 into two parts, identifying the amount in each part	Understand the concepts of addition and subtraction by practically combining or removing sets of objects to find how many and use the terminology part – part – whole	Use the part-whole model to identify addition facts for a number up to 5 Use the part-whole model to identify subtraction facts for a number up to 5	Use a ten frame to identify some addition and subtraction facts for 10	**Automatically recall addition and subtraction facts up to 5 and some addition and subtraction facts to 10**

Number - fractions	Understand that when an amount has been shared equally all parts are the same *Wk 9*		Recognise, by counting, whether an amount has been shared equally or not *Wk 9*		In real life contexts, use practical equipment to share an amount into equal parts *Wk 3*	**Understand that sharing is splitting an amount into equal parts** ***Wk 3***
	Understand that when an object (that can be cut) has been shared equally between two, both parts are the same *Wk 9*	Understand that when a number of objects has been shared equally between two, both groups/parts have the same amount *Wk 9*	Recognise, by counting, whether an amount has been shared equally between two or not *Wk 9*	In real life contexts, use practical equipment and equal sharing to find one half of an even amount of objects *Wk 3*	Understand that halving and sharing between two relate to splitting into two equal sized parts *Wk 3*	**Understand that halving is sharing into two equal parts** ***Wk 3***
	Use concrete materials to model doubles as adding the same number to itself					**Understand that doubling is adding the same number to itself** ***Wk 9***
	Understand that doubling is adding the same number to itself		In real life contexts, use practical equipment to identify the doubles of numbers to double 5 *Wk 9*			**Automatically recall double facts to double 5**

	Learning and Progression Statements				Key Learning
Shape	Find pairs of shapes that are identical (same shape, size and orientation), e.g.  *Wk 6*	Find pairs of shapes that are the same despite being different sizes, e.g.  *Wk 6*	Find pairs of shapes that are the same despite being in different orientations, e.g.  *Wk 6*	Find pairs of shapes that are the same despite being different sizes or in different orientations, e.g.  *Wk 6*	**Know that shapes can appear in different ways and be different sizes** ***Wk 6***
	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	Give reasons for the choice of shapes within a model	**Build and make models with 3-D shapes** ***Wk 6***
	Create pictures with 2-D shapes		Give reasons for the choice of shapes within a picture		**Create and describe pictures using 2-D shapes** ***Wk 6***
	Recognise and name circle *Wk 6*	Identify a circle from a selection of 2-D shapes *Wk 6*	Recognise and name square rectangle *Wk 6*	Identify a square rectangle from a selection of 2-D shapes *Wk 6*	Recognise and name triangle as any shape with three straight sides *Wk 6*	Identify different triangles from a selection of 2-D shapes *Wk 6*	Recognise and name oblong rectangles *Wk 6*	Identify different oblong rectangles from a selection of 2-D shapes *Wk 6*	**Name common 2-D shapes (circle, triangle, square rectangle, oblong rectangle)** ***Wk 6***
	Recognise and name sphere *Wk 6*	Identify a sphere from a selection of 3-D shapes *Wk 6*	Recognise and name cube *Wk 6*	Identify a cube from a selection of 3-D shapes *Wk 6*	Recognise and name cuboid *Wk 6*	Identify different cuboids from a selection of 3-D shapes *Wk 6*	**Name common 3-D shapes (sphere, cube, cuboid)** ***Wk 6***
	Understand and use 'straight', 'flat', 'curved', 'solid' and 'round' *Wk 6*	Understand that 'side' refers to 2-D shapes and 'face' refers to 3-D shapes *Wk 6*	Understand and use 'side' and 'face' when describing shapes *Wk 6*	Understand that 'vertex' is the mathematical word for 'corner' *Wk 6*	Understand and use 'sharp', 'point(ed)', 'vertex' when describing shapes *Wk 6*	**Talk about shapes using mathematical language (straight, curved, sides, flat, solid)** ***Wk 6***
	Say what is the same about a given group of objects *Wk 6*	Say what is the same about a given group of shapes *Wk 6*	When given one criterion, identify the objects that match *Wk 6*	When given one criterion, identify the shapes that match *Wk 6*	**Sort shapes according to their own criteria** ***Wk 6***
Space	Use spatial words in play, including 'in', 'on', 'under', 'up', 'down', 'between'	In everyday situations, understand and use 'on top', 'under(neath)'	In everyday situations, understand and use 'in front of', 'behind', 'next to', 'beside'	In everyday situations, understand and use 'above', 'below'	**Understand and use positional language in everyday situations** ***Wk 8***
	Understand and use 'first' and 'last' to describe position in a line	Understand and use 'second', 'third', 'fourth' and 'fifth' to describe position in a line *Wk 8*	Understand and use the full range of ordinal numbers *Wk 8*		**Understand and use ordinal numbers when describing position** ***Wk 8***

<table>
<tr><td rowspan="4"></td><td colspan="2">In everyday situations, understand and use ‘forwards’, ‘backwards’</td><td colspan="2">In everyday situations, understand and use ‘up’, ‘down’, ‘turn’</td><td>Understand and use the language of movement/direction
Wk 8</td></tr>
<tr><td colspan="3">Recognise where a set of objects is arranged in a repeating pattern and where it is not</td><td colspan="2">Identify and describe the part of a pattern being repeated, e.g.
 
It is always red, blue then red, blue again
Wk 8</td><td>Describe and recognise patterns made of objects, numbers and shapes
Wk 8</td></tr>
<tr><td>Copy a simple repeating pattern (ABAB)</td><td>Continue a simple repeating pattern (ABAB)</td><td>Continue a repeating pattern including ABBABB and ABBCABBC
Wk 6</td><td>Create a repeating pattern from a given description,
e.g. make me a pattern that is circle, square, circle, square…
Wk 8</td><td>Create patterns made of objects, numbers and shapes
Wk 8</td></tr>
<tr><td>Statistics</td><td colspan="2">Say what is the same about a given group of objects
Wk 6</td><td colspan="2">When given one criterion, identify the objects that match
Wk 9</td><td>Sort objects and say what features they have in common
Wk 9</td></tr>
</table>

	Learning and Progression Statements				Key Learning
Measurement - Distance	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** ***Wk 4***
	Understand that height refers to how tall or short an item is (*this refers to the vertical dimension of an object*)				
	Understand that width refers to how wide or narrow an item is (*this normally refers to the shorter dimension of an object*) *Wk 4*				
	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 objects using 'longer than', 'shorter than', 'same', 'equal'	Compare the widths of two objects using 'wider than', 'narrower than', 'same', 'equal' *Wk 4*	**Understand and use language to compare the length/width of two objects** ***Wk 4***
	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 objects using 'taller than', 'shorter than', 'same', 'equal' *Wk 4*		**Understand and use language to compare the height of two objects** ***Wk 4***
	Compare the length/width/height of two items *Wk 4*	When comparing three items, use a systematic approach to compare each item against the others *Wk 4*	Order a set of three items from shortest to longest / narrowest to widest / shortest to tallest *Wk 4*		**Understand and use the language of comparison when ordering three objects of different lengths/widths/heights** ***Wk 4***
			Order a set of three items from longest to shortest / widest to narrowest / tallest to shortest *Wk 4*		
	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 *Wk 4*			**Understand the concept of the conservation of length/width/height** ***Wk 4***
Measurement - weight	Understand that weight/mass refers to how heavy or light an item is				**Understand the measurement of weight/mass (heavy/light)** ***Wk 5***
	Compare the weight/mass of two markedly different items using 'heavier than' and 'lighter than'	Explore what happens when two objects are placed on each side of a balance scale *Wk 5*	Use a balance scale to compare the weights/masses of two objects understanding that the lower side contains the heavier object and the higher side contains the lighter object *Wk 5*	Understand that if the balance scale is level, the objects being compared are equal in weight/mass *Wk 5*	Compare the weight/mass of two objects using 'lighter than', 'heavier than', 'same', 'equal' *Wk 5*	**Understand and use language to compare the weight/mass of two objects** ***Wk 5***
	Recognise that the weight/mass of an item does not change when the item is moved to another place *Wk 5*	Recognise that the weight/mass of an item does not change when its orientation changes *Wk 5*				**Understand the concept of the conservation of weight/mass** ***Wk 4***

Measurement – volume/capacity	Understand that volume refers to how much liquid is in a container *Wk 5* Understand that capacity refers to how much a container can hold when it is full *Wk 5*		Use 'full' and 'empty' to describe volume / capacity *Wk 5*	Use 'nearly full' and 'nearly empty' to describe volume *Wk 5*		**Understand the measurement of volume/capacity (empty/full/nearly) *Wk 5***
	Recognise changes by pouring into and out of a container	Compare the capacities of two different containers with similar girth saying which holds more and which holds less	Understand that comparing the volume of two of the same container holding different amounts is easier if they are near to each other *Wk 5*	Understand that comparing the volume of two of the same container holding different amounts is easier if their bases are on the same level *Wk 5*	Compare the volumes of two of the same container holding different amounts using 'more than' and 'less than' *Wk 5*	**Understand and use language to compare two of the same container holding different amounts, e.g. more than, less than *Wk 5***
	Compare the volume of two of the same container holding different amounts *Wk 5*		When comparing three identical containers, use a systematic approach to compare each container against the others *Wk 5*	Order a set of three identical containers with different amounts from most full to least full *Wk 5* Order a set of three identical containers with different amounts from least full to most full *Wk 5*		**Understand and use the language of comparison when ordering three of the same container holding different amounts, e.g. most / least *Wk 5***
	Recognise that the volume / capacity of an item does not change when the item is moved to another place *Wk 5*			Recognise that the weight of an item does not change when its orientation changes *Wk 5*		**Understand the concept of the conservation of volume/capacity *Wk 5***
Measurement - money	In role play, exchange goods for coins					**Understand that we need to pay for goods**
	Understand that we need to pay for goods			Understand that different 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 *Wk 9*	Understand that money can be paid in other ways such as a plastic card or using the internet *Wk 9*	**Talk about different ways we can pay for things *Wk 9***
	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 *Wks 5 and 9***

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…** ***Wk 7***
	Understand that we can compare the order of events using 'before' and 'after'	Use 'before', understanding that it refers to preceding a particular event or item	Use 'today', understanding that it refers to the current day	Use 'yesterday', understanding that it refers to the day before today		**Understand and use language – before, after, yesterday, today, tomorrow** ***Wk 7***
		Use 'after', understanding that it refers to following a particular event or item		Use 'tomorrow', understanding that it refers to the day after today		
	Understand that we can compare time durations using 'longer than' and 'shorter than' *Wk 7*	Use 'longer than' to compare two events, understanding that it refers to the event which takes more time *Wk 7*	Understand that we can compare speeds using 'faster than' and 'slower than' *Wk 7*	Use 'faster' to compare two speeds, e.g. The hare runs **faster** than the tortoise. *Wk 7*	Understand 'faster' can refer to an event that takes less time, e.g. Lily is faster at drinking her milk than eating her banana. *Wk 7*	**Use the language of comparison when talking about time, e.g. longer/shorter; faster/slower** ***Wk 7***
		Use 'shorter than' to compare two events, understanding that it refers to the event which takes less time *Wk 7*		Use 'slower' to compare two speeds, e.g. The tortoise runs **slower** than the hare. *Wk 7*	Understand 'slower' can refer to an event that takes more time, e.g. Lily is slower at eating her banana than drinking her milk. *Wk 7*	
	Understand and use 'before' and 'after' when describing the order of two events	Use 'between', understanding that it refers to the middle or second of three events *Wk 7*	Understand and use 'before', 'after' and 'between' when describing the order of three events *Wk 7*			**Sequence two or three familiar events and describe the sequence** ***Wk 7***
	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** **Wk 7**
	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** **Wk 7**