Mathematics in Reception

Summer Term

Sequence of Learning

Opportunities for Learning

The following tables detail a suggested sequence of learning for Summer term that correspond with the Learning and Progression Steps (LAPS) for EYFS.

However, some of the content within the LAPS is best learned through daily routines and regular exposure through quality interactions during continuous provision. This specific content is:

- Rote counting back from 20
- Counting sounds and actions and keeping track of the count

- Understand and use the terms second, third, fourth and fifth to describe position in a line
- In everyday situations, understand and use the terms forwards, backwards, up, down, turn

- Understand that money can be in the form of coins and notes
- Understand that money can be paid in other ways such as plastic card or using the internet
- Sort coins into sets, e.g. all 1p coins, all 2p coins etc.
- 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

- 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 'after', understanding that it refers to following a particular event or item
- Use the word 'between', understanding that it refers to the middle or second of three events
- 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
- Use the word 'tomorrow', understanding that it refers to the day after today
- Name the days of the week (not necessarily in order)
- Join in with rote recital of the days of the week in order

Week 1 Big Idea – Counting, Comparing and Ordering		
Lesson	**LAPS – Learning Objective**	**Related Learning**
1	**Rote count from one number to another within 20, starting and stopping at the correct place.** **Rote count back from one number to another within 20, starting and stopping at the correct place.**	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
2	**Say the number between two given numbers within 20 e.g. what number is between 12 and 14?**	Recognise and identify numerals 0-20 Write numerals to 20 Find the numeral between two given numerals e.g. 13 and 11
3	**Say a number between two given numbers within 10 e.g. tell me a number between 4 and 8.**	Find a numeral between two given numerals e.g. 11 and 17
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.** **State without counting (subitise) quantities within 5** ***(because some amounts may not need to be counted)*** **Make a sensible guess of quantities within 10**	Recognise and identify numerals 0-20 Select the numeral that that represents a set of objects. Write numerals to 20 Recognise repeating patterns in the counting sequence i.e. 6, 7, 8, 9 and 16, 17, 18, 19
5	**Order three or more sets of objects** Order numerals 0-20 **Order a random set of numerals within the range 0-20**	Recognise and identify numerals 0-20 Select the numeral that that represents a set of objects. Write numerals to 20
Week 2 Big Idea – Understanding Part – Whole, Addition and Subtraction		
Lesson	**LAPS – Learning Objective**	**Related Learning**
1	**Identify one more and one less than a given number.** **Identify two more and two less than a given number.**	
2	**Understand that 'teen' numbers (11-19) are a group of 10 plus another number (by partitioning a set of objects into a ten and the ones using part – whole language)** **Understand that 20 is the same as two groups of 10** Partition a set of objects in different ways using the terminology part – whole	Recognise and identify numerals 0-20 Select the numeral that that represents a set of objects. Write numerals to 20
3	Understand the concept of addition by practically combining sets of objects to find how many and use the terminology part – whole. 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.**	
4	Understand the concept of subtraction by practically removing one amount from within another to find how many are left and use the terminology part – whole. Remove a given amount from a greater set (with a whole up to 20) counting to identify how many are left. **Subtract a single-digit number from a number greater than 10 using practical equipment.**	

5	**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.** Relate subtraction to addition in practical situations using the terminology part – whole.	
Week 3 Big Idea – Fractions		
Lesson	**LAPS – Learning Objective**	**Related Learning**
1	**In real life contexts, use practical equipment and equal sharing to find one half of an even amount of objects.** Understand that halving is sharing (dividing) into two equal parts.	Understand that the terms halving and sharing between two relate to splitting into two equal parts. Understand and use the terminology part – whole.
2	**In real life contexts, use practical equipment to share an amount into equal parts.** Understand that sharing is splitting (dividing) an amount into equal parts.	Understand and use the terminology part and whole.
3	**Understand that doubling is adding the same number to itself (in practical contexts)**	
4	**Solve practical problems that involve doubling, halving and sharing.**	
5	**Solve practical problems that involve doubling, halving and sharing.**	
Week 4 Big Idea – Distance (length, height, width), Weight		
Lesson	**LAPS – Learning Objective**	**Related Learning**
1	**Recap - Compare the lengths of two items using direct comparison and use the terms longer and shorter.** Understand and use the language of comparison when ordering three objects of different lengths/widths/heights e.g. longest/shortest; widest/narrowest; tallest/shortest.	Understand that to compare the lengths of objects they need to be pointing in the same direction Understand that comparing the lengths of objects is easier if they line up at one end Recognise that the length of an item does not change when it is moved to another place Recognise that the length does not change when its orientation changes
2	**Order a set of three items from longest to shortest (and vice versa) using direct comparison.** **Use uniform non-standard units (items of the exact same size) to measure length / width / height.**	Order numerals 0-20 Order a random set of numerals within the range 0-20 Order three or more sets of objects.
3	**Order a set of three items from longest to shortest (and vice versa) using direct comparison.** **Use uniform non-standard units (items of the exact same size) to measure length / width / height.**	Order numerals 0-20 Order a random set of numerals within the range 0-20 Order three or more sets of objects.
4	**Recap – Compare two objects of different weight e.g. heavier / lighter.** **Use uniform non-standard units (items of the exact same size) to measure weight.**	Order numerals 0-20 Order a random set of numerals within the range 0-20
5	**Recap – Compare two objects of different weight e.g. heavier / lighter.**	Order numerals 0-20 Order a random set of numerals within the range 0-20

	Use uniform non-standard units (items of the exact same size) to measure weight. Understand the concept of conservation of weight.	
Week 5 Big Idea – Capacity/Volume and Money		
Lesson	**LAPS – Learning Objective**	**Related Learning**
1	**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 conservation of volume/capacity.	
2	**Use uniform non-standard units (items of the exact same size) to measure capacity.** Understand and use the language of comparison when ordering three of the same container holding different amounts e.g. most / least.	Order numerals 0-20 Order a random set of numerals within the range 0-20 Order three or more sets of objects.
3	**Use uniform non-standard units (items of the exact same size) to measure capacity.** Understand and use the language of comparison when ordering three of the same container holding different amounts e.g. most / least.	Order numerals 0-20 Order a random set of numerals within the range 0-20 Order three or more sets of objects.
4	**Count up to 20 objects (1p coins) to match a given numeral.**	Recognise and identify numerals 0-20 Select the numeral that that represents a set of objects.
5	**Count up to 20 objects (1p coins) to match a given numeral.**	Recognise and identify numerals 0-20 Select the numeral that that represents a set of objects.
Week 6 Big Idea – Shape and Sorting		
Lesson	**LAPS – Learning Objective**	**Related Learning**
1	Find pairs of 2-D shapes that are the same despite being different sizes or in different orientations. Know that shapes can appear in different ways and be different sizes. **Name common 2-D shapes (circle, triangle, square rectangle, oblong rectangle).**	Understand that 'vertex' is the mathematical word for 'corner'. Understand and use the terms 'point(ed)' and 'vertex' to describe corners. Talk about shapes using mathematical language (straight, curved, sides, flat). Use everyday language to talk about shapes in the environment.
2	Find pairs of 2-D shapes that are the same despite being different sizes or in different orientations. Know that shapes can appear in different ways and be different sizes. **Name common 2-D shapes (circle, triangle, square rectangle, oblong rectangle).**	Understand that 'vertex' is the mathematical word for 'corner'. Understand and use the terms 'point(ed)' and 'vertex' to describe corners. Talk about shapes using mathematical language (straight, curved, sides, flat). Use everyday language to talk about shapes in the environment.
3	Find pairs of 3-D shapes that are the same despite being different sizes or in different orientations. Know that shapes can appear in different ways and be different sizes. **Name common 3-D shapes (sphere, cube, cuboid).**	Understand that 'vertex' is the mathematical word for 'corner'. Understand and use the terms 'point(ed)' and 'vertex' to describe corners. Talk about shapes using mathematical language (straight, curved, face, flat, solid). Use everyday language to talk about shapes in the environment.
4	Find pairs of 3-D shapes that are the same despite being different sizes or in different orientations. Know that shapes can appear in different ways and be different sizes.	Understand that 'vertex' is the mathematical word for 'corner'. Understand and use the terms 'point(ed)' and 'vertex' to describe corners.

	Name common 3-D shapes (sphere, cube, cuboid).	Talk about shapes using mathematical language (straight, curved, face, flat, solid). Use everyday language to talk about shapes in the environment.
5	**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.**	Understand that 'vertex' is the mathematical word for 'corner'. Understand and use the terms 'point(ed)' and 'vertex' to describe corners. Talk about shapes using mathematical language (straight, curved, face, flat, solid). Use everyday language to talk about shapes in the environment.
Week 7 Big Idea – Time		
Lesson	**LAPS – Learning Objective**	**Related Learning**
1	Talk about significant times of the day. **Sequence two or three familiar events and describe the sequence.**	Understand and use language – before, after, yesterday, today, tomorrow Use the word 'between', understanding that it refers to the middle, or second of three events
2	Know the names of the days of the week. **Say the names of the days of the week in order.**	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
3	Use the language of comparison when talking about time, e.g. longer/shorter; faster/slower. **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. Use the word 'shorter' to compare two events, understanding that it refers to the event which takes less time.	
4	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. 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 **Use the language of comparison when talking about time, e.g. longer/shorter; faster/slower.**	When comparing the duration of two actions, they can be compared in two ways: action A is slower than action B so action B is faster than action A. *NB – this learning refers to children comparing the time taken for two different tasks.*
5	**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. Use the word 'slower' to compare two speeds, e.g. The tortoise runs **slower** than the hare.	When comparing the length of time two people have taken, they can be compared in two ways: person A is slower than person B so person B is faster than person A. *NB – this learning refers to children comparing the time taken for two children to complete the same task.*
Week 8 Big Idea – Space		
Lesson	**LAPS – Learning Objective**	**Related Learning**
1	Understand and use the terms first, second, third, fourth, fifth etc. to describe position in a line. Understand and use the full range of ordinal numbers. **Understand and use ordinal numbers when describing position.**	

2	**Create a repeating pattern from a given description, e.g. make me a pattern that is circle, square, circle, square…** **Identify and describe the part of a pattern being repeated, e.g.**  ***It is always red, blue then red, blue again***	Understand and use ordinal numbers when describing position of objects within the pattern.
3	**Describe and recognise patterns made of objects, numbers and shapes.** **Create patterns made of objects, numbers and shapes.**	Understand and use ordinal numbers when describing position of objects within the pattern.
4	**Understand and use positional language in everyday situations.** In everyday situations, understand and use the terms forwards and backwards. In everyday situations, understand and use the terms up, down and turn.	
5	**Understand and use the language of movement/direction.** In everyday situations, understand and use the terms forwards and backwards. In everyday situations, understand and use the terms up, down and turn.	

Week 9 Big Idea – Money and Sorting

Lesson	LAPS – Learning Objective	Related Learning
1	**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, mobile phone or using the internet. Talk about different ways we can pay for things.	
2	**Understand that money can be in the form of coins and notes.**	Identify coins and notes from a range of items When given one criterion, identify the objects that match **Sort objects and say what features they have in common**
3	**Understand that money can be in the form of coins and notes.**	Identify coins that have common properties When given one criterion, identify the objects that match **Sort objects and say what features they have in common**
4	**Use 1p coins to pay for objects with prices up to 20p.**	Recognise and identify numerals 0-20 Select the numeral that that represents a set of objects.
5	**Use 1p coins to pay for objects with prices up to 20p.**	Recognise and identify numerals 0-20 Select the numeral that that represents a set of objects.

Week 10 Big Idea – Number Sense

Lesson	LAPS – Learning Objective	Related Learning
1	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** Recognise repeating patterns in the counting sequence i.e. 6, 7, 8, 9 and 16, 17, 18, 19 and 26, 27, 28, 29 etc.	Rote count from one number to another within 20, starting and stopping at the correct place Join in with rote counting from 20 to 0 Rote count back from 20 to 0 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 Know what number comes before or after a given number

2	Find the numeral between two given numerals, e.g. 13 and 11 **Find a numeral between two given numerals, e.g. 11 and 17** Recognise repeating patterns in the counting sequence i.e. 6, 7, 8, 9 and 16, 17, 18, 19 and 26, 27, 28, 29 etc.	Rote count from one number to another within 20, starting and stopping at the correct place Join in with rote counting from 20 to 0 Rote count back from 20 to 0 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 Know what number comes before or after a given number
3	**Count up to 20 pictures without marking, ensuring that all pictures are included and that none have been counted more than once, using a strategy such as starting at one side.**	State without counting (subitise) quantities within 5 Make a sensible guess of quantities within 10 Write numerals 11 to 20 for a given purpose Write numerals 0 to 20
4	**Understand that 'teen' numbers are a group of 10 plus another number.** **Understand 20 is the same as two groups of 10.** Partition a set of objects in different ways using the terminology part – whole.	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
5	**Order three or more sets of objects.**	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

Week 11 Big Idea – Addition and Subtraction		
Lesson	**LAPS – Learning Objective**	**Related Learning**
1	Understand the concept of addition by practically combining sets of objects to find how many and use the terminology part – whole. **Identify one more than a given number.** **Identify two more than a given number.**	Select the numeral that represents a set of objects Write numerals 11 to 20 for a given purpose Write numerals 0 to 20
2	Understand the concept of addition by practically combining sets of objects to find how many and use the terminology part – whole. **Add two single-digit numbers totalling greater than 10, using practical equipment.** Place each of two amounts on separate ten frames and explore how they can be combined to find the total.	Select the numeral that represents a set of objects Write numerals 11 to 20 for a given purpose Write numerals 0 to 20
3	Understand the concept of addition by practically combining sets of objects to find how many and use the terminology part – whole. **Add two single-digit numbers totalling greater than 10, using practical equipment.** Place each of two amounts on separate ten frames and explore how they can be combined to find the total.	Select the numeral that represents a set of objects Write numerals 11 to 20 for a given purpose Write numerals 0 to 20
4	**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.** Relate subtraction to addition in practical situations using the terminology 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 – whole Select the numeral that represents a set of objects Write numerals 11 to 20 for a given purpose Write numerals 0 to 20
5	**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**	Understand the concept of subtraction by practically removing one amount from within another to find how many are left and use the terminology part – whole Select the numeral that represents a set of objects

	(part) makes a group of 7 pens (whole) 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 part – whole.	Write numerals 11 to 20 for a given purpose Write numerals 0 to 20
Week 12 Big Idea – Addition and Subtraction		
Lesson	**LAPS – Learning Objective**	**Related Learning**
1	Understand the concept of subtraction by practically removing one amount from within another to find how many are left and use the terminology part – whole. **Identify one less than a given number.** **Identify two less than a given number.**	Select the numeral that represents a set of objects Write numerals 11 to 20 for a given purpose Write numerals 0 to 20
2	**Understand the concept of subtraction by practically removing one amount from within another to find how many are left and use the terminology part – whole.**	Select the numeral that represents a set of objects Write numerals 11 to 20 for a given purpose Write numerals 0 to 20
3	Understand the concept of subtraction by practically removing one amount from within another to find how many are left and use the terminology part – whole. Remove a given amount from a greater set when shown on ten frames (with a whole of up to 20) counting or subitising to identify how many are left. **Subtract a single-digit number from a number greater than 10 using practical equipment.**	Select the numeral that represents a set of objects Write numerals 11 to 20 for a given purpose Write numerals 0 to 20
4	Understand the concept of subtraction by practically removing one amount from within another to find how many are left and use the terminology part – whole. Remove a given amount from a greater set when shown on ten frames (with a whole of up to 20) counting or subitising to identify how many are left. **Subtract a single-digit number from a number greater than 10 using practical equipment.**	Select the numeral that represents a set of objects Write numerals 11 to 20 for a given purpose Write numerals 0 to 20
5	**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.** Relate subtraction to addition in practical situations using the terminology 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 – whole Select the numeral that represents a set of objects Write numerals 11 to 20 for a given purpose Write numerals 0 to 20