## Maths Long Term Plan for Reception 2020-21

| Intent | Implementation | mpact |
| :---: | :---: | :---: |
| Planning and Progression of Learning <br> Maths is planned from the White Rose guidance and in relation to the NCTEM recommendations <br> to plan for a Number a week, using Number <br> Blocks and the PowerPoints that support these programmes. <br> Progressive planning is made to build on knowledge across the required standards as stated below. <br> B - Beginning <br> D - Developing <br> S - Secure <br> G - Goal <br> E-Exceeding <br> 40-60m <br> Early Learning Goals (ELGs) <br> (Proposed ELGs) | All planning is created knowing the cohort of the children. It is based on planning and progression <br> \& adapting lessons / resources to suit the children, creating differentiated weekly Teacher Led activity that is carried out 1:1 with each child or in small groups, during continuous provision time. <br> We also plan for a Maths table which displays 'Number of the Week' resources for the children to access. For example, objects to count, the formation of the number, examples of the number used in different places (front doors, buses, football t-shirts), number lines, five and ten frames, numicon, dice, etc. <br> We have a Maths Area in each classroom, where the children are taught to self resource and to explore maths with their friends. We sometimes put resources from our teaching on this table, for the children to recreate what we have been learning. <br> There is a lot of practical maths taking place in both the Shared Area and Outside Area during continuous provision for example counting activities incorporated into our 'Finger Gym' activities, numicon used within tuft tray activities and counting games outside. Also, as part of many of our Wonderful Wellies sessions outside for example collecting a specific number of sticks and ordering them by size. | The maths curriculum provides parity for all groups of pupils, allowing for differentiation as required to ensure progress is made. <br> Showing that maths is successfully implemented ensuring pupils' progression in knowledge - pupils successfully 'learn the curriculum' and it is adapted based on how the pupils access the lessons. <br> Variation on how maths is delivered to suit learning styles of all pupils. <br> In Reception we have seen an improvement in the children's Early Number Sense through the weekly focus on each number and different representations of it. Also our focus on number bonds to each number and especially to 10. |

## Assessment

We carry out the NfER Baseline assessment during
September and analyse the results, giving us an idea early on of the cohorts understanding in Maths.

At the end of each term we carry out number recognition and formation assessments.

On-going assessment is carried out through our observations of the children during teaching inputs, during observations in continuous provision time (which we often record on
Tapestry) and through our Teacher Led work with the children each week.

We use o-track at the end of teacher term, to formally record the progress of the children.

## Moderation

Two thirds of the teachers in Reception were externally moderated in Summer 2019 with accurate evaluations made. This also supports ongoing teacher assessment and teachers use moderated examples to support judgements.

## Developing Further Challenge

Children believed to be able to work with the Exceeding require further challenge to develop their learning and skills in maths - particularly problem solving.

Assessments are recorded as and when we observe the children fulfilling that objective. In their Maths books, we highlight the objectives they have achieved during our Teacher Led work and write 'Next Steps'.

We identify any intervention that individual children would benefit from for Maths and keep
this information in a file in each Reception classroom that teachers or TAs pick up to work on as frequently as possible.

This information then helps update internal data through O-track.

We give an end of year level which is reported to parents.

Teachers attend local authority and cluster moderation to maintain standards and knowledge levels.
Peer-to-peer moderation reviewing previously moderated books and current work in books in different Reception classes.

Reception teachers ensure that during teaching inputs, they use effective questioning to stretch their more able children. Then during Teacher Led activities, a greater expectation is put upon such children to produce work of a higher standard. More discussion and reasoning is expected too.

Enables teachers to evaluate the teaching and to understand individual pupil knowledge so changes to teaching can be made.

Have a clear picture that progress of children is being made through internal monitoring and tracking.

Enables teachers to make comparisons to carry out improvements / changes to own judgements and planning.

Ensure a wide and balanced curriculum so that al children can progress to their full potential.

Ensure that parents have a say in supporting their children's learning

## Mathletics Online Resource

Greater use and focus of maths learning using the online Mathetics resource that children can access from home with their unique log-ins.

Bronze certificates are celebrated in class. Silver \& Gold certificates are celebrated in weekly school assemblies. Annual school-wide Mathletics competitions to encourage greater access to this learning tool.

Allow further maths-based work outside of the classroom to support a greater learning opportunity for as many children as possible.
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Provide a sense of competition and achievement for individuals.

## Reception Autumn Term

| Autumn 1 | Autumn 2 |
| :---: | :---: |
| Week 1 - Home Visits | Week 9 - Number 4 <br> 40-60m: <br> Recognises some numerals of personal significance. <br> Recognises numerals to 5 . <br> Counts up to three or four objects by saying one number name for each item. <br> Counts actions or objects that can't be moved. <br> ELG: <br> Count reliably with numbers from one to 20 , place them in order and say which number is one more or one less than a given number. <br> Subitise (recognise quantities without counting) up to 5 . <br> Have a deep understanding of number to 10 , including the composition of each number. |
| Week 2 - Part time and settling in | Week 10 - Number 5 <br> 40-60m: <br> Recognises some numerals of personal significance. <br> Recognises numerals to 5 . <br> ELG: <br> Count reliably with numbers from one to 20 , place them in order and say which number is one more or one less than a given number. <br> Subitise (recognise quantities without counting) up to 5. <br> Have a deep understanding of number to 10 , including the composition of each number. |
| Week 3 - Sorting into groups | Week 11 - One More <br> 40-60m: <br> Uses the language of 'more' and 'fewer' to compare two sets of objects. <br> Says the number that is one more than a given number. <br> Finds one more from a group of up to five objects. <br> In practical activities and discussion, beginning to use the vocabulary involved in adding. <br> ELG: <br> Count reliably with numbers from one to 20 and say which number is one more than a given number. |
| Week 4 - Number 1 <br> 40-60m: <br> Recognises some numerals of personal significance. <br> Recognises numerals to 5 . <br> Counts up to three or four objects by saying one number name for each item. <br> Counts actions or objects that can't be moved. <br> ELG: <br> Count reliably with numbers from one to 20 , place them in order and say which number is one more or one less than a given number. <br> Subitise (recognise quantities without counting) up to 5 . <br> Have a deep understanding of number to 10 , including the composition of each number. | Week 12 - One Less <br> 40-60m: <br> Uses the language of 'more' and 'fewer' to compare two sets of objects. <br> Finds one more or one less than a group of up to five objects. <br> In practical activities and discussion, beginning to use the vocabulary involved in adding and subtracting. <br> ELG: <br> Count reliably with numbers from one to 20 and say which number is one more or one less than a given number. |

## Week 5 - Number 2

## 0-60m:

Recognises some numerals of personal significance.
Recognises numerals to 5 .
Counts up to three or four objects by saying one number name for each item.
Counts actions or objects that can't be moved.
ELG:
Count reliably with numbers from one to 20 , place them in order and say which number is one more or one less than a given number.
Subitise (recognise quantities without counting) up to 5 .
Have a deep understanding of number to 10, including the composition of each number

## Week 6 - Number 3

## 40-60m:

Recognises some numerals of personal significance.
Recognises numerals to 5
Counts up to three or four objects by saying one number name for each item.
Counts actions or objects that can't be moved.
ELG:
Count reliably with numbers from one to 20 , place them in order and say which number is one more or one less than a given number.
Subitise (recognise quantities without counting) up to 5 .
Have a deep understanding of number to 10 , including the composition of each number.

## Week 7 - Time - My Day

## 40-60m:

Uses everyday language related to time
Order and sequences familiar events.
Measures short periods of time in simple ways.
ELG:
Use everyday language to talk about size, weights, capacity, position, distance, time and money to compare quantities and objects and to solve problems.

## Week 8 - Comparing Quantities of Identical Objects

## 40-60m:

Estimates how many objects they can see and checks by counting them.
Counts actions and objects that cannot be moved.
Counts objects to 10
ELG:
Use everyday language to talk about size, weights, capacity, position, distance, time and money to compare quantities and objects and to solve problems.
Subitise (recognise quantities without counting) up to 5 .
Compare sets of objects up to 10 in different contexts, considering size and difference.

## Week 13 - Comparing quantities of non-identical objects

## 40-60m

Estimates how many objects they can see and checks by counting them.
Counts actions and objects that cannot be moved.
Counts objects to 10
ELG:
Use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems.
Subitise (recognise quantities without counting) up to 5 .
Compare sets of objects up to 10 in different contexts, considering size and difference

## Week 14 - Numbers to 5

## 40-60m:

Recognises numerals to 5
Counts objects to 5 .
Counts up to six objects from a larger group.
Selects the correct numeral to represent 1 to 5
Counts an irregular arrangement of up to five objects.
Estimates how many objects they can see and checks by counting them.
ELG:
Count reliably with numbers from one to 20 , place them in order and say which number is one more or one less than a given number.
Subitise (recognise quantities without counting) up to 5 .
Have a deep understanding of number to 10 , including the composition of each number.

## Week 15 - Number bonds to 5

## 40-60m:

Finds the total number of items in two groups by counting all of them.
In practical activities and discussion, beginning to use the vocabulary involved in adding.
Records using marks that they can interpret and explain.
ELG:
Add two single-digit numbers
Have a deep understanding of number to 10 , including the composition of each number.
Automatically recall (without reference to rhymes, counting or other aides) number bonds to 5 (including subtraction facts) and some number bonds to 10 , including double facts.

## Reception Spring Term

| Spring 1 | Spring 2 |
| :---: | :---: |
| Week 1 - Number bonds to 5 <br> 40-60m: <br> Finds the total number of items in two groups by counting all of them. <br> In practical activities and discussion, beginning to use the vocabulary involved in adding. Records using marks that they can interpret and explain. <br> ELG: <br> Add two single-digit numbers. <br> Have a deep understanding of number to 10, including the composition of each number. Automatically recall (without reference to rhymes, counting or other aides) number bonds to 5 (including subtraction facts) and some number bonds to 10 , including double facts. | Week 7 - Compare groups up to 10 <br> 40-60m: <br> Counts actions and objects that cannot be moved. <br> Counts objects to 10 <br> ELG: <br> Have a deep understanding of number to 10 , including the composition of each number. Compare sets of objects up to 10 in different contexts, considering size and difference. |
| Week 2 - Number 6 and counting to 6 <br> 40-60m: <br> Counts objects to 10 . <br> Counts out up to six objects from a larger group. <br> Selects the correct numeral to represent 1 to 5 , then 1 to 10 objects. <br> Counts an irregular arrangement of up to ten objects. <br> In practical activities and discussion, beginning to use the vocabulary involved in adding and subtracting. <br> ELG: <br> Count reliably with numbers from one to 20 , place them in order and say which number is one more or one less than a given number. <br> Have a deep understanding of number to 10 , including the composition of each number. Automatically recall (without reference to rhymes, counting or other aides) number bonds to 5 (including subtraction facts) and some number bonds to 10 , including double facts. | Week 8 - Combining two groups to find the whole <br> 40-60m: <br> Counts objects to 10 . <br> Counts out up to six objects from a larger group. <br> Selects the correct numeral to represent 1 to 5 , then 1 to 10 objects. <br> Counts an irregular arrangement of up to ten objects. <br> Estimates how many objects they can see and checks by counting them. <br> Finds the total number of items in two groups by counting all of them. <br> In practical activities and discussion, beginning to use the vocabulary involved in adding and subtracting. <br> ELG: <br> Compare sets of objects up to 10 in different contexts, considering size and difference. <br> Use quantities and objects to add/subtract two single-digit numbers and count on/back to find the answer. |
| Week 3 - Number 7 and counting to 7 <br> 40-60m: <br> Counts objects to 10 . <br> Selects the correct numeral to represent 1 to 5 , then 1 to 10 objects. <br> Counts an irregular arrangement of up to ten objects. <br> In practical activities and discussion, beginning to use the vocabulary involved in adding and subtracting. <br> ELG: <br> Count reliably with numbers from one to 20 , place them in order and say which number is one more or one less than a given number. <br> Have a deep understanding of number to 10 , including the composition of each number. Automatically recall (without reference to rhymes, counting or other aides) number bonds to 5 (including subtraction facts) and some number bonds to 10 , including double facts. | Week 9 - Number bonds to 10 (Ten frame) <br> 40-60m: <br> Finds the total number of items in two groups by counting all of them. <br> In practical activities and discussion, beginning to use the vocabulary involved in adding. <br> Records using marks that they can interpret and explain. <br> ELG: <br> Have a deep understanding of number to 10, including the composition of each number. Automatically recall (without reference to rhymes, counting or other aides) number bonds to 5 (including subtraction facts) and some number bonds to 10 , including double facts. |

## Week 4 - Number 8 and counting to 8

40-60m:
Counts objects to 10 .
Selects the correct numeral to represent 1 to 5, then 1 to 10 objects.
Counts an irregular arrangement of up to ten objects.
In practical activities and discussion, beginning to use the vocabulary involved in adding and subtracting.
ELG:
Count reliably with numbers from one to 20 , place them in order and say which number is one more or one less than a given number.
Have a deep understanding of number to 10, including the composition of each number Automatically recall (without reference to rhymes, counting or other aides) number bonds to 5 (including subtraction facts) and some number bonds to 10 , including double facts.

## Week 5 - Number 9 and counting to 9

## 40-60m:

Counts objects to 10 .
Selects the correct numeral to represent 1 to 5 , then 1 to 10 objects.
Counts an irregular arrangement of up to ten objects.
In practical activities and discussion, beginning to use the vocabulary involved in adding and subtracting.
ELG:
Count reliably with numbers from one to 20 , place them in order and say which number is one more or one less than a given number.
Have a deep understanding of number to 10, including the composition of each number. Automatically recall (without reference to rhymes, counting or other aides) number bonds to 5 (including subtraction facts) and some number bonds to 10 , including double facts.

## Week 6 - Number 10 and counting to 10

## 40-60m:

Counts objects to 10
Selects the correct numeral to represent 1 to 5 , then 1 to 10 objects.
Counts an irregular arrangement of up to ten objects.
In practical activities and discussion, beginning to use the vocabulary involved in adding and subtracting.
ELG:
Count reliably with numbers from one to 20 , place them in order and say which number is one more or one less than a given number.
Have a deep understanding of number to 10 , including the composition of each number. Automatically recall (without reference to rhymes, counting or other aides) number bonds to 5 (including subtraction facts) and some number bonds to 10 , including double facts.

## Week 10 - Number bonds to 10 (Part-Whole Model)

## $40-60 \mathrm{~m}$ :

Finds the total number of items in two groups by counting all of them
In practical activities and discussion, beginning to use the vocabulary involved in adding.
Records using marks that they can interpret and explain.
ELG:
Have a deep understanding of number to 10 , including the composition of each number
Automatically recall (without reference to rhymes, counting or other aides) number bonds to 5 (including subtraction facts) and some number bonds to 10 , including double facts.

## Week 11 - Spatial awareness (and 2D shape)

## 40-60m

Can describe their relative position, such as 'behind' or 'next to'.
Beginning to use mathematical names for 'solid' 3D shapes and 'flat' 2D shapes, and mathematical terms to describe shapes.
ELG:
Use everyday language to talk about size, weights, capacity, position, distance, time and money to compare quantities and objects and to solve problems.
They explore characteristics of everyday objects and shapes and use mathematical language to describe them.

## Week 12 - 3D shape

## 40-60m

Beginning to use mathematical names for 'solid' 3D shapes and 'flat' 2D shapes, and mathematical terms to describe shapes.
ELG:
They explore characteristics of everyday objects and shapes and use mathematical language to describe them.

## Reception Summer Term

| Summer 1 | Summer 2 |
| :---: | :---: |
| Week 1 - Counting to 20 <br> ELG: <br> Count reliably with numbers from one to 20 , place them in order and say which number is one more or one less than a given number. | Week 7 - Odds and evens <br> 40-60m: <br> Begins to identify own mathematical problems based on own interests and fascinations. <br> ELG: <br> They solve problems, including doubling, halving and sharing. <br> Explore and represent patterns within numbers up to 10 , including evens and odds, double facts and how quantities can be distributed equally. |
| Week 2 - Counting to 20 <br> ELG: <br> Count reliably with numbers from one to 20, place them in order and say which number is one more or one less than a given number. | Week 8 - Length, height and distance <br> 40-60m: <br> Order two or three objects by length or height. <br> ELG: <br> Use everyday language to talk about size, weights, capacity, position, distance, time and money to compare quantities and objects and to solve problems. |
| Week 3 - Making simple patterns <br> 40-60m: <br> Uses familiar objects and common shapes to create and recreate patterns and build models. <br> ELG: <br> Recognise, create and describe patterns. <br> Explore and represent patterns within numbers up to 10 , including evens and odds, double facts and how quantities can be distributed equally. | Week 9 - Weight <br> 40-60m: <br> Order two or three objects by weight or capacity. <br> ELG: <br> Use everyday language to talk about size, weights, capacity, position, distance, time and money to compare quantities and objects and to solve problems. |
| Week 4 - Exploring more complex patterns <br> 40-60m: <br> Uses familiar objects and common shapes to create and recreate patterns and build models. <br> ELG: <br> Recognise, create and describe patterns. <br> Explore and represent patterns within numbers up to 10 , including evens and odds, double facts and how quantities can be distributed equally. | Week 10 - Capacity <br> 40-60m: <br> Order two or three objects by weight or capacity. <br> ELG: <br> Use everyday language to talk about size, weights, capacity, position, distance, time and money to compare quantities and objects and to solve problems. |
| Week 5 - Adding more <br> 40-60m: <br> Finds the total number of items in two groups by counting all of them. <br> In practical activities and discussion, beginning to use the vocabulary involved in adding and subtracting. <br> Records, using marks that they can interpret and explain. <br> ELG: <br> Use quantities and objects to add/subtract two single-digit numbers and count on/back to find the answer. | Week 11 - Counting to 20 <br> ELG: <br> Count reliably with numbers from one to 20 , place them in order and say which number is one more or one less than a given number. |

## Week 6 - Taking away

40-60m:
In practical activities and discussion, beginning to use the vocabulary involved in adding
and subtracting.
Records, using marks that they can interpret and explain.
ELG:
Use quantities and objects to add/subtract two single-digit numbers and count on/back to find the answer.

## Week 7 - Doubling

## 40-60m:

Begins to identify own mathematical problems based on own interests and fascinations ELG:
They solve problems, including doubling, halving and sharing.
Explore and represent patterns within numbers up to 10 , including evens and odds,
double facts and how quantities can be distributed equally.

## Week 6 - Halving and sharing

40-60m:
Begins to identify own mathematical problems based on own interests and fascinations ELG:
They solve problems, including doubling, halving and sharing.

## Week 12 - Counting to 20

ELG:
Count reliably with numbers from one to 20 , place them in order and say which number is one more or one less than a given number.

