## Reception Maths MTP Autumn 12023

| Vocabulary | Children will learn to: | Number- am | Teach Weekly Focus- pm | Group Work- pm |
| :---: | :---: | :---: | :---: | :---: |
| Week 1 <br> Count, number, forwards, up, higher, bigger, larger | - Recite numbers to 10 <br> - Count to 10 using fingers <br> - Show some finger numbers up to 5 <br> - Recite the number song- $1,2,3,4,5$... with actions <br> - Recognise some numerals to 10 | (Half days first week) <br> 1, 2, 3, 4, 5 Once I Caught a Fish Alive: <br> Recite rhyme alongside number track to demonstrate the pattern of the numbers and emphasise- we are counting in $1 \mathrm{~s} /$ counting forwards/ up/ numbers are getting bigger/higher etc. <br> Model how to count to 5 using fingers- extend to 10. <br> Practise showing finger numbers up to 5 <br> Practise reciting numbers to 10 <br> Begin to build counting into everyday routines- register, tidying up, lining up, counting fruit at snack time etc |  | Work with children in areas of provisionModel how to use the resources, key vocabulary, expectations of behaviour etc. Tidy up routine- Order the numbered bricks, Count the blocks, sort the coloured lego, correct number of pencils in the pot. <br> Start baseline assessments towards the end of the week |
| Week 2 <br> Number 1, once, first, only, alone <br> Two, twice as much, duo, duet <br> Part-partwhole <br> Match, the same, different, pair | - Recite numbers to 10 <br> - Find different ways of representing 1 and 2 <br> - Recognise and form numerals 1 and 2 <br> - Partition 2 into ' 1 and another $1^{\prime}$ <br> - Find and match objects which are the same <br> - Match objects into pairs | Numberblocks Ep 1- ‘One’ <br> How many different ways can you represent 1? <br> Carry out different actions 'once'. Emphasise- 1 time. <br> Create a sequence of actions to carry out once e.g hop, clap, jump. <br> '1 Finger, 1 Thumb Keep Moving' <br> Numberblocks Ep 2- 'Another One’ <br> Numberblocks Ep 3- 'Two' <br> Give examples of things that come in twos- socks, shoes, gloves, singing a duet, dancing, Explore examples of 2 in multiple contextscounting objects, sounds, movements. <br> Model how to combine 1 and 1 to make 2 . Partition 2 into 1 and 1 - introduce the part-partwhole model. | Matching <br> Can you see one exactly like mine? How do you know it's the same? Can you find one that is different? Why is this one not like mine? Emphasise- match, matching, the same as To match it needs to be exactly the same colour, size, shape... <br> Give examples of cars the same colour but only two match.. Why are the other cars different? <br> Give each child a card. They find the person with the matching card and sit down together. <br> Matching into pairs- What comes in pairs? Match the wellies into pairs. Are they exactly the same? Why not? | Baseline assessments <br> Counting obs in books <br> Number formation-1, 2 <br> Provide opportunities for the children to find and match objects which are the same. <br> Basket of socks to match into pairs <br> Selection of different sized lids/buttons. <br> Children match to the correct outline on the paper. <br> Lotto games <br> Construction Area <br> Can you build towers that match? Are they the same height? Do they look the same? Do they need exactly the same blocks? <br> Outdoors <br> Introduce outdoor area-rules and expectations. Children work outside in groups. |



## Sorting

Read 'The Button Box' by Margarette Reid Discuss the different ways the little boy sorted the buttons- discuss the language used in the story-metal, shiny, sparkly, wooden, thick, thin,

Teach-collections of objects can be sorted into sets based on attributes such as colour, size or shape.
What is the same about the objects in this set? How are they different to the other sets?

Sorting at lining up time- Line up if you like.... Line up if you have...
Emphasise sorting at tidy up time

## Counting objects

Model how to count objects in each set by moving them into a line. Check counting by touching each object. Could I count the objects in a different way?
Share ideas and model different methods.

## Comparing amounts

Following on from sorting last week- After sorting into two sets, compare- which set has more/most items and which has
less/fewer/fewest? How do you know?
Model how to line up items in a five/ten frame
Show the children two baskets filled with fruit. Which has more? Which has less? How do you know? Count to check.

Show the children 2 different baskets and a range of fruit. How could we put the fruit into the baskets?

Using vocabulary from the story- The Button Box
Variety of buttons to sort in different ways.
Choose one criteria to sort into two sets
(shiny/not shiny)
Extend to sorting into more sets using
different criteria.
How many buttons are in this set?

## Role Play

How could you sort the food? Can you sort the socks by colour/size/?

## Construction Area

Sort blocks using words such as stack, roll, shape, large, small, round etc

## Outdoors

Continue to reinforce rules and expectations outdoors. Spark excitement about number- Which numbers can you find outside? How many do you recognise? Can you put the number mats in the correct order? Emphasise sorting at tidy up time

Grab a handful of cubes- How many can you hold? Can your partner hold more/fewer than you or the same amount? Compare numbers using five/ten frames.

## Role Play

How many pieces of fruit are in your basket? Have you got the same number as ....? How do you know? This basket has 6 pieces of fruit and the other has 9 ... how could you make both baskets the same? Which basket holds the most oranges? How do you know? How could you find out?
$\left.\begin{array}{|l|l|l|}\hline \begin{array}{l}\text { diamond, } \\ \text { side, corner }\end{array} & & \begin{array}{l}\text { Subitise groups of } 4 \text { objects- How do you know it's } \\ \text { 4? }\end{array} \\ \text { Practise counting objects to 4 } \\ \text { Part-part whole- Which numbers is 4 made up of? } \\ \text { How many different ways can you make 4? }\end{array}\right]$

Could we do it in a different way?
Do both baskets have the same number? How could you make sure both baskets have an equal number?

Use dot plates to compare and order- How many dots does this plate have? Can you find a plate with more dots? Fewer dots? Can you put these 3 plates in order? What would come next?
1 more than
Practise reciting numbers to 10 and beyond- as we count, each number is one more than the number before. Demonstrate using number line, multilink cubes, 10 frame...

Use a staircase pattern to show that the next counting number is the previous number plus/add one.

Count the objects in the basket. Encourage children to put the objects in a line to count/move out of the way.
Add one more object to the basket. How many objects now? How do you know? Model on a large five/ten frame
'Peter Hammers with 1 Hammer'
Ask children to predict what the next number will be. How do you know?

Use a numberline to jump on 1 more... Which way are you moving along the number line?

## Outdoors

Compare number of cupfuls of water needed to fill each container, using correct vocabulary. Also model- full, empty

Children make staircase patterns using multilink. Can you record the numbers you've made?

Count cubes onto ten frame. Add 1 more. How many do you have now?

Number track games- roll the dice and add 1,2 , or 3 cubes to fill track. Who has the most/least counters. How many more do you need to fill your track?

## Role Play

Children practise adding 1 more item to their shopping basket. How many items do you have now? What will happen to the basket if you keep adding 1 more?

## Outside

Fill the bucket with sand- add 1 more scoop each time. What is happening to the sand in the bucket each time you add 1 more scoop?
Order the number mats 1-10. Find the corresponding number of objects for each mat. What do you notice? Emphasise- 1 more each time...

| Week 6 <br> Counting back, down, less, fewer, lower, take away, minus <br> Before, after | - Recite numbers to 10 and beyond <br> - Count back from 10 <br> - Order numbers to 5 <br> - Know that the last number reached when counting a small set of objects tells you how many there are in total-'cardinal principle' <br> - Demonstrate understanding of the composition of numbers to 5 <br> - Subitise to 5 <br> - Make predictions about what the outcome will be in songs/rhymes if one is taken away <br> - Find 1 less than numbers to 10 | Numberblocks Ep 10- 'How to Count' <br> Subitising to 5 . Encourage reasoning- ‘I know it’s 3 because I can see 2 and 1 more.' <br> Counting accurately to 5 -count objects, actions, sounds, pictures. <br> Numberblocks Ep 11- 'Stampolines’ <br> Different ways of arranging blocks to 5- recognise that the number of objects stays the same however they are arranged. <br> Numberblocks Ep 12- 'Whole of Me' Part-part whole structure. Use a range of manipulatives to model and emphasise language'If the whole is 4 then 2 is a part and 2 is a part. Find different ways of making numbers to 5 <br> Number Talks- https://nrich.maths.org/14005 |
| :---: | :---: | :---: |
| Week 7 <br> Big, <br> medium, <br> small, <br> bigger, <br> smaller, <br> smallest, <br> large, <br> largest, long, <br> short, <br> longer, <br> shorter, <br> longest, | - Recite numbers to 10 and beyond <br> - Subitise to 5 <br> - Automatically recall number bonds to 5 <br> - Demonstrate understanding of the composition of numbers to 5 <br> - Make comparisons between objects relating to size <br> - Order 3 objects by size | Numberblocks Ep 13- ‘The Terrible Twos’ <br> Explore how 4 is represented as two 2 s . <br> Describing two groups of two- two pairs of... two lots of .... <br> Partitioning numbers to 4 <br> 'two is 2 ones' <br> 'four is 2 twos' <br> Numberblocks Ep 14- 'Holes' <br> Quantities can be changed by adding/taking away. Model using a range of manipulatives- cubes, counters, bead strings etc <br> Number bonds to 5 using ladybirds to model. How many ways can you memorise? |


| $\mathbf{1}$ less than |
| :--- |
| Practise counting back from 10, referring to a |
| number line- as you count back the numbers |
| are getting smaller/lower. As you count back |
| each number is one less than the previous |
| number. |
| Introduce new vocab- Take away, less than... |
| fewer |
| ‘5 Currant Buns' |
| Encourage children to predict how many buns |
| will be left. Model on five frame. |
| Use a numberline to count back 1... Which way |
| are you moving along the number line? |

'5 Currant Buns'
Make buns using playdough and act out rhyme. Refer also to number track. Emphasise that the whole is still 5 but some are in the shop and some have been taken away.

Number track game- take a counter away when you roll a .... Who can empty their track first? Who has the fewest counters left?

Roll dice and record number in the centre. Record 1 less and 1 more on either side. Use objects and ten frames and number line to support.

## Revisit sorting (week 3)- Autumn objects <br> Order autumn objects by size- conkers, pine cones, leaves.

## Comparing size

Show children a mystery box- Children predict what could be inside. What else could/could not fit inside the box?
Introduce size related vocabulary and model- A ... would not fit because it is too big...

Model comparative language- This is bigger than that...

Goldilocks and the Three Bears

Measure the length of objects around the room using non-standard units of measurement. Use language to compareThe ... is longer/shorter than ...
I know .... Because...

## Construction

Building towers- tall and short. How many blocks have you used? Which tower is the tallest/shortest? Can you build a taller tower than mine?

## Reception Maths MTP Autumn 12023

\(\left.$$
\begin{array}{|l|l|l|l|l|}\hline \begin{array}{l}\text { shortest, } \\
\text { tall, tallest }\end{array} & \begin{array}{l}\text { Use the correct } \\
\text { vocabulary to } \\
\text { describe size }\end{array} & \begin{array}{l}\text { Numberblocks Ep 15- 'Hide and Seek' } \\
\text { Introduce number sentences. Begin to record } \\
\text { number sentences to represent number bonds to } \\
5 .\end{array} & \begin{array}{l}\text { Discuss the language from the story- big, } \\
\text { medium, small. } \\
\text { Sort objects from the story by size. Which bowl } \\
\text { belongs to Baby Bear? }\end{array} & \begin{array}{l}\text { Outdoors } \\
\text { Hide a selection of large and small balls } \\
\text { around the outside area. Children find and } \\
\text { collect the balls. What do you notice? Can } \\
\text { you sort the balls into } 2 \text { buckets- large and } \\
\text { small balls? Which balls are easier/harder to } \\
\text { catch? Which ball is the largest/smallest? }\end{array}
$$ <br>
Introduce length related vocabulary and model <br>
how to measure objects using non-standard <br>
units. Which object.is the longest? How do you <br>

know?\end{array}\right]\)| How many scoops of sand will each |
| :--- |
| container hold? |

Begin every session:

- Count the number of children on the carpet and record the number on ten frames- 'How many children were here yesterday?' 'Do we have more/less children today?'
- Days of the week. Sing the song and recite days in order. How many days have we been in school this week? How many days do we come to school? How many days are in the weekend? How many days are in a week? How many days in two weeks?


## Books/Songs/Rhymes

1, 2, 3, 4, 5 Once I Caught a Fish Alive
1 Finger, 1 Thumb Keep Moving
The Button Box by Margarette Reid
Peter Hammers with 1 Hammer
5 Currant Buns
5 Little Speckled Frogs
Goldilocks and the Three Bears

## Website links

https://www.ncetm.org.uk/classroom-resources/ey-numberblocks-series-1/
https://assets.whiterosemaths.com/resources-2022/early-years/autumn-block-2-just-like-me/Phase-1-Just-like-me.pdf
https://www.topmarks.co.uk/learning-to-count/paint-the-squares
https://www.topmarks.co.uk/Search.aspx?AgeGroup=1
https://nrich.maths.org/early-years

