

Maths workshop for Reception

Tuesday 28th February 2023



How we teach Maths in Reception

- Children are taught in a whole class carpet session focused on a particular area of their learning.
- Children then have the opportunity to practise those skills and choose from different indoor and outdoor activities all based around the skill they have just learnt.

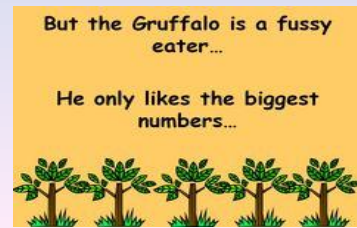


Mathematical Play

- In the Foundation Stage, children learn from a combination of: what has been taught directly to them, trying out those ideas for themselves and then also creating their own ideas about maths.

Eg “If I put more sand in that bucket, I think it will become even heavier.”

- The children enjoy learning through their class topic and using exciting and enticing materials.



Counting

- Children need to have **1 to 1 correspondence**.
- Encourage them to point and move the object if possible.
- Encourage counting different types of objects. How many candles are on your birthday cake?



- How many items are in our shopping trolley already?
- Once children can count confidently, can they **estimate** how many objects there are?
- Can they compare the numbers? Who has the **most** cakes?
- Who has the **least**?

Noticing is really important!

- We encourage the children to talk about what they have **'noticed'**?
- Playing **'Spot the difference'**.
- Which is the **'odd one out'**?
- Asking them what is the **same** and what's **different**?



Subitising



In order for children to calculate successfully further up in the school, children need to be able to 'subitise' well.

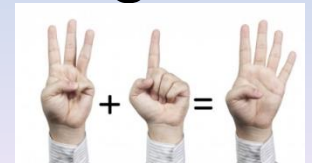
This means they need to be able to recognise how many spots there are on dice, dominoes and Numicon etc instantly without counting them.

Eventually, the children will imagine these images in their head, helping them to calculate.

So dig out your dice and dominoes and start playing!

Teaching early addition

- We use the vocabulary of plus, more, sum, total, add, altogether and through practical activities within 10
- Through Songs –
“1,2,3,4,5 Once I caught a fish alive”.
- Talk about counting on, altogether, one more etc
- Understanding + and = using informal words such as ‘and’ and ‘makes’
- Illustrate number stories with number sentences
- Representing numbers e.g. making marks or using their fingers
- Counting on fingers in a consistent way
- Recalling number bonds to 5 and 10 and within 10

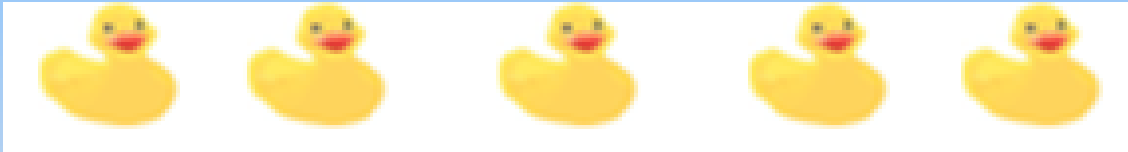


A quick free game for you to take home!

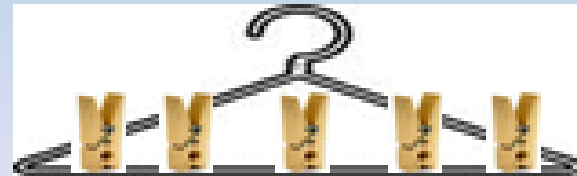
- 'Dotty sixes'
- The aim of the game is to fill your sheet with **number bonds** to 6.
- All you need 2 different colours of counters or 2 different colours of coins and a pencil.
- $\underline{\quad} + \underline{\quad} = 6$

Teaching early subtraction

- Understand concept and vocabulary of -, difference, subtraction, less, minus, take away through practical activities in meaningful contexts within 10
- Songs such as 5 little ducks went swimming one day...



1 less than 5 (take a peg off the hanger)



- Teaching 1 less, 2 less

Teaching early multiplication

- Arrange objects in **groups of 2**

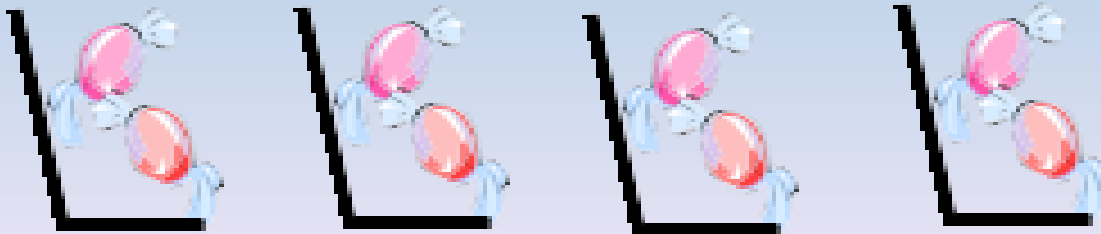
- To understand what a **'pair'** means



- Sort shoes, socks, small objects

- Sort objects into groups of 2, 5 or 10.

- Use different contexts to sort objects into groups
eg Put 2 sweets in each party bag



Teaching early division

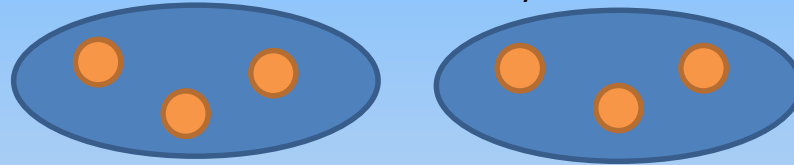
- Understand concept and vocabulary of division (sharing, shares, equal groups, 1 whole/half) through practical activities in meaningful contexts

- Sharing 6 cakes between 2 people



- Share a bag of 10 sweets between 2 children – one for you, one for me

- Grouping objects equally



- How many pairs of socks are there in the “laundrette”?

- Put 10 objects in groups of 2. How many groups are there?



- Introduce halving even numbers up to 10

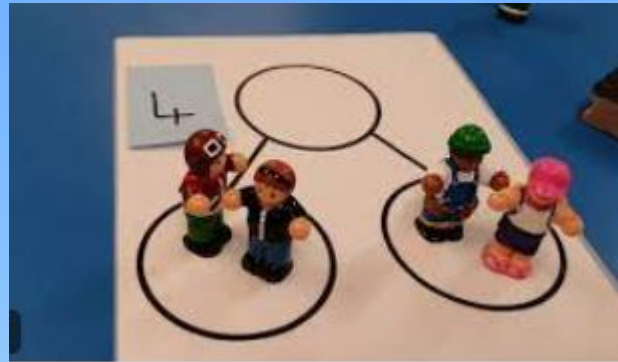
- Using multilink, counters etc.



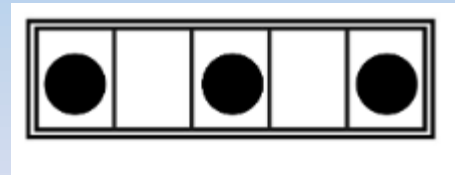
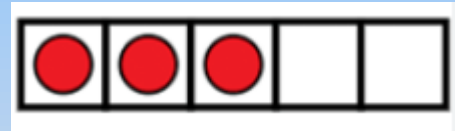
- Half of 4 Halving numbers of coins

Some new terminology!

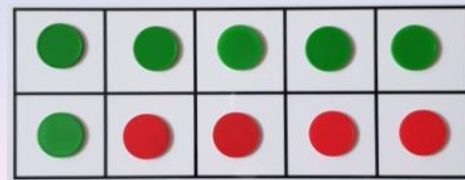
- Part/whole models



- Fives frames

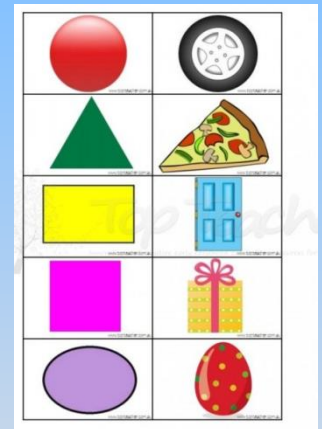


- Tens frames



What can you do at home to help their Maths learning?

- Point out where Maths exists in real life to support children with mathematical language and to help their understanding.
- What shapes can they see?
- Which size of saucepan do we need for cooking?



- How much of their pizza has been eaten?



- When walking past houses on the way home from school, what is happening to the door numbers? Are they getting bigger or smaller?

- Count the pairs of socks on the washing line.



- Measuring themselves.





Mark making





- In Reception, we give the children plenty of opportunities to make marks which explain their thinking.
- These could initially be in the form of dots/dashes/hoops
- And over time will move onto forming numerals and eventually writing number sentences
- Different children will develop at different levels.
- Encourage your children by saying, can you tell me what you've written? Drawn?
- If your child struggles to form their numerals correctly, show them slowly where to start. Write the correct version alongside their mark making. Don't ask them to cross anything out.


Number formation rhymes


Number Formation Rhymes

Free Printable at TeachingMama.org


 Around and around
And around we go...
When we get home we have a zero.



 Number 1 is like a stick.
A straight line that is very quick.





 Around and back on the railroad track.
Two, two, Two, two!



 Around a tree,
Around a tree.
That's the way to make a three!





 Down and over,
Down once more.
That's the way to make a four!



 Straight line down,
Then around.
Hat on top
And five's a clown!





 Make a curve,
Then make a loop.
There are no tricks to make a six!





 Across the sky
And down from heaven.
That's the way to make a seven!





 Make an S
And do not wait.
Go back up
And that's an eight!



 A loop and a line,
That makes a nine!



 Straight line down,
Then around with a grin.
That's the way to make a ten!



Which materials can I use at home to help them?



- Allow them to play in the bath with different sized containers- use the language of small, medium and large.
- Counting objects can be made from Lego, small figures, rubber ducks, buttons, coins.
- Building blocks are great for talking about measurement, the difference between 2 numbers, adding blocks etc.



- Their fingers! Encourage them to count on and count back, add and subtract using their fingers.



- Story books- Look for the Maths!