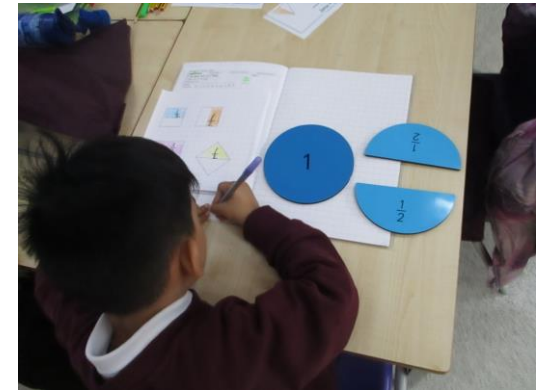


# Meeting for parents

## Mathematics



# Agenda

- What does maths look like in the Early years?
- Common confusions and how to address them
- How can you support your child with maths

# Early years

## Maths in the environment

- Interactive display
- Routines
- Group activities
- Games
- Rhyme time & Story time

## Maths sessions

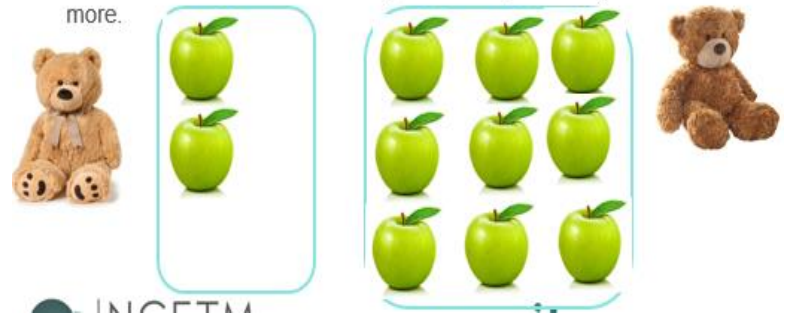
- Daily teaching
- Understanding of number
- Counting
- Comparison
- Subitising
- Using five and ten frames

# Comparison

Having a feel for relative sizes of numbers, putting numbers in order, estimating  
3 aspects to consider

- Comparing
- Ordering
- Estimating

- Compares collections that are quite different in size – which teddy has the most apples?
- NB not concerned with how many each has just seeing who has more.



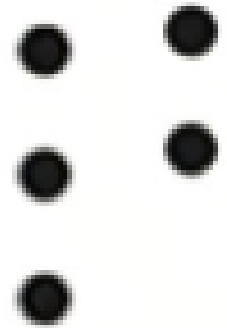
Comparing	Ordering	Estimation
<ul style="list-style-type: none"><li>• Perceptual</li><li>• Matching</li><li>• Counting</li></ul>	<ul style="list-style-type: none"><li>• Ordinal</li><li>• Mental number line</li></ul>	<ul style="list-style-type: none"><li>• Spatial perception</li></ul>

# Counting principles

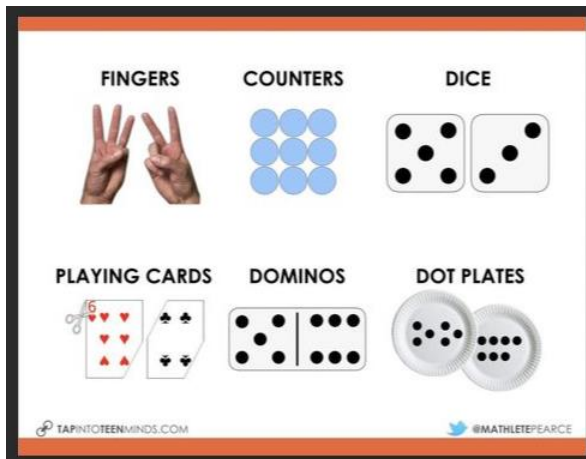
- Consistently use the number names in the correct order
- Counting every object in a set once, saying one number name as you count (1:1 correspondence)
- Understand that the last number used represents the set (cardinal principle)
- Understand that any collection of objects can be counted (Abstract principle)
- Understand that the result is the same whichever order you put the objects in

# Subitising

- Short sessions throughout day
- Breaks down amounts to help understand numbers
- Focus on base numbers 1 -10

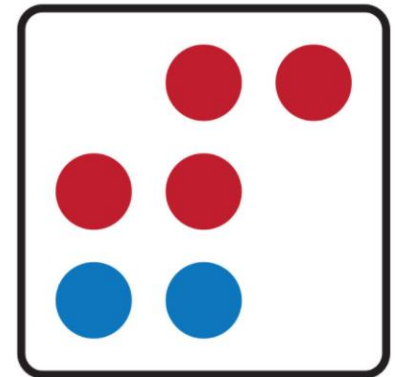


$$5$$
$$4 + 1$$
$$2 + 2 + 1$$



*What can you see?*

*How do you see it?*



# Subitising

- Key to helping the children develop number sense - Daily practice of subitising skills
- It's important to use resources with a low cognitive load. We use counters that are the same colour and shape so the focus is on the maths.
- We show the children a pattern and ask them to tell us "What do you see?" and "How do you see it?"
- We don't ask children "How many?" because we are then just asking them to count.

# Subitising

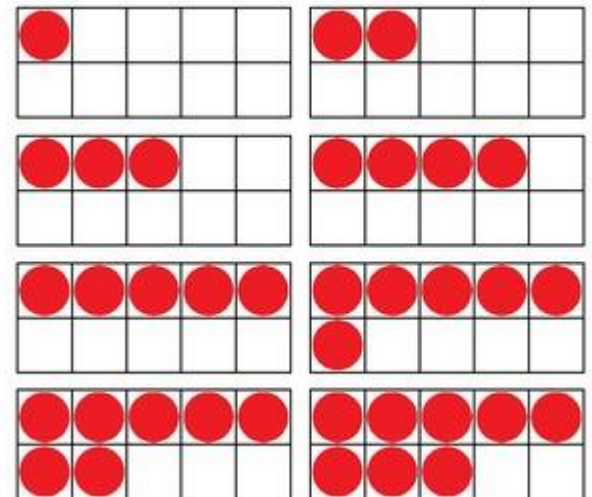
- Then we move onto questions - "Can you see it in a different way"
- We want them to begin to visualise patterns - NOT just die patterns!
- Important step before teaching the children to count.

# Numbers

- Apple v's 4
- Children often use their fingers to represent numbers
- Important to use Rhymes, songs and games that use fingers alongside counting out loud help children to associate 1:1 correspondence, cardinality, 1 more/1 less etc.

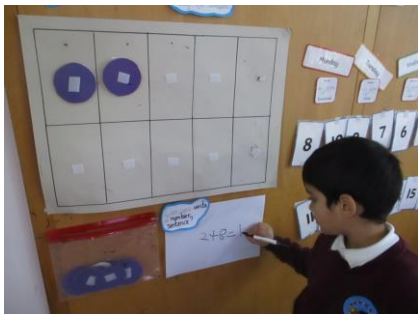
# Ten frames

- Start with a 5 frame
- Our hands help us understand that 10 is made up of 2 groups of 5
- Self-Registration - We start with 5 frames
- Ten frames
- We teach base numbers 1 - 10
- Teen numbers - 2 tens frames



# Enriching environment

Each classroom has a maths display which is interactive so that the children can access throughout the day



Tens frame being used by reception child to show different ways to make ten



## Reception



Independent activity that children have shared with the class by putting it on the display table



Roleplay areas include mathematical element - Yellow Class have a café where children order and pay for food

# Enriching environment

Each classroom has a maths display which is interactive so that the children can access throughout the day



Children are all familiar with tens frames and numicon and interactive displays are being used

## Reception



Red class had a fairy tale shop for their role play area. Each of the fairy tale items has a price and children can buy and sell them.



# Outside learning

The outside area is an extension of the classroom and we ensure that maths experiences are throughout the area



New playground markings include maths



Looking for patterns



Can you spot the shapes in the environment?



Using familiar numbers - this is the 235



Signs around the area to reinforce number recognition and counting

# Routines

Opportunities to support maths have been added to daily routines



Pay system in reception - they use numicon to pay for their fruit - support the learning of representation and exchange.



When putting resources away the children learn to match to size and number

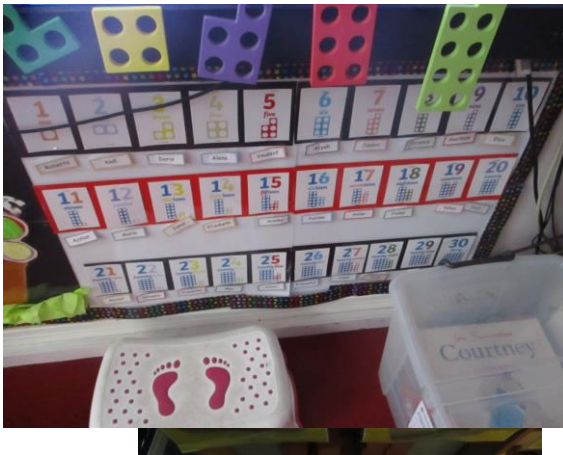


# Routines

Opportunities to support maths have been added to daily routines



Counting at snack times



Counting and number matching for self registration

**Next:** moving to a tens frame system of self registration to support fluency  
**Questioning:** How many are missing? How many more to come?

# Expectation for Mathematics at the end of Reception

## Number Early Learning Goal

Children at the expected level of development will:

- Have a deep understanding of number to 10, including the composition of each number;
- Subitise (recognise quantities without counting) up to 5; eg. recognise that there are 3 pieces of pizza left on a plate.
- 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.

# Expectation for Mathematics at the end of Reception

## Numerical Patterns Early Learning Goal

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.

# Ways to support your child

- Counting on and back at all times
- Making collections and counting amounts
  - How many altogether?
- Setting up shop at home
- Having an analogue clock at home,
  - referring to time
  - talking about time it takes to do something ie tv program, cooking
- **Maths games** – track games, turn taking, matching

# Ways to help your child

- Play subitising games which involve quickly revealing and hiding numbers of objects
- Drop marbles into a tin and ask the children to listen (without looking) to count how many there are
- Play with either dot or numeral dice. Discuss that six on the dice is worth more than four

# Ways to help your child

## Numbers

- Plan a picnic with me and let me decide how many sandwiches and bananas we will need.
- Show me a number before we leave for school. Who can find that number?
- Play number snap or bingo with numbers that we've cut out of a magazine.
- Sing number songs where I have to count backwards like "Five Little Ducks" or "Ten Fat Sausages".

# Ways to help your child

## Shape, space and measure

- Let me sort out the pairs of shoes so that they go from small to big.
- Let me make patterns with buttons or lids, like "big, small, big".
- Let me give you instructions for an obstacle course, like "Go under the blanket", "Go through the tunnel" and "Go behind the chair".

# Useful Websites

- Active Learn
- BBC bitesize



- Top marks maths



# New app that supports subitising



Have you heard about our amazing app?

It's 1-minute maths

FIND OUT MORE

