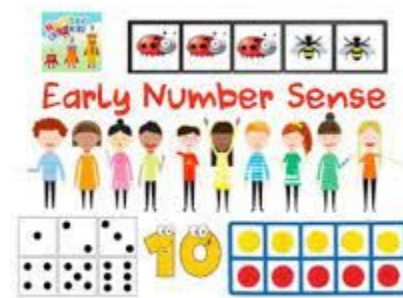




Welcome to the Early Number Maths Workshop



Aims of the workshop:

- For families to have an increased understanding of early number concepts
- For families to feel more confident in supporting their child's maths learning at home



EVERYONE CAN DO MATHS:

EVERYONE CAN!

Positive attitude

The most effective support that you can give is to be enthusiastic and excited by maths.





Early Learning Goals - Reception

Maths	Number	• Have a deep understanding of number to 10, including the composition of each number. • Subitise (recognise quantities without counting) up to 5. • 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.
	Numerical Patterns	• 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.

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Getting to know you (Take this time to play and get to know the children!)			Just like me!			It's me 1, 2, 3!			Light and Dark		
Spring	Alive in 5!			Growing 6, 7, 8			Building 9 and 10			Consolidation		
Summer	To 20 and Beyond			First, then, now			Find My Pattern			On the Move		



The 5 Counting Principles

I

The one-one principle. This involves children assigning one number name to each object that is being counted. Children need to ensure that they count each object only once ensuring they have counted every object.

Children will sometimes count objects more than once or miss an object out that needs to be counted. Encourage children to line up objects and touch each one as they count saying one number name per object. This will also help to avoid children counting more quickly than they touch the objects which again shows they have not grasped one-one correspondence.



1



2



3



4



5



The 5 Counting Principles

2

The stable-order principle. Children understand when counting, the numbers have to be said in a certain order.

Children need to know all the number names for the amount in the group they are counting. Teachers can therefore encourage children to count aloud to larger numbers without expecting them to count that number of objects immediately.





The 5 Counting Principles

3

The cardinal principle. Children understand that the number name assigned to the final object in a group is the total number of objects in that group.

In order to grasp this principle, children need to understand the one-one and stable-order principle. From a larger group, children select a given number and count them out. When asked 'how many?', children should be able to recall the final number they said. Children who have not grasped this principle will recount the whole group again.





The 5 Counting Principles

4

The abstraction principle. This involves children understanding that anything can be counted including things that cannot be touched including sounds and movements e.g. jumps.

When starting to count, many children rely on touching the objects in order to count accurately. Teachers can encourage abstraction on a daily basis by counting claps or clicks. They can also count imaginary objects in their head to encourage counting on, this involves the children visualising objects.





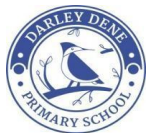
The 5 Counting Principles

5

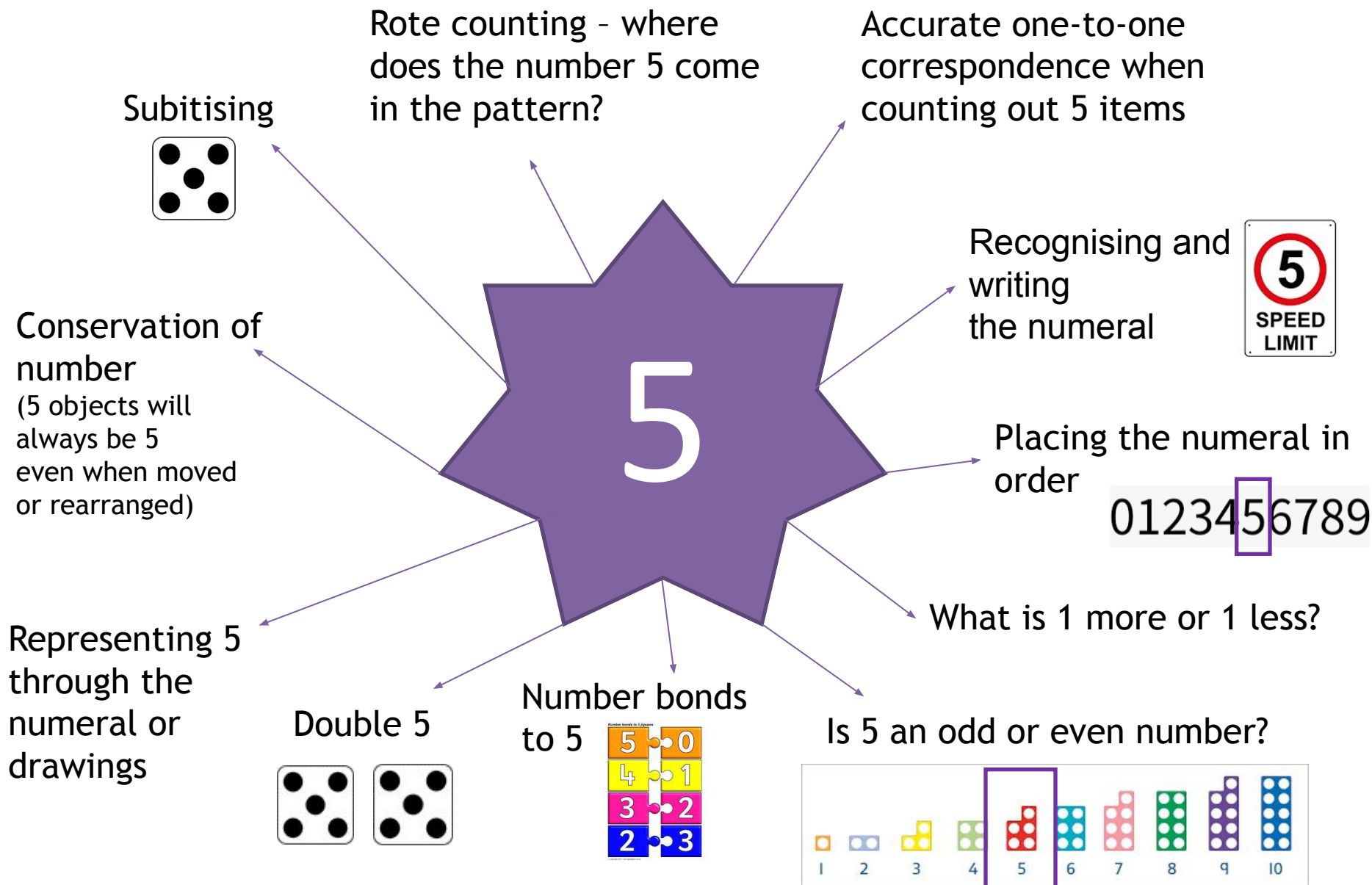
The order-irrelevance principle. This involves children understanding that the order we count a group of objects is irrelevant. There will still be the same number.

Encourage children to count objects, left to right, right to left, top to bottom and bottom to top. Once children have counted a group, move the objects and ask children how many there are, if they count them all again they have not fully grasped this principle.



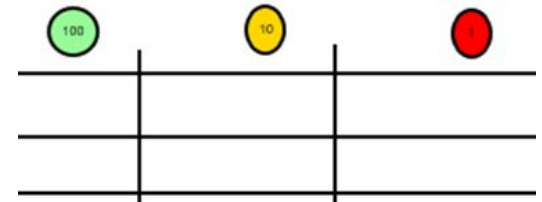
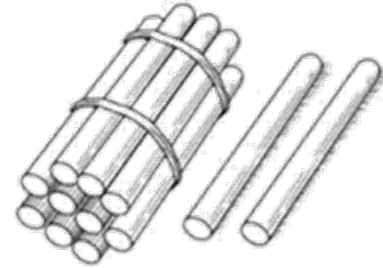


How do we deepen number understanding?



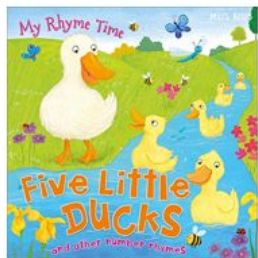


Resources (manipulatives) used in school





What can you do at home? Number



Learn
number
rhymes

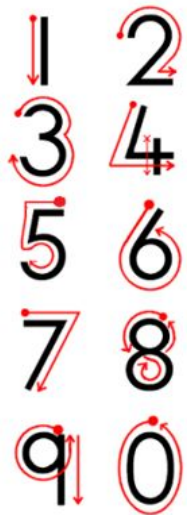
Count
everything!



Look for numerals
in the environment



One-to one
correspondence



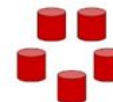
Practise
forming
numerals
correctly



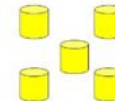
Play games which
use a dice



Conservation of Number



Groups of 5 counters are
arranged in the following
3 patterns



Kate Lockton, Emma Smith, Hilary Chisholm, Zeynep Mollu,
19th Edition, © 2008

Arrange the same number of
objects in different ways

Counting



- Count stairs as you walk up or down them
- Count plates or cutlery needed for tea
- Count out food:
Can you get me 5 biscuits please?
How many potatoes on your plate?
- Count how many steps to the front gate



- Count fingers on gloves
- Count buttons as you fasten them
- Count things in pictures when looking at books
- Count food at the shops:
Can you get me 5 carrots please?
- Count socks as you put them in the washing machine

