## Maths in Reception

TUESDAY 17<sup>TH</sup> JANUARY

#### MASTERY IN MATHS

- New Curriculum 2014 Greater depth in Maths Reception is preparing children for this learning which begins in Year 1.
- Changes to maths curriculum 3 key aims problem solving, fluency and reasoning – Basis laid out in EYFS
- Greater focus on mental methods beginning in Reception e.g. recalling number bonds to 5 & 10.
- Number formation taught from Reception Expected at start of Yr 1

#### NUMBER

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;

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

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.

### Number skills The key skills in Maths in Reception are:

#### Counting

1:1 Correspondence

Using numbers to recognise how many there are in a set (matching quantity to numeral)

Recognising numbers

Subitising

Ordering numbers

Working out one more and one less than a given number

Adding amounts in practical situations.

Taking away in practical situations

Doubling & halving in practice situations

Sharing amounts

Identifying odd & even numbers

Recognising pattern of number

#### NUMBER SENSE

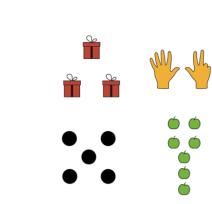
Often children who are struggling in KS1 and KS2 have poor number sense and are weak in basic number work

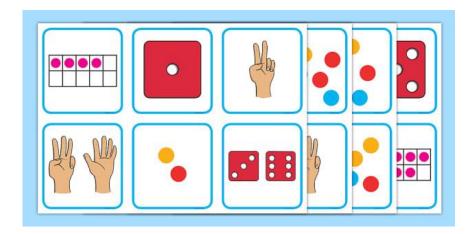
A simple example of this is six dots arranged in two rows of three as on dice or playing cards. Because this image is familiar, six can be instantly recognised when presented this way

Children use mental strategies to recognise numbers and begin to see numbers as part, part whole.

Early foundations are crucial.

#### SUBITISING





#### A Maths Lesson

- Daily lesson Linked to Power Maths
- 20 minute input with use of intervention where necessary
- Every child has 'Maths Journey'
- Maths opportunities in all areas of classroom in & out
- Weekly Maths Challenges
- Half termly, personalised Maths targets
- 40-45 minutes focussed learning
- Guided indoor/outdoor activity
- Independent indoor/outdoor activity
- Hands on, fun & meaningful

#### Power Maths

- Whole school scheme from Reception to Year 6
- Progressive
- Builds on key skills as identified previously
- Supported by activities in classroom (indoors and outdoors)
- NCETM Mastery Approach

#### Outdoor Maths

- Weekly outdoor Maths activities
- Supports indoor Maths work
- Use of Natural objects
- Great links to CL & PD

#### **ADDITION & SUBTRACTION**

- We use Numicon, Part, Part, Whole Model & objects to help us add and subtract.
- How many are there altogether?
- Who has more/less? How do you know?
- Can you use different Numicon pieces to make 5? 10? 20?
- Can you count on to find the answer?
- Instant recall of bonds and one more/one less questions
- This is a crucial skill to master in Reception. This will be the foundation of much Maths learning in KS1. The more practice, the better children will become at this.



#### 🕨 Fun

Number recognition – Busses, trains, house numbers

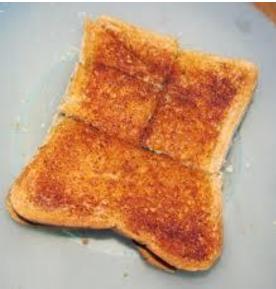
Counting

Arrangements



Quick recall & quizzes

Solving problems involving number. Would you like 2 pieces of toast? Can you cut it in half? How many pieces? Can we add one more scoop? Double ice cream scoops for dessert.



Problem solving and number activities can be a part of our day from the moment we wake up.

What time is it?

Calendar

How many minutes do we have to....



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What time is it?



How many minutes do we have to....





Can we describe the pattern?
Can we find a matching pair?
Which one is the odd one out? Why?
How many? Can you count in 2s? 5s? 10s?

## Going shopping has lots of opportunities for learning?





# Going shopping has lots of opportunities for learning?

Matching the items on the list to the things on the shelves. Can you find 2 tins of beans? Can you get me one more? How many? Oh no, we've one too many? Can you put one back? Can you read the price tag?



Going shopping has lots of opportunities for learning?

Can you get me 6 big apples? I need 10 apples and I have 4? How many more do I need?



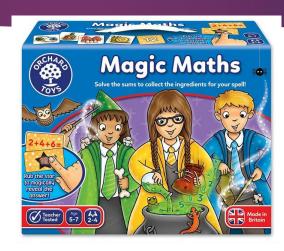
Putting the shopping away can also offer lots of opportunities for learning ?

Can you put all the boxes with straight edges in this bag? How many will fit in the cupboard/ on the shelf? Is the item heavy or light?

Is the packaging big or small? Is it bigger/smaller than ....

### **Board Games**



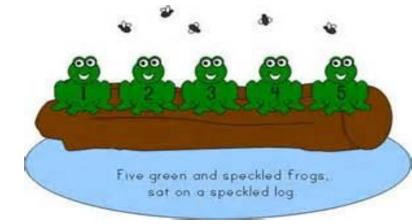


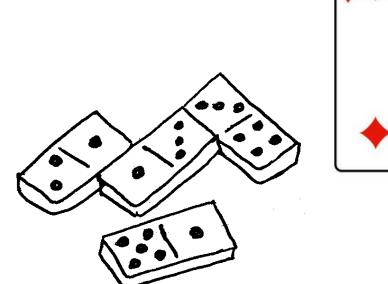


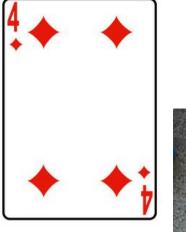




## Board Games









### Apps & Technology



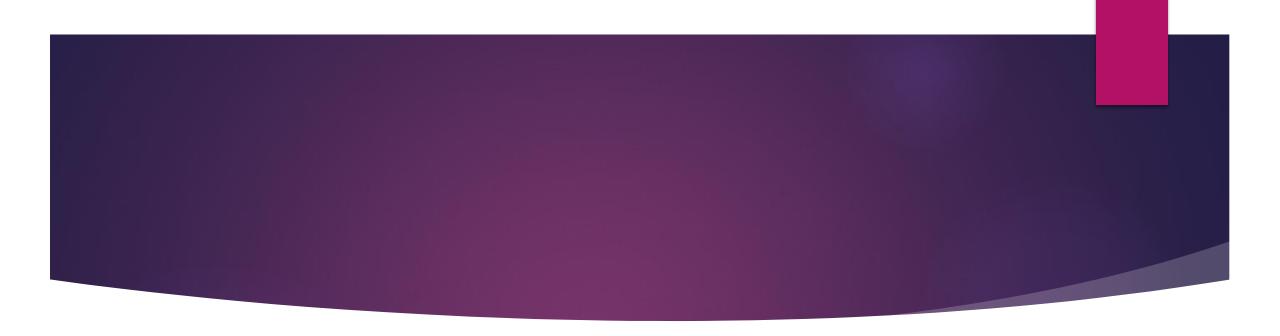
#### EYFS NRICH



#### Fuel the Brain







These are just a few ideas you could use to help your child understand maths and problem solving. Most of all have fun!



## Now it's your turn

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