# Maths at 

## Home

## Reception Booklet



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## Maths at home

Research shows that if parents get involved in their child's education they can enhance their achievements in school. Simply by talking to your child at home about what they have been doing at school, getting involved in homework and going over maths activities you can make a real difference to their achievements in school.

Talk to your child about what maths they are doing at school. Try not to be negative if you yourself are not confident with maths as your
attitude can affect your child's attitude to maths. Good things to do at home are to practise counting, maths facts and play games. Most importantly try to keep things fun and enjoyable.

In this booklet are some ideas of ways you can do maths at home with your child. If you have any queries about the booklet or want further information, then please contact Mrs McVittie.

## Maths through reading

There are some lovely maths books available that you can read with your child to help improve both their reading and their maths. Many are available from local libraries or make good present ideas.

For Nursery and Reception there are many good books available. Here are a few suggestions:

- One Bear at Bedtime by Mick Inkpen (Counting to 10)
- One to Ten and Back Again by Nick Sharratt \& Sue Heap (Counting to 10 and back again)
- Hippos Go Beserk by Sandra Boynton (Counting to 10 and back again)
- 10 Little Rubber Ducks - Eric Carle (Counting to 10)
- 10 Sleepy Sloths - Neil Griffiths (Counting to 10)
- 10 Little Penguins Pop-up Hardcover - Joelle Jolivet (Counting to 10)
- One Ted Falls Out of Bed Julia Donaldson \& Anna Currey (Counting to 10)
- Hedgehog Howdedo Lynley Dodd (Counting to 10)
- Handa's Hen - by Eileen Browne (Counting to 10)
- One Gorilla - by Anthony Browne (Counting to 10)
- 100 Hungry Ants - Elinor J. Pinczes (Counting to 100)
- The Great Pet Sale by Mick Inkpen (Money to $£ 1$ )
- One Year with Kipper by Mick Inkpen (Months of the year)
- Anno's Counting Book by Mitsumasa Anno (Counting/ months of the year)
- The Very Hungry Caterpillar by Eric Carle (Counting to 5, days of the week)
- What's the Time Maisie by Lucy Cousins (Hours time)
- Angry ladybird by Eric Carle (Hours time)


## TV Programmes

There are a few TV programmes and DVDs that encourage counting and other mathematical ideas.


- Numberblocks - currently on CBeebies (http://www.bbc.co.uk/cbeebies/shows/numberblocks
- Numberjacks - Old CBeebies - available online (http://www.numberjacks.co.uk)
- Maisy Numbers and Colours DVD (Lucy Cousins)


## Number Apps

There are many different maths apps which can be downloaded for phones and tablets including

- Bugs and Buttons - $£ 1.99$ App store (numbers, counting, fine motor skills etc.)
- Bugs and Numbers - $£ 1.99$ App store (counting etc.)
- Hungry Fish - Free App store ( number recognition, number bonds)
- Play 1,2,3 - Free App store (numbers, colours)


## Counting

Counting is an important skill that forms the basis of a lot of mathematical understanding.

- Begin by practicing counting out loud in in ones, first forwards and then when confident count backwards.
- Then practice counting objects such as buttons, toy figures for accurately.

There are many good counting books (see previous page) and counting songs such as:

- Five little ducks went swimming one day
- Ten Fat sausages
- Animals went in 2 by 2
- 1,2,3,4,5 once I caught a fish alive

Find more at
http://www.bbc.co.uk/learning/schoolradio/subjects/mathematics/counti ngsongs

## Number Formation

It is important for children to form their numbers correctly.

You can practise this at home by:

- Making them out of play doh
- Drawing them in crayon, paint or chalk.
- Painting them in water on the ground.

Then your child can match the number symbol to the correct amount of objects or dots.

## Subitising

Subitising is when you can look at a small number of objects or dots and know how many there are without counting. For example, it is likely that you know the number of dots below without having to individually counting each dot.


Subitising is an important skill for children to develop (as it helps them develop more
 sophisticated addition strategies) therefore dice games and domino games are useful for children to practice subitising.

## Maths at home through Games

Playing maths games at home is a fun way to improve your child's confidence and achievement in maths. If you are looking for present ideas for birthdays or Christmas, then there are some great maths games available as a fun way for your child to practise maths.

The Green Board Game Company (also known as Brain Box) produce a great range of snap games for practicing a range of facts such as my first number snap, colour and shape snap and addition snap.

Orchard Toys also do a good range of maths games for children from reception to year 4. These games practice counting skills (e.g. The Ladybirds Game and the Spotty Dog Game), addition and subtraction (e.g. Bus Stop Game) and money (e.g. Pop to the Shops). Have a look at their website for the full range of maths games: www.orchardtoys.com.

Top Trumps is also a good game for practising the comparing of numbers. Different packs have different ranges of numbers from 1-10 (e.g. Thomas the Tank Engine), 1-100 (e.g. Ben Ten) and then much bigger numbers (e.g. Dinosaurs). Match Attax can also be used in a similar way.


## Dice, card and domino games

Using dice, cards or dominoes there are a variety of games you play at home.

You can pick two cards, throw two dice or pick a domino and add the values or find the difference between the values. The player with the highest or lowest amount could win.

When adding the values ask your child how they worked out the total.


As they become familiar with the game try to encourage them to count on from the first number (and then as they get proficient at that, from the highest number) and to use the facts they know like doubles.

## Money

Often we pay by credit card in shops and forget that our children are not getting the chance to see and experience money. Children learn best about money by handling coins and playing with them.

To help your child understand about money the first thing you can do is let them handle coins and play with them until they become familiar
 with each coin and know the value, even without reading the number on them.

Young children really enjoy playing shops and it is easy to set up a shop with a few coins and an old purse or tin. Stick post-its or paper labels on toys or tins from the kitchen cupboard to create your items
 to sell and buy.

Begin with paying just with pennies for single-digit prices. Then move on to using ten pence and one pence coins to pay for two-digit prices. When your child is confident with those coins then use a mix of coins and finally move on to giving change.
As they get more familiar with the shop ask other questions:

- Which coin could you use to buy the toy which is 5p? Could you pay with different coins?
- Which coin has the greatest value.
- How much would it be altogether if you bought a toy at $5 p$ and a toy at $3 p$ ?
- The items in the shop have increased by 1p. How much do the items cost now?


## Telling the time

Telling the time is an important skill but is hard to learn. To help your child begin to tell the time here are a few suggestions:

Talk to them about what the time is at various points during the day breakfast, school start, school end, teatime, bedtime.

- Asks questions such as: What number is the little hand/big hand pointing to.

If possible get them a small clock with hands for their bedroom or a watch with hands.

Also talk about the days of the week and months of the year so that children become familiar with the names.

## Maths in and out of the house

Whilst outside, walking or travelling by car there are many number activities you can do.

## Counting outdoor items

- Steps you have taken
- Stairs you have climbed
- Cars, dogs, trees, flowers
- Skipping - counting your skips, jumps.


## Door Numbers

- What is the number on that house?
- What number will come next?
- Looking at the odd and even pattern of house numbers.


## Car registrations or bus numbers

- What is the number?
- Can you find a bigger/smaller number?
- What is one more than that number?
- What would happen if you added 1 to that number?
- What is one less?


## Sports

As you watch the football results come in or watch a match or another sporting event, ask questions e.g.
 How many more goals did the team need to win? Who has scored the most goals?


## Maths in the Kitchen

There are lots of opportunities for doing maths activities at home such as cooking, laying the table for a meal or looking at receipts.

## Cooking



- How much flour does the recipe need?
- How many eggs will be left after we use two?
- We need to make double. Can you help me double all of the numbers?
- Cake tray or egg box: How many cakes/eggs in a row? How many rows? How many cakes/eggs altogether?


## Laying the table

- How many knives, forks and spoons do we need?
- Can you count them out?
- We have 4 cups, we need 1 more. How many will that be?
- Mummy doesn't want a spoon, how many will it be if we take 1 away?
- Can you give everyone 5 slices of cucumber? How many will that be altogether?
- I have 12 biscuits, if I share them equally how many will we have each? How many left over?


## Construction play

Using construction materials such as blocks, Lego and stickle bricks the children can build models to develop their understanding about shapes, space, size, measurements etc...

- What would be the best shape for a roof? Why?
- Who can build the tallest tower?
- How many blocks have you used?
- What shape is the door?

- Can you make a pattern?
- Make me a rocket using the shapes.


## Bath Time

Using different bottles, pots and tubs the children can learn about capacity. They can fill them to explore which holds the most while having a bath. You can also buy foam numbers. They will have a splashing time!!!!

