Supporting your Child

with

Maths in Key Stage One

A place to think and grow

Brookhurst Primary School

Carl Upton

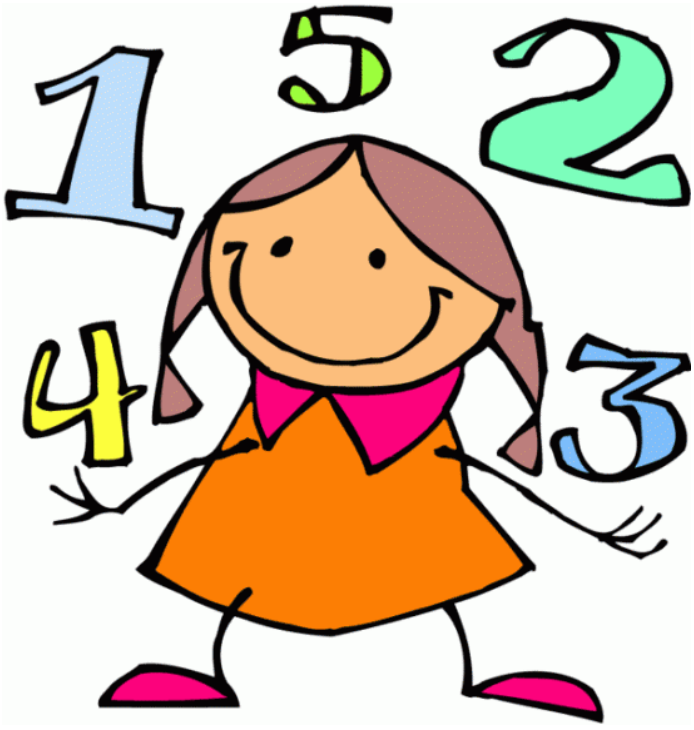
Sept 2014

Supporting your child at home with Maths

Maths should be **FUN**!!

Maths should be part of children's everyday lives!

Maths should be about exploring the world around them!



Playing Maths Games

Children love to play Maths games especially if it involves spending quality time with an adult.

Games that you could play:

- Snakes & Ladders
- Dominoes
- Children's dart boards
- Battleships (simple coordinates)
- Ludo
- And lots more!

Make up your own games with dice:

- Make your own track game (based on Snakes & Ladders or other board games)
- Throw two dice each. Who has the greatest total?
- Start at 20 then take it in turns to throw the dice. Who gets down to 0 first?

Use of Stories, Rhymes & Role Play

Stories & Rhymes:

- There are lots of opportunities to practice counting whilst reading books, simply by encouraging your child to counting the number of objects on a page
- Many nursery rhymes or other children's songs have numbers in them (1,2,3,4,5; Once I Caught a Fish Alive, Ten Green Bottles, Five Little Men in a Flying Saucer, etc)

Role Play:

- Set up a tea party for their toys then ask them to:
    - Measure the heads using a tape measure then make hats to fit their toys. Use language to describe the size (biggest/smallest, etc)
    - Make a shopping list for the party – add prices and work out the total amount spent
    - Make up problems – If 6 teddies are coming and they eat 2 sandwiches each, how many sandwiches do you need to make?
    - Make necklaces for the toys using beads to make repeated patterns
    - Set the table. How many plates and cups will you need altogether?
    - Have cups of different sizes. Which cup will hold the most/least? Experiment by filling them up and having fun!

Cooking

Most children enjoy helping with the cooking and this is a great way to help children to learn to measure, weigh, count, estimate and use time.

- Make some cakes together. Count out the cake cases. How many sweets will you need if you put 2 on each cake? Practice counting in 2's, etc
- Measure the liquids. Show them the marks on the jug. Can they read the numbers?
- Set the timer for when the cakes are ready. Count down the timer together
- Count out spoonfuls of ingredients
- Put prices on the ingredients. How much did it cost to make the cakes?
- Sell the cakes to each other. Practice giving the right coins and giving change

Sports & Hobbies

Lots of children enjoy sports and have different hobbies and pastimes that could involve Maths. Although the ideas below relate to football they can be adapted for other sports or hobbies.

Football:

- Design a football shirt using 2D shapes
- Put numbers on the back of football shirts. Can you put them in order from smallest to largest, etc?
- Choose two different numbers. What is the total? What is the difference? Can you find two shirt numbers that total 11?
- Look at the football league tables. Who is top of the league? How many more points have they got than the team at the bottom?
- Chose two teams. Look at the number of goals they have got. Who has scored the most goals?
- If a ticket to a football match costs £6, how many tickets can I buy for £15?

Time

- Time one minute. What can they do in one minute? Can they put their shoes on? Jump up and down? Sing?
- Look at clocks. Encourage them to start telling the time on clocks around the house. What time is bedtime/teatime/bathtime?
- Estimate how long it will take them to get dressed then time them. Did it take a longer or shorter time than they thought?
- Have a calendar for your child to write on. What day is it? What do they do on Tuesdays? When is their birthday? Countdown to major events like birthdays, holidays, etc
- Use a stopwatch to time each other to complete an obstacle course or run around the garden. Who was the quickest? How long did it take?

Shopping/Money

All children have or will experience going shopping and handling money. This is a real life skill that involves plenty on Maths.

- Set up a shop using food out of the cupboards and get your children to put price labels on
- Use real money to buy things encouraging them to find totals and work out change
- Write receipts
- When visiting the shops ask the children to tell you the cost of items. Allow them to buy something themselves. Can they check the change?
- Play guess the coin. With their eyes closed, place a coin in their hand and ask them to guess what the coin is.
- Empty your purse/wallet and get your child to estimate how much there is. Count it together

Shape

The world is full of shapes and patterns which your children can be encouraged to recognise and talk about.

- Ask your child to look out for shapes and patterns on walls, floors, buildings, animals, plants, etc
- Draw pictures made entirely of triangles, rectangles, circles, etc
- Make symmetrical butterflies with paint. Draw a picture and put a mirror next to it. What happens? How does the picture change when the mirror is moved?
- Make mobiles by suspending objects form coat hangers, trying to get them to balance
- Make a collection of 3D shapes by looking in the kitchen cupboard or recycling box. Can they sort the objects into groups? How did they sort them?

Key Learning Points from 2014 Maths Curriculum

Year 1

- count, read and write numerals to 100
- 1 more or less than a given number to 100
- begin to know place value in numbers beyond 20 (33 = 30 + 3)
- number bonds within 20 (17 + 3 =20, 7 + 13 = 20)
- add and subtract one-digit and two-digit numbers to 20
- adding and subtracting zero
- use the terms: put together, add, altogether, total, take away, distance between, difference between, more than and less than to develop the concept of addition and subtraction
- counting in twos, fives and tens
- multiplication and division problems using concrete objects and arrays (grouping and sharing) finding halves and quarters of objects, numbers and quantities
- move from measuring using non-standard units to common standard units (cm, mm, g, kg, etc)
- recognise and know value of coins and notes tell the time to the hour and half past the hour
- recognise and name common 2-D and 3-D shapes, e.g. rectangles (including squares), circles and triangles, cuboids (including cubes), pyramids and spheres
- describe position, directions and movements - *make whole, half, quarter and three-quarter turns*
- **solve number problems and practical problems involving these ideas**

Year 2

- count in 2s, 3s and 5s from 0 and 10s from any number
- read, write, compare and order numbers to at least 100
- know the place value of each digit in two-digit numbers
- recall and use facts to 20 and derive related facts to 100 (3 + 7 = 10 so 30 + 70 = 100)
- using concrete objects, pictorial representations and mentally, add and subtract ones, tens and two-digit numbers to and from two-digit numbers
- adding several single digits
- tables and division facts for x2, x5 and x10
- use commutativity of addition and multiplication (3 + 2 = 5 is the same as 2 + 3 = 5, 2 x 3 = 6 is the same as 3 x 2 = 6)
- check answers to calculations using inverse relationships (3 + 4 = 7 so 7 – 4 = 3)
- recognise, find, name and write fractions $^{1}/_{2}$, $^{1}/_{3}$, $^{1}/_{4}$, $^{2}/_{4}$, $^{3}/_{4}$
- recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value; add and subtract money of the same unit, including giving change
- tell the time to the 5 minute
- identify, compare and sort 2-D and 3-D shapes based on their properties (including symmetry in a vertical line) and use vocabulary, such as sides, edges, vertices and faces
- identify 2-D shapes on the surface of 3-D shapes
- right angle turns clockwise and anti-clockwise
- interpret and construct simple pictograms, tally charts, block diagrams and simple tables
- **solve number problems and practical problems involving these ideas**

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