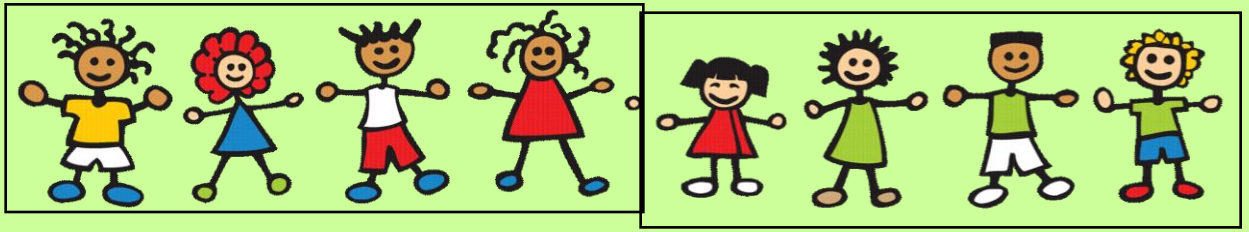


Perton First School

Welcome to KS 2

Family Maths Session

Why a new National Curriculum?

- **New National Curriculum framework-** September 2014.
- The changes were necessary to keep pace with the achievement of pupils in other countries.
- The new curriculum is very knowledge based.
- **Higher expectations overall.**

Broad aims of the New Curriculum

To ensure

- that pupils develop mathematical fluency eg times tables, number bonds etc
- children can reason mathematically. Children need to be able to **explain** the mathematical concepts with number sense, they must explain **how** they got the answer and **why** they are correct.
- an emphasis on problem-solving throughout so

they can make connections across mathematical ideas, applying their skills to real- life contexts.

Maths Curriculum 2014
(Year 1 onwards)

Maths is broken down into 3 areas:

- **NUMBER**

+,-,x,÷ also fractions, measurement

- **GEOMETRY**

Properties of 2D and 3D shapes/position , direction and movement

- **STATISTICS**

Constructing charts and interpreting data

Throughout and underpinning these strands is

USING AND APPLYING

Word problems and real life connections

Expectations in Number and Place Value

3	Read and write numbers to 1000 in numerals and words Count from 0 in multiples of 4,8,50 & 100 Identify, represent and estimate numbers using different representations Find 10 or 100 more or less than a given number Compare & order numbers to 1000 Recognise place value in three digit numbers (hundreds / tens / ones) Solve number problems and practical problems involving these ideas
4	Count in multiples of 6,7,9,25 & 1000 Identify, represent & estimate numbers using different representations Find 1000 more or less than a given number Compare & order numbers beyond 1000 Recognise place value in four digit numbers (TH H T U) Solve number problems and practical problems involving these ideas with increasingly larger numbers Round any number to the nearest 10, 100 & 1000 Count backwards through zero to include negative numbers Read Roman Numerals to 100 and understand history of numbers

Expectations in fractions

3	Count up & down in tenths; recognise that 1/10 arises from dividing by 10 Add, subtract and order fractions <1 with same denominators Recognise, find & write fractions of a discrete set of objects.
4	Count up & down in hundredths; recognise that 1/100 arises from dividing by 100. Recognise equivalence to ¼, ½ & ¾ Compare decimals to 2DP. Round decimals with 1 DP Link decimals to solving money problems

Expectations in measure

3	Measure, compare, add and subtract lengths, mass and volume Measure perimeter of 2D shapes Add & subtract amounts of money Tell the time on analogue, 12 hour and 24 hour clocks to the nearest minute. Know the number of seconds in a minute and the days in each month
4	Convert between units e.g. km – m & hours to minutes Calculate the perimeter of rectilinear figures in cm and m Find the area of rectilinear shapes by counting squares

Expectations in Geometry

3	Draw 2D and make 3D shapes using modelling material. Start to recognise angles as a property of shape, that a right angle is 90 degrees and there are 4 right angles in a full turn Identify horizontal and vertical lines
4	Compare and classify 2D and 3D shapes Identify acute and obtuse angles Identify lines of symmetry in different orientations Complete symmetrical diagrams. Use coordinates in the first quadrant and describe translations

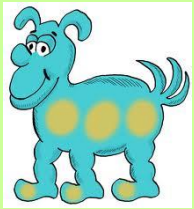
Expectations in Statistics

3	Interpret & present data using bar charts, pictograms ad tables. Solve one and two step problems using the information presented
4	Interpret & present discrete and continuous data using bar charts and time graphs. Solve comparison, sum and difference problems using the information presented

Calculation Policy

Big Maths

Big Maths



Big Maths is based upon the principle that there are 4 core skills that lie at the heart of numeracy.

These core skills form the platform for virtually all other maths skills and are affectionately known as CLIC ….

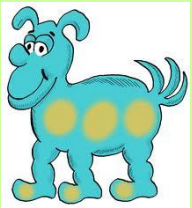
CLIC

* Counting- Learn to count.
* Learn Its- Learn to remember totals as facts
* It's Nothing New- Apply these facts to new situations
* Calculations

What happens on Friday?

<u>Fridays is our Challenge session</u>

Big Maths Beat That – timed challenge where children answer 'Learn Its' questions. The aim is to beat their previous score.



How can you help your child?

Key Ideas

- Maths can carry a lot of emotion.
- Make maths fun.
- We want children to feel good about Maths and develop the children's confidence.
- Little and often.
- Encouragement to think for themselves.
- It's ok to make a mistakes!

Number

Number is key to all other aspects of maths. It includes:

- Counting
- Understanding number
- Knowing and using number facts
- Calculating

You can make a difference to your child's learning.

By playing simple maths games little and often

(just a few minutes each day) children's confidence and self esteem soars.

Everyday 'real' maths

- Out shopping – making totals, finding change, % discounts.
- Time – plan days out, what time to leave, how much money to take.
- Cooking – weighing ingredients, reading scales, adapting recipes.
- Keeping score in games.

How you can support your child at home?

- Look for and talk about numbers in the environment
- Play games
- Shopping and giving change.
- Number bonds for 10, 20, 100
- Times tables
- Cooking
- Telling the time and reading timetables

Why play games?

- It cannot be stressed enough how important playing games with your child is for not only developing their mathematical skills but also their all round thinking, logic, strategy and problem solving skills; as well as developing vital speaking and listening and social skills, such as turn taking and learning that we can't always win!
- Most importantly, they should be fun and a chance to share time together.

Play Games

- Playing number games, including board games like Snakes and Ladders, has been proven by research to increase children's understanding of relative number size as well as counting.

Games to play

- **Snakes and ladders** – as it is, vary dice numbers
- **Guess Who?** – systematic working, exploring possibilities
- **Junior Monopoly** – money
- **Cluedo** – strategy
- **Battleships** – coordinates and strategy
- **Noughts and crosses** – strategy
- **Connect 4** – strategy
- **Bingo/beetle drive**

Games to play

Simple, versatile and practical resources

- Dice (subitize)
- Dominoes
- Digit cards – place value
- Playing cards – collecting totals, matching and remembering numbers

A range of games at different levels that promote use of maths vocabulary.

Maths Apps

- Numberjacks

£1.49

Addition facts to 10

- Bugs and Numbers

£1.99

- Andre Brodie – Mental Maths Y1-6

£1.99 each

- DK – 10 minutes a day – FREE

- Squeebles – Times Tables

£1.49

Websites

Education City

- Busy Things

- Espresso

Finally

Let's have fun!