

Maths Workshop

Friday 5th June 2015

9am

The Aims of this Session...

- To give you an overview of the new National Curriculum for Maths that became statutory in September 2014.
- To talk briefly about our approach to calculation methods.
- To take feedback from parents on future workshops relating to maths.

The New National Curriculum

The new curriculum began in schools from September 2014. However, this year the children in Year 2 and Year 6 are being formally assessed using the old curriculum because the 2014 curriculum will only have been in place for nine months.

If your child is currently in year 1, 3, 4 or 5 then they will be taught using the New Maths Curriculum.

New tests will be produced for the summer of 2016 to assess work from the new curriculum.

Aims of Mathematics

The three aims of the Maths Curriculum are for children to

- **become fluent,**
- **reason**
- **solve problems.**

“The expectation is that the majority of pupils will move through the programmes of study at broadly the same pace. However, decisions about when to progress should always be based on the security of pupils’ **understanding** and their **readiness** to progress to the next stage. Pupils who grasp concepts rapidly should be **challenged** through being offered rich and sophisticated problems before any acceleration through new content. Those who are not sufficiently fluent with earlier material should consolidate their understanding, including through additional practice, before moving on.” *National Curriculum for Maths 2014*

The Main Changes.

These are the main changes that have taken place with the implementation of the New Maths Curriculum.

- **Five-year-olds are expected to learn to count up to 100** (compared to 20 under the current curriculum) and learn **number bonds to 20** (currently up to 10)
- **Simple fractions ($\frac{1}{4}$ and $\frac{1}{2}$) are taught from KS1**, and by the end of primary school, children should be able to convert decimal fractions to simple fractions (e.g. $0.375 = \frac{3}{8}$)
- By the age of nine, children are expected to know **times tables up to 12x12** (currently 10x10 by the end of primary school)
- There is an increased requirement for pupils to **use formulae for volume** and to calculate the area of shapes other than squares and rectangles.
- **Probability** has been removed from the primary curriculum.
- **Financial education** has been reinforced, with a renewed emphasis on essential numeracy skills, using money and working with percentages.

continued..

- The curriculum has a strong steer that the use of calculators should be restricted until the later years of primary.
- There is a greater emphasis on the use of large numbers, algebra, ratio and proportion at an earlier age than in the current documentation.
- Roman numerals have been introduced in the Year 3 curriculum.
- There is a focus on counting beyond whole numbers, e.g. decimals, fractions.
- Data handling has decreased, but the curriculum makes more reference to interpretation of data.
- (See a copy of the 'Guide for Parents' for further information)

Planning

- As a consequence of the changes, St Vincent's School needed to review and update their planning.
- We plan using the Collins Maths Scheme.
- In preparation for the New Maths Curriculum Collins sent us new planning guidance, books and materials that were in line with the New Curriculum and these are currently being used in class daily to support teaching and learning.
- From Year 1 to Year 6 your children are being taught using this scheme. In Nursery and Reception the Early Years Framework is being used.

Written Calculations

- Due to the changes that took place in September 2014 St Vincent's needed to review and update the school's calculation policy so that all year groups were being taught the correct calculation methods.
- The calculation policy is designed to give pupils a consistent and smooth progression in the learning of calculations across St Vincent's School from Reception to Year 6.

Why inform parents?



- “They didn’t do it like that in my day!”
- This booklet will also provide information and guidance for you to support your children at home.

The Written Calculation Policy

- A copy of the calculation policy is available for you to take away.
- As there are many sections please take the policy that is most useful to you.
- Early Years and Key stage 1
- Key stage 2
- The policy will also be available on the school website.

Which is more important:

- mental calculation ?



- written ?

or

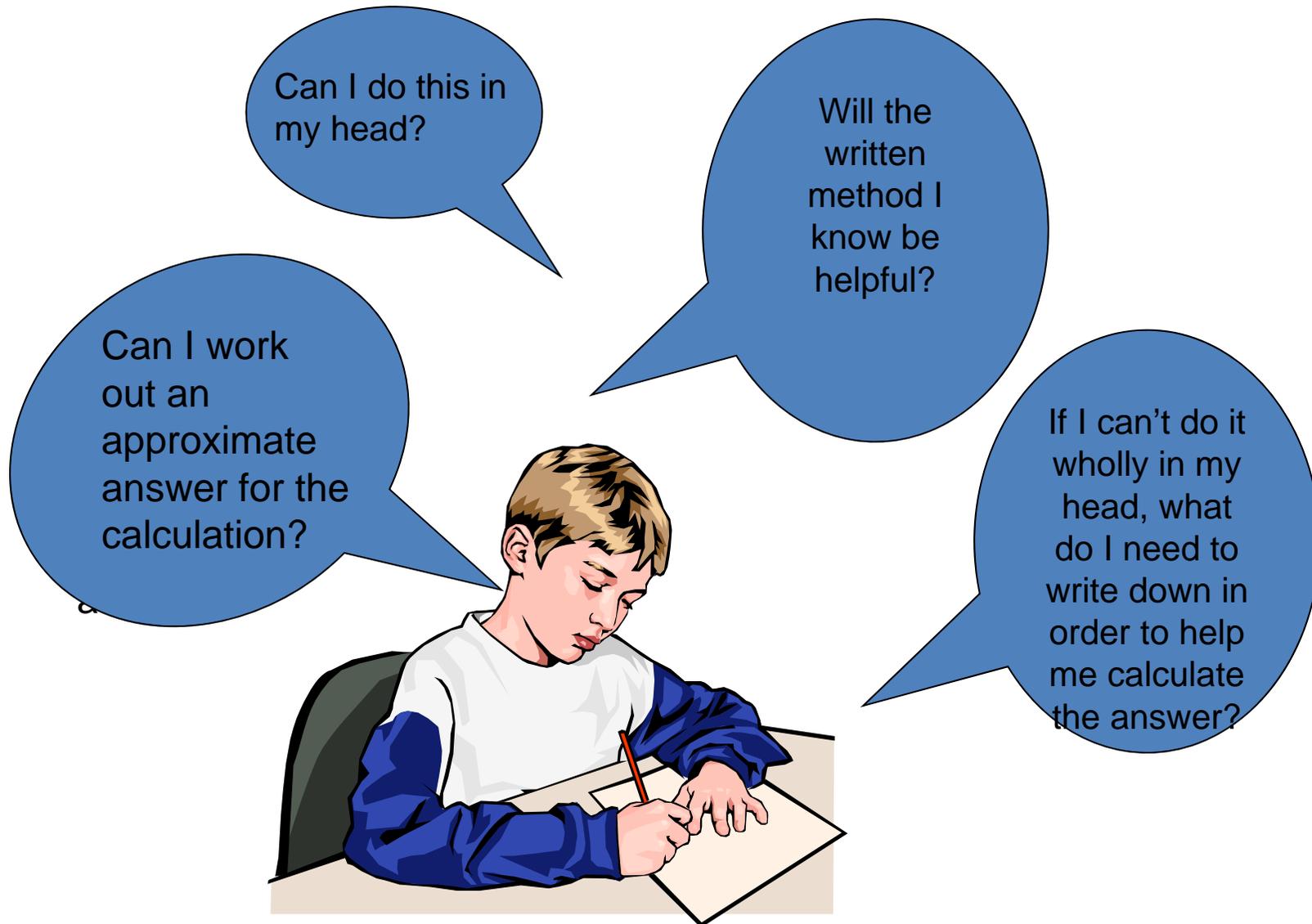


Mental Maths!!

- **Mental Mathematics:**

- Mental mathematics is **valued more than written methods** because it is used in everyday life more widely.
- Mental mathematics does not mean no writing, children should have the opportunity to make informal jottings and use the methods taught in lessons.
- Mental mathematics does not mean no visuals or reciting multiplication tables, children should have a picture of number in front of them if it is not in their head.
- Priority needs to be placed on getting the children familiar with counting in groups of numbers, both forwards and backwards.
- We aim to have a good understanding of the links between the multiplication tables.
- Children should be encouraged to have a real sense of number. This means seeing number in a range of ways i.e. tens, ones, number bonds, factors, prime, multiples, square, whole, decimal
- Children should be taught to separate numbers in ways other than just tens and ones i.e. 48 is $40+6$, $30+18$, $20+28$, $32+16$

Before solving a calculation children should be taught to select the most efficient method.



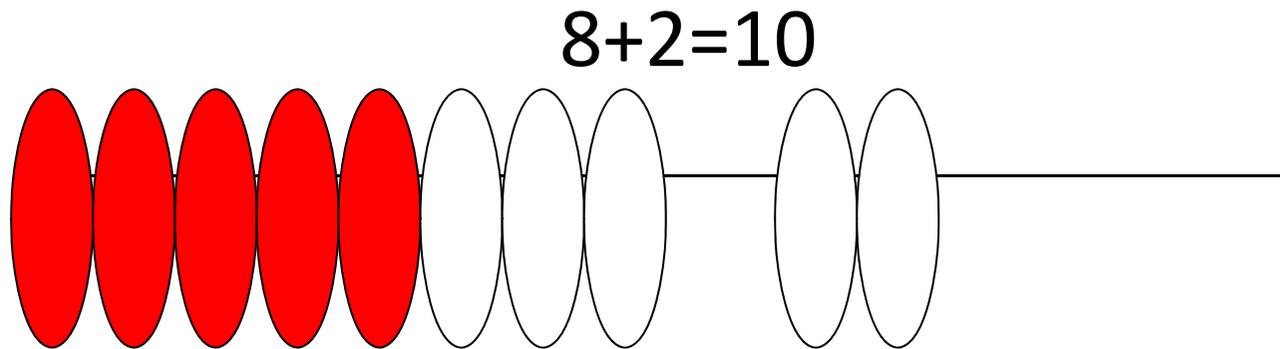
Children attempting to use formal written methods without a secure understanding will try to remember rules, which may result in unnecessary and mistaken applications of a standard method.

Problems will start off being verbal questions and will become more formal as they progress through Key Stage 1.

This can be seen clearly in the policy.

Example

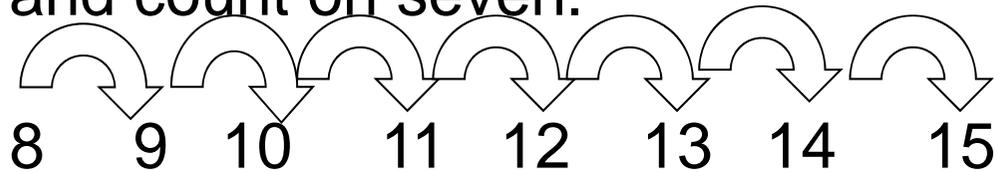
Bead strings or bead bars can be used to illustrate addition



For Example:

Children then begin to use numbered lines to support their own calculations using a numbered line to count on in ones.

E.g. **8 + 7 = 15** 'Put your finger on number eight and count on seven.'



EQUIPMENT THAT WE USE

A range of equipment is used to support children when written calculations.

Here are some examples:

- Counters,
- Numicon
- Bead strings
- Multilink,
- Pictures,
- Objects,
- Diennes,
- Dice,
- Dominoes,
- Place value cards,
- Money

CALCULATIONS IN CONTEXT

All the methods support children in using their mental and written skills to solve calculations.

Children need to be encouraged to use the method **that they understand and can use confidently.**

It is important that children are able to choose the most appropriate method for the calculation.

Problem Solving

It is important that as children learn appropriate methods to add, subtract, multiply and divide that they are able to use these to solve problems and investigations. In St Vincent's School all children are given guidance and regular opportunities to solve a range of problems.

One Example

4 C.DS at £2.99 – How much altogether?

£2.99 is almost £3.00 and so teach them to round up, then multiply, then adjust:

$$4 \times £3.00 = £12.00$$

$$£12.00 - 4p = £11.96$$

Helping your child with Maths

To help your child develop a good understanding of number we ask you to use every opportunity to bring in counting and exploring number in every day life. For example:

- Play fun board games with your children like dominoes, snakes and ladders, snap, connect 4, uno, battleships, Cranium, Guess Who?
- Practice all the multiplication tables or play multiplication songs (up to 12 multiplication table).
- Practice counting in different groups of number.
- If you are following recipe, ask...If this recipe is for 4 people, how much ingredients do we need for 8?
- Encourage your child to handle money. Ask questions...If there is 10% off, how much is the new price? Compare money off deals e.g. buy one get one half price and ask...How much cheaper is the deal?
- Encourage children to have savings and to manage their own money.
- When planning DIY ask...How many tins of paint will we need? How long/wide do the new curtains need to be?
- Other ideas...If the film starts at 7.45pm and is 120 minutes long, when will it finish?
- Explore bus time tables...What bus do you need to get to arrive at school on time?

**THANK YOU FOR LISTENING.
PLEASE SEE ME AFTER THE WORKSHOP IF
YOU HAVE ANY QUERIES OR QUESTIONS.**

•

•

