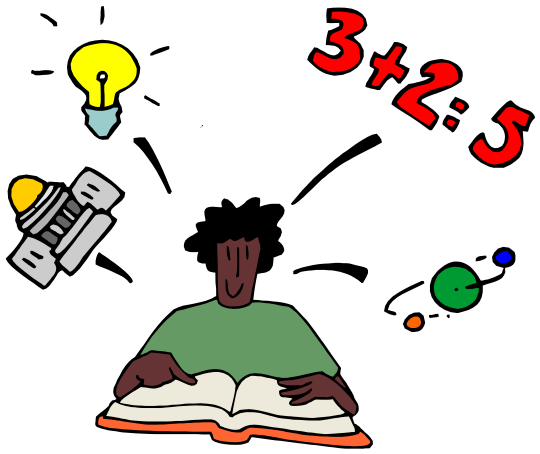
WILTHORPE **INFANT SCHOOL**

PARENTS BOOKLET

HELPING YOUR CHILD WITH NUMERACY



Maths is one of the key subjects taught, with the National Numeracy Strategy (NNS) being at the heart of the drive to raise standards in schools.

A good grounding in maths at an early age will help our children through the rest of their lives both at work and home.

Although techniques have recently changed vastly, they are much simpler and quicker to use, with a greater emphasis on mental maths.

Remember:

Children are now learning a whole range of methods in addition and subtraction, some of which have not been seen before by their parents.

Ask your child to explain what they are trying to do. Ask them to talk you through the way they are working out their answer.
Even though their route may seem illogical, if it makes sense to them, it can be no bad thing!

Don't tell them they are doing it the wrong way. Try their approach. You may be surprised. You may find their way of working out is faster and easier to do than the 'right' way you were taught at school.

Don't correct too quickly-if your child makes an error give them time to think and see if they can sort it out themselves.
Give suggestions to help them.

Encourage your child to think through the task as they work out the answer.

'Standard written methods are reliable and efficient procedures for calculating, which once mastered, can be used in many different contexts. But they are of no use to someone who applies them inaccurately and who cannot judge whether the answer is reasonable.'
(NNS)

The NNS recognises that there are a number of efficient ways of setting out and working out calculations, but that the processes need to make sense.

At school some of the work is done orally, so Children at Infant school write down less than they once did.
The teacher talks with the children, asking questions and asking them to explain **how** they worked out their answers.
Through sharing their approaches, children are now developing a range of **mental calculation strategies.**

‘An ability to calculate mentally lies at the heart .of Numeracy.’ (NNS)

In order to make quick and accurate mental .calculations, there are a number of skills and pieces of specific knowledge that have to be .learned.

Children need to:

- Have a sense of the size of the number and where .it fits into the number system.

- Know by heart number facts such as pairs of numbers totalling 10, doubles, halves, near-doubles.

- Use what they know by heart to figure out answers mentally
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- Calculate accurately and efficiently, both mentally and with pencil and paper.

- Draw on a range of calculation strategies, such as putting the biggest number first when adding two numbers, counting on and counting back.

- Judge whether their answers are reasonable and have Strategies for checking them where necessary.

Addition and Subtraction.

Addition and subtraction are taught at the same time. The reason for this is that each is the opposite of the other.
If you subtract what you have just added, you will end up where you started. While this may seem to be the most obvious thing in the world to you, or children this knowledge will be of enormous mathematical use to them.
If you know that 7 + 3 = 10, then it is really useful to know that 3 + 7 = 10, and that
10 – 7 = 3 and 10 – 3 = 7.

Addition and Subtraction.

Once children are clear on this, it is only a small .step to saying that ‘If I know that 7 + 3 = 10, then I also know that 70 + 30 = 100 and
700 + 300 = 1000.’

‘’If I know that 27 + 3 = 30, then I also know .that 3 + 27 = 30, and 30 – 3 = 27 and 30 – 27 = 3.’

Children need to be aware that addition can be done in any order, but that subtraction cannot.

Children need to realise that when adding numbers, the answer will be **bigger**, and when subtracting numbers, the answer will be **smaller.** Knowing this will help your child to be able to check their answers, and realise when an answer is not reasonable.

Add sets of numbers with your child, using real objects.

Play Shop-add and subtract to calculate spending and Change.

Addition and Subtraction.

Play games with dice which involve counting on and back. Add and take away the numbers.

Play games with packs of cards that involve addition and subtraction.

Use addition and subtraction in everyday activities. use the correct words to help your child to remember that to add up means to give the total. Ask them to take away or to subtract.

addition vocabulary:

add, plus, more, altogether, total

subtraction vocabulary:

take away, minus, less, left

Questions to ask your child

Try to ask your child open-ended questions.
Children should be able to express their findings orally, and practising this at home can give them extra confidence and increase their mathematical vocabulary:

- what do you think would happen if..?
- what will you do next?
- I wonder..
- How can we check and see how close your guess is?
- Why do you think that?
- How did you work that out?
- How can we do this differently?
- What other ways can we show that?
- Tell me how you did that..
- I had never thought of that. Tell me more about it.