Year 1 Maths Workshop Friday 3rd February

Thinking is at the heart of Mathematics and therefore should be at the heart of mathematical teaching and learning.





NSPCC Numbers Day







Session Aims

 To get an insight into the Maths taught here at St Joseph's linked to the 2014 curriculum and White Rose and other resources we use.

To take away some ideas to support your children at home.

To take part in some Maths activities with your child.





The Mathematics Curriculum

Children should:

Become **fluent** in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.

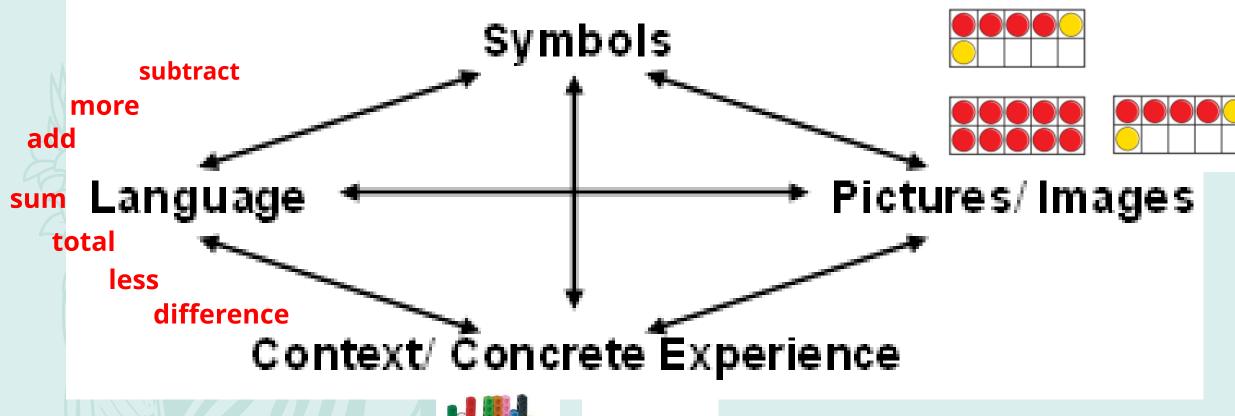
Reason mathematically by following a line of enquiry, conjecturing relationships and generalisations and developing an argument, justification or proof using mathematical language.

Solve problems by applying their mathematics to a variety of problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.









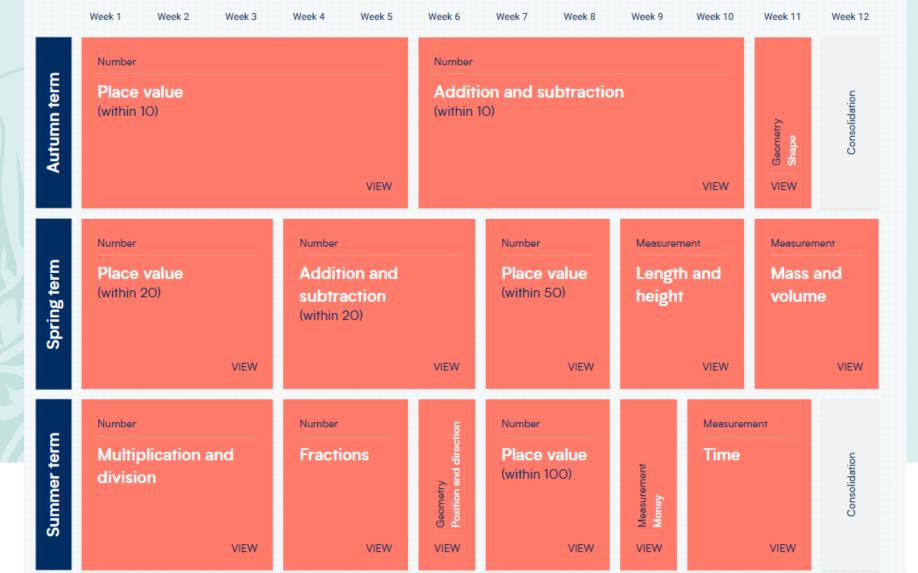








What is taught in Year 1?









Number Sense

Children need to understand our number system, starting with counting numbers, building an understanding of how our numbers work and fit together. This includes exploring place value and comparing and ordering numbers then applying this understanding in different contexts.





Recalling facts

It is important that children recognise number bonds, different pairs of numbers with the same total.













$$7^{6+1}$$











Choose the correct answer 21 22 12 23 21 33 24 42 14 23 21 25

2 tens 7 ones

ones

3 ones

Place Value

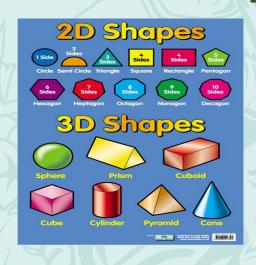
Place value is at the heart of the number system. All digits have a value and a secure understanding of this will enable children to use and understand different calculation methods.



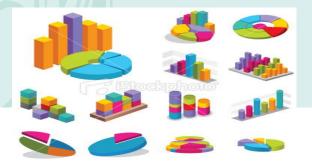


The Other Mathematical Areas

Geometry



Data Handling



Measures











Reasoning in Year 1

Reason mathematically by following a line of enquiry, conjecturing relationships and generalisations and developing an argument, justification or proof using mathematical language.

It would/wouldn't fit in the pattern because...

It could be this because...

Sentence stems

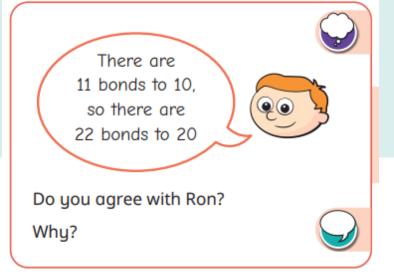
So in that case we could...

It would only work if...



Kay shows a number bond to 20 in a part-whole model.

20
13
What mistake has Kay made?



Problem Solving in Year 1

Solve problems by applying their mathematics to a variety of problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

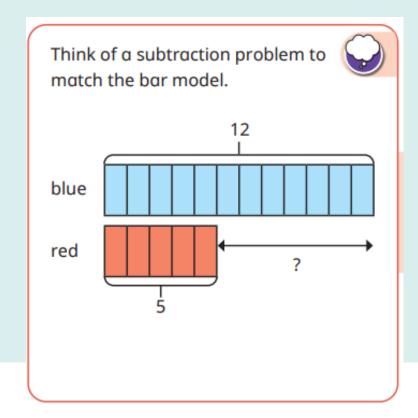
Two numbers have a difference of 4



The greater number is less than 15

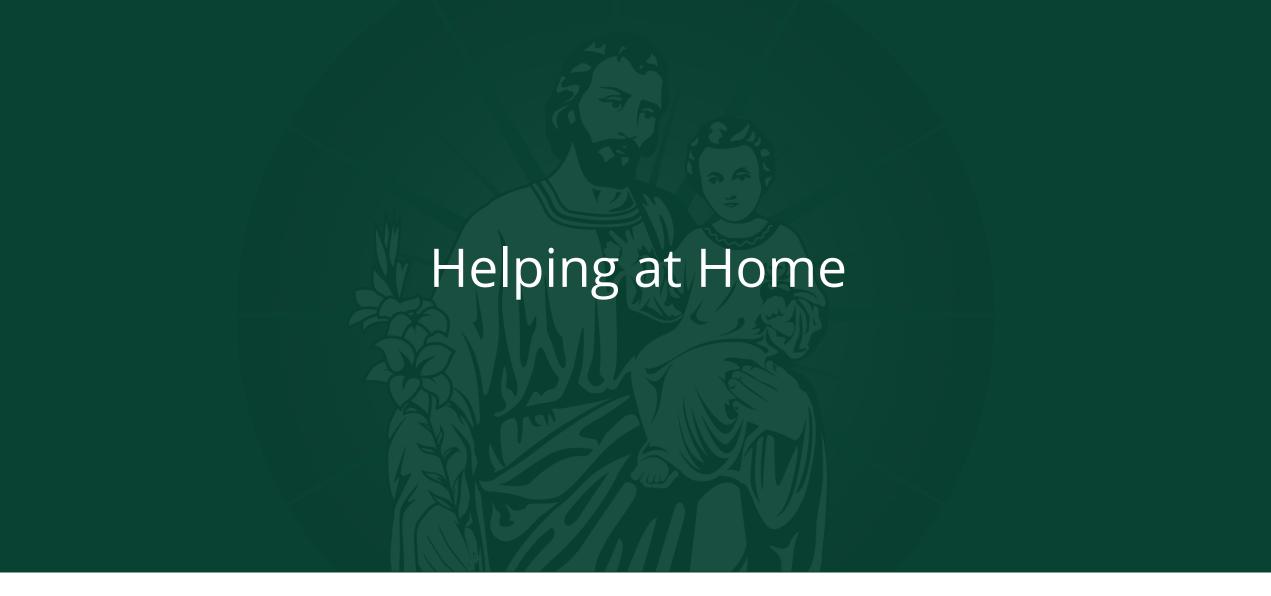
The smaller number is more than 6

What could the two numbers be?



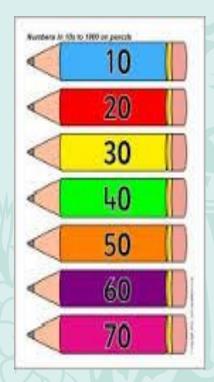




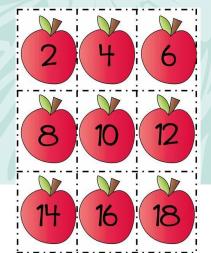






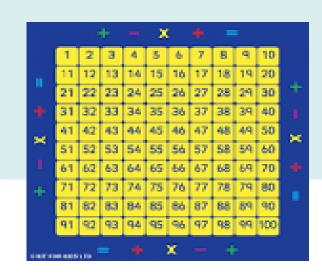






Keep Counting!

- Backwards and forwards in 1s and 10s.
- Counting in 5s,2s etc.
- Counting from other numbers as well as 0







1-minute maths

1 Minute Maths App

What's the app about?

This first version of the app is aimed at Key Stage 1 pupils. Individual one-minute tasks focus on adding and subtracting — and on 'Subitising', the skill of instantly recognising the number of items in a group without counting.

How do we use it?

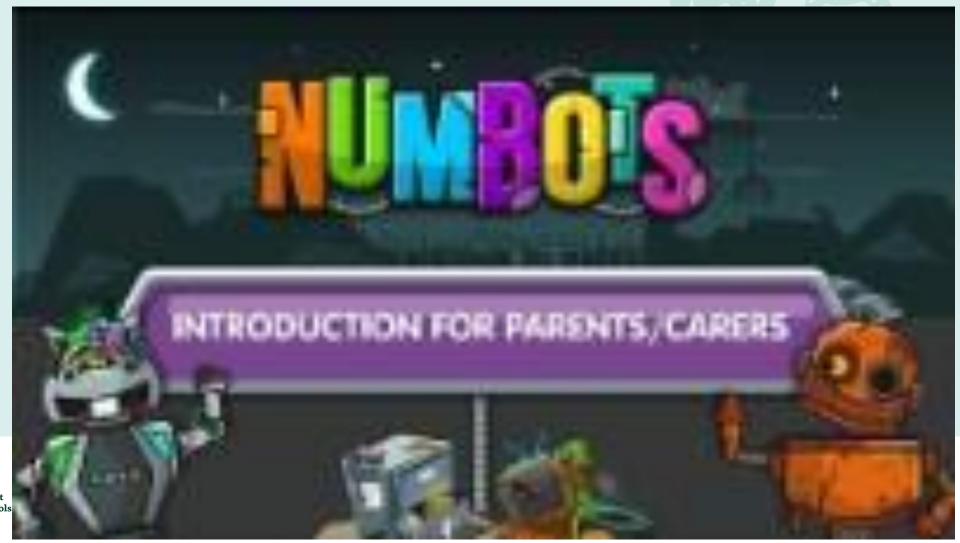
Your child can choose any topic they want to try. They then answer a unique series of questions. If they're struggling with a question, a 'Hint' button will give a helpful clue by showing the question in a different but familiar way.

When the one minute's up, they'll see a feedback screen telling them how they've done.





Times Table Rock Stars and Numbots



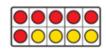




Use our calculation policy

Addition

Use a part-whole model alongside other representations to find number bonds.





Make sure to include examples where one of the parts is zero

Missing numbers need to be placed in all possible places. Use of part whole model to scaffold this.

$$\Box$$
 + ∇ = 7

7 = □ + ▽

 $\Pi = 3 + 4$

 $7 = \Pi + 4$

7 = 3 + 🗆

Subtraction

Children use a part-whole model to support the subtraction to find a missing part.



$$8 - 5 = ?$$

Children develop an understanding of the relationship between addition and subtraction facts in a part-whole model.

Multiplication

Multiplication is related to doubling and counting groups of the same size.



Looking at columns 3 groups of 2

Looking at rows 2 groups of 3

Repeated addition can also be used to show multiplication.

$$2 + 2 + 2$$

3 + 3

Use Number tracks/lines to count in 2s. 5s. 10.s.

Ι	2	3	4	5	6	7	8	9	10
Ι	2	3	4	5	6	7	8	9	10

Counting using a variety of practical resources

Counting in 2s e.g. counting socks, shoes, animal's legs...

Division

Sharing - 6 sweets are shared between 2 people. How many do they have each?









Practical activities involving sharing, distributing cards when playing a game, putting objects onto plates, into cups, hoops etc.

Grouping

Sorting objects into 2s / 3s/ 4s etc How many pairs of socks are there?







8 socks grouped into 2 is 4.

Thank you for coming. Any Questions?



