Maths in KS1

In 2014 the government changed the National Curriculum for maths. Adding in concepts that had previously been covered by older year groups. However they did not change the Early Years Curriculum.

Year 1 :Counting & writing numerals to 100

Write numbers in words up to 20 .

Number bonds secured to 20 .

Use of vocabulary such as equal, more than, less than, fewer, etc.

Year 2 : Solving problems with subtraction

Finding/writing fractions of quantities (and lengths). Adding two 2-digit numbers.

Adding three 1-digit numbers.

Describing properties of shape (e.g. edges, vertices).

Measuring temperature in °C

Tell time to nearest 5 minutes .

Make comparisons using < > = symbols.

Recognise £ p symbols and solve simple money problems

It is down to individual school's to review their current practise and set their own criteria for change.

	TERM 1	TERM 2	TERM 3	TERM 4	TERM 5	TERM 6
YEAR 1	Reading, writing and ordering numbers Estimating Counting in twos and tens Problem solving	Addition and subtraction as counting on and back Solve one step problems and missing number problems	Geometry Position and Direction Place Value Problem Solving	Place Value Fractions Problem solving	Measures Multiplication and division Problem solving	Time Money Problem solving
YEAR 2	Reading and writing numbers Comparing, ordering and sorting numbers Place value Addition Subtraction Problem solving	Number sequences Doubling Multiplication Halving Division Problem solving	Measurement Time Money Properties of shape Fractions (shape and number) Addition and subtraction Problem solving	Position and direction Statistics Multiplication Division Problem solving	Addition Subtraction Problem solving	Multiplication and division problem solving Time Measurements

Year R

Shape and Space	Counting	Reading and Writing Numbers	Calculation	Measures
Shows an interest in shape and space by playing with shapes or making arrangements with objects. Shows an awareness of similarities of shapes in the environment. Shows an interest in shape by sustained construction activity or by talking about shapes or arrangements. Uses shapes appropriately for tasks. Beginning to talk about the shape of everyday objects e.g. round or tall. Beginning to use mathematical names for flat shapes. Selects a particular named shape (2D). Uses mathematical terms to describe flat shapes. Beginning to use mathematical names for solid shapes. Selects a particular named shape (3D). Uses mathematical terms to describe a solid shape. Uses familiar objects and common shapes to create and recreate patterns and build models. Recognise, create and describe patterns. Uses positional language Can describe their relative position such as behind and next to.	Uses some number names and number language spontaneously. Uses some number names accurately in play. Realises that not only objects, but anything can be counted. Recites numbers in order to 10. Counts actions or objects which cannot be moved (when they have been arranged in a regular group for the child) Counts 3 or 4 objects saying one number name for each item Counts objects that can moved Counts objects to 10, begin to count beyond 10 Count out 6 objects from a larger group Estimate how many objects can see and check by counting (Exceeding – to 20). Count fixed objects in an irregular pattern. Recites numbers beyond 10. Count back from 10. Counts reliably with numbers 1 – 20 (* on and back). Counts on (and back) from any number within 20. Exceeding – Count in 10s, 2s and 5s. Exceeding – Solve practical problems that involve combining groups into 10s, 2s and 5s.	Shows an interest in numerals. Shows curiosity about numbers by offering comments or asking questions. Shows an interest in representing numbers Knows that numbers identify how many are in a set. Begins to represent numbers using fingers, marks on paper or pictures. Recognises some numbers of personal significance Sometimes matches numbers and quantity correctly. Recognises numbers 1 to 5. Select correct numeral to represent 1 to 5 objects. Orders consecutive numbers 1 to 5. Recognises numbers 6 to 10. Select correct numeral to represent 6 to 10 objects. Orders consecutive numbers 1 to 10. Recognises numbers 11 to 20. Orders numbers 1 to 20. Orders numbers 1 to 20 when there are missing numbers. Shows interest in number problems.	Separates a group of 3/4 objects in different ways, beginning to recognise that the total is still the same. Compares two groups of objects saying when they have the same number. Uses language more and fewer to compare two sets of objects. Finds the number that is one more up to 5. Finds one more up to 10. Finds the number that is one less up to 5. Finds one less up to 10. Says number that is one more than a given number. Says which number is one less than a given number. In practical activities and discussion begin to use the vocabulary of addition. Finds total number of items in two groups by counting them. In practical activities and discussion begin to use the vocabulary of subtraction. Can take away practically by removing objects and counting how many are left. Begins to identify own mathematical problems based on own interests and fascinations. Uses quantities and objects to add two single digit numbers. Doubles. Uses quantities and objects to subtract two single digit numbers. Add by counting on. Subtract by counting back. Share Half Solve problems (including money, measures etc) Solve practical problems that involved combining groups into 2s, 5s and 10s)	Orders and sequences familiar events. Uses everyday language related to time, including making comparisons. Measures short periods of time in simple ways. Orders 2/3 items by length and height and make comparisons based on length and height using everyday language. Uses everyday language to talk about and compare distance. Orders 2 items by weight and capacity using everyday language to make comparisons. Uses everyday language related to money and make comparisons. To solve problems to do with quantities and measures.

The emphasis in KS1 is on mental arithmetic **BUT** based on practical activities. Useful things to practise at home include:

Doubles and halves
Bonds of 10, 20 and 100
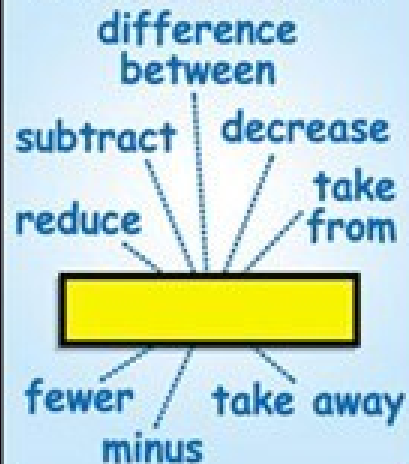Adding 2 small numbers
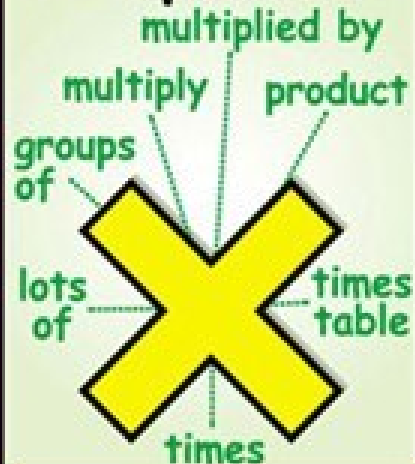Adding or subtracting
Using different vocabulary

Addition

- Counting on using objects
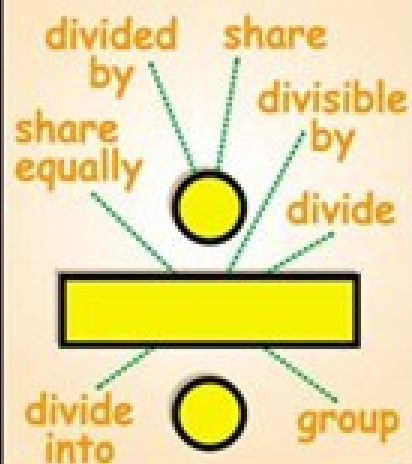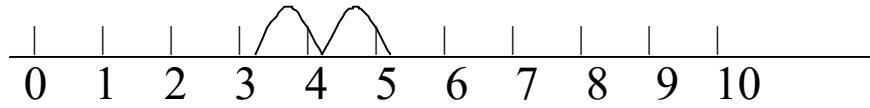- Counting on using number line / tracks
- Counting on using a hundred square
- Blank number line (bridging)
- Partitioning

ADDITION: Number tracks / lines

3 + 2 =

0　1　2　3　4　5　6　7　8　9　10

and 2 more

0　　　　　　3　　　5

ADDITION : partitioning

Where any number can be split into smaller useful amounts.
 Eg 5 = 4 and 1   3 and 2   5 and 0
 15= 10 and 5

- Essential for any work on place value.

- Links to number bonds.

- Needs to be practical-hands on for the children.

- Can be used to understand numbers and their relationships to each other.

- Will help when children move on to calculations.

Subtraction

- Counting back using objects
- Counting back using a number line
- Counting back using a hundred square
- Blank number line
- Partitioning

SUBTRACTION: Number lines

5 – 2 =
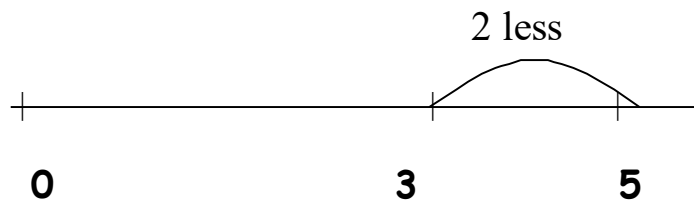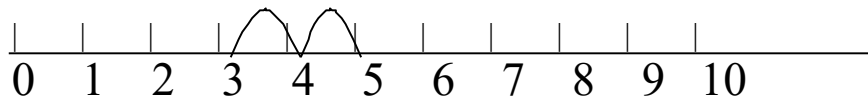
Multiplication

- Doubles – objects / beadstring
- Counting in steps of 2,5,10
- Counting objects
- Pictures
- Number lines
- Times tables

By The end of year 2 children should be confident with their 2, 3, 5 and 10 times tables

Division

- Halving
- Sorting hoops and objects
- Pictures
- Related times tables facts

Helping at home KS1/ FS

- **Play board games**
- **Cook – measuring and weighing**
- **Look at numbers in the environment e.g. telephone keys, number plates, door numbers, book pages, sleeps until Christmas!**
- **Money**
- **Comparing heights**
- **Birthdays, Months of the year, Days of the week**
- **Time**
- **If your child is in year 2 help them learn their 2, 3 ,5 and 10 times table facts**

My Maths

My Maths.co.uk is an online subscription website, that provides access to a range of lessons and homework activities.

MyMaths — User Guide

Year 2 will have access to this website next week.
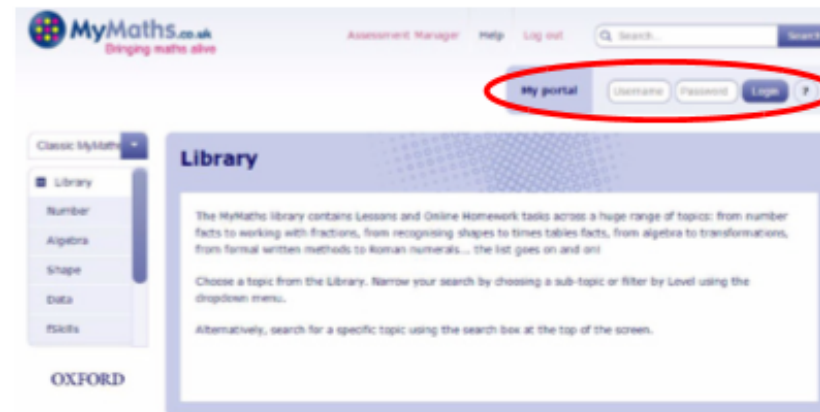
User name: stnicholas6
Password: angles110

The pupils' experience

How do pupils access the site?

Once a pupil has received a letter containing their username and password (see **'Parent letters' on page 52**), they can log in to the site.

Pupils log in to the home page with the school username and password, which they received in their letter. They're then taken to the library:

Library

The MyMaths library contains Lessons and Online Homework tasks across a huge range of topics: from number facts to working with fractions, from recognising shapes to times tables facts, from algebra to transformations, from formal written methods to Roman numerals... the list goes on and on!

Choose a topic from the Library. Narrow your search by choosing a sub-topic or filter by Level using the dropdown menu.

Alternatively, search for a specific topic using the search box at the top of the screen.

Pupils can access resources in the library on the left of the screen without logging in any further. But if they want to record any scores to the MyMaths database, they will need to log in to **My portal** (circled above) using their personal username and password.

Once a pupil logs in to the portal, they're taken straight to a list of homework that they've been set by the teacher:
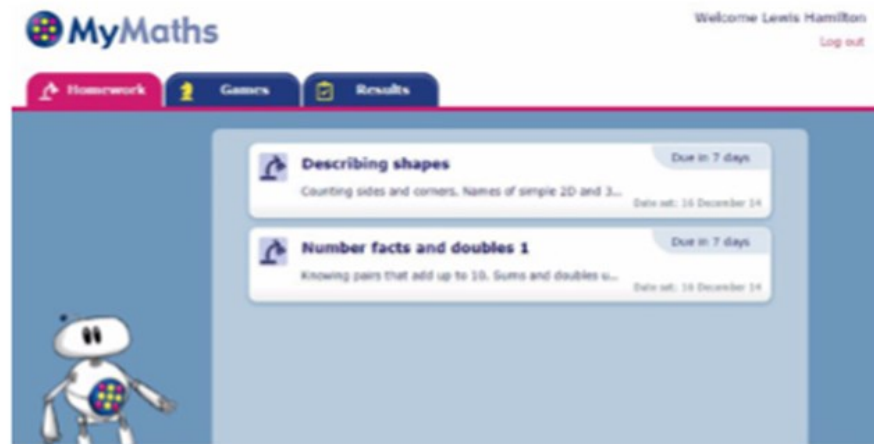
If the pupil clicks on one of the tasks, they'll be given the option to open a lesson, or go straight to the homework:
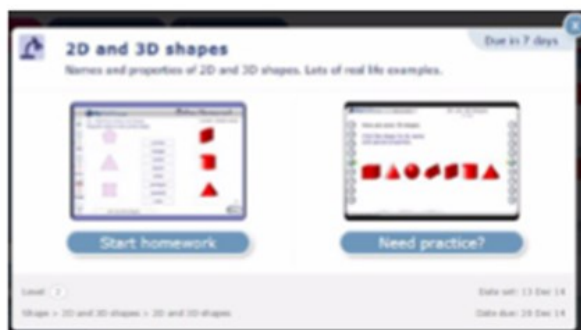
- Click on **Need practice?** to open a lesson

- Click on **Start homework** to do the homework

- Click on ⊗ to close the window.

MyMaths   User Guide

Homework

From the **Homework** tab, a pupil can click on **Start online Homework** to access their homework. They will be taken directly to the homework set by their teacher:

In the example above, Peter Parker has been taken to his **Position and turning** homework.

To complete the task in our example, the pupil has to choose whether the coloured squares are turning clockwise or anti-clockwise, and then tick the boxes (circled) of any shapes that have at least one right angle.

Once the pupil is happy with their answers, they click on **Markit** to submit their homework, and have it marked instantly.

> **NOTE!** Each homework contains two question tabs, the pupil will need to click on each tab to attempt both parts of the homework.

Checkout

The pupil can click the **Checkout** tab to see a summary of their scores:

The score sheet on the left shows a summary of their scores for this attempt.

NOTE! Pupils can click (Next) to try the task again. They can attempt each task as many times as they like, only their best score for each question will be recorded.

You can see how many attempts each pupil has made at a task in the class results, see the screen shot on .

The score sheet on the right shows the pupil's best score for this task, along with an

Thank you for coming.

Any Questions?