KS1 Maths

How does our school teach your child to be a confident mathematician?

Purpose of the meeting

- To outline the Year 1 and Year 2 Maths curriculum
- To look closely how key concepts (addition, subtraction, multiplication and division) are taught to the children
- To model the steps of progress throughout Year 1 and Year 2
- To experiment with the resources that we provide to support the children
- To highlight ways in which you can support your children at home.

In the Infant Department we follow the Mastery Lancashire scheme of work. This is a spiral approach that builds on prior learning throughout the year. Below is a breakdown of the Maths topics across the school year.

The Deepdale Maths Curriculum

Year 1

Mastery One Yearly Overview

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Week 1	Number and place value	Sequencing and sorting	Number and place value	Mass/weight Length	Number and place value	Time
Week 2	Number and place value	Fractions	Number and place value Mass/weight	Addition and subtraction	Addition and subtraction	Multiplication and division
Week 3	Length and mass/weight	Fractions Capacity/volume	2-D and 3-D shape	Fractions	Addition and subtraction Capacity/volume	Statistics and calculation
Week 4	Addition and subtraction	Money	Counting Money	Position and direction	Fractions	Measurement
Week 5	Addition and subtraction	Time	Multiplication	Time	Position and direction Time	Sorting and sequencing
Week 6	2-D and 3-D shape	Assess and review week	Division	Assess and review week	2-D and 3-D shape	Assess and review week

Year 2

Mastery 2 Yearly Overview

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Week 1	Number and place value	Counting, multiplication and sorting	Number and place value	Length	Number and place value Statistics	Mental Addition and subtraction
Week 2	Number and place value	Statistics	Measurement	Addition and subtraction	Addition and subtraction	Multiplication and division
Week 3	Length and mass/weight	Fractions	Addition and subtraction	2-D and 3-D shape	Capacity/volume Temperature	Statistics and calculation
Week 4	Addition and subtraction	Capacity/volume Money	Money	Fractions Position and direction	Fractions	Measurement
Week 5	Addition and subtraction	Time	Multiplication and division	Time	Position and direction Time	Assess and review week
Week 6	2-D and 3-D shape	Assess and review week	Multiplication and division	Assess and review week	2-D and 3-D shape	Assess and review week

When do we teach Mathematics?

- Maths lessons are taught every morning in which the children learn new concepts and practise and consolidate previous strategies.

- Everyday Maths takes place in all year groups outside of the maths lesson each day to support children in retaining understanding in mathematical knowledge, skills and procedures.

- The 2s, 5s and 10s times tables are taught in Year 2 and practised throughout the day for this learning to become automatic.

Addition

Year 1

Add one-digit and two digit numbers to 20

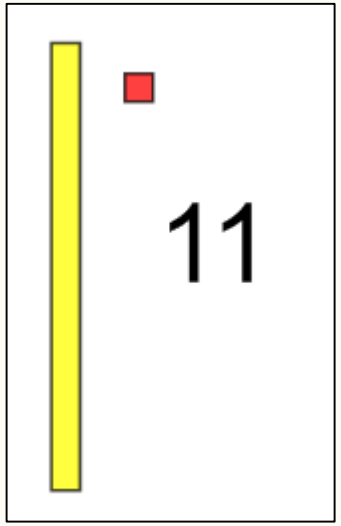
Counting Tools

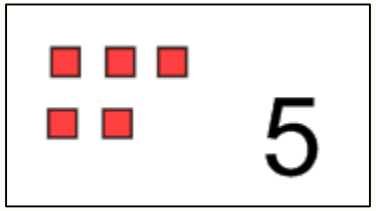
5 + 4 = 9

The children will use practical equipment to combine groups by counting all or counting on

Base 10

11 + 5 =



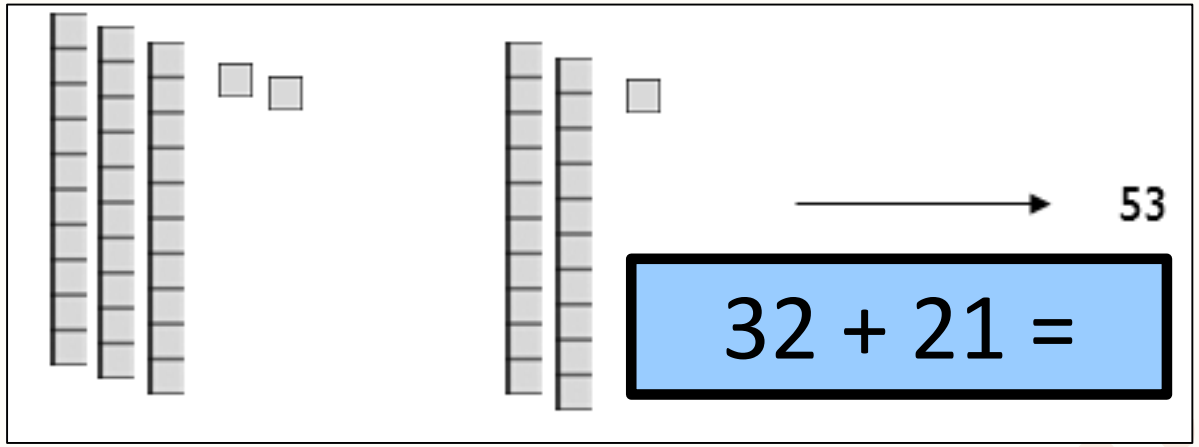


The children will represent each number using Base 10 and then combine the groups

Year 2

Add a two-digit number and ones; a two digit number and tens; two two-digit numbers and three one-digit numbers

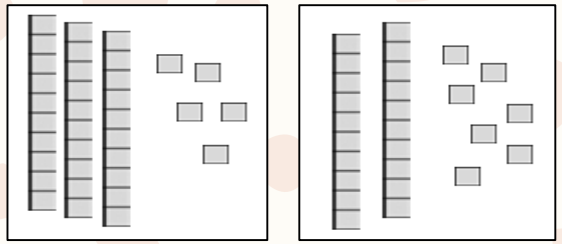
The children make individual amounts, counting the tens first and then counting the ones.



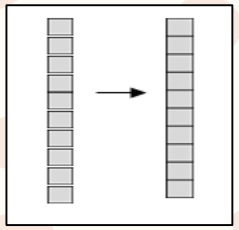
Year 2

Add a two-digit number and ones; a two digit number and tens; two two-digit numbers and three one-digit numbers

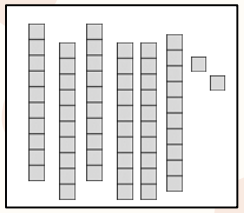
35 + 27 = 62



When the unit total is more than 10, the children are encouraged to exchange 10 ones for 1 ten



Then, identifying the fact that there are enough ones to exchange for a ten, they can carry out this exchange.



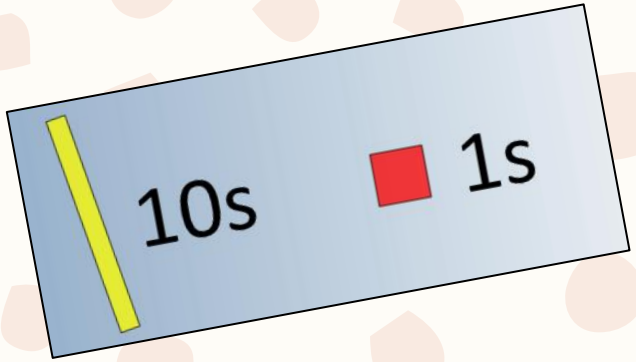
Leave the total. The children then count the 10s and then the 1s

Year 2

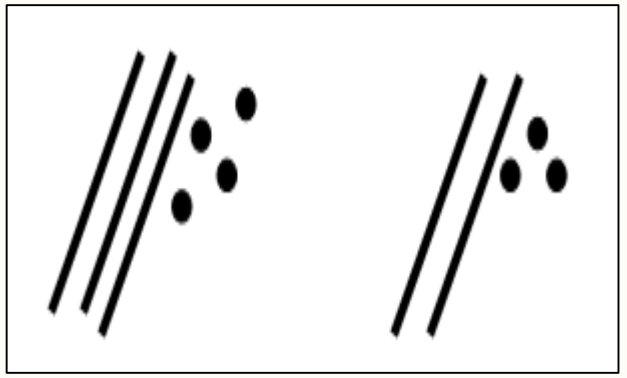
Add a two-digit number and ones; a two digit number and tens; two two-digit numbers and three one-digit numbers

With jottings

Children can also record the calculations using their own drawings of the Base 10 equipment



34 + 23 = 57



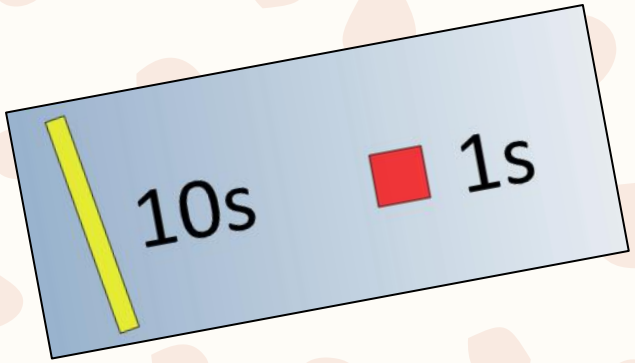
Slanted lines for the 10 rods and dots for the 1s

Year 2

Add a two-digit number and ones; a two digit number and tens; two two-digit numbers and three one-digit numbers

Jottings with exchange

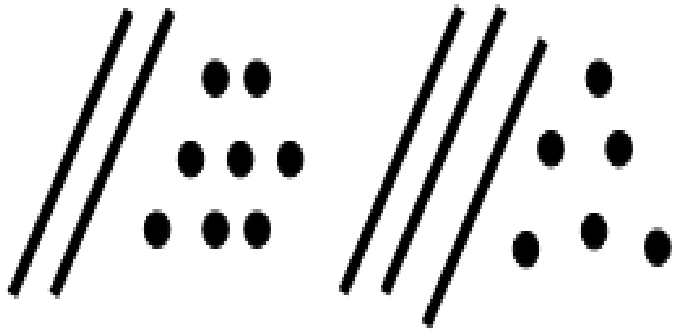
28 + 36 = 64



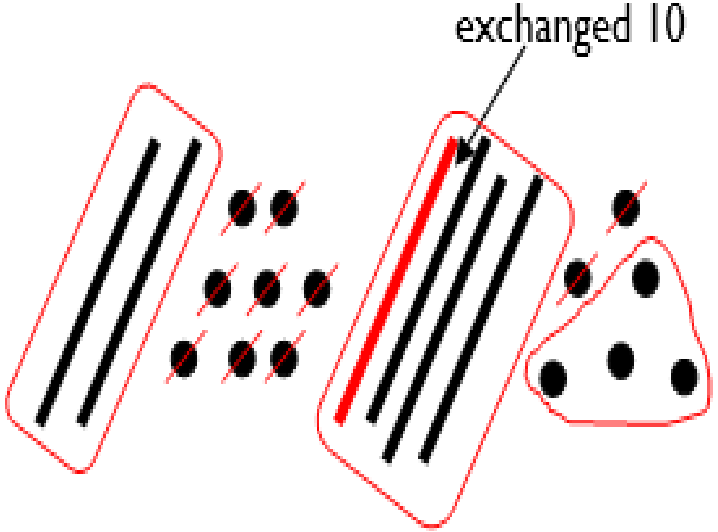
Slanted lines for the 10 rods and dots for the 1s

With exchange:

e.g. 28 + 36 =



will become



Add 0	Add 1	Add 2
0 + 0	0 + 1	0 + 2
1 + 0	1 + 1	1 + 2
2 + 0	2 + 1	2 + 2
3 + 0	3 + 1	3 + 2
4 + 0	4 + 1	4 + 2
5 + 0	5 + 1	5 + 2
6 + 0	6 + 1	6 + 2
7 + 0	7 + 1	7 + 2
8 + 0	8 + 1	8 + 2
9 + 0	9 + 1	9 + 2
10 + 0	10 + 1	10 + 2

Number bonds

- One of the main mathematical concepts for Year 1 and Year 2 children to be able to recall is… NUMBER BONDS!
- This is an area of the maths curriculum that as a school we are focusing on and we would like parents to support us with this.
- By the Christmas holidays, we would like **all** children to be able to add 0, 1 and 2 to a number up to 10.

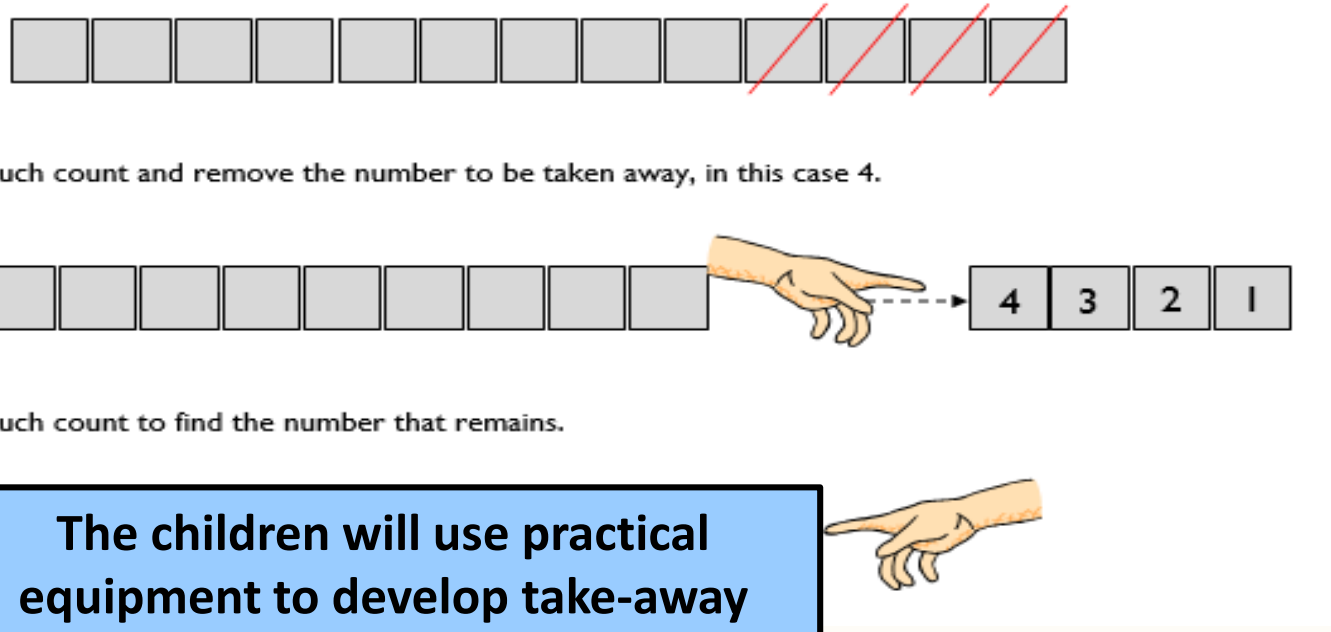
Subtraction

Year 1

Subtract one-digit and two digit numbers to 20

Counting Tools

13 - 4 = 9

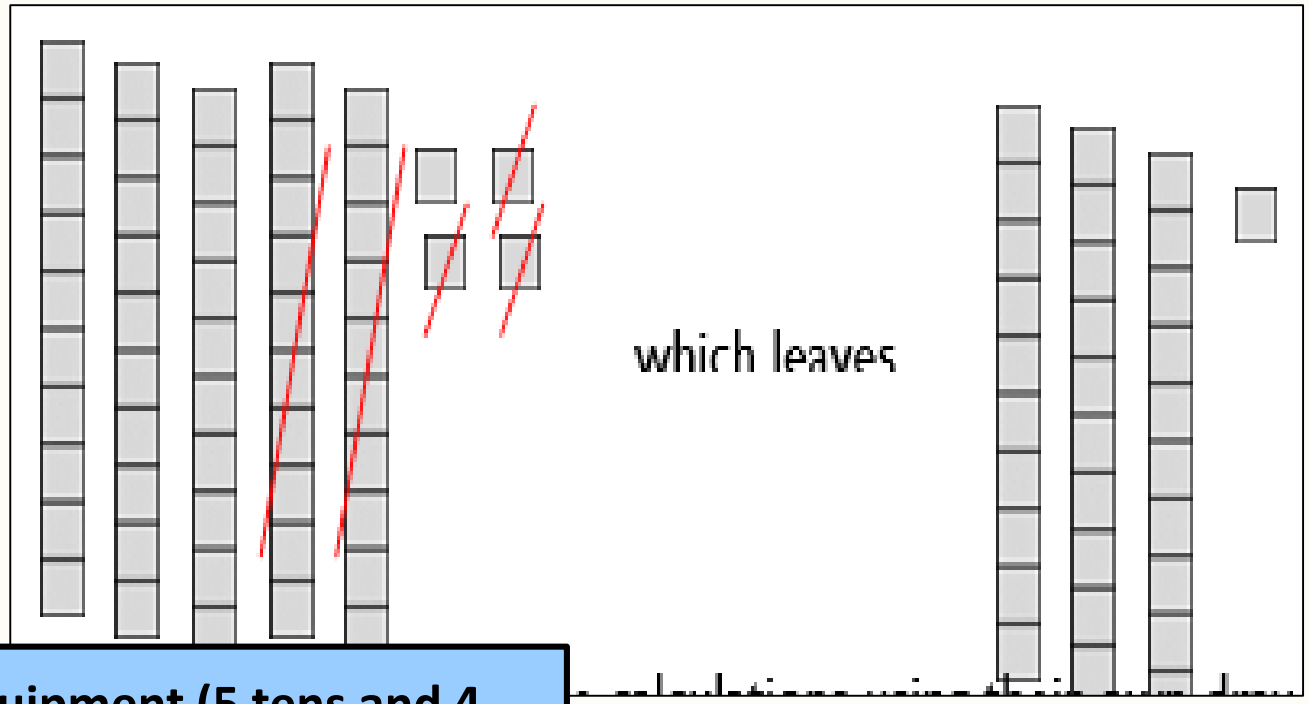


The children will use practical equipment to develop take-away strategies

Year 2

Subtract a two-digit number and ones; a two-digit number and tens and two two-digit numbers

54 – 23 = 31



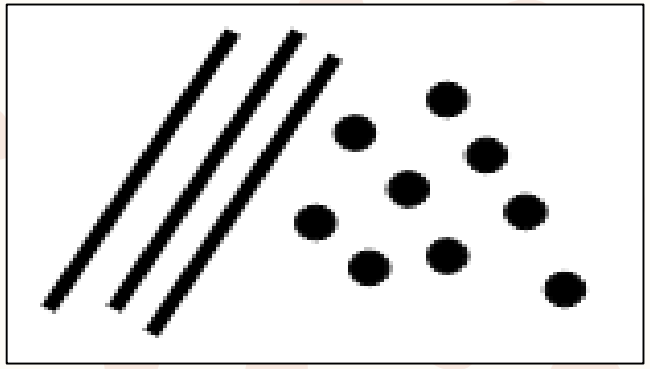
The children count out 54 using Base 10 equipment (5 tens and 4 ones) and then remove 3 ones and 2 tens.

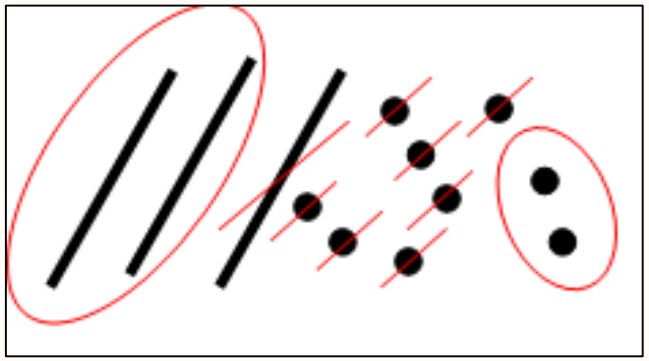
Year 2

Subtract a two-digit number and ones; a two-digit number and tens and two two-digit numbers

With jottings

39 – 17 = 22





To calculate 39 – 17, children would draw 39 as 3 tens and 9 ones

Cross out 7 ones and 1 ten and then count up the answer

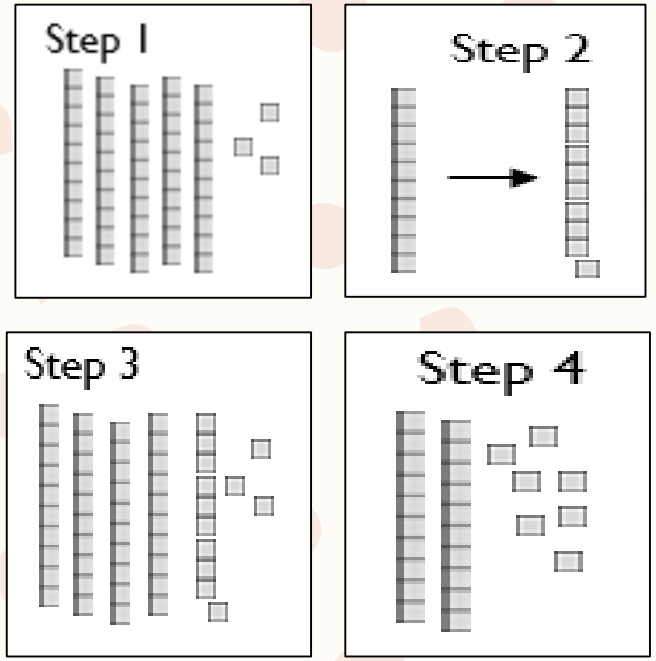
Circling the tens and ones that remain will help children to identify how many remain.

Year 2

Subtract a two-digit number and ones; a two-digit number and tens and two two-digit numbers

53 – 26 = 27

Exchanging



When the amount of units to be subtracted is greater than the units of the original number, an exchange method is required.

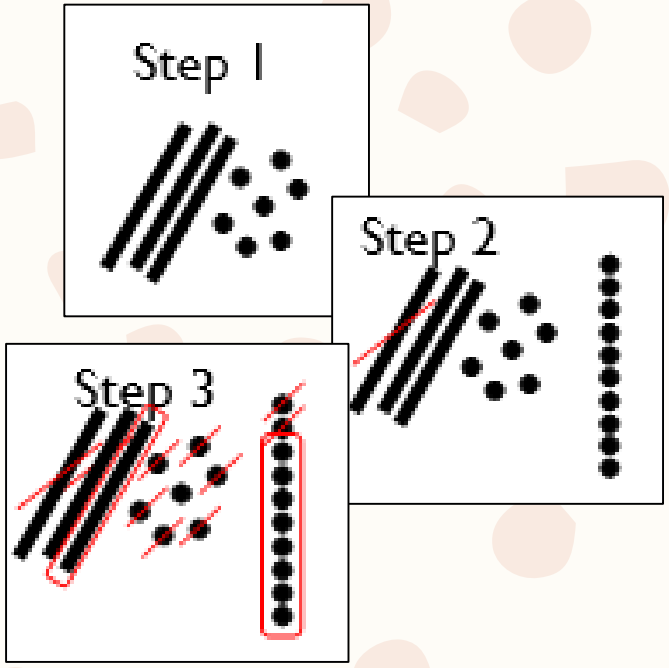
The children count out 53 using tens and ones and then consider whether there are enough ones to remove 6

In this case there are not so they need to exchange a ten into ten ones to make sure that there are enough.

Year 2

Subtract a two-digit number and ones; a two-digit number and tens and two two-digit numbers

37 – 19 = 18



Jottings with exchange

When recording their own drawings, children should draw 37 as 3 tens and 7 ones.

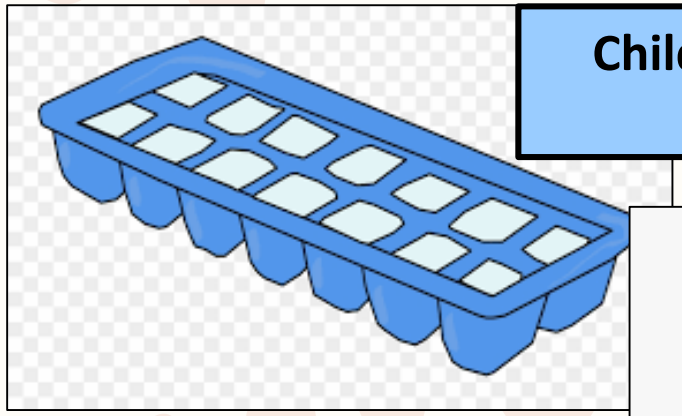
The children should then cross out a ten and exchange it for ten ones in a vertical line (step 2). This ensures that children create ten ones and so not to get them confused with the ones already in place.

Circling then tens and ones that remain (step 3) will help the children to identify how many remain.

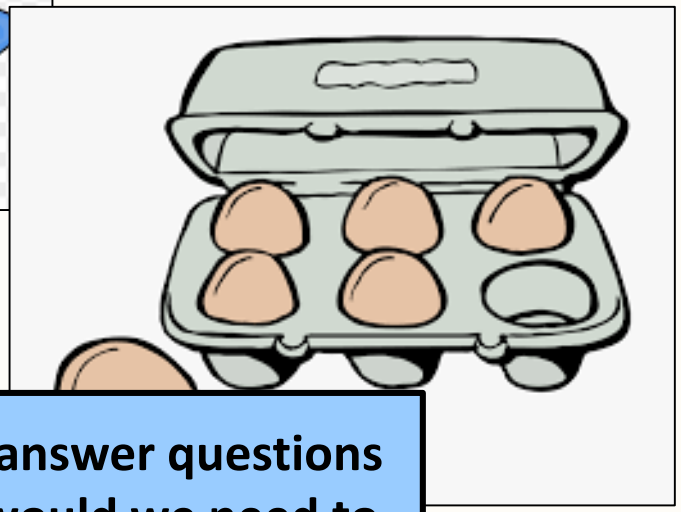
Multiplication

Year 1

Solve one-step problems involving multiplication by calculating the answer using objects, pictures and arrays.



Children should see everyday versions of arrays



Each pot has two pencils in. How many pencils are there altogether?

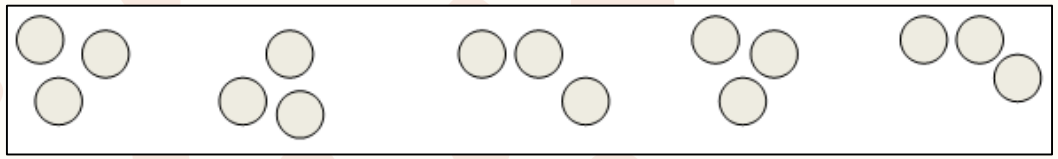
Children use the arrays to answer questions such as, 'How many eggs would we need to fill the egg box? How do you know?'

Year 2

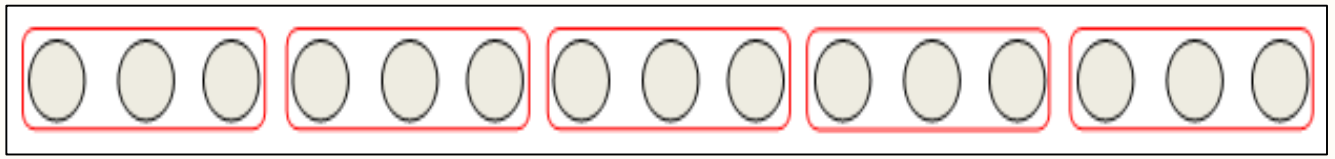
Calculate mathematical statements for multiplication (using repeated addition) and write them using the multiplication (x) and equals (=) sign.

5 x 3 = 15

Children should understand and be able to calculate multiplication as repeated addition



grouped in a random pattern



grouped in a more ordered pattern

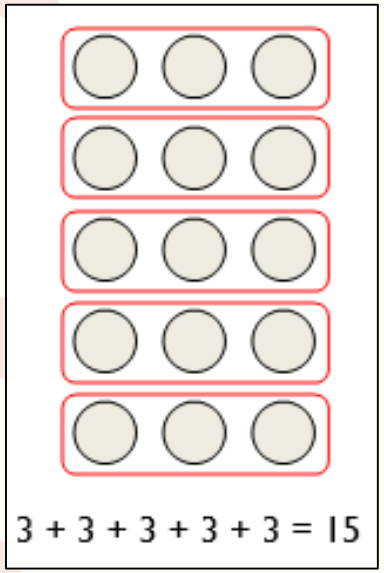
5 x 3 can be shown as five groups of three counters either…

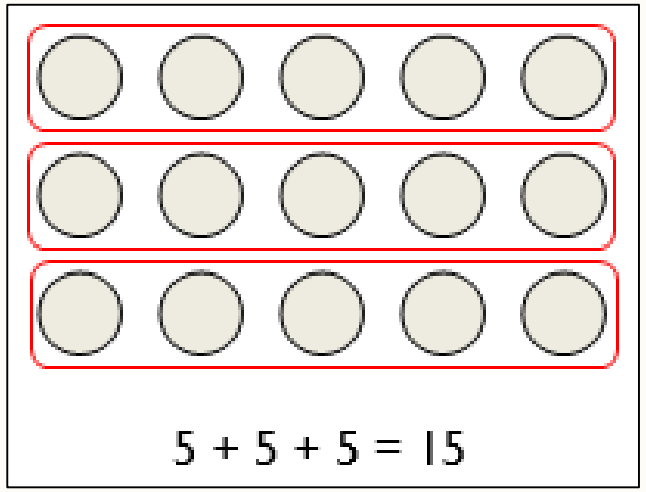
Year 2

Calculate mathematical statements for multiplication (using repeated addition) and write them using the multiplication (x) and equals (=) sign.

5 x 3 = 15

Children should develop this knowledge to show how multiplication calculations can be represented by an array





For mathematical accuracy 5 x 3 is represented by the second example – five three times

TT Rockstars

www.ttrockstars.com

- The times tables are the basics of maths. If you know the basics, you'll find the rest much much easier.

- Children will receive a password for the website so that they can access this at home.

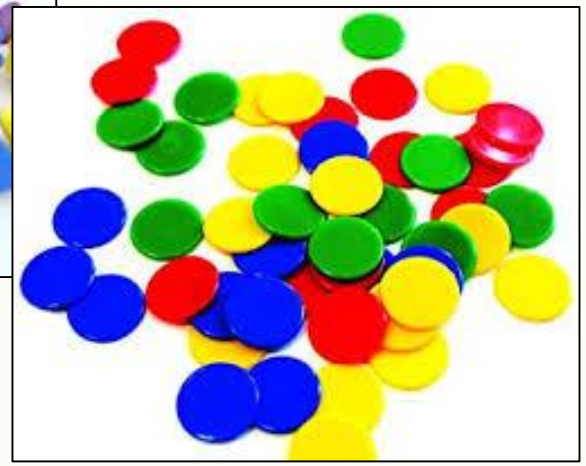
- The children earn coins to create their own 'rock hero' by answering timetables which are set at their level by the teacher

Division

Year 1

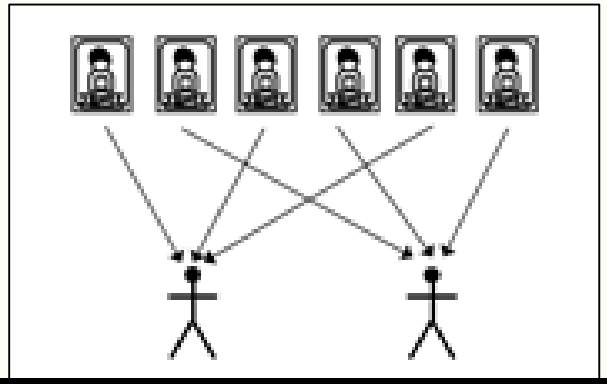
Solve one-step problems involving division by calculating the answer using objects, pictures and arrays.

Children should solve division problems using practical equipment and jottings



They should use equipment to share objects and separate them into groups.

If six football stickers are shared between two people. How many do they each get?



‘one for you, one for me’ strategy

Year 2

Calculate mathematical statements for division within the multiplication tables and write them using the multiplication (x) and equals (=) sign.

12 ÷ 3 =

Children should use practical equipment to represent division calculations as grouping (repeated subtraction) and use jottings

The children will learn that this calculation reads as

How many groups of 3 are there in 12?