

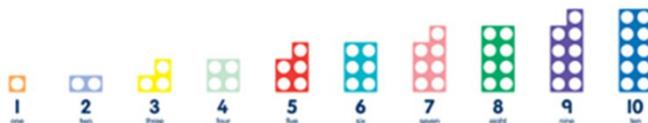
Progression in Calculation

Maths for young children should be meaningful. Where possible, concepts should be taught in the context of 'real' life. Games and songs are a useful way to introduce key vocabulary involved in the four mathematical operations.

Addition Early Years

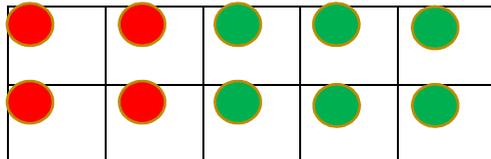
Useful guidance, models and images.

- Numicon shapes are introduced straight away and should be used to:
 - Identify 1 more/less
 - Combine pieces to add
 - Find number bonds
 - Add without counting



Children can record this by printing or drawing around Numicon pieces.

- Tens frames can also be used to:
 - identify 1 more/less
 - Find number bonds



- Children can begin to combine groups of objects using concrete apparatus:



- Construct number sentences verbally or using cards to go with practical activities.



1	+	1	=	2
---	---	---	---	---

Key language which should be used:

Plus, estimate, add, more, and, sum, total, make, altogether, score, double.

One more, two more, three more...

How many more make...?

How many more is...than...?

Same as

- Children should be encouraged to read number sentences aloud in different ways.

$$3 + 2 = 5$$

"Three add two equals 5", "5 is equal to three and two" or

"5 is the same as three and two".

- Children make a record in pictures, words or symbols of addition activities.

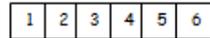


- Solve simple problems using fingers.

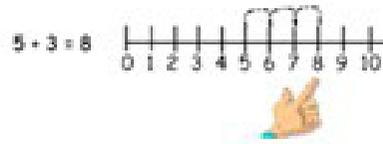


- Introduce number tracks to count-up on and to find one more:

What is one more than 4?



- Use number lines alongside number tracks and practical apparatus to solve addition calculations and word problems.

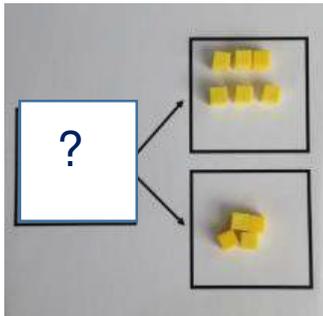
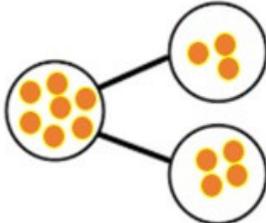
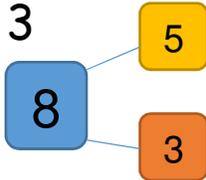


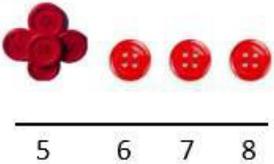
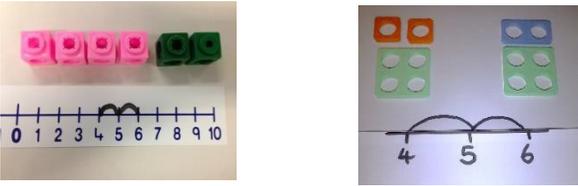
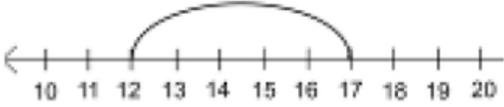
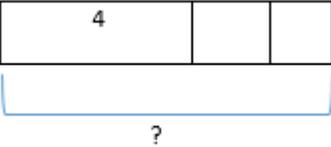
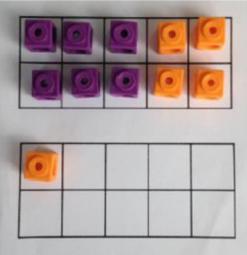
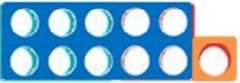
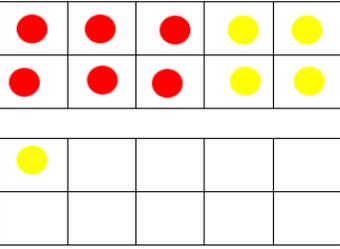
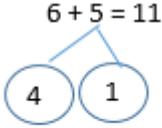
Children will need the opportunity to look at and talk about different models and images as they move between different representations.

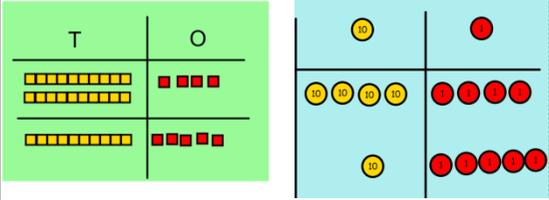
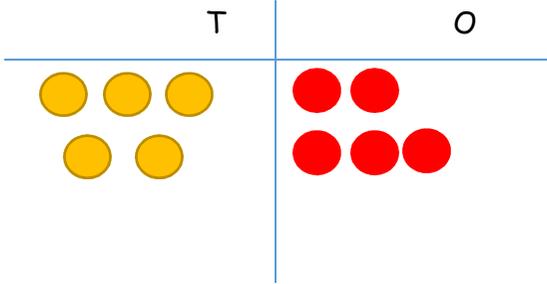
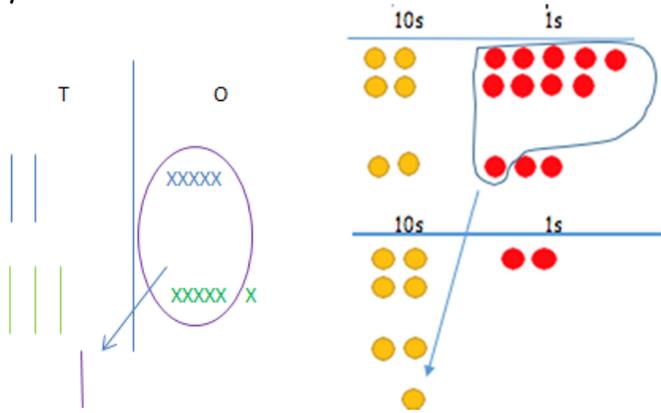
Addition KS 1 & 2

Key language which should be used:

sum, total, parts and wholes, plus, add, score, altogether, more than, 'is equal to', 'is the same as'.

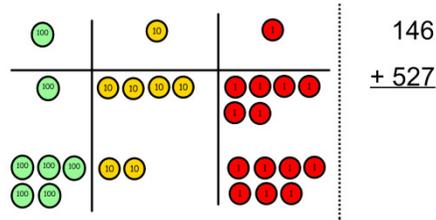
		Concrete	Pictorial	Abstract
Year 1	Combining two parts to make a whole: part-whole model	  <p>Use cubes and other counting resources to add two numbers together as a group.</p> 	 <p>7 is the whole 3 and 4 are the parts</p> <p>Use pictures to add two numbers together as a group.</p>	$5 + 3 = 8$ $8 = 5 + 3$  <p>Use the part-part whole diagram as shown above to move into the abstract.</p>

		Concrete	Pictorial	Abstract
Year 1	Starting at the bigger number and counting on	<p></p> <p>Start with the larger number on the bead string and then count on to the smaller number 1 by 1 to find the answer.</p> <p></p> <p>Count on using number lines by using counters, cubes or numicon.</p> <p></p>	<p>$12 + 5 = 17$</p> <p></p> <p>Start at the larger number on the number line and count on in ones or in one jump to find the answer.</p> <p>A bar model which encourages the children to count on.</p> <p></p>	<p>$12 + 5 = 17$</p> <p>Place the larger number in your head and count on the smaller number to find your answer.</p>
Year 1	Regrouping to make 10	<p>$6 + 5 = 11$</p> <p></p> <p>Use counters and tens frames or Numicon.</p> <p>Start with the bigger number and use the smaller number to make 10. Then add on the rest.</p> <p></p>	<p>Children to draw the tens frame and counters/cubes.</p> <p></p>	<p>Children develop an understanding of what is happening with the numbers and do this in their head.</p> <p>$6 + 5 = 11$</p> <p></p> <p>$6 + 4 = 10$</p> <p>$10 + 1 = 11$</p>

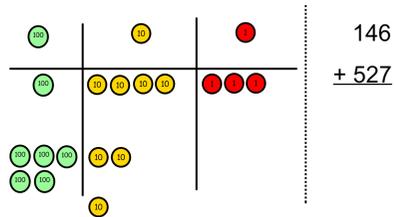
		Concrete	Pictorial	Abstract												
Year 2	TO + TO Column method- no regrouping	<p>Add together the ones first then add the tens. Use the Base 10 blocks first before moving onto place value counters.</p> $24 + 15 =$ 	<p>After practically using the base 10 blocks and place value counters, children can draw the blocks/counters to help them to solve additions.</p> $32 + 23 =$ 	$21 + 42 =$ $20 + 40 = 60$ $1 + 2 = 3$ $60 + 3 = 63$ <div style="border: 1px solid black; background-color: #e0f2f1; padding: 5px; margin-top: 10px;"> <p style="text-align: center; font-size: small;">Calculations</p> $21 + 42 =$ 21 $+ 42$ </div>												
Year 2	TO + TO Column method- with regrouping	<p>Make both numbers on a place value grid.</p> <table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th></th> <th>Tens</th> <th>Ones</th> </tr> </thead> <tbody> <tr> <td>+</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td>=</td> <td></td> <td></td> </tr> </tbody> </table> <p>Add up the units and exchange 10 ones for 1 ten. This could also be done using place value counters.</p>		Tens	Ones	+						=			<p>Children can represent the concrete in one of two ways:</p> 	$40 + 9$ $+ 20 + 3$ $60 + 12 = 72$ <p>Formal method:</p> $\begin{array}{r} 49 \\ + 23 \\ \hline 72 \\ 1 \end{array}$
	Tens	Ones														
+																
																
=																

Concrete

Make both numbers on a place value grid.



Add up the units and exchange 10 ones for one 10.



Add up the rest of the columns, exchanging the 10 counters from one column for the next place value column until every column has been added.

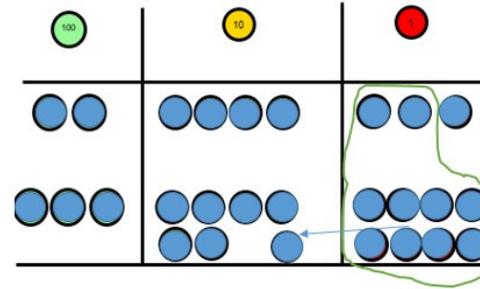
This can also be done with Base 10 to help children clearly see that 10 ones equal 1 ten and 10 tens equal 100.

As children move on to decimals, money and decimal place value counters can be used to support learning.

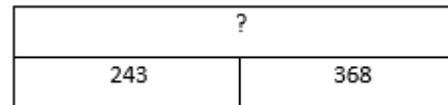
NB: By Year 4 children will progress on to adding four digit numbers.

Pictorial

Children can draw a pictorial representation of the columns and place value counters to further support their learning and understanding.



If the children are completing a word problem, draw a bar model to represent what it's asking them to do



Abstract

Start by partitioning the numbers before moving on to clearly show the exchange below the addition.

$$100 + 40 + 6$$

$$\underline{500 + 20 + 7}$$

$$600 + 70 + 3 = 67$$

As the children progress, they will move from the expanded to the compacted method.

$$146$$

$$+ \underline{527}$$

$$\underline{673}$$

$$1$$

As the children move on **beyond Year 4**, introduce decimals with the same number of decimal places. Money can be used here.

$$\underline{72.8}$$

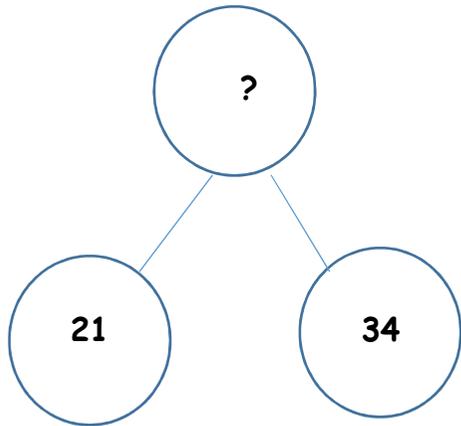
$$+ \underline{54.6}$$

$$\underline{127.4}$$

$$11$$

£	2	3	.	5	9
+	£	7	.	5	5
<hr/>					
£	3	1	.	1	4
		1		1	

Fluency variation, different ways to ask children to solve addition calculations e.g. $21 + 34$



Sam saved £21 one week and £34 another. How much did he save in total?

$21 + 34 = 55$. Prove it!

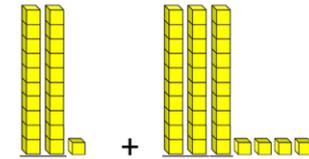
(Reasoning but the children need to be fluent in representing this)

$$\begin{array}{r} 21 \\ +34 \\ \hline \end{array}$$

$21 + 34 =$

$= 21 + 34$

What's the sum of twenty one and thirty four?



Always use missing digit problems too:

Tens	Ones
	?
?	5

Subtraction Early Years

Useful guidance, models and images.

- Concrete apparatus is used to relate subtraction to taking away and counting how many objects are left. E.g. $5 - 2 =$



- Construct number sentences verbally or using cards to go with practical activities.



$5 - 1 = 4$

- Children should be encouraged to read sentences aloud in different ways... "five subtract one leaves four", "four is equal to five subtract one" or "four is the same as five subtract one".
- Children make a record in pictures, words or symbols of subtraction activities.



- Solve simple problems using fingers.



- Introduce number tracks to c.

1	2	3	4	5	6
---	---	---	---	---	---

 o find one less:
What is 1 less than 6?

Key language which should be used:

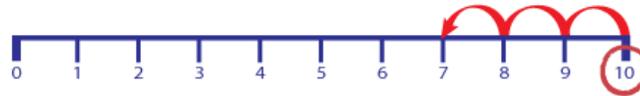
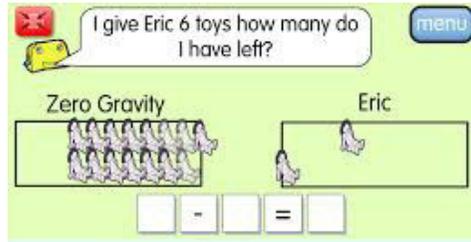
Take (away), estimate, leave, left, fewer, less, difference between, the same as, counting/hopping back.

How many are left/left over?

How many have gone - one less, two less, three less...

How many fewer is...?

- Number lines can be used alongside number tracks and practical apparatus to solve subtraction calculations and word problems. Children count back showing hops back on the number line.

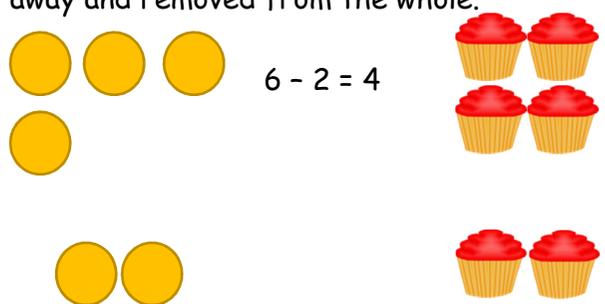
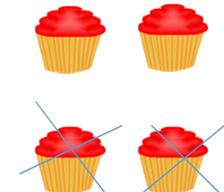
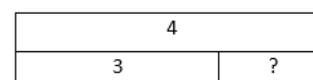
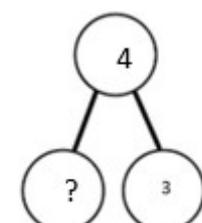
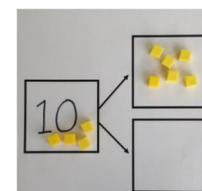
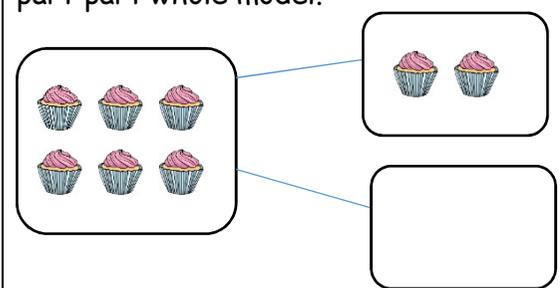


Children will need the opportunity to look at and talk about different models and images as they move between different representations.

Subtraction KS 1 & 2

Key language which should be used:

Take away, less than, the difference, subtract, minus, fewer, decrease, '7 take away 3', 'the difference is four'.

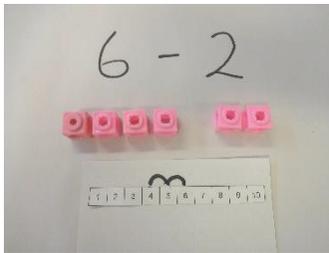
		Concrete	Pictorial	Abstract
Year 1	Taking away ones	<p>Use physical objects, counters, cubes etc. to show how objects can be physically taken away and removed from the whole.</p>  <p>6 - 2 = 4</p>	<p>Cross out drawn objects to show what has been taken away.</p> <p>4 - 2 = 2</p> 	<p>4 - 3 = <input type="text"/></p> <p><input type="text"/> = 4 - 3</p> <p>Encourage children to understand how the abstract idea can be visualised by using numbers in a bar model or part whole model.</p>  
		<p>Link to addition- use the part whole model to help explain the inverse between addition and subtraction.</p> <p>If 10 is the whole and 6 is one of the parts. What is the other part?</p> <p>10 - 6 =</p> 	<p>Use a pictorial representation of objects to show the part part whole model.</p> 	

Concrete

Make the larger number in your subtraction.
Move the beads along your bead string as you count backwards in ones.



Use cubes and move them away from the group as you take them away counting backwards as you go.



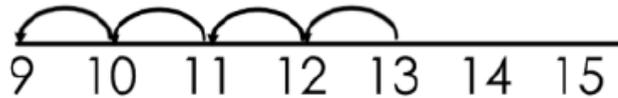
Pictorial

Draw a bar and cross off the amount.
 $4 - 3 = 1$



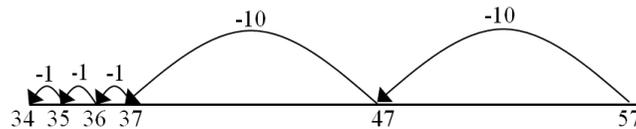
Count back on a number line or number track.

$$13 - 4 = 9$$



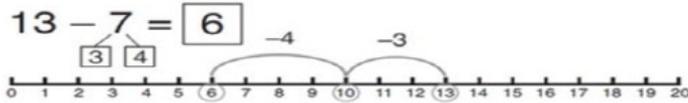
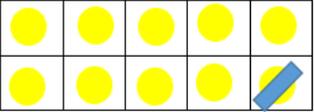
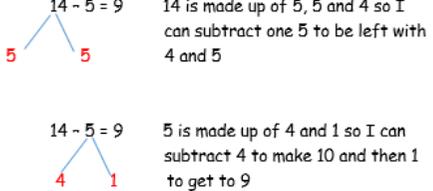
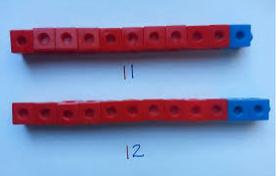
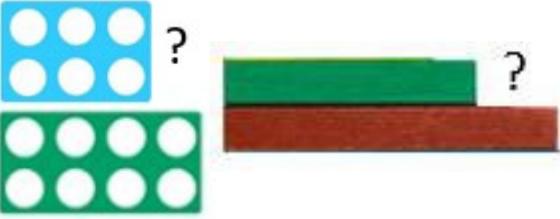
Start at the bigger number and count back the smaller number showing the jumps on the number line.

NB: Later this can progress all the way to counting back using two 2 digit numbers:



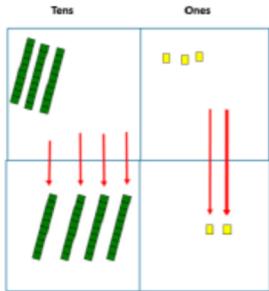
Abstract

Put 13 in your head, count back 4.
What number are you at? Use your fingers to help.

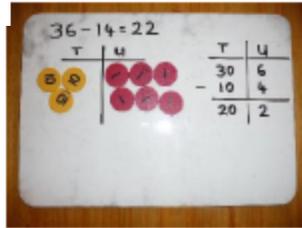
		Concrete	Pictorial	Abstract
Year 1	Make 10	<p>14 - 9 =</p>  <p>Make 14 on the ten frame. Take away the four first to make 10 and then take away one more so you have taken away 5. You are left with the answer of 9.</p> <p>This can also be done using Numicon.</p> 	<p>13 - 7 = 6</p>  <p>Start at 13. Take away 3 to reach 10. Then take away the remaining 4 so you have taken away 7 altogether. You have reached your answer.</p>   <p>Children can draw the tens frame.</p>	<p>14 - 5 = 9</p> <p>How many do we take off to reach the next 10?</p> <p>How many do we have left to take off?</p> <p>Children to represent it how they have solved it e.g.</p> 
		Year 1	Find the difference	<p>Compare amounts and objects to find the difference.</p>  <p>Use cubes to build towers or make bars to find the difference.</p> <p>Use basic bar models with items to find the difference.</p> 

Concrete

$$75 - 42 = 33$$

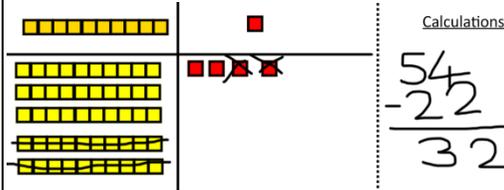


Use Base 10 to make the bigger number then take the smaller number away.



Show how you partition numbers to subtract. Again make the larger number first.

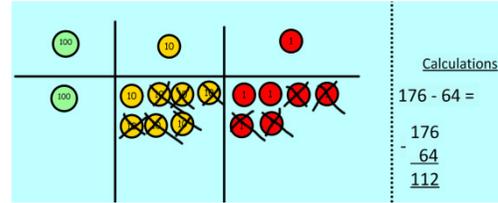
Pictorial



Calculations

$$\begin{array}{r} 54 \\ - 22 \\ \hline 32 \end{array}$$

Draw the Base 10 or place value counters alongside the written calculation to help to show working.

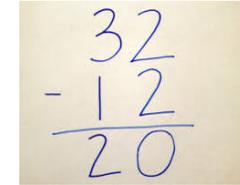


Calculations

$$\begin{array}{r} 176 - 64 = \\ 176 \\ - 64 \\ \hline 112 \end{array}$$

Abstract

This will lead to a clear written column subtraction.



Concrete

Use Base 10 to start with before moving on to place value counters. Start with one exchange before moving onto subtractions with 2 exchanges.

Base 10
45-26

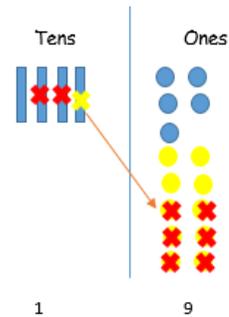


- 1) Start by partitioning 45
- 2) Exchange one ten for ten more ones
- 3) Subtract the ones, then the tens.

Show children how the concrete method links to the written method alongside your working. Cross out the numbers when exchanging and show where we write our new amount.

Pictorial

Represent the Base 10 pictorially:



Abstract

$$\begin{array}{r} 836 - 254 = 582 \\ \begin{array}{r} \text{H} \quad \text{T} \quad \text{U} \\ 800 \quad 130 \quad 6 \\ - 200 \quad 50 \quad 4 \\ \hline 500 \quad 80 \quad 2 \end{array} \end{array}$$

Children can start their formal written method by partitioning the number into clear place value columns.

$$\begin{array}{r} 728 - 582 = 146 \\ \begin{array}{r} \text{H} \quad \text{T} \quad \text{U} \\ \cancel{7} \quad 2 \quad 8 \\ \underline{5 \quad 8 \quad 2} \\ 1 \quad 4 \quad 6 \end{array} \end{array}$$

Moving forward the children use a more compact method.

Concrete

Place value counters

Make the larger number with the place value counters.

100	10	1
●●	●●●	●●●●

Calculations

$$\begin{array}{r} 234 \\ - 88 \\ \hline \end{array}$$

Start with the ones, can I take away 8 from 4 easily? I need to exchange one of my tens for ten ones.

100	10	1
●●	●	●●●●●●●●●●●●

Calculations

$$\begin{array}{r} 234 \\ - 88 \\ \hline \end{array}$$

Now I can subtract my ones.

100	10	1
●●	●	●●●●●●

Calculations

$$\begin{array}{r} 234 \\ - 88 \\ \hline \end{array}$$

Now look at the tens, can I take away 8 tens easily? I need to exchange one hundred for ten tens.

100	10	1
●	●●●●●●●●●●●	●●●●●●

Calculations

$$\begin{array}{r} 234 \\ - 88 \\ \hline \end{array}$$

Now I can take away eight tens and complete my subtraction.

100	10	1
●	●●●●●	●●●●●●

Calculations

$$\begin{array}{r} 234 \\ - 88 \\ \hline 146 \end{array}$$

Pictorial

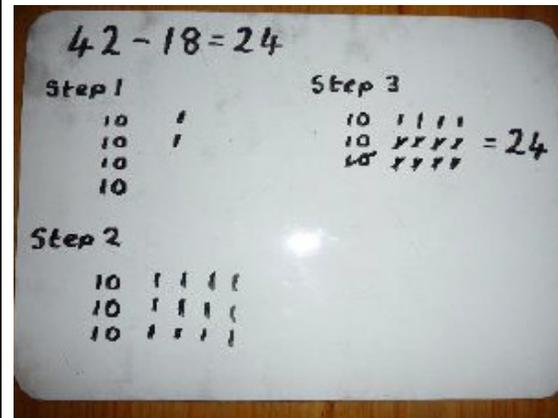
Place value counters

Hundreds	Tens	Ones
●●	●●●●●●●●●●	●●●●●●
5	12	6
- 2	7	5
3	5	1

Draw the counters onto a place value grid and show what you have taken away by crossing the counters out as well as clearly showing the exchanges you make.

When confident, children can find their own way to record the exchange/regrouping.

Just writing the numbers as shown here shows that the child understands the method and knows when to exchange/regroup.



Abstract

Multiplication Early Years

Useful guidance, models and images.

- The link between addition and multiplication can be introduced through doubling.
- Numicon can be used to visualise the repeated adding of the same number.



Children can record this by printing or drawing around the Numicon pieces.

- Begin with mostly concrete or pictorial representations.



e.g. How many groups of 2 are there? $2 + 2 + 2 + 2 + 2$, so 5 groups of 2

- Use 'real' life contexts and use of practical equipment to count in repeated groups of the same size.

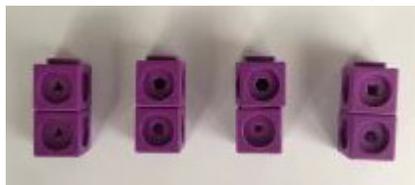


How many wheels are there altogether?



How much money do I have?

- Count in twos, fives, tens both aloud and with objects.



Key language which should be used:

Lots of, groups of, times, multiply, multiplied by, multiple of.

Once, twice, three times...

...times as (big, long, wide...)

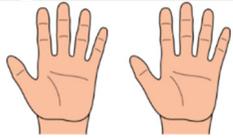
repeated addition

double

estimate

add again and again

- Give children multiplication problems set in a 'real' life context. Encourage them to visualise the problem using concrete materials or by drawing pictures.
e.g. How many fingers on two hands?



How many sides on three triangles?



How many legs on four ducks?

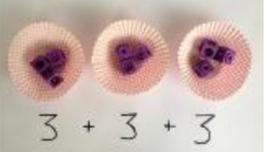


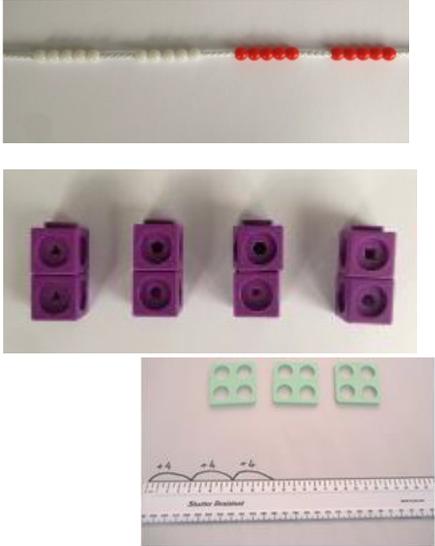
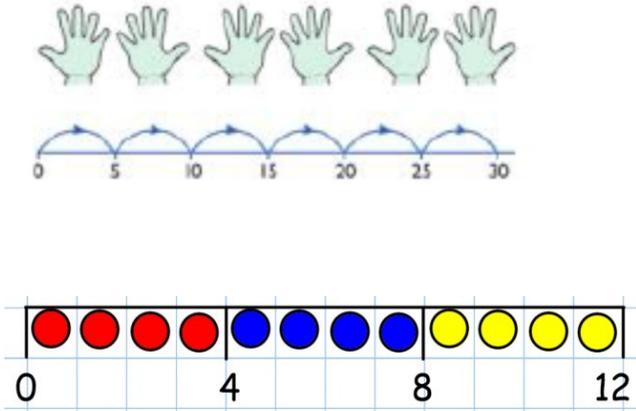
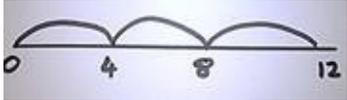
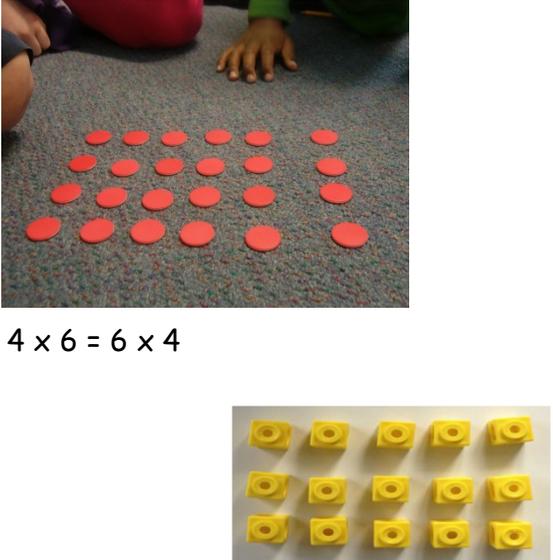
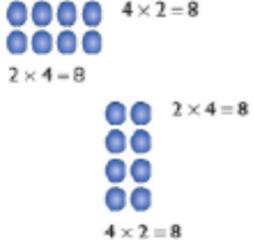
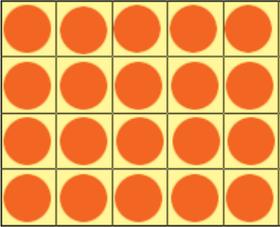
- Children should be encouraged to read number sentences aloud in different ways... "five times two makes ten", "ten is equal to five multiplied by two" or "ten is the same as five lots of two".

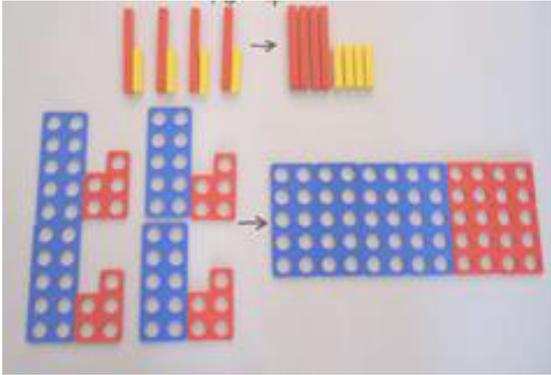
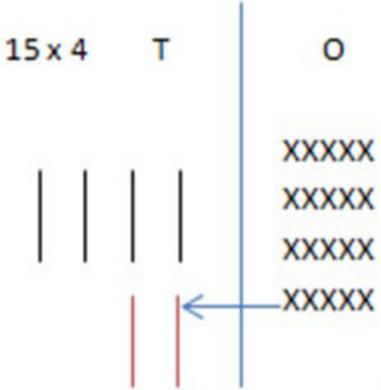
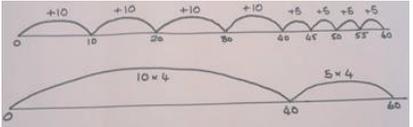
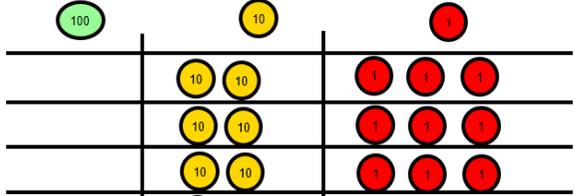
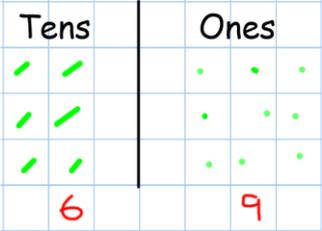
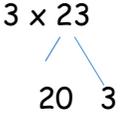
Multiplication KS 1 & 2

Key language which should be used:

Double, times, multiplied by, the product of, groups of, lots of, 'is equal to', 'is the same as'

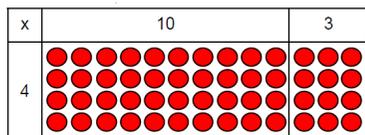
		Concrete	Pictorial	Abstract
Year 1/2	Repeated addition	<p>Use different objects to add equal groups.</p>    	<p>Children can represent the practical resources in a picture.</p> <p>XX XX XX XX XX XX</p> <p>There are 3 plates. Each plate has 2 star biscuits on. How many biscuits are there?</p>    <p>2 add 2 add 2 equals 6</p>	<p>Write addition sentences to describe objects or pictures.</p> <p>$4 + 4 + 4 = 12$</p> <p>$3 \times 4 = 12$</p>  <p>$2 + 2 + 2 + 2 + 2 = 10$</p>

		Concrete	Pictorial	Abstract
Year 1/2	Counting in multiples	<p>Count in multiples supported by concrete objects in equal groups.</p> 	<p>Use a number line or pictures to continue support in counting in multiples.</p> 	<p>Count in multiples of a number aloud.</p> <p>Write sequences with multiples of numbers.</p> <p>2, 4, 6, 8, 10</p> <p>5, 10, 15, 20, 25, 30</p> <p>Abstract number line</p> 3×4 
Year 1/2	Arrays- showing commutative multiplication	<p>Create arrays using counters/ cubes to show multiplication sentences.</p>  <p>$4 \times 6 = 6 \times 4$</p>	<p>Draw arrays in different rotations to find commutative multiplication sentences.</p>   <p>Link arrays to area of rectangles.</p>	<p>Use an array to write multiplication sentences and reinforce repeated addition.</p>  <p>$5 + 5 + 5 = 15$</p> <p>$3 + 3 + 3 + 3 + 3 = 15$</p> <p>$5 \times 3 = 15$</p> <p>$3 \times 5 = 15$</p>

		Concrete	Pictorial	Abstract
Year 3	Partition to multiply	Use Base 10, Numicon, Cuisenaire rods) 4×15 15×4 	Children can represent the concrete manipulatives in a picture e.g. Base 10 can be represented like... 	Children to be encouraged to show the steps that they have taken. $\begin{array}{r} 4 \times 15 \\ \swarrow \searrow \\ 10 \quad 5 \end{array}$ $10 \times 4 = 40$ $5 \times 4 = 20$ $40 + 20 = 60$ A number line can also be used. 
		Use Base 10 or place value counters. 3×23 Make 23, 3 times. See how many ones, then how many tens 	Children to represent the counters in a pictorial way. 	Children to record what it is they are doing to show understanding 3×23  $3 \times 20 = 60$ $3 \times 3 = 9$ $60 + 9 = 69$ $\begin{array}{r} 23 \\ \times 3 \\ \hline 69 \end{array}$
Year 3/4	Grid Method, no exchanging			

Concrete

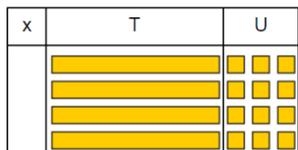
Show the link with arrays to first introduce the grid method.



4 rows of 10
4 rows of 3

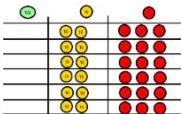
Move on to using Base 10 to move towards a more compact method.

4 rows of 13

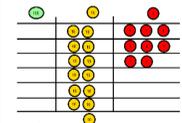


This stage helps children understand how the column method works.

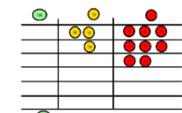
6×23



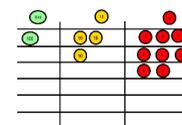
Step 1: get 6 lots of 23



Step 2: 6×3 is 18. Can I make an exchange? Yes! Ten ones for one ten....



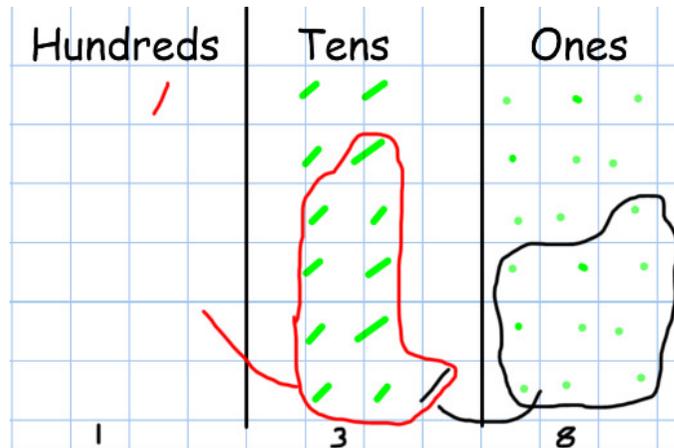
Step 3: 6×2 tens and my extra ten is 13 tens. Can I make an exchange? Yes! Ten tens for one hundred...



Step 4- What do I have I in each column?

Pictorial

Children can represent the work they have done with place value counters in a way that they understand.



Abstract

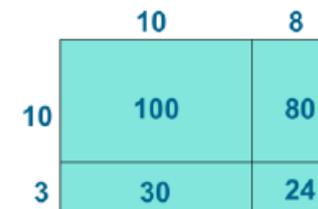
Start with multiplying by one digit numbers and showing the clear addition alongside the grid.

X	20	3
6	120	18

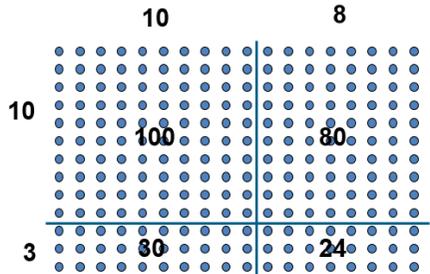
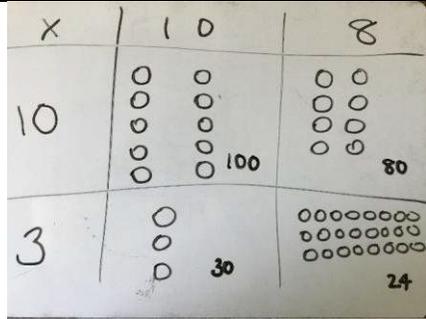
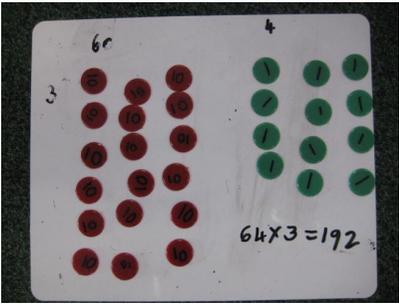
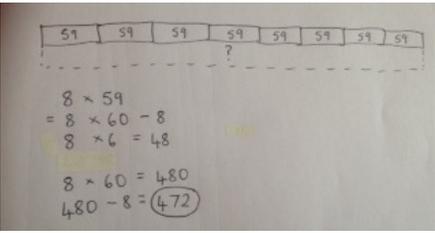
$120 + 18 = 138$

$$\begin{array}{r} 23 \\ \times 6 \\ \hline 138 \\ 11 \end{array}$$

Moving forward **beyond Year 4**, multiply by a 2 digit number showing the different rows within the grid method.



X	1000	300	40	2
10	10000	3000	400	20
8	8000	2400	320	16

		Concrete	Pictorial	Abstract
Year 5/6	Expanded method	<p>Show the link with arrays to first introduce the expanded method.</p> 		<p>Start with long multiplication, reminding the children about lining up their numbers clearly in columns.</p> $ \begin{array}{r} 18 \\ \times 13 \\ \hline 24 \quad (3 \times 8) \\ 30 \quad (3 \times 10) \\ 80 \quad (10 \times 8) \\ \underline{100} \quad (10 \times 10) \\ 234 \end{array} $
Year 5/6	Column multiplication	<p>Children can continue to be supported by place value counters at the stage of multiplication.</p>  <p>It is important at this stage that they always multiply the ones first and note down their answer followed by the tens which they note below.</p>	<p>Bar modelling and number lines can support learners when solving problems with multiplication alongside the formal written methods.</p> 	<p>Start with long multiplication, reminding the children about lining up their numbers clearly in columns.</p> $ \begin{array}{r} 7 \quad 4 \\ \times 6 \quad 3 \\ \hline 1 \quad 2 \\ 2 \quad 1 \quad 0 \\ 2 \quad 4 \quad 0 \\ + 4 \quad 2 \quad 0 \quad 0 \\ \hline 4 \quad 6 \quad 6 \quad 2 \end{array} $ <p>This moves to the more compact method.</p> $ \begin{array}{r} 2 \quad 3 \quad 1 \\ 1342 \\ \times 18 \\ \hline 13420 \\ \underline{10736} \\ 24156 \\ \hline 1 \end{array} $

Fluency variation, different ways to ask children to solve 6×23

23	23	23	23	23	23
----	----	----	----	----	----

?

With the counters, prove that
 $6 \times 23 = 138$

Why is $6 \times 23 = 32 \times 6$?

Mai had to swim 23 lengths, 6 times a week. How many lengths did she swim in one week?

Tom saved 23p three days a week. How much did he save in 2 weeks?

Find the product of 6 and 23

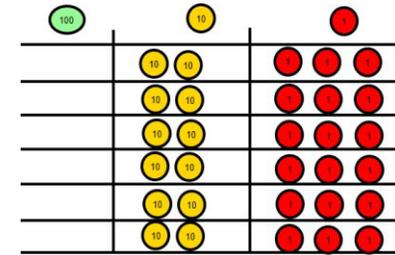
$$6 \times 23 = \square$$

$$\square = 6 \times 23$$

$$\begin{array}{r} 6 \\ \times 23 \\ \hline \end{array} \qquad \begin{array}{r} 23 \\ \times 6 \\ \hline \end{array}$$

What's the calculation?

What's the answer?



Division Early Years

Useful guidance, models and images.

- Solve problems including doubling, halving and sharing.
- Show children representations of division as grouping and sharing.
- Introduce through halving.
e.g. Concrete and pictorial representations linked to 'real' life.



- Grouping
Mum has 6 socks. She grouped them into pairs - how many pairs did she make? How many socks did she have altogether?



- Sharing - this is a useful way of introducing young children to fractions and calculating with fractions.
e.g. I have ten sweets. I want to share them with my friend. How many will we each have?



I have got a whole pizza to share between two people. Can you cut the pizza in half?



- Children can record in pictures, words or symbols of division activities.

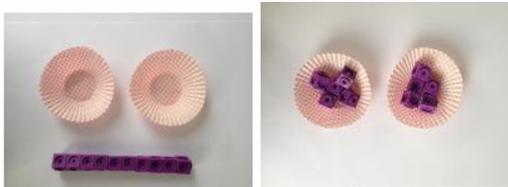
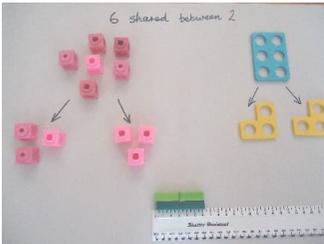
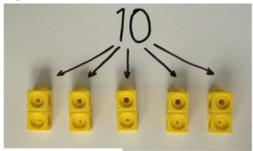
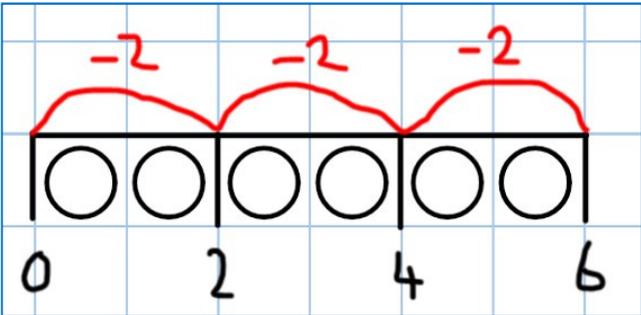
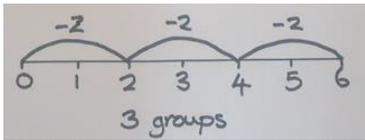
Key language which should be used:

Halve, share, share equally,
one each, two each...
group in pairs, threes,
equal groups of
divide
divided by
divided into
left over
estimate
fraction
half
halves
whole
quarter

Division KS 1 & 2

Key language which should be used:

Share, group, divide, divided by, half, 'is equal to', 'is the same as'.

		Concrete	Pictorial	Abstract
Year 1/2	Sharing objects into groups	 <p>I have 10 cubes, can you share them equally in 2 groups?</p> 	<p>Children use pictures or shapes to share quantities.</p>  <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> $8 \div 2 = 4$ </div>	<p>Share 9 buns between three people.</p> $9 \div 3 = 3$
	Division as grouping	<p>Understand division as repeated grouping and subtracting. Use cubes, counters, objects etc. to aid understanding.</p>  <p>$96 \div 3 = 32$</p> 	<p>Use a number line and pictures of counters to show jumps in groups. The number of jumps equals the number of groups.</p> 	<p>Abstract number line.</p> 

Concrete

Tens Units

3 2

$96 \div 3 =$

Use place value counters to divide using the bus stop method alongside.

Calculations

$42 \div 3$ $42 \div 3 =$

Start with the biggest place value, we are sharing 40 into three groups. We can put 1 ten in each group and we have 1 ten left over.

We exchange this ten for ten ones and then share the ones equally among the groups.

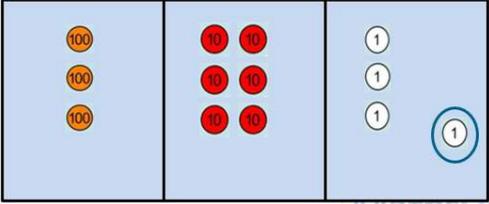
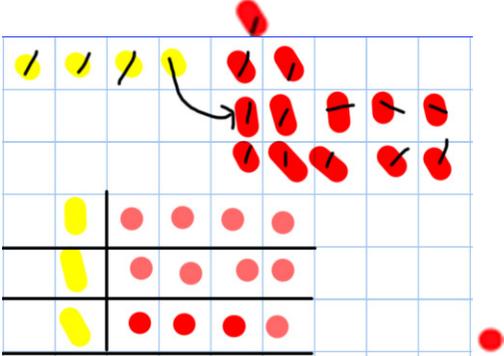
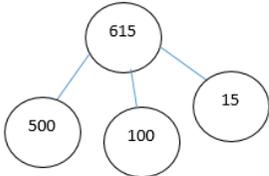
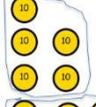
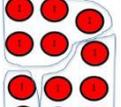
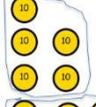
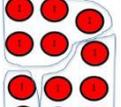
We look how much in 1 group so the answer is 14.

Pictorial

Abstract

Begin with divisions that divide equally with no remainder.

$$\begin{array}{r} 218 \\ 3 \overline{) 872} \end{array}$$

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">Year 5/6</p> <p style="writing-mode: vertical-rl; transform: rotate(180deg);">Short division with remainders</p>	<p style="text-align: center;">Concrete</p> <p>$364 \div 3 =$</p> $\begin{array}{r} 121 \text{ rem } 1 \\ 3 \overline{) 364} \end{array}$ 	<p style="text-align: center;">Pictorial</p> <p>$43 \div 3 = 14 \text{ r. } 1$</p> 	<p style="text-align: center;">Abstract</p> <p>Division with remainder</p> $\begin{array}{r} 86 \text{ r } 2 \\ 3 \overline{) 432} \end{array}$									
	<p>Fluency variation, different ways to ask children to solve $615 \div 5$</p>											
<p>Using the part whole model below, how can you divide 615 by 5 without using the 'bus stop' method?</p>  <p>(Use practical equipment and share out each partitioned number).</p>	<p>I have £615 and share it equally between 5 bank accounts. How much will be in each account?</p> <p>615 pupils need to be put into 5 groups. How many will be in each group?</p>	<p>$5 \overline{) 615}$</p> <p>$615 \div 5 \quad \square =$</p> <p>$\square = 615 \div 5$</p> <p>How many 5's go into 615?</p>	<p>What's the calculation? What's the answer?</p> <table border="1" data-bbox="1630 831 2011 1059"> <thead> <tr> <th>H</th> <th>T</th> <th>O</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table>	H	T	O						
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