Briercliffe Primary School

Years 1&2

Maths - How can you help your child at home?

Why should we support mathematics at home?

Reasoning and arithmetic enables children to solve everyday problems and improves memory.

Basic Skills

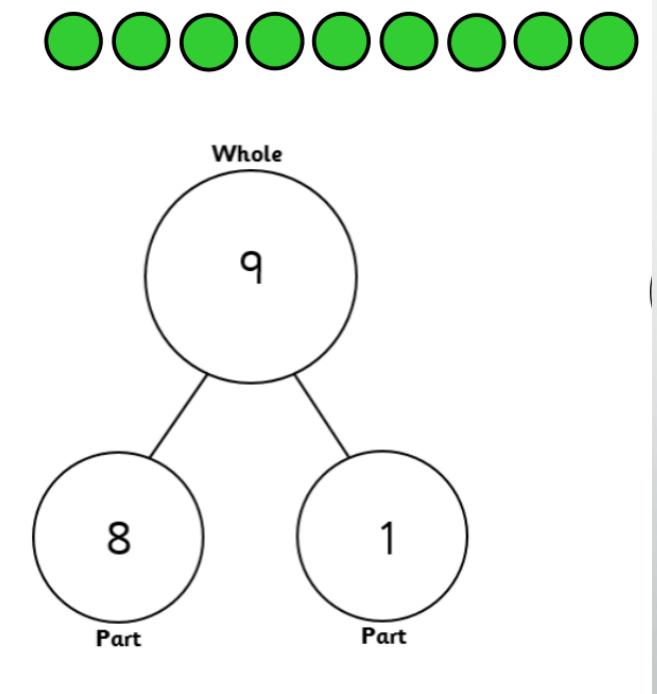
The following are basic skills that we teach in school:

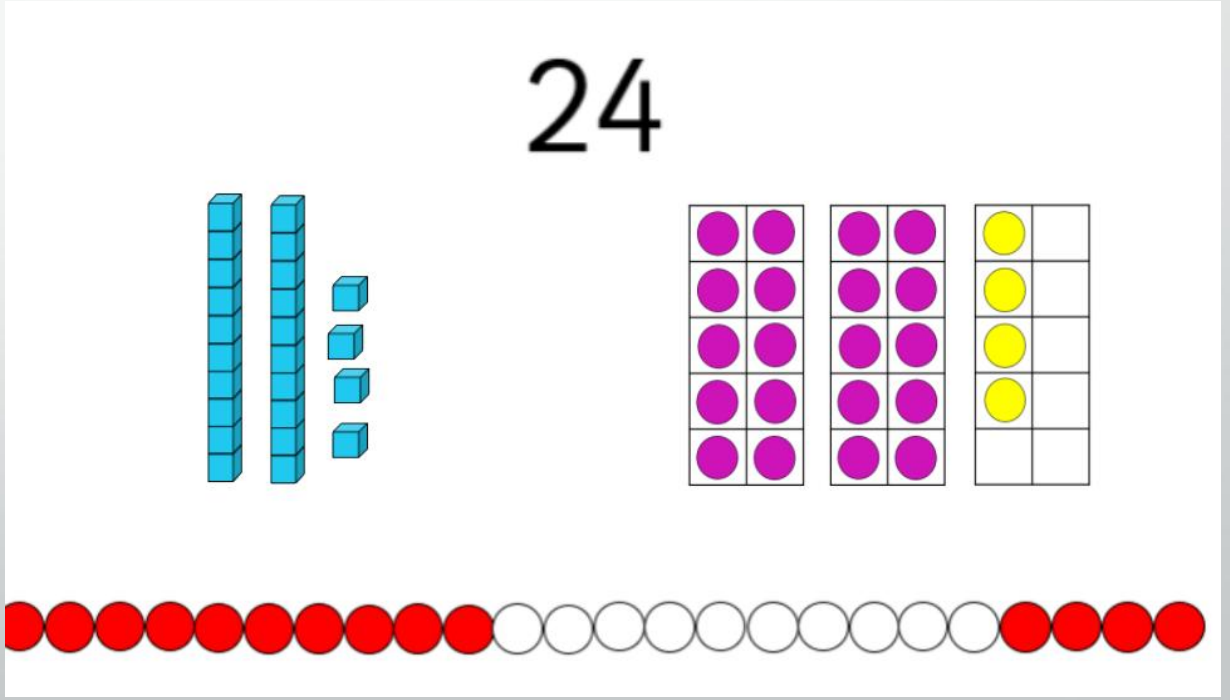
- Counting
- Representing numbers
- Addition and subtraction facts
- Multiplication and division facts
- Multiply and divide by 10, 100 and 1000

Place Value in Year 1 (the value of number)

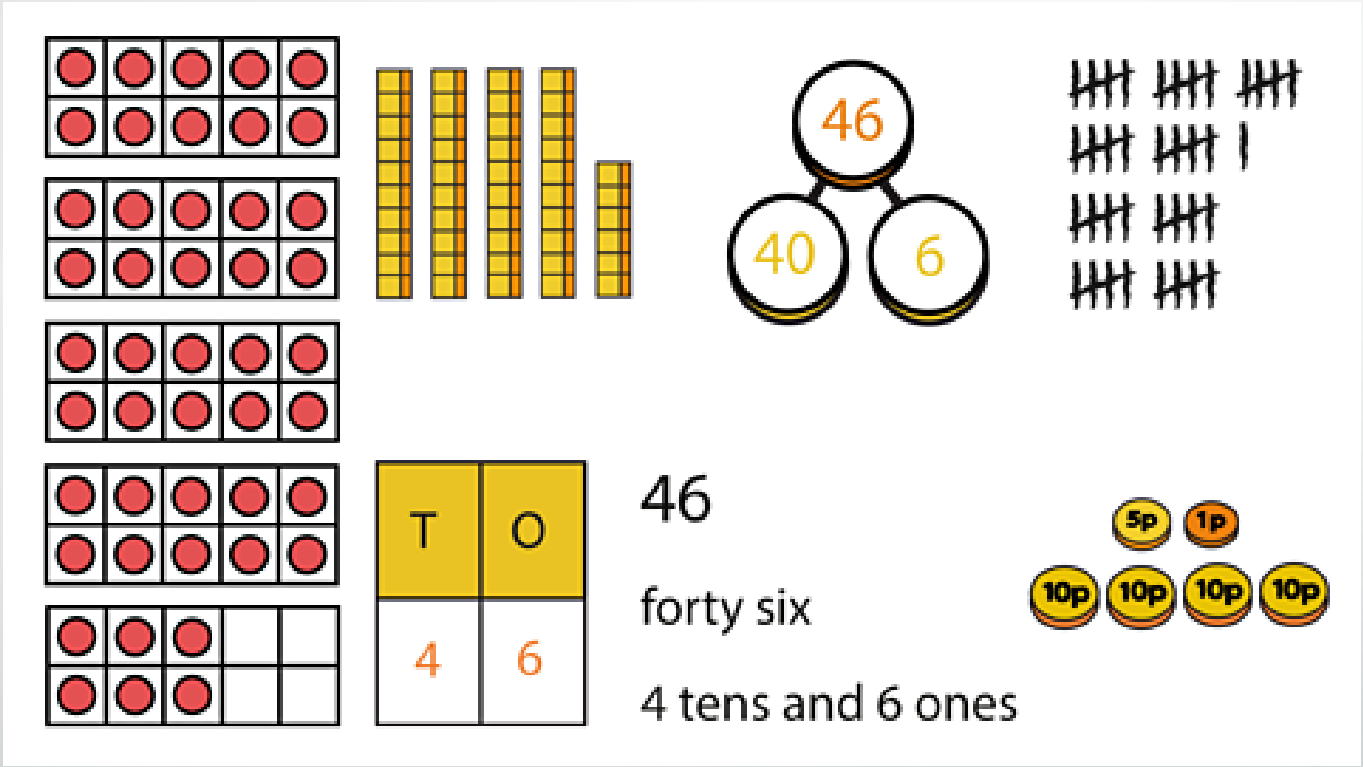
Why is it important?

Place value is the foundation of our number system. We need to be able to determine a digit's worth based on its position. It allows us to represent and compare numbers of any size and enable access to the four operations (+ - x ÷).





Place Value in Year 2
(the value of number)



How Can I Help at Home?

- Counting forwards and backwards in 1's from any number while walking to school.
- Jumping or hand clapping while counting in 2's 5's 10's.
- Writing or painting 2 digit numbers using interesting materials such as (chalk or felt tips)
- Play online Maths games using

https://www.topmarks.co.uk/maths-games/5-7-years/counting

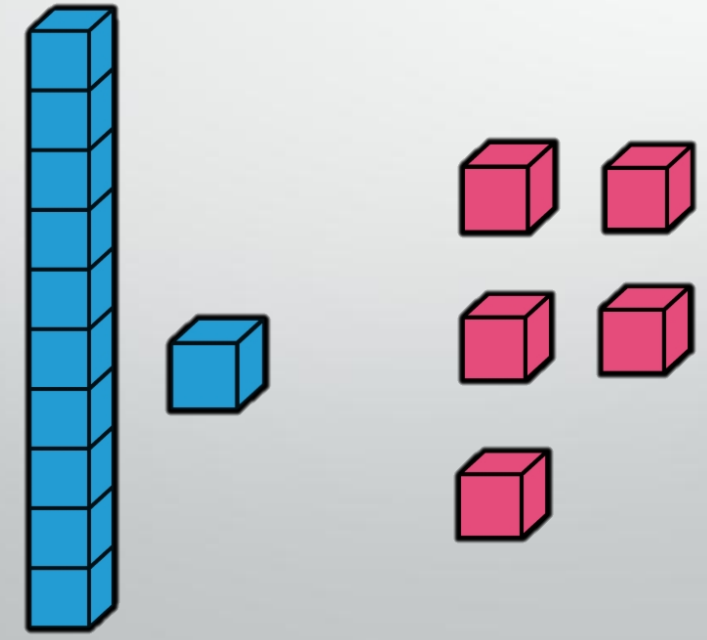
Addition in Year 1

What does it look like in school for Year 1?

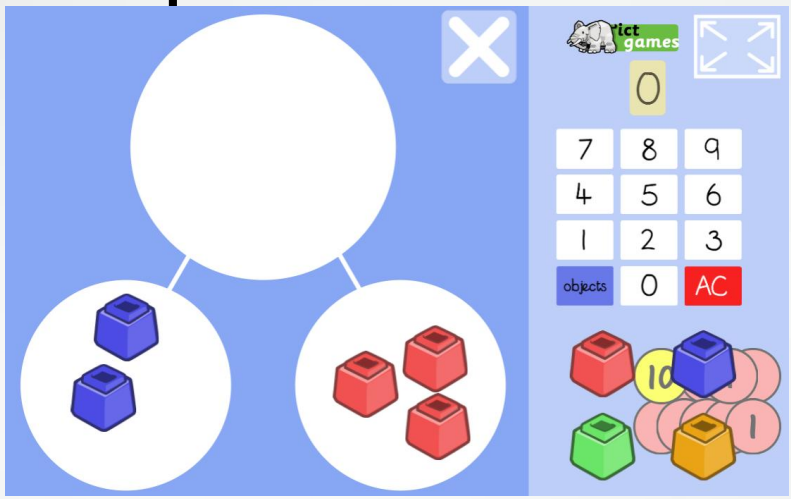
Y1

End of Year Objective:
Add one-digit and two-digit numbers to 20, including zero (using concrete objects and pictorial representations).

Children will continue to use practical equipment, combining groups of objects to find the total by counting all or counting on. Using their developing understanding of place value, they will move on to be able to use Base 10 equipment to make teens numbers using separate tens and units.
For example, when adding 11 and 5, they can make the 11 using a ten rod and a unit.



How Can I Help at Home?



- Play mental maths games on Numbots – we have given your child their login details in the back of their reading record. https://play.numbots.com/#/intro
- Play quick mental maths games (Level 1) using Daily 10. https://www.topmarks.co.uk/maths-games/daily10
- https://ictgames.com/mobilePage/partPartWhole/index.html
- Use a part-part-whole model and solving simple addition problems using small objects at home such as dried peas, pasta or lego.

Addition in Year 2

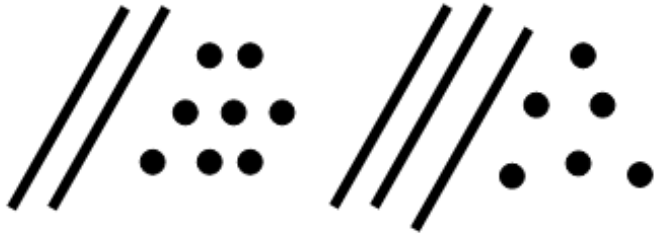
What does it look like in school for Year 2?

Children can also record the calculations using their own drawings of the Base 10 equipment (as slanted lines for the 10 rods and dots for the unit blocks).

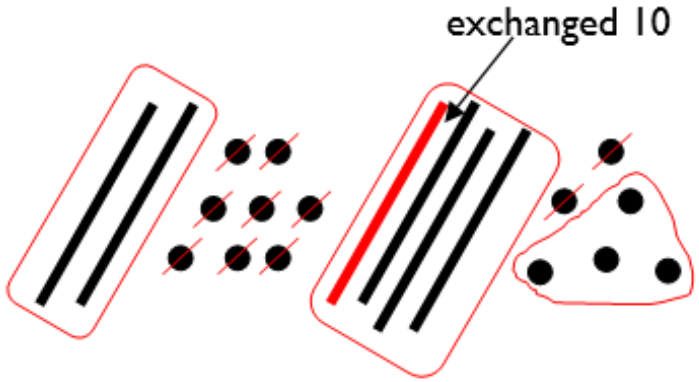
e.g. 34 + 23 =

With exchange:

e.g. 28 + 36 =



will become



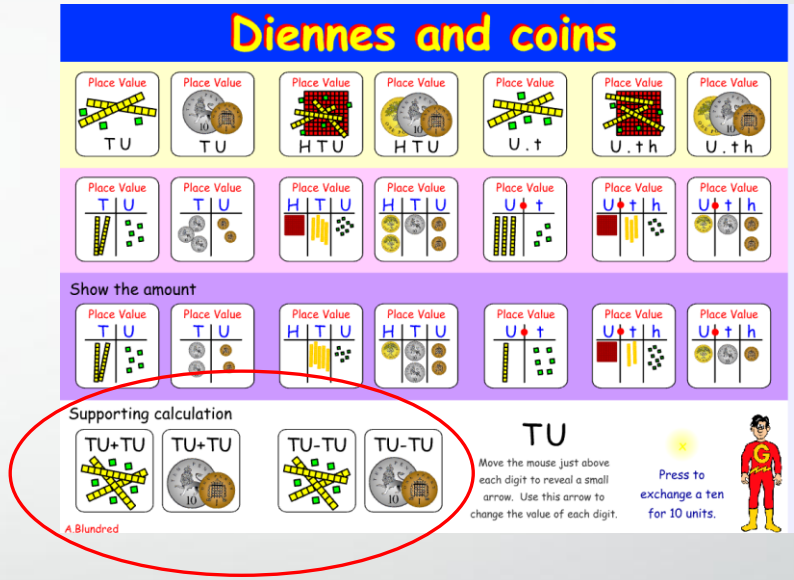
so 28 + 36 = 64

It is important that children circle the remaining tens and units/ones after exchange to identify the amount remaining.

How Can I Help at Home?

- Remind your child to draw a jotting to support their working.

- Addition:
  Count your ones
  Exchange 10 ones for 1 ten if needed
  Count your tens and remaining ones
  Write your answer.



- On Topmarks, your child can practice using place value teaching resources to support their calculations.
  https://www.topmarks.co.uk/Flash.aspx?f=diennesandcoinsv3

- Use Daily 10 to encourage rapid recall of number facts (addition, subtraction, number bonds) https://www.topmarks.co.uk/maths-games/daily10

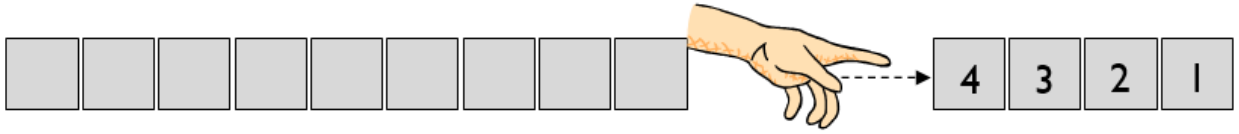
Subtraction in Year 1

What does it look like in school?

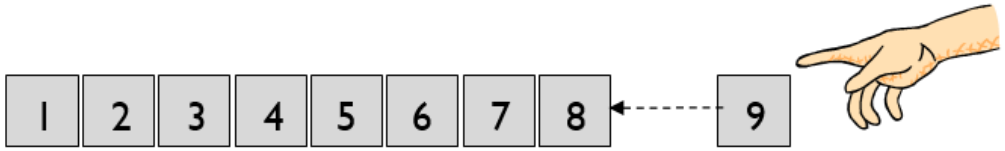
End of Year Objective:
Subtract one-digit and two-digit numbers to 20, including zero (using concrete objects and pictorial representations).

Children will co Saved to T: Drive ractical equipment and taking away strategies. To avoid the need to exchange for subtraction at this stage, it is advisable to continue to use equipment such as counters, cubes and the units from the Base 10 equipment, but not the tens, e.g. 13 - 4

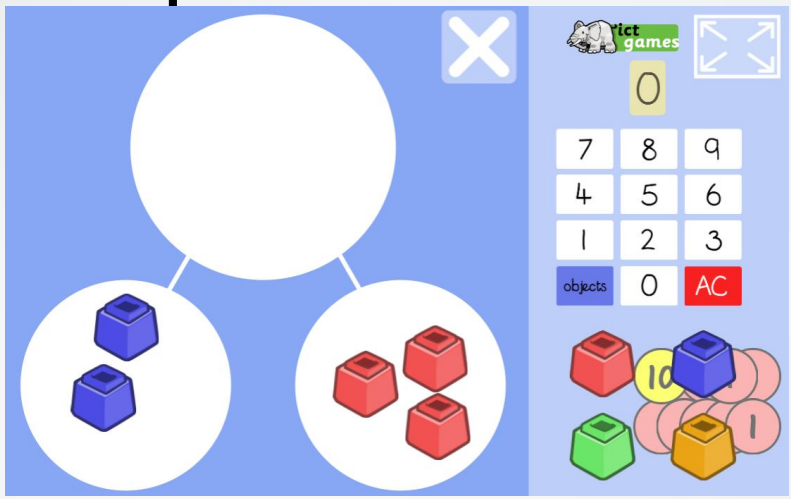
Touch count and remove the number to be taken away, in this case 4.



Touch count to find the number that remains.



How Can I Help at Home?



- Play mental maths games on Numbots – we have given your child their login details in the back of their reading record. https://play.numbots.com/#/intro
- Subtraction games within 10 Topmarks website.https://www.topmarks.co.uk /subtraction/subtraction-to-10
- Missing number subtraction games https://www.topmarks.co.uk/maths-games/subtraction-grids
- Use a part-part-whole model and solving simple subtraction problems using small objects at home such as dried peas, pasta or lego.

Subtraction in Year 2

What does it look like in school?

Y2

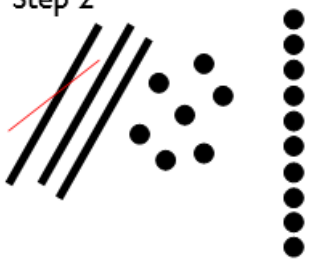
End of Year Objective:
Subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers.

Children can record the calculations using their own drawings of the Base 10 equipment (as slanted lines for the 10 rods and dots for the unit blocks), e.g. to calculate 39 – 17 children would draw 39 as 3 tens (lines) and 4 units (dots) and would cross out 7 units and then one ten, counting up the answer of 2 tens and 2 units to give 22.

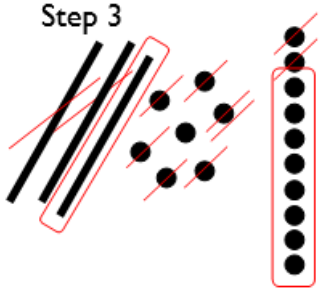
When recording their own drawings, when calculating 37 – 19, children would cross out a ten and exchange for ten units. Drawing them in a vertical line, as in Step 2, ensures that children create ten ones and do not get them confused with the units that were already in place.

Step 1

Step 2



Step 3

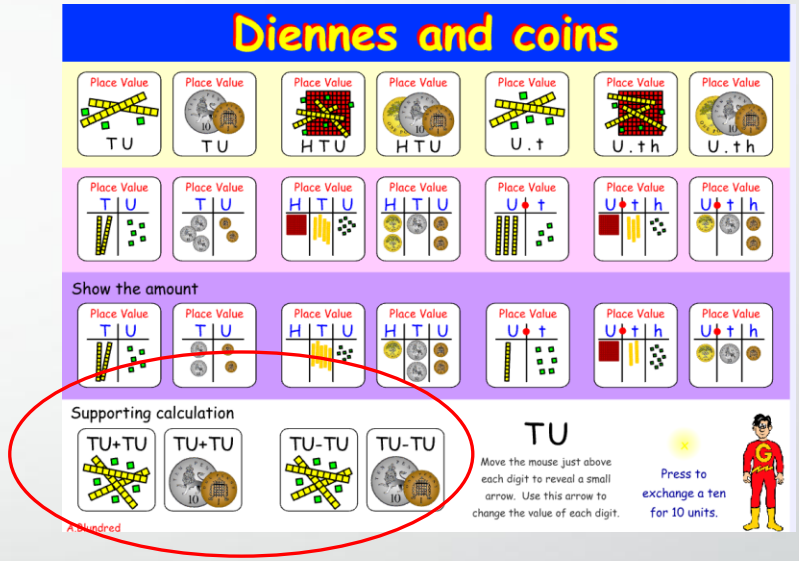


Circling the tens and units that remain will help children to identify how many remain.

How Can I Help at Home?

- Remind your child to draw a jotting to support their working.

- Subtraction:
  Count your ones
  Exchange 1 ten for 10 ones if needed.
  Count your remaining tens and ones.
  Write your answer.



- On Topmarks, your child can practice using place value teaching resources to support their calculations.
  https://www.topmarks.co.uk/Flash.aspx?f=diennesandcoinsv3

- Use Daily 10 to encourage rapid recall of number facts (addition, subtraction, number bonds) https://www.topmarks.co.uk/maths-games/daily10

Multiplication Year 1

What does it look like in school?

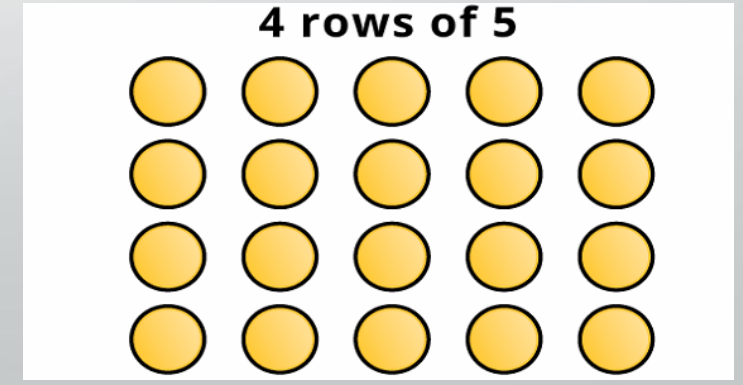
Y1

End of Year Objective:
Solve one-step problems involving multiplication by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.

In year one, children will continue to solve multiplication problems using practical equipment and jottings. They may use the equipment to make groups of objects. Children should see everyday versions of arrays, e.g. egg boxes, baking trays, ice cube trays, wrapping paper etc and use this in their learning, answering questions such as 'How many eggs would we need to fill the egg box? How do you know?'

How Can I Help at Home?

- Counting in 2's, 5's, 10 by clapping, skipping, jumping etc
- Counting coins in groups of 2's.
- Creating arrays using lego or pennies
- Putting buttons or sweets in bun cases to count in 2's, 5's and 10's.
- Doubling numbers using small objects
- Hit the Button – doubles https://www.topmarks.co.uk/maths-games/hit-the-button



Multiplication Year 2

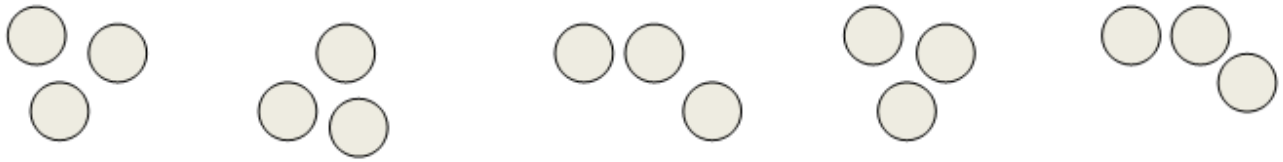
What does it look like in school?

Y2

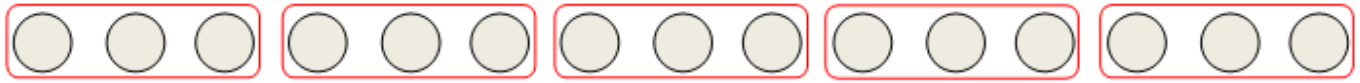
End of Year Objective:
Calculate mathematical statements for multiplication *(using repeated addition)* and write them using the multiplication (x) and equals (=) signs.

Children should understand and be able to calculate multiplication as repeated addition, supported by the use of practical apparatus such as counters or cubes. e.g.

5 x 3 can be shown as five groups of three with counters, either grouped in a random pattern, as below:



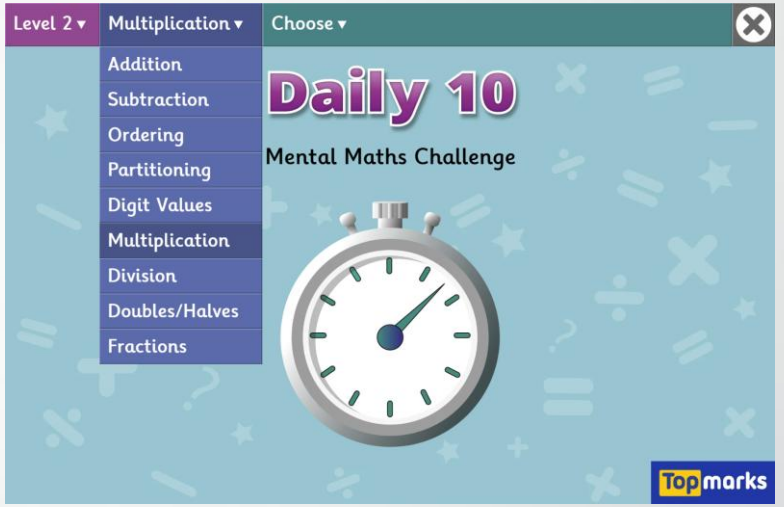
or in a more ordered pattern, with the groups of three indicated by the border outline:

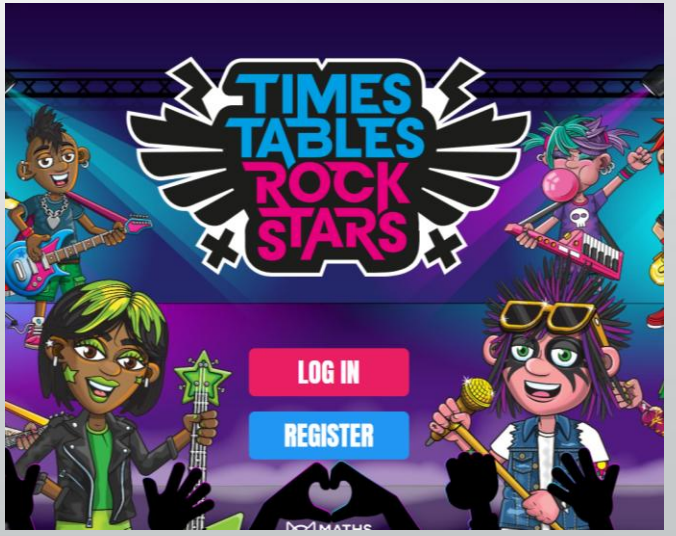


Children should then develop this knowledge to show how multiplication calculations can be represented by an array, (this knowledge will support with the development of the grid method in the future). Again, children should be encouraged to use practical apparatus and jottings to support their understanding, e.g.

How Can I Help at Home?

- Use Topmarks and TTRockstars to encourage rapid recall of 2, 5 and 10 multiplication facts.
- https://www.topmarks.co.uk/maths-games/daily10
- https://www.topmarks.co.uk/maths-games/hit-the-button
- https://play.ttrockstars.com/





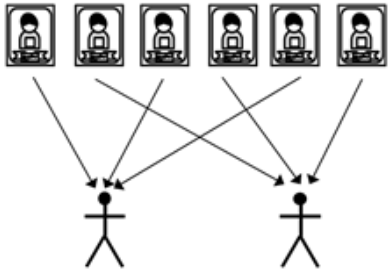
Division in Year 1

What does it look like in school?

Y1

End of Year Objective:
Solve one-step problems involving division by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.

In year one, children will continue to solve division problems using practical equipment and jottings. They should use the equipment to share objects and separate them into groups, answering questions such as 'If we share these six apples between the three of you, how many will you each have? How do you know?' or 'If six football stickers are shared between two people, how many do they each get?' They may solve both of these types of question by using a 'one for you, one for me' strategy until all of the objects have been given out.



Children should be introduced to the concept of simple remainders in their calculations at this practical stage, being able to identify that the groups are not equal and should refer to the remainder as '… left over'.

How Can I Help at Home?

- Sharing biscuits and sweets with family members or teddies.
- Play simple sharing games on https://pbskids.org/games/play/fair-shares/18990
- Halving numbers by using small objects and moving them into two groups.
- Quickly reciting the half for different numbers.
- Hit the Button Halves - https://www.topmarks.co.uk/maths-games/hit-the-button

Division in Year 2

What does it look like in school?

Y2

End of Year Objective:
Calculate mathematical statements for division within the multiplication tables and write them using the division (÷) and equals (=) signs.

Children will utilise practical equipment to represent division calculations as grouping (repeated subtraction) and use jottings to support their calculation, e.g.

12 ÷ 3 =

Children need to understand that this calculation reads as 'How many groups of 3 are there in 12?'

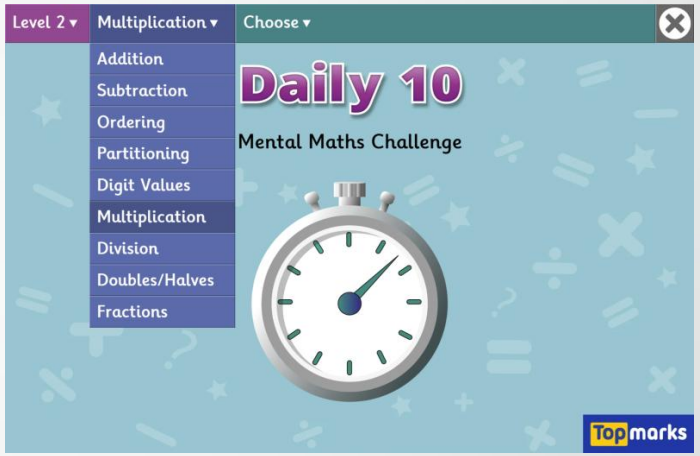
They should also continue to develop their knowledge of division with remainders, e.g.

13 ÷ 4 =

13 ÷ 4 = 3 remainder 1

How Can I Help at Home?

- Use Daily 10 and TTRockstars to encourage rapid recall of 2, 5 and 10 division facts.
- https://www.topmarks.co.uk/maths-games/daily10
- https://www.topmarks.co.uk/maths-games/hit-the-button
- https://play.ttrockstars.com/



Why have we not included other areas of mathematics?

Other areas of maths are important but place value and the four operations are paramount for our children's future. Shape, angles, fractions, measure (and others) all have a place in our curriculum but these rarely change.

However, the processes for + - x and ÷ do and is the reason we want to offer this guidance.

Still unsure? Get in touch with your child's teacher.