A Parent's Guide to Maths at Starcross Primary School

Year 2

The way Maths is taught in primary schools may seem to have changed considerably since you yourself were in the classroom. With the introduction of a new National Curriculum in 2014, some more complicated concepts have been introduced and a much deeper understanding of what is taught is now necessary.

From starting in Foundation, all the way through to Year Six, your child will follow a progressive scheme of learning that will build on their previous knowledge and adapt known methods and images to ensure their working becomes more efficient as they work with larger numbers.

This guide is designed to support you to understand the methods that are being taught in the classroom on a year group basis and the understanding that your child will be gaining. We provide the children with images to match the concrete tools they may be using to complete maths problems with the aim to be able to remove the concrete depictions and replace them with pictorial representations by the end of KS2.

It is however very important to recognise that although a new method may be introduced to your child as they progress through the school, if they find it more difficult to grasp, they will always be supported to continue using *their* most efficient method whilst being provided with plenty of opportunities to practise the new (more effective) technique. It is very important that your child understands the workings of each method, not simply a mechanical means to answer a question.

Terminology

It is important to note the vocabulary we use in school and that you try to embed this in any maths talk at home.

Your child will now be working with numbers within 100 (up to 2-digits) and will need to know about the third digit's column.

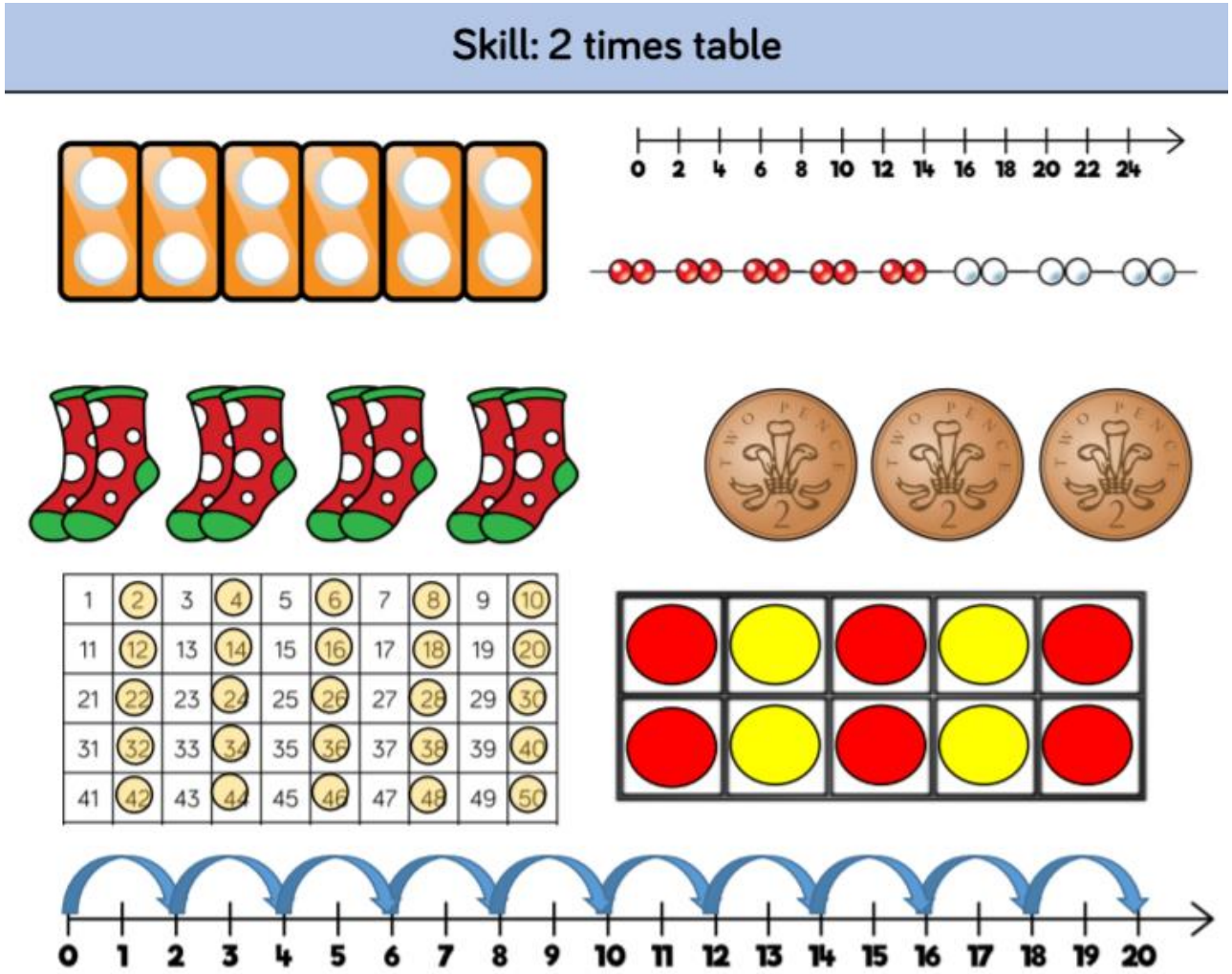
Hundreds	Tens	Ones
H	T	O

Addition (+)	Subtraction (-)	Multiplication (x)	Division (÷)	Equals (=)
add more plus altogether	subtract minus less take away difference	multiply times lots of groups of repeated addition	divide by share group divide share equally	same as makes balances

Multiplication Tables

By the end of the year, your child will be expected to rapidly and fluently recall most of the facts related to the multiplication tables that they have been taught.

Several representations of each multiplication table will be used throughout your child's learning and they will be encouraged to find their most useful representation and continue to practise with this. They will have many opportunities to count forwards in backwards in the required groups to support their understanding of these tables.



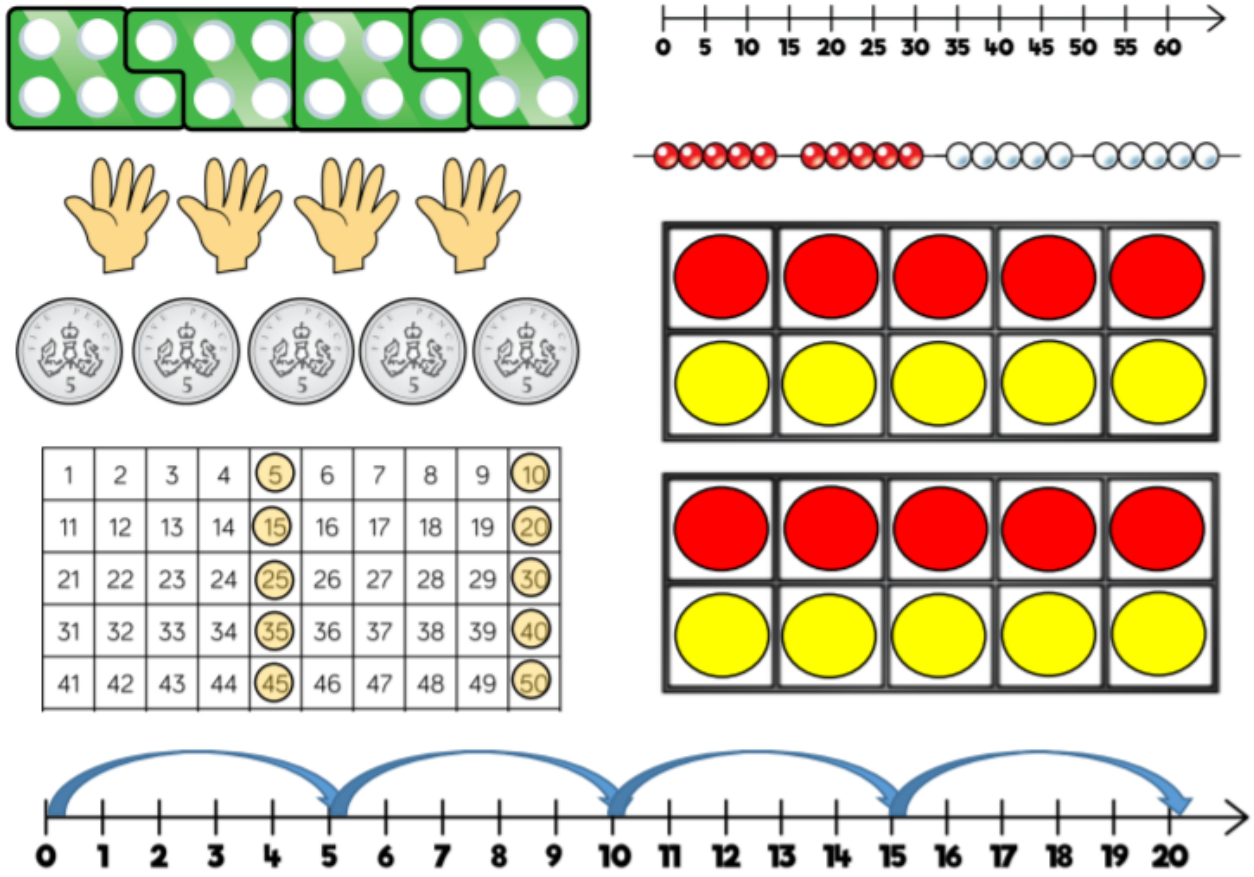
New Learning

In Year 2, your child will learn and practise the 2 times table.

Your child will use many concrete representations and look at the patterns they see when the table has been highlighted on a hundred square.

They will make links to doubling.

Skill: 5 times table



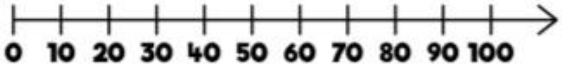
New Learning

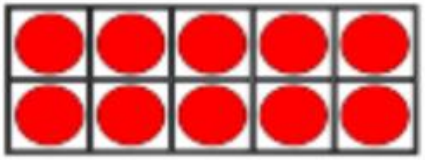
In Year 2, your child will learn and practise the 5 times table.

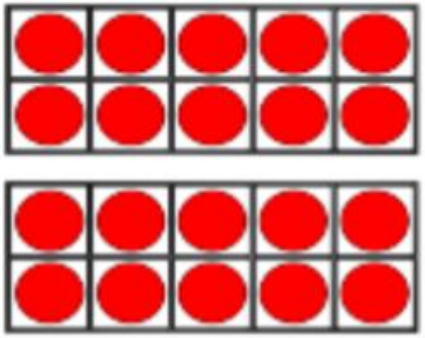
They will be encourages to explore the shape of the numbers and notice the odd, even patterning.

Your child will look at the patterns they can see on the hundred square and note that all of the multiples end with a 0 or 5.

Skill: 10 times table







1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

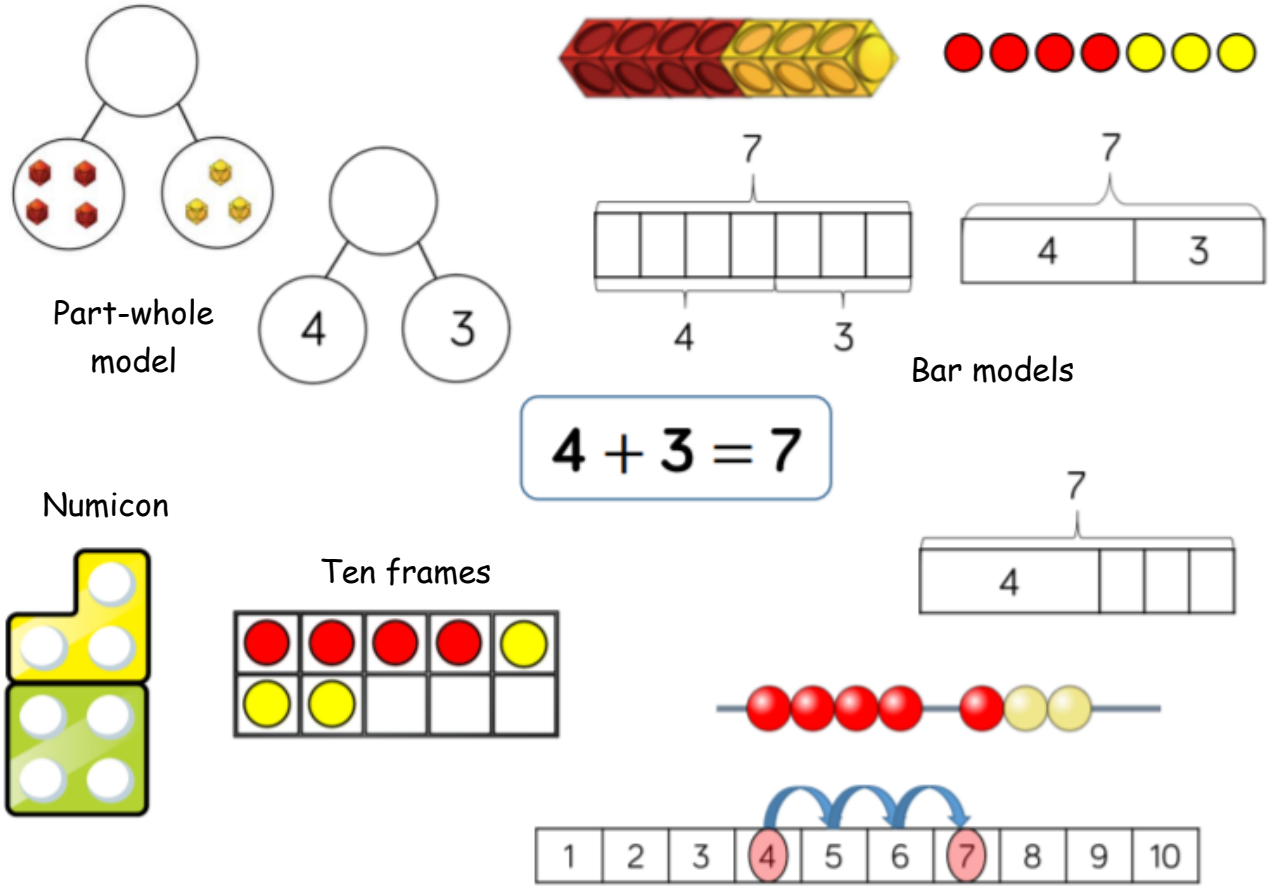
New Learning

In Year 2, your child will learn and practise the 10 times table.

Your child will look at the patterns they can see on the hundred square and note that all of the multiples have a 0 in the ones column.

Addition

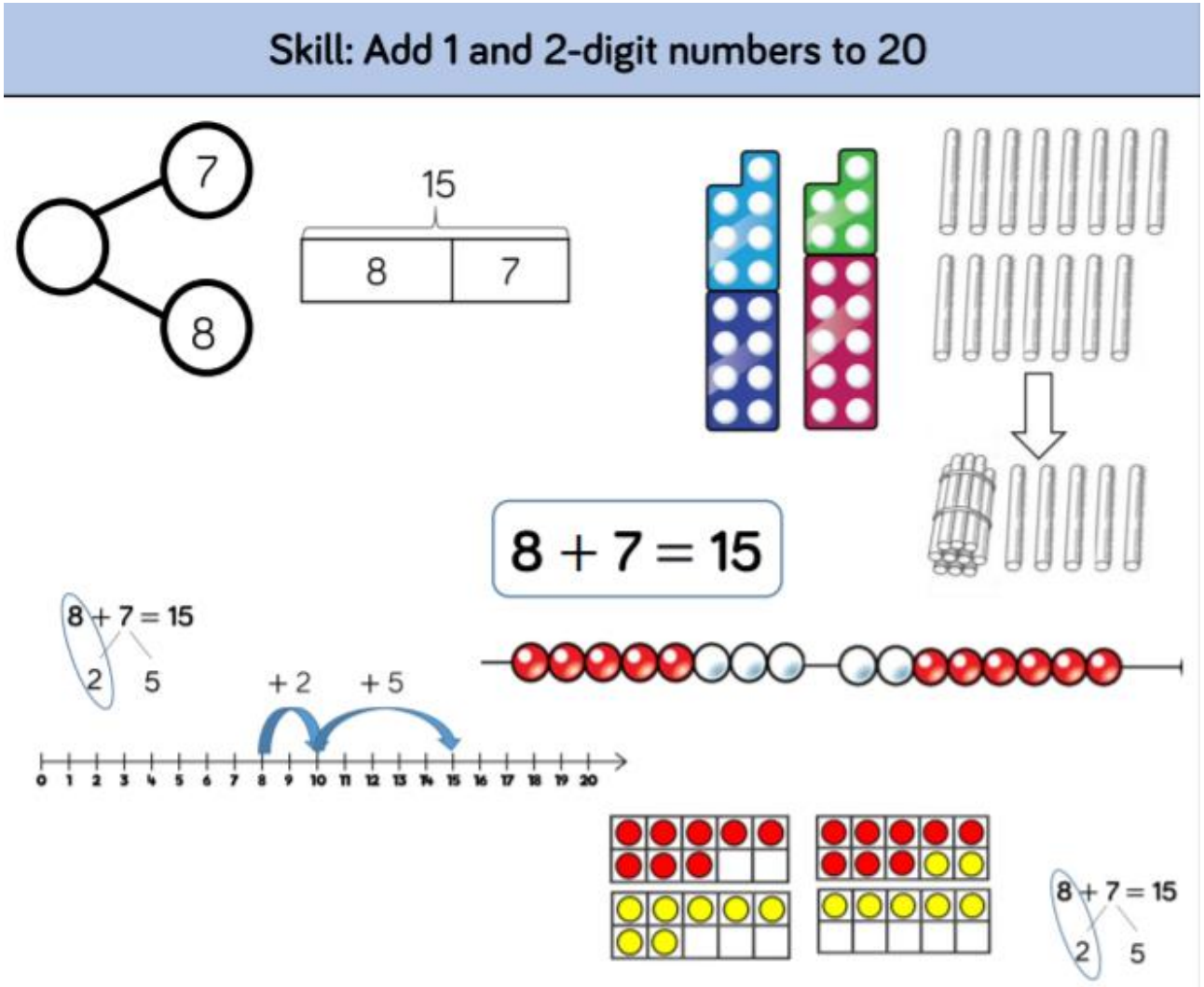
Skill: Add 1-digit numbers within 10



Previous Learning

Your child will confidently be using part-whole models, ten frames and number shapes (Numicon) to support partitioning of numbers. They will have been introduced to bar models too.

Your child will have explored the combining of two sets (aggregation) and increasing a quantity by another (augmentation).

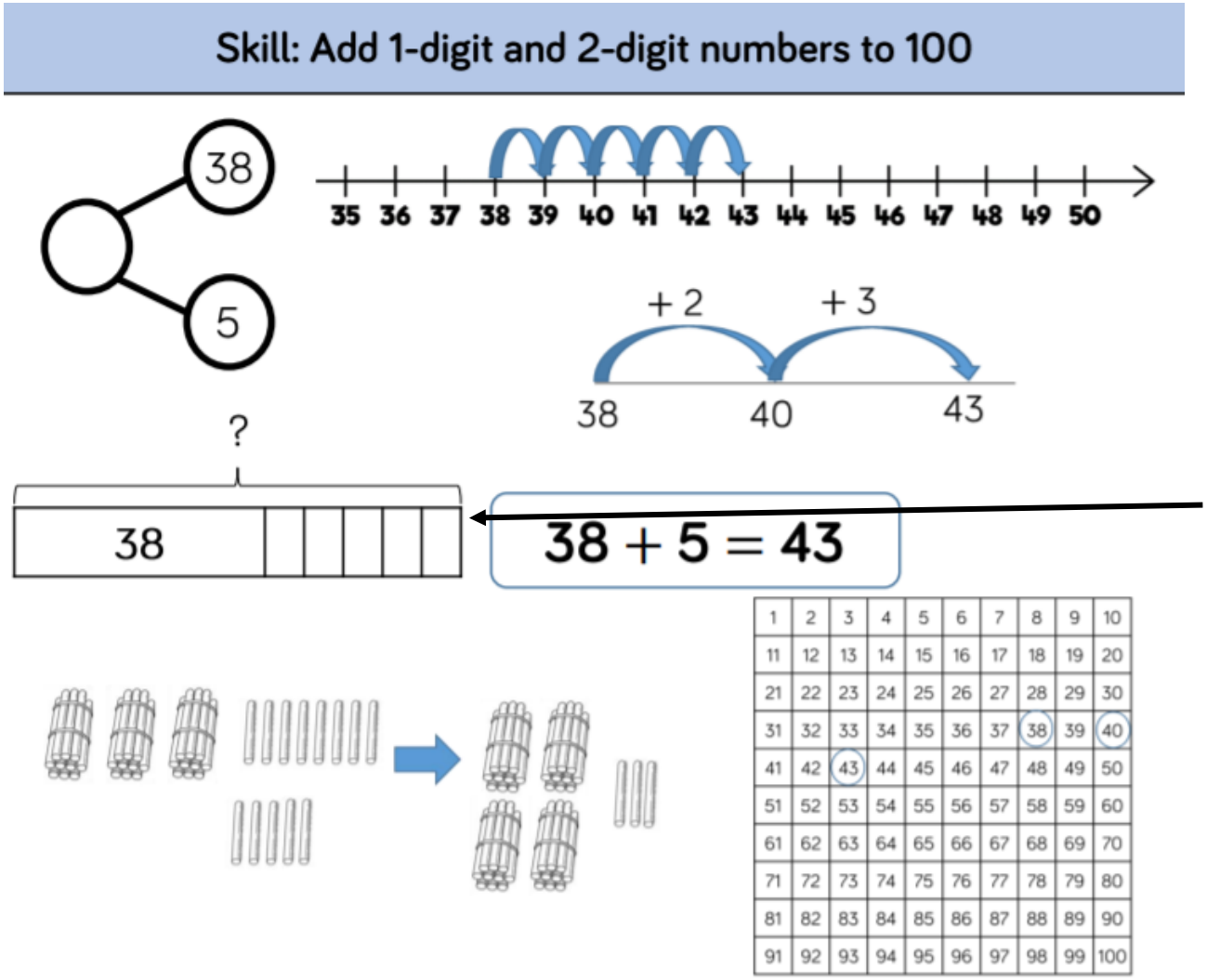


Previous/New Learning

Some children will have already looked at this skill in Year One but most will only just be coming across it this year.

As your child 'bridges 10' they will gain a secure understanding of ten ones being equal to one ten. They will use a range of concrete representations/manipulatives to explore this.

They will practise using 'tricks' such as partitioning and using known number bonds to support faster/mental calculation.

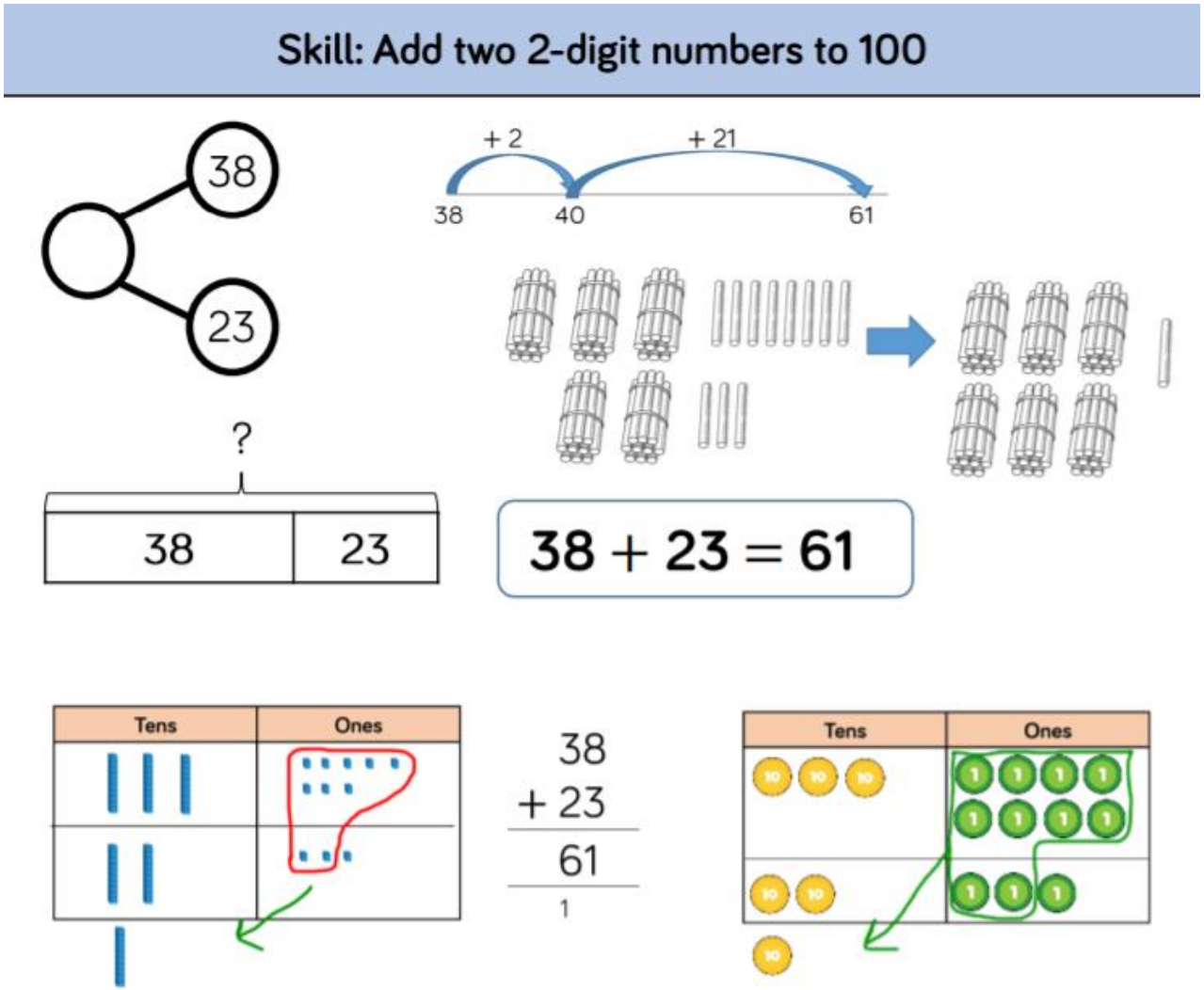


New Learning

Your child will learn to add one and two-digit numbers using a range of methods. They will be encouraged to choose their most efficient method.

By the end of Year Two, your child will have seen problems represented with a bar tool and will be beginning to more independently use these to support themselves.

Lots of children will still rely quite heavily on concrete representations to support their workings – this is perfectly acceptable and will be supported as they move on.



New Learning

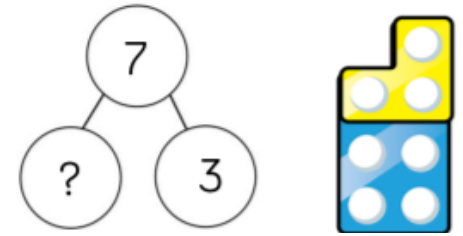
Some children will start to use these methods in Year Two whereas others may not be ready to move onto these until Year 3.

Your child will be encouraged to add numbers in larger chunks. This could be with concrete or pictorial representations.

If they are showing particularly good understanding of the concrete and pictorial representations they are using, they will begin to write the formal written method, column addition alongside.

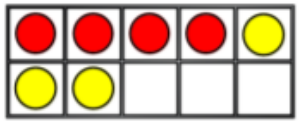
Subtraction

Skill: Subtract 1-digit numbers within 10

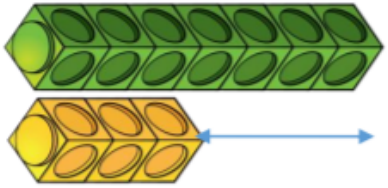


Part-whole model

Numicon

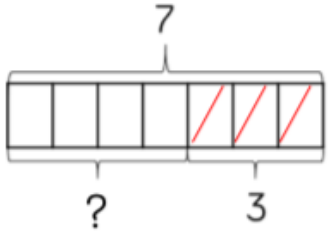


Ten frames

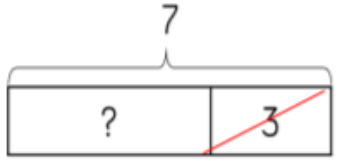


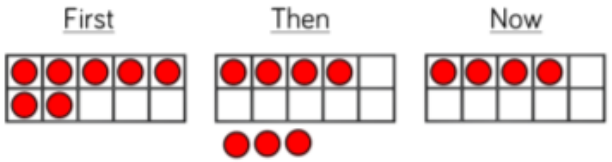
Bar model

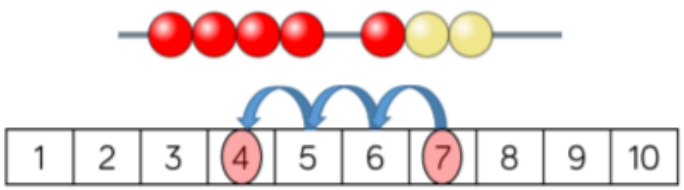
$7 - 3 = 4$



Bar model





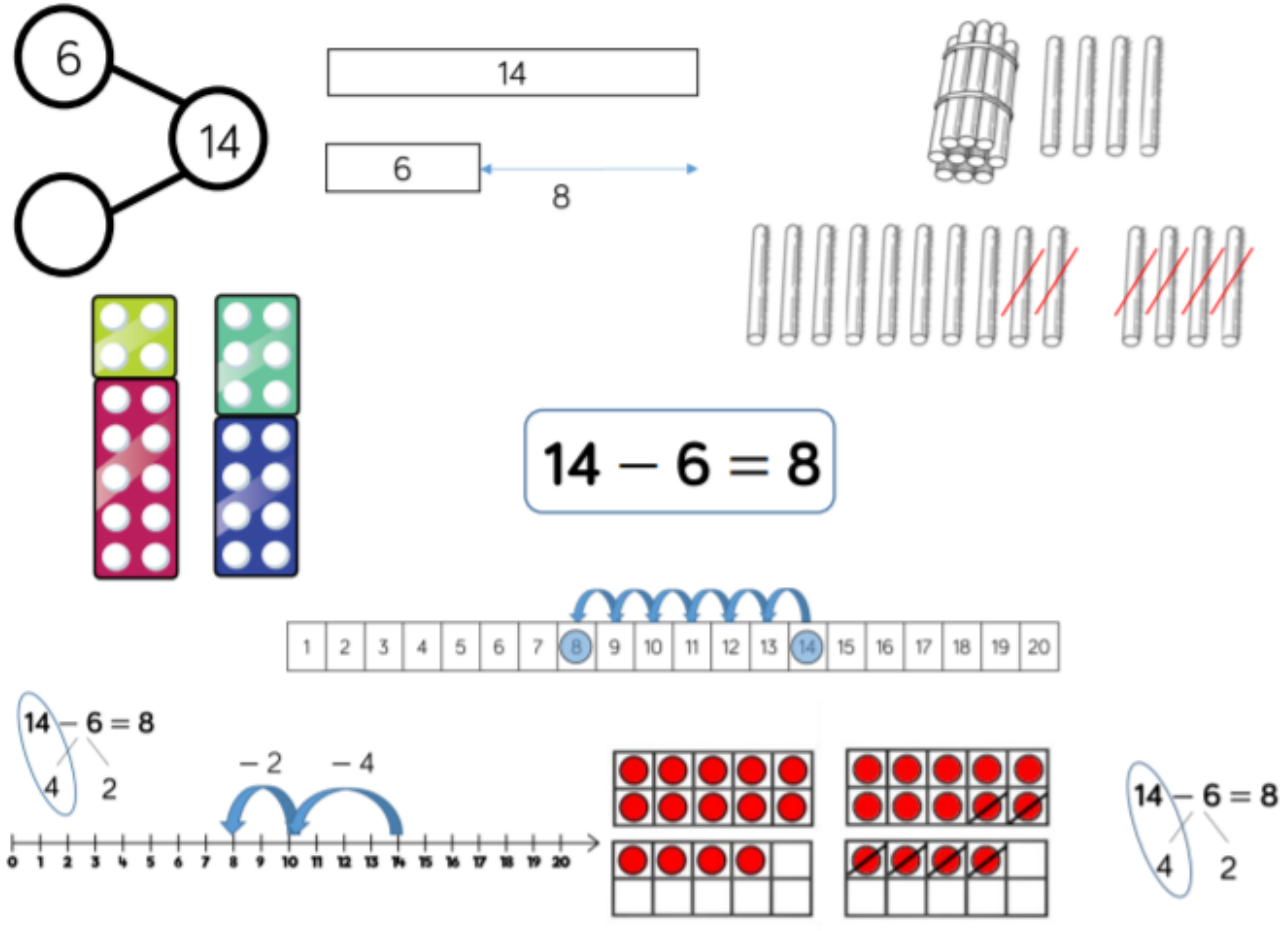


Previous Learning

Your child will confidently be using part-whole models, ten frames and number shapes (Numicon) to support partitioning of numbers.

They will have explored the concept of a quantity getting smaller (reduction) as well as comparative problems (difference). The bar model is the most useful tool to support your child to understand difference problems.

Skill: Subtract 1 and 2-digit numbers to 20

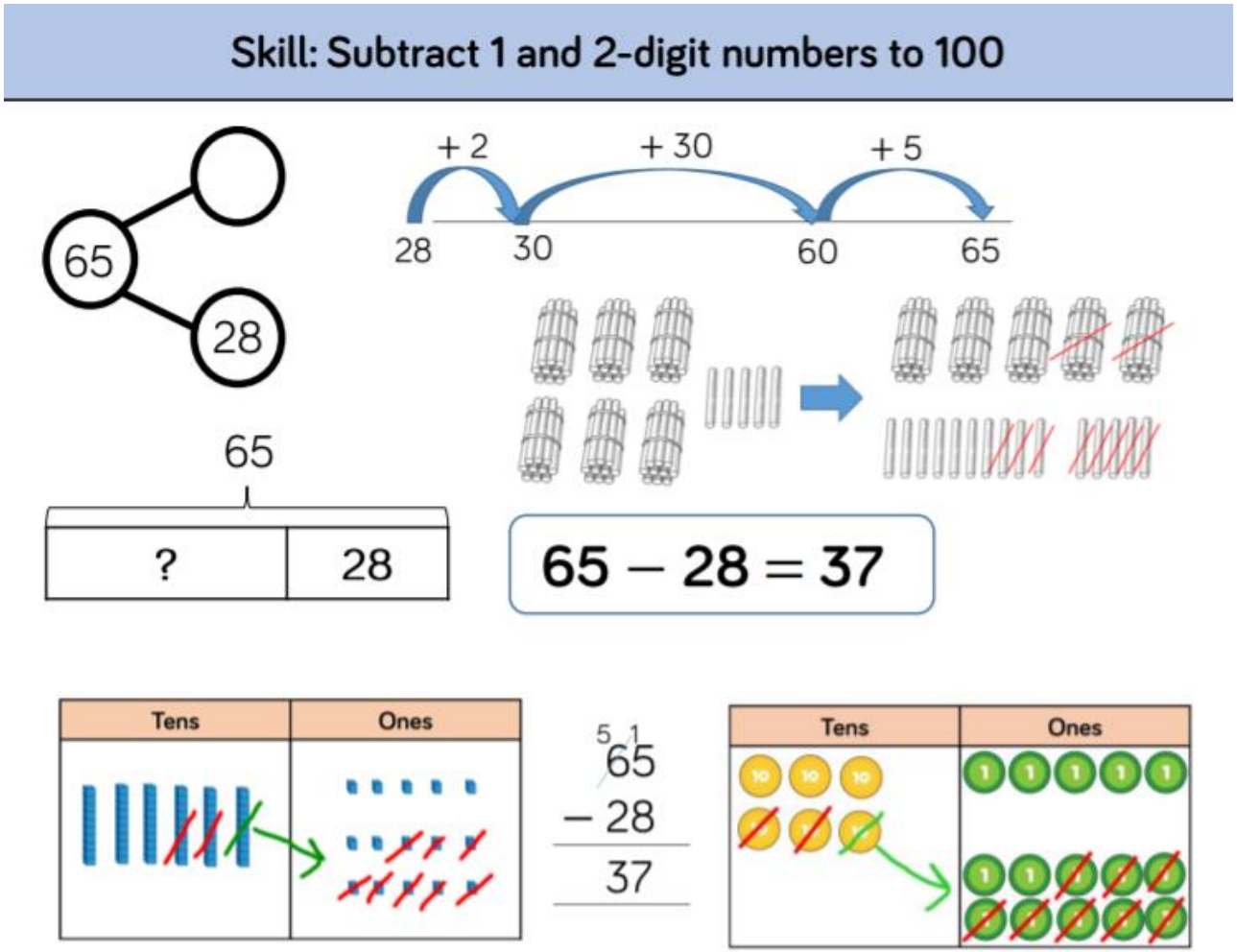


Previous/New Learning

Your child will work with larger numbers, so will gain a very good understanding of ten ones being equal to one ten to support them when subtracting across ten.

They will learn 'tricks' such as partitioning the subtracted number to ensure they reach ten, before using this same bond knowledge to subtract what is remaining.

As they continue to practise this throughout Year Two, they will become more efficient and may even be able to complete some problems using mental strategies.

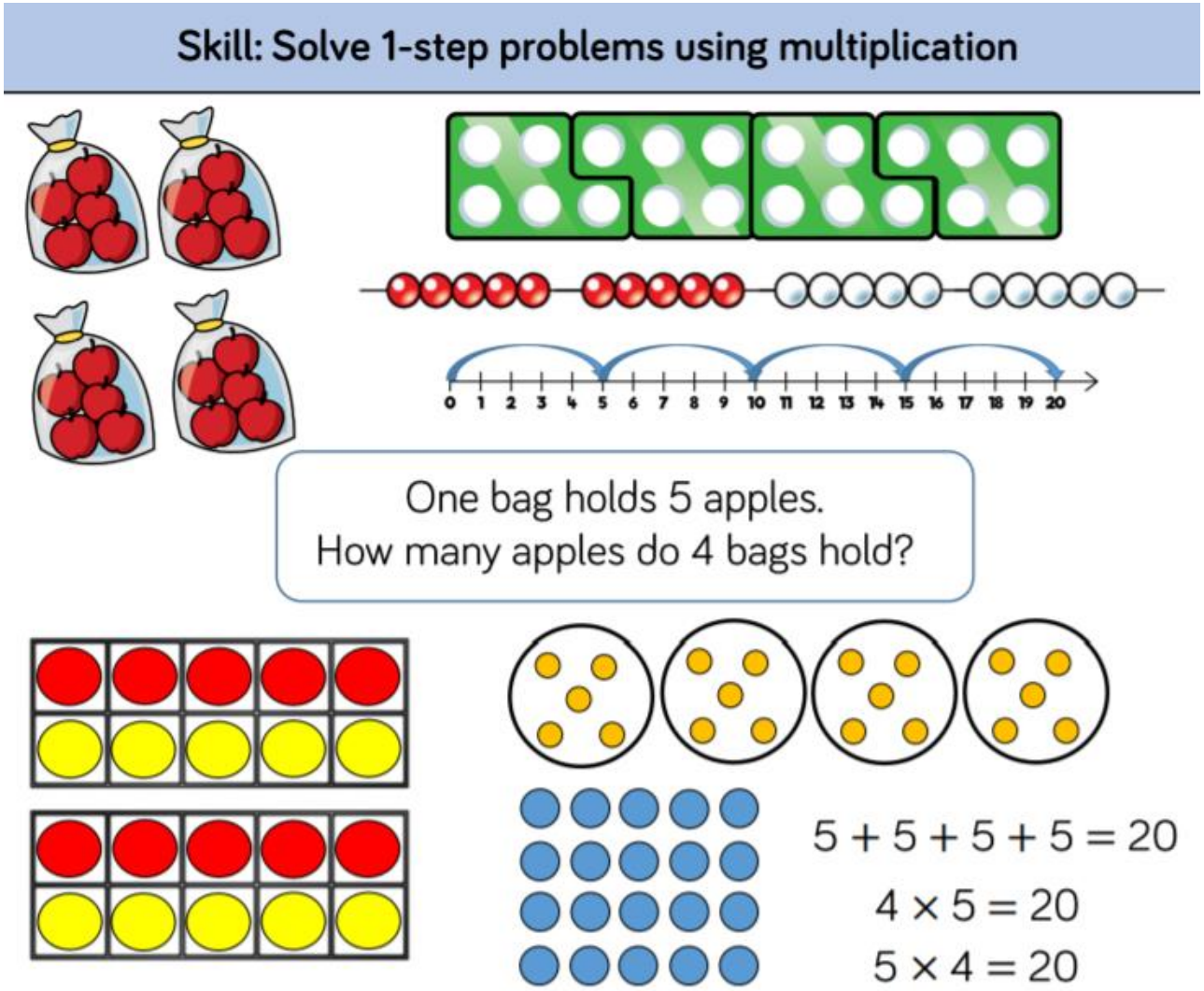


New Learning

Your child will work with increasingly large numbers to practise their subtraction skills. They will be encouraged to subtract larger chunks to be more efficient.

Some children will begin to use the formal written method of column subtraction but this will be heavily supported by concrete representations.

Multiplication



Previous/New Learning

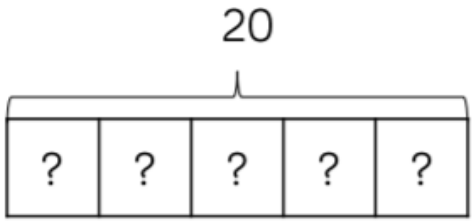
Your child will represent multiplication as repeated addition in many different ways.

Your child will learn how to use repeated addition and begin to use arrays to support their solving of multiplication problems.

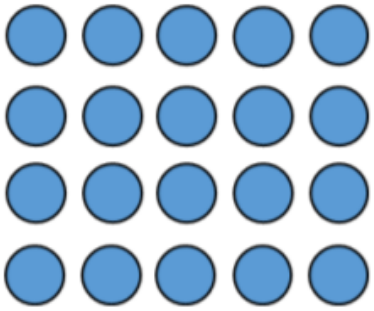
They will be introduced to the multiplication symbol for the first time and will use it to write multiplication number sentences.

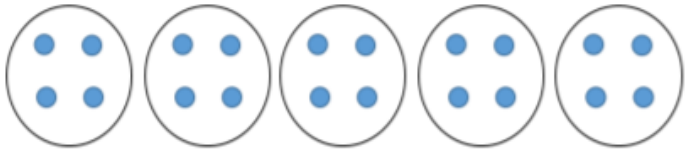
Division

Skill: Solve 1-step problems using multiplication (sharing)



There are 20 apples altogether.
They are shared equally between 5 bags.
How many apples are in each bag?





$20 \div 5 = 4$

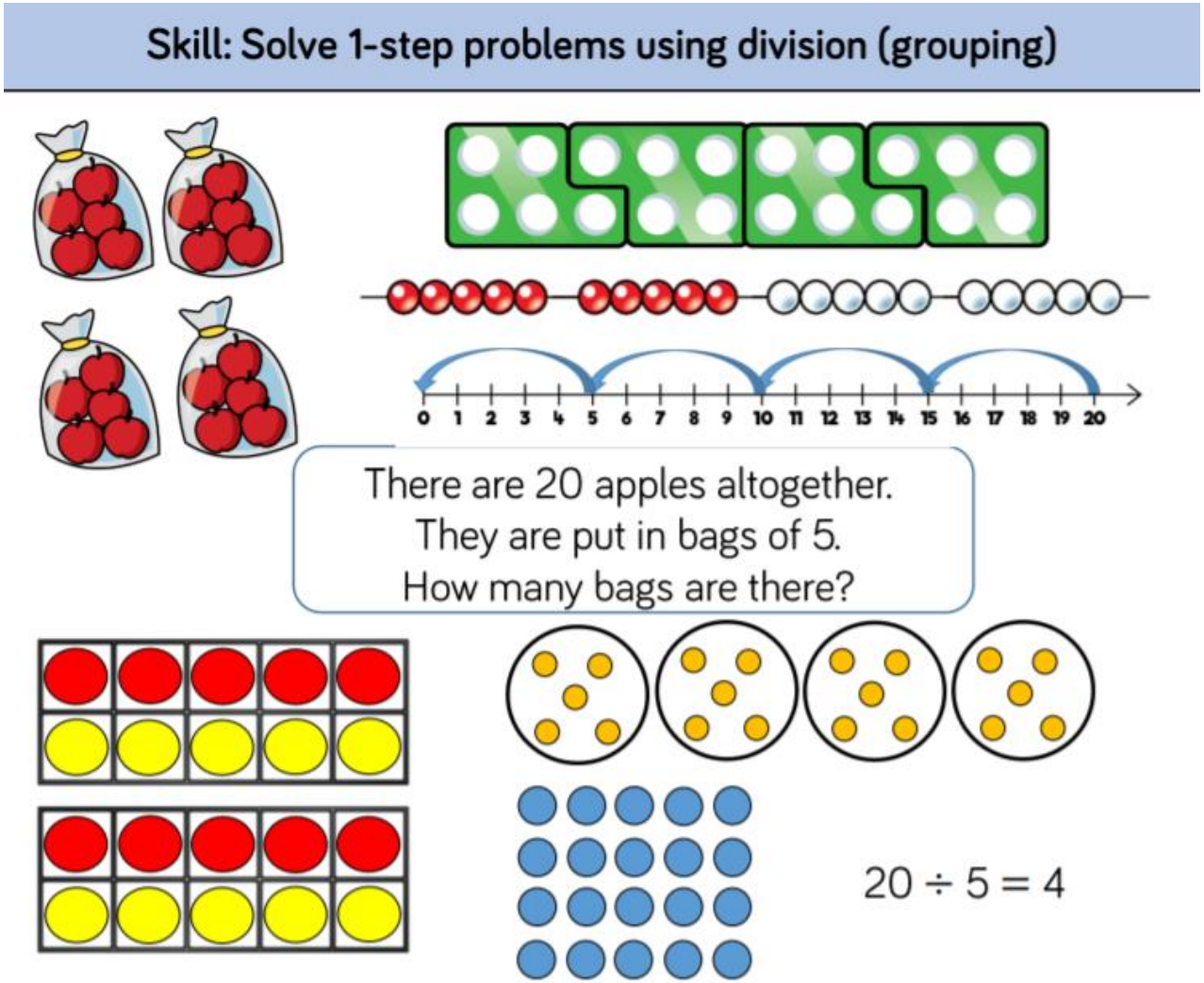
Previous Learning

Your child will have solved problems by sharing amounts into equal groups.

They will have used concrete and pictorial representations to solve problems.

New Learning

In Year Two, your child will be introduced to the division symbol and will learn to record number sentences using it correctly.



Previous Learning

Your child will have use concrete and pictorial representations to group objects and then count the number of groups created.

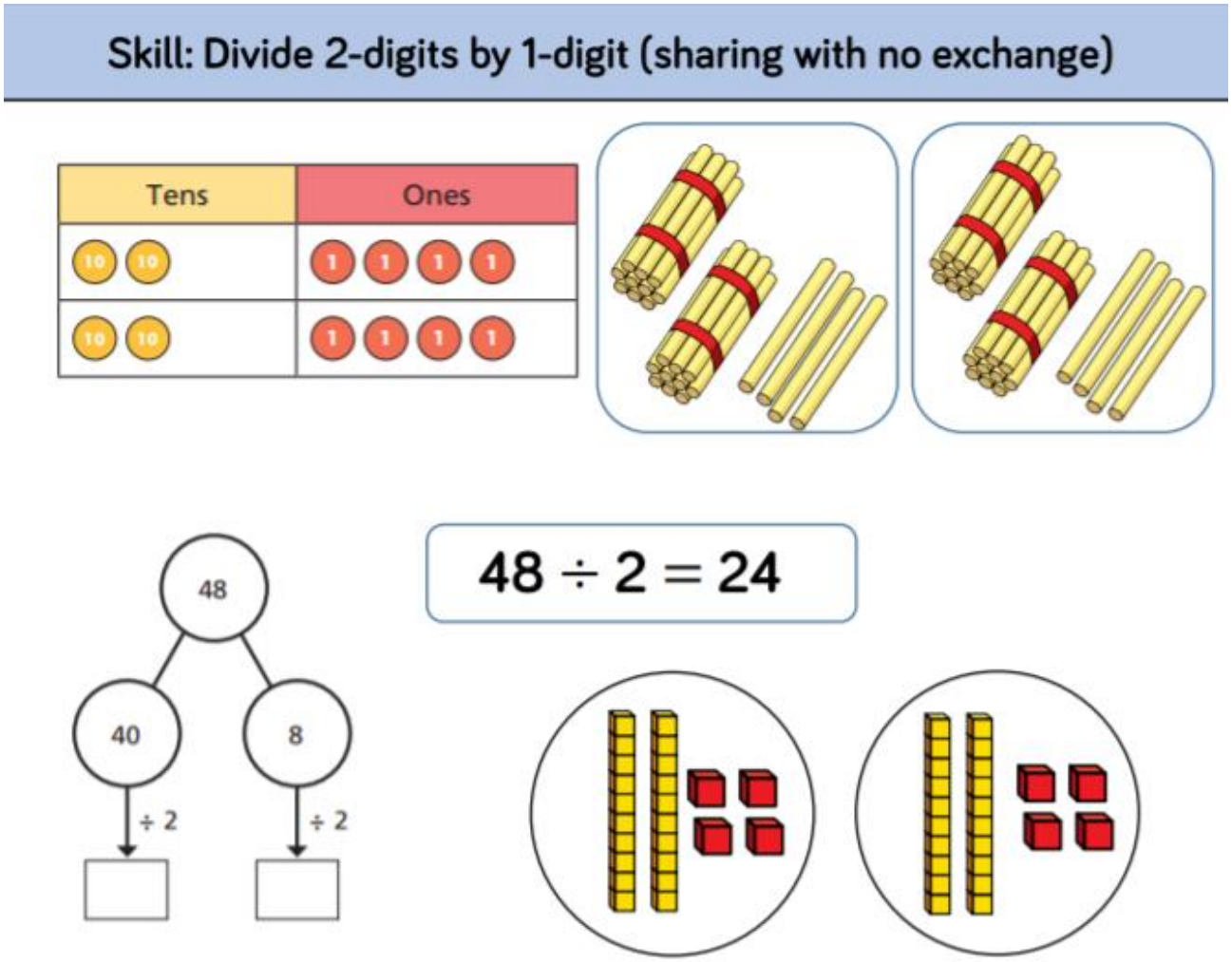
This is linked to repeated subtraction and counting in multiples.

Using fixed shapes, such as Numicon, will support your child to notice the links between division and multiplication.

New Learning

Your child will continue to develop this strategy whilst working with some larger numbers.

They will be recording their findings more formally with the division symbol.



Previous Learning

Your child will have learned about how to divide numbers using sharing.

They will have used a range of concrete objects in Year One to support their workings.

New Learning

Your child will use the part-whole model to partition numbers to make them easier to work with.