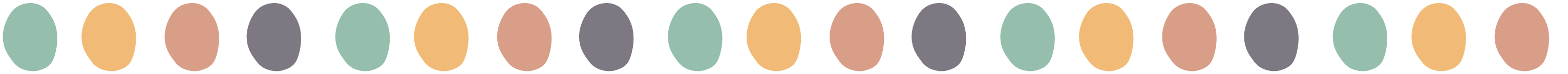


Y2- Overview

	Autumn 1		Autumn 2		Spring 1		Spring 2		Summer 1				Summer 2		
Unit	1	2	3	4	5		6	7	8	9	10	11	12	13	14

	Number and place value
	Number facts
	Addition and subtraction
	Multiplication and division
	Fractions
	Geometry
	Other

Spring 1	GROUPING OBJECTS IN DIFFERENT WAYS AND RELATING TO MULTIPLICATION
Ready to progress	2MD-1 Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2, 5 and 10 multiplication tables.
NCETM documents	THE WHOLE DOCUMENT https://www.ncetm.orguk/media/8d84023fc6a3601/ncetm_spine2segment02_y2.pdf#page=4
Small steps	To explain how to group objects in different ways. To describe how to group objects. To represent repeated groups as repeated addition To represent repeated groups as multiplication To explain and represent multiplication when a group contains zero or one items. To identify and explain each part of a multiplication equation. To use knowledge of multiplication to calculate the product. To use knowledge of multiplication to solve problems. To use knowledge of multiplication to solve problems in a range of contexts.
Links	NCETM- https://www.ncetm.orguk/classroom-resources/cp-year-2-unit-5-introduction-to-multiplication/ OAK https://www.thenationalacademy/teachers/programmes/maths-primary-ks1/units/grouping-objects-in-different-ways-and-relating-to-multiplication/lessons?sid-dlad0d=GutmUIcO2N&sm=0&src=3 WHITE ROSE https://whiteroseeducation.com/account/resources Mastery with greater depth https://www.ncetm.orguk/media/dnobtkl4/mastery_assessment_yr2.pdf
Reasoning	Missing numbers 10 = 5 x What number could be written in the box? Making links I have 30p in my pocket in 5p coins. How many coins do I have? Making links Write the multiplication number sentences to describe this array X X X X X X X What do you notice? Write the division sentences. Prove It Which four number sentences link these numbers? 3, 5, 15? Prove it. True or false? When you count up in tens starting at 5 there will always be 5 units. Use the inverse Use the inverse to check if the following calculations are correct: 12 ÷ 3 = 4 3 x 5 = 14



Problem solving

 [Click on me](#)

Glossary

- *Group* - A set of things with an identity.
- *Equal* - Exactly the same amount or value.
- *Unequal* - Do not have exactly the same amount or value.
- *Repeated addition* - The process of adding the same equal group to itself multiple times.
- *Multiplication* - The basic idea of multiplication is repeated addition, adding a number to itself multiple times. The result of a multiplication is a product.
- *Zero* - Zero is the number that represents no amount or objects. When we add zero to a number, the result is just the number, unchanged.
- *Product* - A product is the result of two or more numbers multiplied together.
- *Multiplication equation* - An equation is used to show that one number or calculation is equal to another. Multiplication equations use $\times$ and $=$ symbols.
- *Factor* - A factor is a number which exactly divides another whole number.
- *Skip count* - Counting in steps of equal size. For example, skip counting in twos means to count in equal steps of two.
- *Product* - A product is the result of two or more numbers multiplied together.
- *Factor* - A factor is a number which exactly divides another whole number.

Stem sentences

Before grouping - There are some _____

After grouping- The _____ have been grouped.

The groups are equal because there are the same number of _____ in each group.

The groups are unequal because there are a different number of _____ in each group.

There are _____ equal groups of _____.

There are _____ in each group.

There are _____ groups of _____.

There are _____ groups of _____.

There are _____ and _____ and _____ and _____.

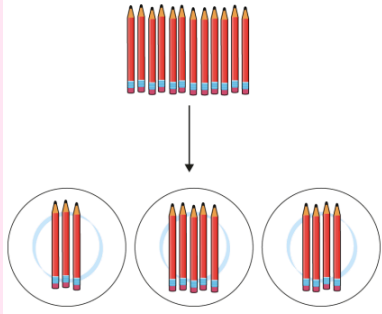
We can write this as _____ plus _____ plus _____ plus_____ plus...

There are _____ groups of _____.

We can write this as _____ $\times$ _____.

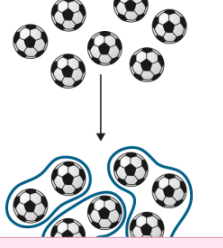
Representations

Grouping objects – example 1:
‘There are some pencils.’

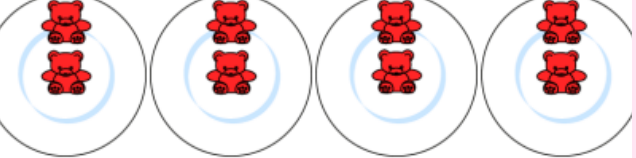


The pencils have been grouped.’

Grouping objects – example 2:
‘There are some footballs.’

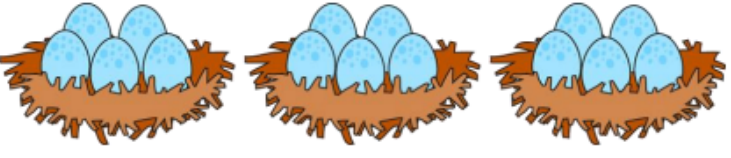


Describing equal groups – example 1:
‘How many equal groups are there?’
‘How many bears are there in each group?’



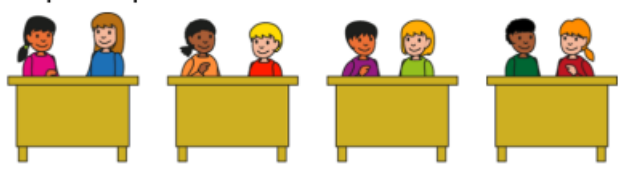
- ‘There are four equal groups of bears.’
- ‘There are two bears in each group.’
- ‘There are four groups of two.’

Completing written sentences to describe a representation:
‘Complete the sentences.’



- There are ____ equal groups of eggs.
- There are ____ eggs in each group.
- There are ____ groups of ____.

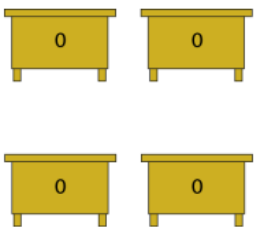
Example 1 – practical context:



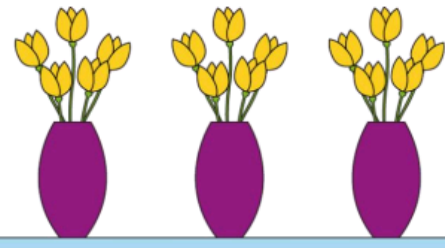
2	2	2	2
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2 + 2 + 2 + 2

- ‘There are four groups of two.’
- ‘There are two and two and two and two.’
- ‘We can write this as two plus two plus two plus two.’

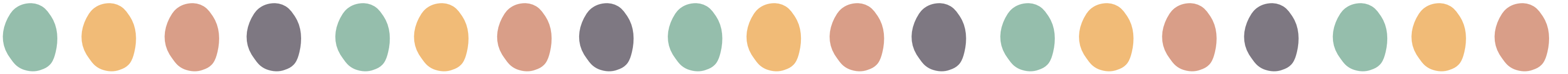
Group size > 0	Group size = 0
 • ‘There are four groups of two children.’ • ‘We can write this as <u>two</u> plus <u>two</u> plus <u>two</u> plus <u>two</u>.’ 2 + 2 + 2 + 2 • ‘We can write this as four times two.’ 4 $\times$ 2	 • ‘There are four groups of zero children.’ • ‘We can write this as <u>zero</u> plus <u>zero</u> plus <u>zero</u> plus <u>zero</u>.’ 0 + 0 + 0 + 0 • ‘We can write this as four times zero.’ 4 $\times$ 0

Example 1:



- ‘There are three groups of five.’

• ‘We can write this as <u>five</u> plus <u>five</u> plus <u>five</u>.’ 5 + 5 + 5	• ‘We can also write this as three times five.’ 3 $\times$ 5 • ‘What does the “3” represent?’ ‘The “3” represents the number of groups.’ • ‘What does the “5” represent?’ ‘The “5” represents the number of flowers in each group.’
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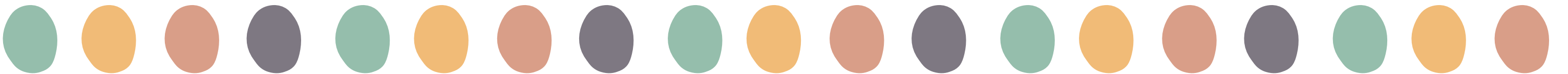


Y2- Overview

	Autumn 1		Autumn 2		Spring 1		Spring 2		Summer 1				Summer 2		
Unit	1	2	3	4	5		6	7	8	9	10	11	12	13	14

	Number and place value
	Number facts
	Addition and subtraction
	Multiplication and division
	Fractions
	Geometry
	Other

Spring 2	Representing counting in 2s, 5s and 10s as the 2, 5 and 10 times tables
Ready to progress	2MD-I Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2, 5 and 10 multiplication tables.
NCETM documents	WHOLE DOCUMENT - (You might want to combine lots of these parts together) https://www.ncetm.org.uk/media/gaalkare/ncetm_spine2_segment03_y2.pdf#page=7 TEACHING POINT 1 AND 2 - (You might want to combine lots of these parts together) https://www.ncetm.org.uk/media/bydb1b5z/ncetm_spine2_segment04_y2.pdf#page=29
Small steps	To represent the 2 times table in different ways. To use knowledge of the 2 times table to solve problems. To explain the relationship between adjacent multiples of 2. To explain that factor pairs can be written in any order. To represent counting in tens as the 10 times table. To represent the 10 times table in different ways. To explain the relationship between adjacent multiples of 10. To represent counting in fives as the 5 times table. To represent the 5 times table in different ways. To explain the relationship between adjacent multiples of 5.
Links	NCETM- https://www.ncetm.org.uk/classroom-resources/cp-year-2-unit-5-introduction-to-multiplication/ OAK https://www.thenationalacademy/teachers/programmes/maths-primary-ks1/units/representing-counting-in-2s-and-10s-as-the-2-and-10-times-tables/lessons?sid-8cd3b3=EknbRyNk8s&sm=0&src=3 WHITE ROSE https://whiteroseeducation.com/resources?year=year-2-new&subject=maths Mastery with greater depth https://www.ncetm.org.uk/media/dnobtk14/mastery_assessment_yr2.pdf
Reasoning	Missing numbers 10 = 5 x What number could be written in the box? Making links I have 30p in my pocket in 5p coins. How many coins do I have? Making links Write the multiplication number sentences to describe this array X X X X X X X What do you notice? Write the division sentences. Prove It Which four number sentences link these numbers? 3, 5, 15? Prove it. True or false? When you count up in tens starting at 5 there will always be 5 units. Use the inverse Use the inverse to check if the following calculations are correct: 12 ÷ 3 = 4 3 x 5 = 14



Problem solving



Glossary

- 2 times table - A set of multiplication facts where the product is a multiple of 2
- Skip count - Counting in steps of equal size. For example, skip counting in twos means to count in equal steps of two.
- Factor - A factor is a number which exactly divides another whole number.
- Product - A product is the result of two or more numbers multiplied together.
- Previous - Occurring before in time or order.
- Next - Occurring after in time or order.
- Commutative - Multiplication is commutative. This means the order of the factors can be changed without changing the calculation or product.
- 5 times table - A set of multiplication facts where the product is a multiple of 5
- Multiple - A multiple is the result of multiplying a number by another whole number.

Stem sentences

Factor times factor is equal to the product.
The product is equal to factor times factor

_____ is a factor.
_____ is a factor.
The product of _____ and _____ is _____
_____ is the product of _____ and _____.

Representations

Skip counting in twos – number line:

Gattegno chart:

1000	2000	3000	4000	5000	6000	7000	8000	9000
100	200	300	400	500	600	700	800	900
10	20	30	40	50	60	70	80	90
1	2	3	4	5	6	7	8	9

Skip counting in twos – objects in pairs:

Skip counting in twos – two-pence coins:

3	×	2	=	6
factor	×	factor	=	product

6	=	3	×	2
product	=	factor	×	factor

Backward counting to reach zero twos:

- 'Six, four, two, zero.'
- 'Three twos, two twos, one two, zero twos.'

- $3 \times 2 = 6$
- $2 \times 2 = 4$
- $1 \times 2 = 2$
- $0 \times 2 = 0$

2 + 2 + 2 + 2 = 8

- 'There are four groups of two eggs. There are eight eggs altogether.'
- $4 \times 2 = 8$

2 × 4 = 8

- 'There are two eggs, four times. There are eight eggs altogether.'
- $2 \times 4 = 8$

	'One two is two.'
	'Two twos are four.'
	'Three twos are six.'

Finding adjacent multiples – ratio chart and number line:

×	2
0	0
1	2
2	4
3	6
4	8
5	10
6	12
7	14
8	16
9	18
10	20
11	22
12	24

↓ +2 $3 \times 2 = 2 \times 2 + 2$

↑ -2 $7 \times 2 = 8 \times 2 - 2$

Skip counting in tens – number line:

Gattegno chart:

1000	2000	3000	4000	5000	6000	7000	8000	9000
100	200	300	400	500	600	700	800	900
10	20	30	40	50	60	70	80	90
1	2	3	4	5	6	7	8	9

Skip counting with groups of ten objects – cardinality visible:

Example 1:

'How many eggs are there? Count in groups of ten.'

10 10 10

- 'Ten, twenty, thirty. There are thirty eggs.'
- 'There are three groups of ten; there are thirty altogether.'

$3 \times 10 = 30$

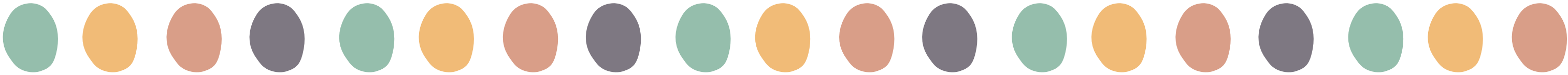
- 'Three is a factor.'
- 'Ten is a factor.'
- 'The product of three and ten is thirty.'
- 'Thirty is the product of three and ten.'

Example 2:

'Show me four groups of ten.'

	'Three tens...'	'Thirty...'
$3 \times 10 = 30$		
	'Two tens...'	'Twenty...'
$2 \times 10 = 20$		
	'One ten...'	'Ten...'
$1 \times 10 = 10$		

	$4 \times 10 = \square$	$10 \times 4 = \square$
	$\square \times 10 = \square$	$10 \times \square = \square$
	$\square \times \square = \square$	$\square \times \square = \square$

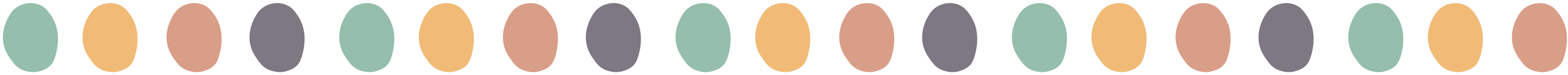


Y2- Overview

	Autumn 1		Autumn 2		Spring 1		Spring 2		Summer 1				Summer 2		
Unit	1	2	3	4	5		6	7	8	9	10	11	12	13	14

- Number and place value
- Number facts
- Addition and subtraction
- Multiplication and division
- Fractions
- Geometry
- Other

Spring 2	Representing counting in 5s as the 5 times table and link to the 10 times tables
Ready to progress	2MD-I Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2, 5 and 10 multiplication tables.
NCETM documents	TEACHING POINT 3 AND 4 - (You might want to combine lots of these parts together) https://www.ncetm.org.uk/media/bydb1b5e/ncetm_spine2_segment04_y2.pdf#page=29
Small steps	To explain how groups of 5 and 10 are related. To explain the relationship between multiples of 5 and 10 To use knowledge of the relationships between 5 and 10 times table to solve problems To explain how a factor of zero or one affects the product To represent multiplication equations in different ways Use knowledge of 2 5 and 10 times table to solve problems in a range of contexts To explain what each factor represents in a multiplication story when one of the factors is one To explain how a multiplication equation with 2 as a factor is related to doubling
Links	NCETM- https://www.ncetm.org.uk/classroom-resources/cp-year-2-unit-5-introduction-to-multiplication/ OAK= https://www.thenationalacademy/teachers/programmes/maths-primary-ks1/units/representing-counting-in-5s-as-the-5-times-table-and-link-to-the-10-times-tables/lessons?sid=467fdb=vBfr9a_0oO&sm=0&src=3 WHITE ROSE https://whiteroseeducation.com/resources?year=year-2-new&subject=maths Mastery with greater depth https://www.ncetm.org.uk/media/dnobtk14/mastery_assessment_yr2.pdf
Reasoning	Missing numbers 10 = 5 x What number could be written in the box? Making links I have 30p in my pocket in 5p coins. How many coins do I have? Making links Write the multiplication number sentences to describe this array X X X X X X X What do you notice? Write the division sentences. Prove It Which four number sentences link these numbers? 3, 5, 15? Prove it. True or false? When you count up in tens starting at 5 there will always be 5 units. Use the inverse Use the inverse to check if the following calculations are correct: 12 ÷ 3 = 4 3 x 5 = 14



Problem solving



Glossary

- *Related* - The relationship between a set of values.
- *Double* - To become twice as many / to multiply by two.
- *Half* - One of two equal parts of a whole. / To divide into two equal parts.
- *Zero* - Zero is the number that represents no amount or objects.
- *Product* - A product is the result of two or more numbers multiplied together.
- *Commutative* - An operation is commutative if the values it is operating on can be written in either order without changing the calculation.
- *Factor pairs* - A set of two factors, which, when multiplied together, give a particular product.
- *Pictogram* - A pictogram is a graph that uses pictures to represent information.
- *Tally* - A tally is a count of something. Tally marks are used to keep count and these are grouped in groups of 5 using a specific pattern.

Stem sentences

For every one group of ten, there are two groups of five.

Products in the 10 times table are also in the 5 times table.

Even multiples of five are also multiples of ten.

The product of _____ and zero is zero.
The product of zero and _____ is zero.
when zero is a factor, the product is zero.

The product of _____ and one is _____
The product of one and _____ is _____.
When one if a factor, the product is equal to the other factor.

Representations

'Double skip counting' – number line:

Gattegno chart:

1000	2000	3000	4000	5000	6000	7000	8000	9000
100	200	300	400	500	600	700	800	900
10	20	30	40	50	60	70	80	90
1	2	3	4	5	6	7	8	9

$6 \times 5 = 30$
 $3 \times 10 = 30$

'Double skip counting' – hundred square:

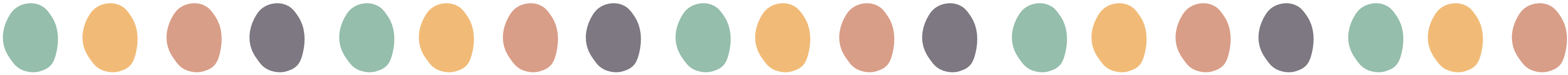
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Comparing counting in multiples of five and ten:

Number	0	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
Counting in 5s	✓					✓					✓					✓					✓					✓
Counting in 10s	✓										✓										✓					

Comparing multiplications equations when zero is a factor:

Two times table		Five times table		Ten times table	
$0 \times 2 = 0$	$2 \times 0 = 0$	$0 \times 5 = 0$	$5 \times 0 = 0$	$0 \times 10 = 0$	$0 \times 10 = 0$
$1 \times 2 = 2$	$2 \times 1 = 2$	$1 \times 5 = 5$	$5 \times 1 = 5$	$1 \times 10 = 10$	$1 \times 10 = 10$
$2 \times 2 = 4$	$2 \times 2 = 4$	$2 \times 5 = 10$	$5 \times 2 = 10$	$2 \times 10 = 20$	$2 \times 10 = 20$
$0 \times 1 = 0$ $1 \times 1 = 1$ $2 \times 1 = 2$ $3 \times 1 = 3$ $4 \times 1 = 4$ $5 \times 1 = 5$ $6 \times 1 = 6$ $7 \times 1 = 7$ $8 \times 1 = 8$ $9 \times 1 = 9$ $10 \times 1 = 10$ $11 \times 1 = 11$ $12 \times 1 = 12$		$1 \times 0 = 0$ $1 \times 1 = 1$ $1 \times 2 = 2$ $1 \times 3 = 3$ $1 \times 4 = 4$ $1 \times 5 = 5$ $1 \times 6 = 6$ $1 \times 7 = 7$ $1 \times 8 = 8$ $1 \times 9 = 9$ $1 \times 10 = 10$ $1 \times 11 = 11$ $1 \times 12 = 12$			

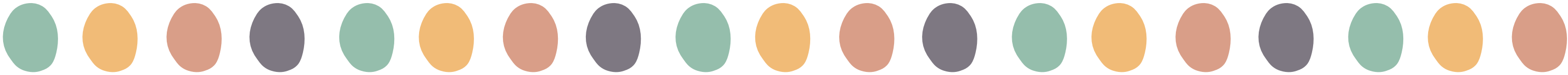


Y2- Overview

	Autumn 1		Autumn 2		Spring 1		Spring 2		Summer 1				Summer 2		
Unit	1	2	3	4	5		6	7	8	9	10	11	12	13	14

- Number and place value
- Number facts
- Addition and subtraction
- Multiplication and division
- Fractions
- Geometry
- Other

Spring 2	Multiplying by 2, doubling and halving (factors and products)
Ready to progress	2MD-I Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2, 5 and 10 multiplication tables.
NCETM documents	STEPS 1, 2 AND 3 https://www.ncetm.org.uk/media/2zypudw2/ncetm_spine2_segment05_y2.pdf#page=15
Small steps	To double 2-digit numbers and record as multiplications where one of the factors is 2 To explain how doubling and halving are related To halve even 2-digit numbers from 12 to 28 and unitise and apply know facts to halve even multiplies of 10 To identify missing factors when one of the factors is 2 To use knowledge of doubling, halving and the 2 times table to solve problems.
Links	NCETM- https://www.ncetm.org.uk/classroom-resources/cp-year-2-unit-5-introduction-to-multiplication/ OAK - https://www.thenationalacademy/teachers/programmes/maths-primary-ks1/units/multiplying-by-2-doubling-and-halving-factors-and-products/lessons?sid-1f743f=fc5efIHWy0&sm=0&src=3 WHITE ROSE https://whiteroseeducation.com/resources?year=year-2-new&subject=maths Mastery with greater depth https://www.ncetm.org.uk/media/dnobtk14/mastery_assessment_yr2.pdf
Reasoning	Missing numbers 10 = 5 x What number could be written in the box? Making links I have 30p in my pocket in 5p coins. How many coins do I have? Making links Write the multiplication number sentences to describe this array X X X X X X What do you notice? Write the division sentences. Prove It Which four number sentences link these numbers? 3, 5, 15? Prove it. True or false? When you count up in tens starting at 5 there will always be 5 units. Use the inverse Use the inverse to check if the following calculations are correct: 12 ÷ 3 = 4 3 x 5 = 14



Problem solving



Glossary

- Double/ Doubling - To become twice as many / to multiply by two.
- Partition - The act of splitting an object or value down into smaller parts.
- Factor - A factor is a number which exactly divides another whole number.
- Product - A product is the result of two or more numbers multiplied together.
- Half / Halving - One of two equal parts of a whole. To divide into two equal parts
- Check - To evaluate working, ensuring our response provides an answer to the given problem

Stem sentences

a times b can represent a groups of b. It can also represent b groups of a. (or a, b times)

If there are two equal groups, we can use the two times table.
If there are five equal groups, we can use the five times table.
If there are ten equal groups, we can use the ten times table.
If there are _____ equal groups, we can use the _____ times table.

If _____ is a factor, we can use the _____ times table.

When one is a factor, the product is equal to the other factor.

There are two groups of _____
There are _____ two times
This is the same as double _____

_____, two times is the same as double _____

If we need to double/find twice the amount, we can use facts from the two times table.

Doubling a whole number always gives an even number

I know double _____ is _____, so two groups of _____ is _____
If there are two equal groups, we can use doubling facts.

There are _____ altogether; half of _____ is equal to _____

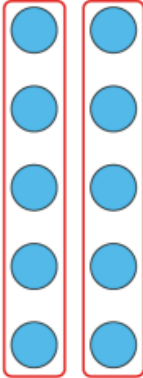
Half of _____ is equal to _____
Double _____ is equal to _____

When one of the factors is two, the other factor is half of the product

I know that double _____ is _____; so half of _____ is _____

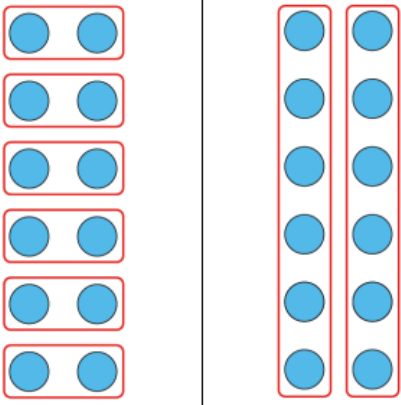
Representations

• 'How many groups of five are there?'



$5 \times 2 = 10$

- 'There are two groups of five.'
- 'Five, two times is equal to ten.'
- 'Five times two is equal to ten.'

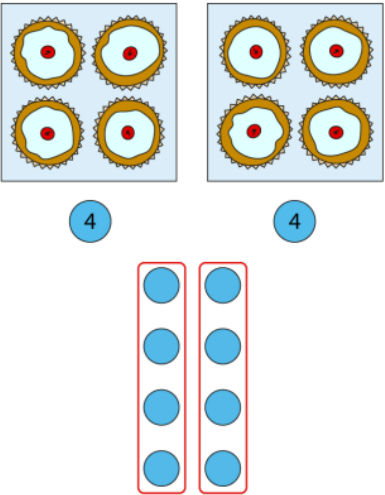


$6 \times 2 = 12$

'Six times two can represent six groups of two.'

'It can also represent two groups of six (or six, two times).'

'There are two boxes of cakes. Each box contains four cakes. How many cakes are there altogether?'



$2 \times 4 = \square$

One interpretation, two equations:



$3 + 3 + 3 + 3 = 12$

- 'There are four groups of three scoops of ice cream.'
 $4 \times 3 = 12$
- 'There are three scoops of ice cream, four times.'
 $3 \times 4 = 12$
- 'The "4" represents the number of ice-cream cones.'
- 'The "3" represents the number of scoops of ice cream in each cone.'

$2 \times 3 = 6$
 $3 \times 2 = 6$



$3 + 3 = 6$

- 'There are two groups of three.'
- 'There are three, two times.'
- 'This is the same as double three.'

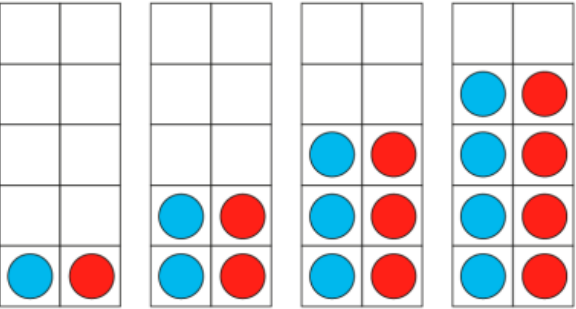
Completing multiplication equations:
'Fill in the missing numbers.'

$2 \times 7 = \square$ $7 \times 2 = \square$

Double 7 is equal to $\square$

7, twice is equal to $\square$

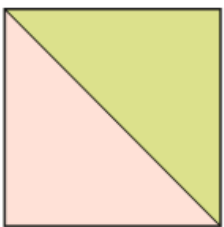
$2 \times 1 = 2$	$2 \times 2 = 4$	$2 \times 3 = 6$	$2 \times 4 = 8$	
$1 \times 2 = 2$	$2 \times 2 = 4$	$3 \times 2 = 6$	$4 \times 2 = 8$	...



$1 + 1 = 2$ $2 + 2 = 4$ $3 + 3 = 6$ $4 + 4 = 8$...

- 'One, two times is the same as double one.'
- 'Two, two times is the same as double two.'
- 'Three, two times is the same as double three.'
- 'Four, two times is the same as double four.'

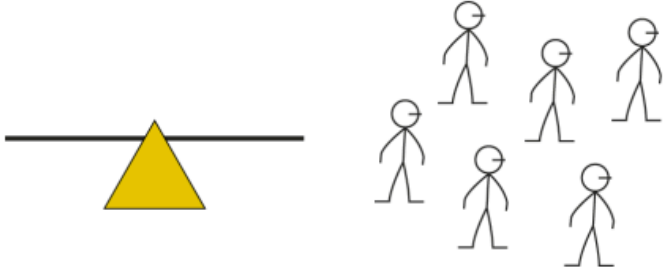
Half of a whole:



- 'The whole is split into two equal parts.'
- 'Each part is one half of the whole.'

Finding half of a number of objects:

- 'There are six stick-children who want to play on the seesaw; half of them should sit on each side. How many is half of six?'



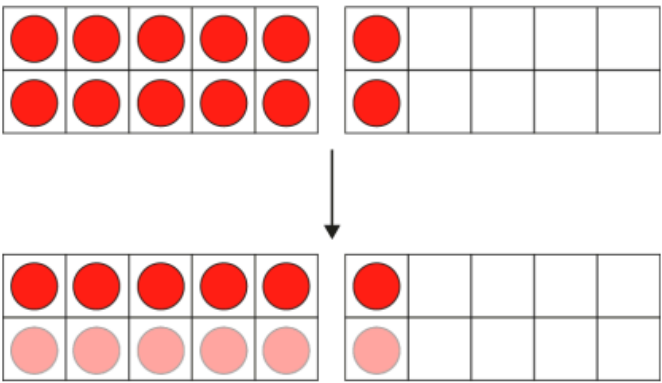
Spotting patterns:						
<table border="1"><tr><td colspan="2">2</td></tr><tr><td>1</td><td>1</td></tr></table> $2 \times 1 = 2$		2		1	1	Half of 2 is equal to 1. Double 1 is equal to 2.
2						
1	1					
<table border="1"><tr><td colspan="2">4</td></tr><tr><td>2</td><td>2</td></tr></table> $2 \times 2 = 4$		4		2	2	Half of 4 is equal to 2. Double 2 is equal to 4.
4						
2	2					

Example 1 – applying known doubling facts:

8	
4	4

'I know that double four is equal to eight; so half of eight is equal to four.'

Example 2 – halving even teen numbers:



half of 12 = half of 10 + half of 2
= 5 + 1
= 6

'Twelve is ten plus two, so half of twelve is equal to half of ten plus half of two.'

Example 3 – halving even two-digit numbers:

half of 26 = half of 20 + half of 6
= 10 + 3
= 13

'Twenty-six is twenty plus six, so half of twenty-six is half of twenty plus half of six.'

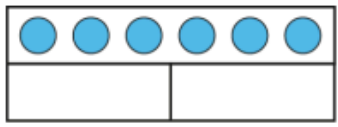
Example 4 – halving odd multiples of ten:

half of 30 = half of 20 + half of 10
= 10 + 5
= 15

'Thirty is twenty plus ten, so half of thirty is half of twenty plus half of ten.'

- 'Two groups of what is equal to six?'
- 'Double what is equal to six?'

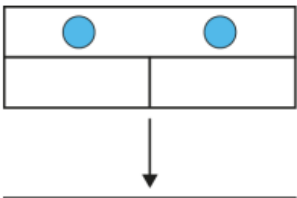
$2 \times \square = 6$ $\square \times 2 = 6$



$2 \times 3 = 6$ $3 \times 2 = 6$

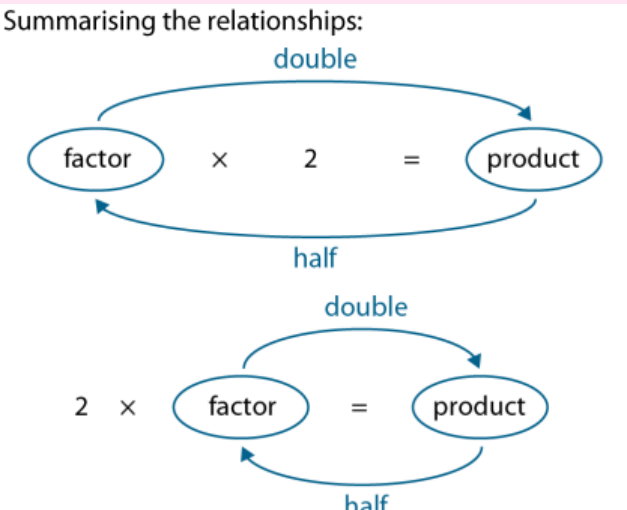


- 'There are six stick-children altogether; half of six is equal to three.'
- 'Three stick-children need to sit on each side of the seesaw.'



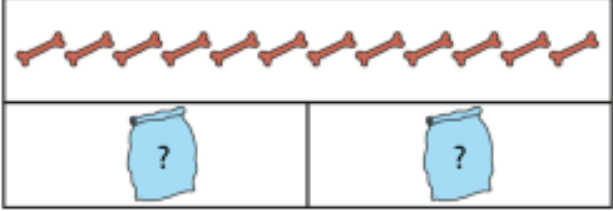
Half of 2 is equal to 1.
Double 1 is equal to 2.

2	
1	1



Example 1 – cardinality visible:

'There are two packets of dog bones. Each packet has the same number of bones. There are twelve bones altogether. How many bones are there in each packet?'



$2 \times \square = 12$ $\square \times 2 = 12$

12	
?	?

- 'One of the factors is two, so the other factor is half of the product.'
- 'Half of the bones are in each packet.'
- 'I know that half of twelve is equal to six.'
- 'So there are six dog bones in each packet.'

Example 2 – cardinality not visible:

'Emily has £20 in total, kept in two money-boxes. Each money-box contains the same amount of money. How much is in each money-box?'



$2 \times \square = 20$ $\square \times 2 = 20$

20	
?	?

- 'One of the factors is two, so the other factor is half of the product.'
- 'Half of the money is in each money-box.'
- 'Half of two tens is equal to one ten.'
- 'So there is ten pounds in each money-box.'