

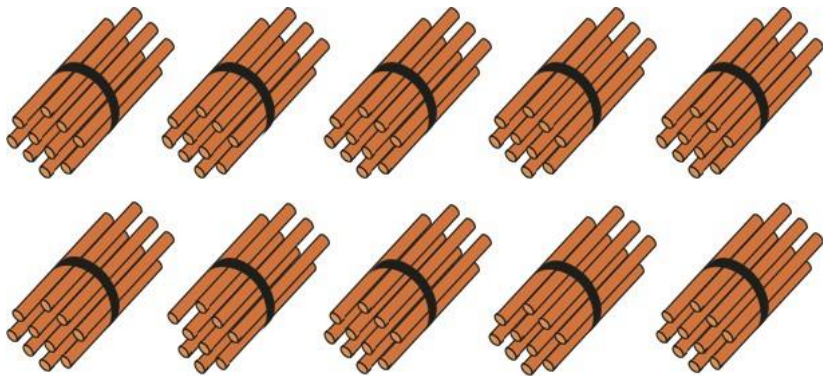
Year 1

Key Mathematical Concepts and representations

Number and Place Value

Year 1

Count forwards and backwards within 100.



Count with straw bundles grouped into 10s.

Eight, nine, ten, eleven, twelve....thirty eight, thirty nine, forty, forty one...

Eight, nine, ten, one-ten-one, one-ten-two, one-ten-three...

Three-tens-eight, three-tens- nine, four tens, four-tens-one...

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	42	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

Count on a hundred square



Count using a number line.

1 2 3 4 5 6 7 8 9 10 11 12...

Count using digits.

1,000	2,000	3,000	4,000	5,000	6,000	7,000	8,000	9,000
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

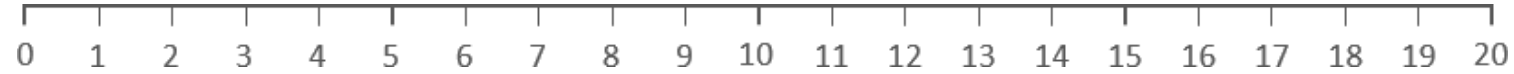
Count using a Gattegno chart

Tap the chart for each number. For two-digit numbers (excluding multiples of 10, tap both numbers e.g. 21 = 20 and 1).

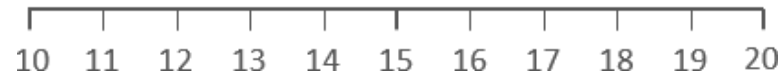
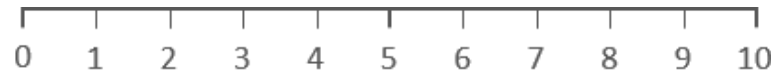
Number and Place Value

Year 1

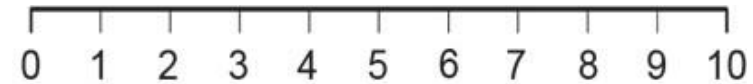
Numbers to 20 in the linear number system.



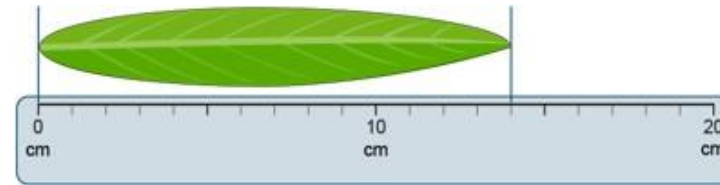
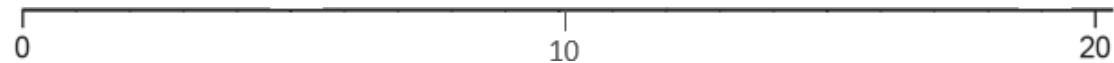
Recognise the position of each number on the number line.



Make connections between 0-10 and 10-20 number lines.



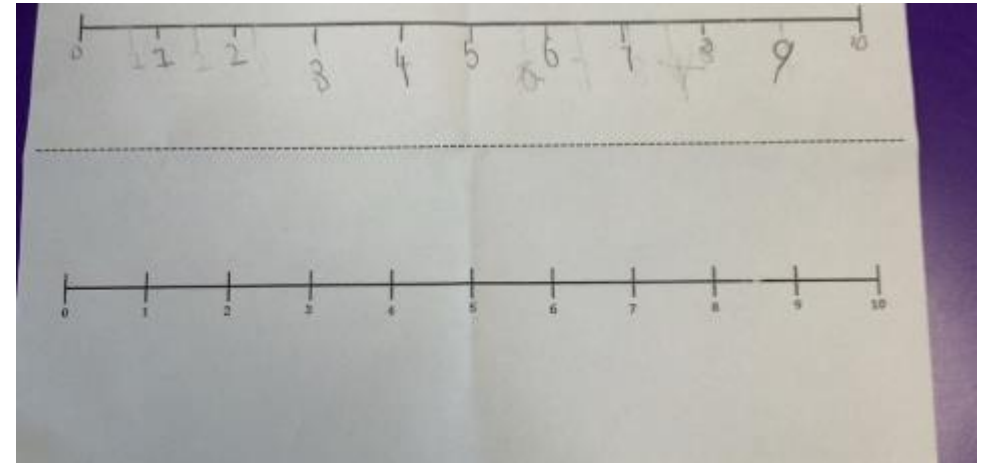
Estimate where numbers sit on the number line.



Make connections to use of measures eg. Ruler to 20

Extend to estimating where numbers sit on the blank number line.

DUO: Number line plotting



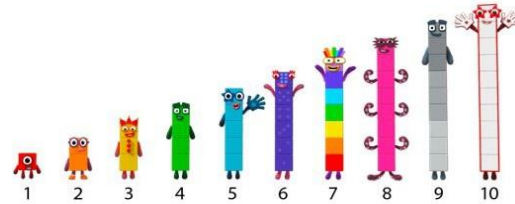
Addition and Subtraction

Year 1

Compose and Partition Numbers to 10 (1)

Vocabulary:

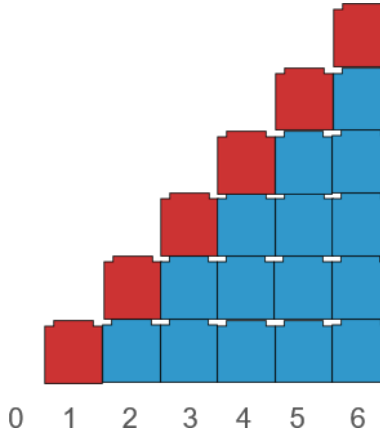
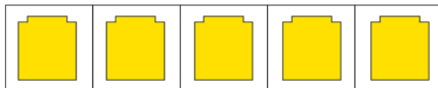
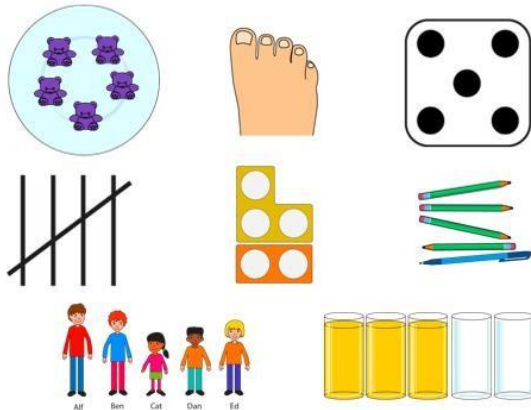
Part Whole One Two Three Four Five Six Seven Eight Nine Ten
Represents Compose Combine Partition Numberblocks Part-Part-Whole
(Cherry) model Tens Frame Fingers Five and-a-bit Systematic Subitise
One more One less



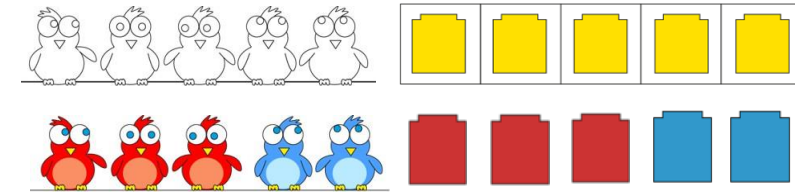
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Understand that numbers to 10 can be represented in many different ways.

Numbers to 5 can be identified without counting (subitising).



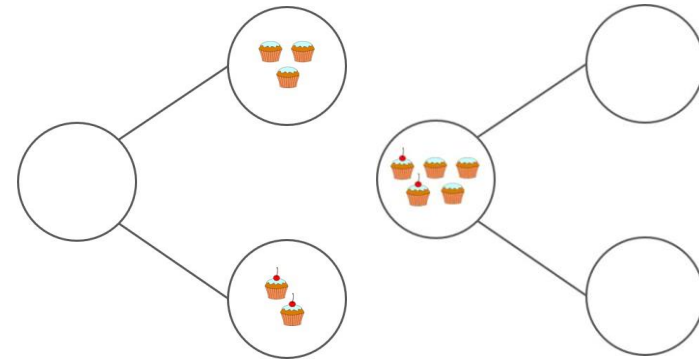
Each number is composed of the previous number and one more.



Each number can be partitioned into two smaller numbers

There are 5 _____. 3 are _____. 2 are _____.

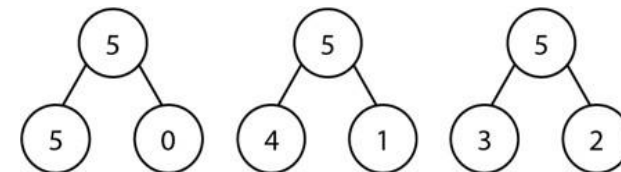
5 is the whole. 3 is a part. 2 is a part.



A number can be partitioned in different ways.

There are 5 _____. 3 are _____. 2 are _____.

5 is the whole. 3 is a part. 2 is a part.



DUO: subitising 5.



Play







Addition and Subtraction

Year 1

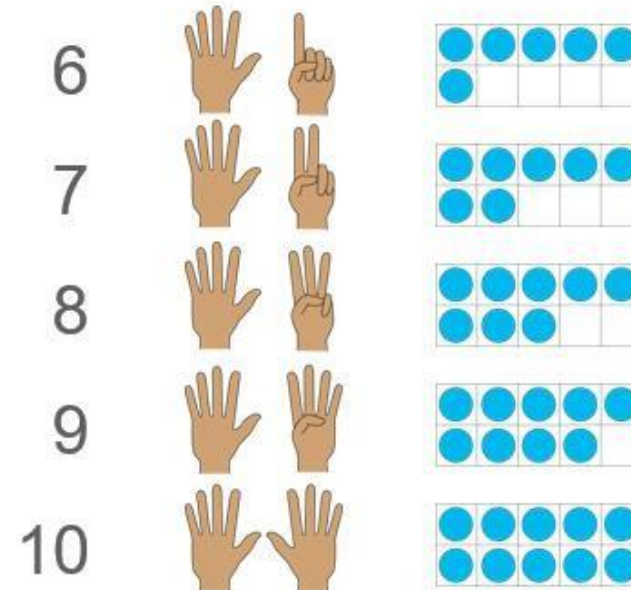
Compose and Partition Numbers to 10 (2)

Vocabulary:

Part Whole One Two Three Four Five Six Seven Eight Nine Ten
Represents Compose Combine Partition Numberblocks Part-Part-Whole
(Cherry) model Tens Frame Fingers Five and-a-bit Systematic Subitise
One more One less

	Blue	Red
	0	5
	1	4
	2	3
	3	2
	4	1
	5	0

A number can be partitioned in different ways systematically.

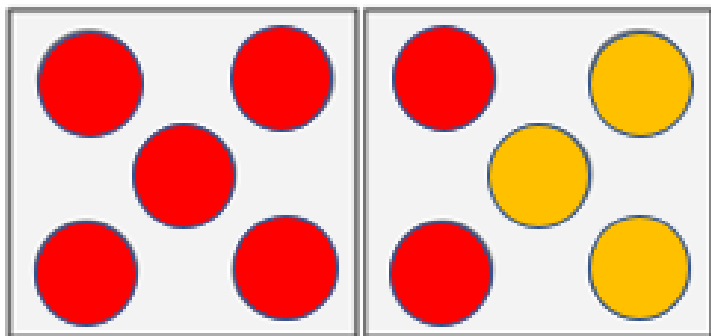
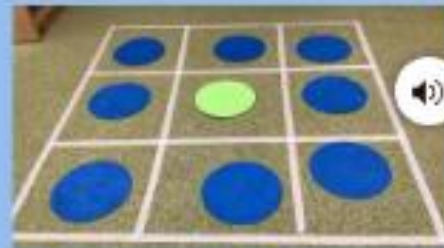


Numbers from 6 – 10 are composed of the '5 and a bit' structure.

DUO: coomposition of 6



DUO: compositions of 9



10 is made of ____ and ____.
____ and ____ make 10.

20 bead Rekenrek



Double ____ is ____;
half of ____ is ____.

Addition and Subtraction

Year 1

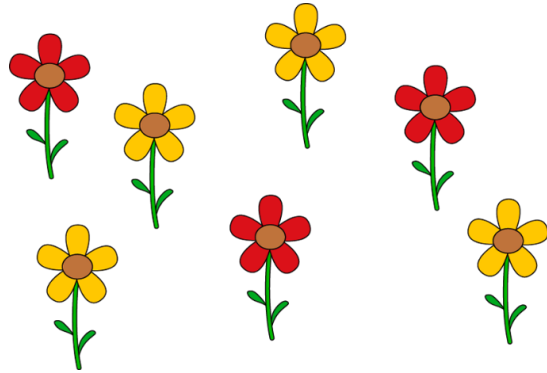
Read, Write and Interpret Additive Equations (1)

Vocabulary:

Part Whole One Two Three Four Five Six Seven Eight Nine Ten
Represents Compose Combine Partition Total Part-Part-Whole (Cherry) model
Tens Frame Fingers Five and-a-bit Systematic Plus + Minus - Equal to =
Addition Subtraction Quantity Increase Decrease First, Then, Now
Expression Equation

Addend + Addend = Sum

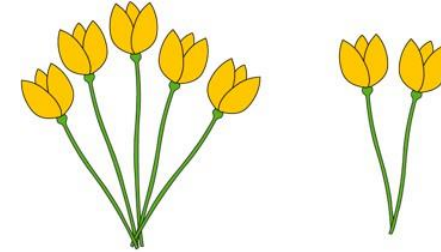
Minuend – Subtrahend = Difference



Identify what each number represents in an expression.

The 4 represents the 4 yellow flowers.

The 3 represents the 3 red flowers.



$$5 + 2 = 7$$

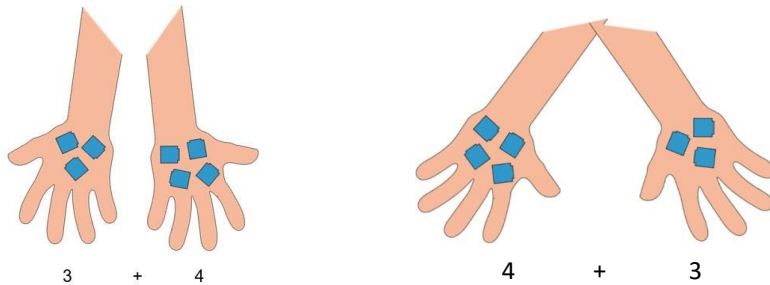
Identify what each number represents in an expression.

We can write 5 plus 2 is equal to 7.

The 5 represents ____.

The 2 represents ____.

The 7 represents the total number of ____.

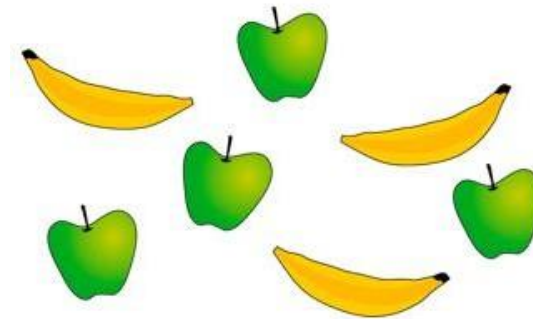


3 + 4

4 + 3

We can write the addends in either order.

(Commutative Law)



$$4 + 3 = 7$$

Addition and Subtraction

Year 1

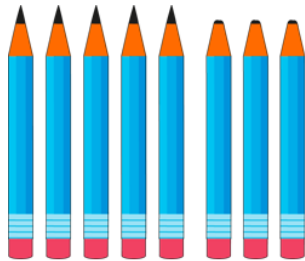
Read, Write and Interpret Additive Equations

Vocabulary:

Part Whole One Two Three Four Five Six Seven Eight Nine
 Ten Represents Compose Combine Partition Total Part-Part-Whole (Cherry)
 model Tens Frame Fingers Five and-a-bit Systematic Plus + Minus -
 Equal to = Addition Subtraction Quantity Increase Decrease First,
 Then, Now Expression Equation

Addend + Addend = Sum
 Difference

Minuend – Subtrahend =



Subtraction can tell us about partitioning.

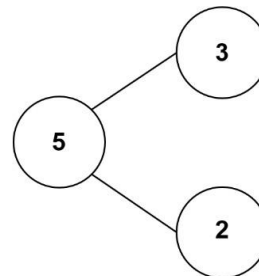
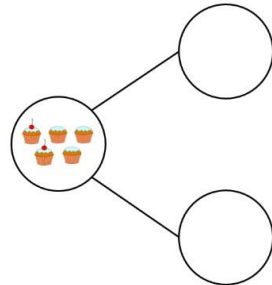
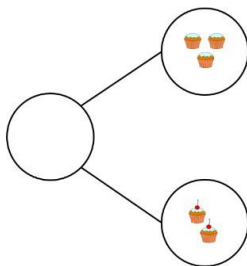
There are 8 _____altogether.

5 _____are _____.

3 _____are _____.

We can write this as 8 minus 5 is equal to 3.

$$8 - 5 = 3$$



Make connections between addition and subtraction using the part-part-whole model.

Addition can tell us about combining objects.

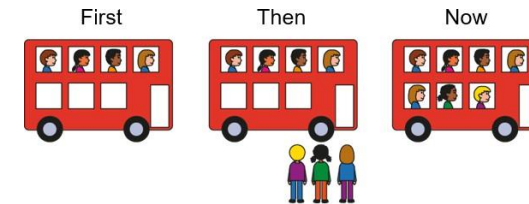
Subtraction can tell us about partitioning objects.

$$2 + 3 = 5$$

$$3 + 2 = 5$$

$$5 - 3 = 2$$

$$5 - 2 = 3$$

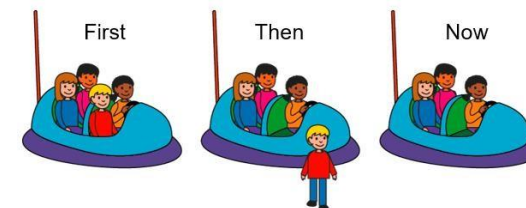


$$\begin{array}{ccc} 4 & + 3 & 7 \\ \hline 4 + 3 = 7 \end{array}$$

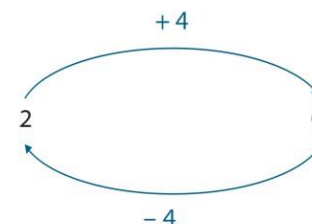
Understand the First, Then, Now structure of addition and subtraction.

Addition can tell us about a quantity increasing.

Subtraction can tell us about a quantity decreasing.

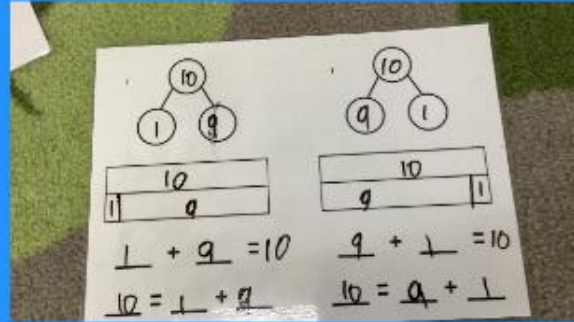


$$\begin{array}{ccc} 4 & - 1 & 3 \\ \hline 4 - 1 = 3 \end{array}$$



Addition and Subtraction undo each other.

DUO: addition



DUO: missing parts



$$6 + ? = 9$$

$$6 + \boxed{3} = 9$$



Addition and Subtraction

Year 1

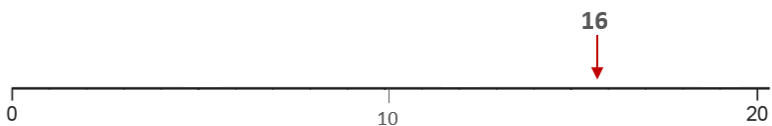
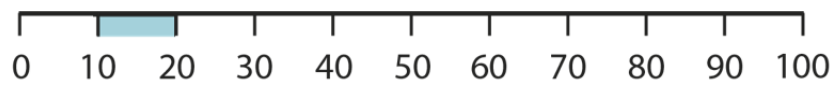
Numbers 0 to 20 (1)

Vocabulary:

'teen' number

10 and a bit numbers

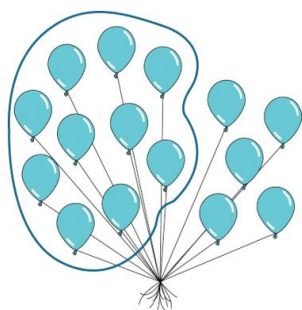
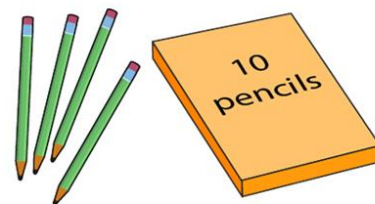
quantity



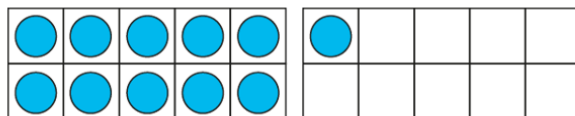
1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

fourteen

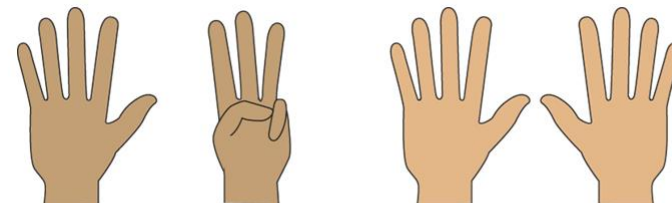
four ten



10s	1s



$$11 = 10 + 1$$



$$8 + 10 = 18$$

Addition and Subtraction

Year 1

Numbers 0 to 20

Vocabulary:

'teen' number

10 and a bit numbers

quantity

DUO: tens and ones

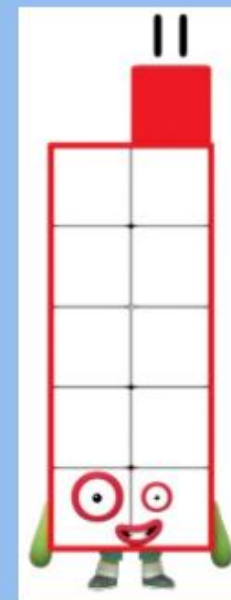
12



DUO: Teen numbers



Play



Addition and Subtraction

Year 1

Unitising and coin recognition

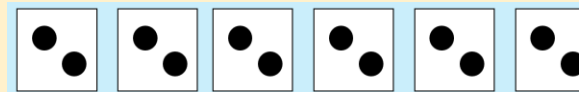
Vocabulary:

Unit of

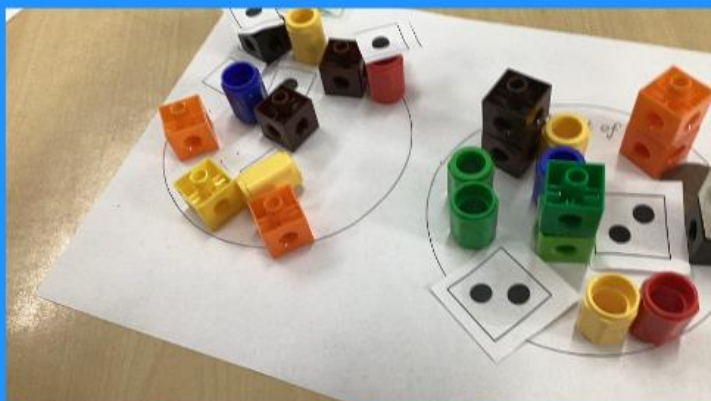
Group token coin pence

I have five units of 2

I have 2, five times



DUO matching units



We have 5 four
times.

Have different objects
with price tags on them.



I can make this amount two different ways

