

# YEAR ONE MATHS

## 2025 / 26

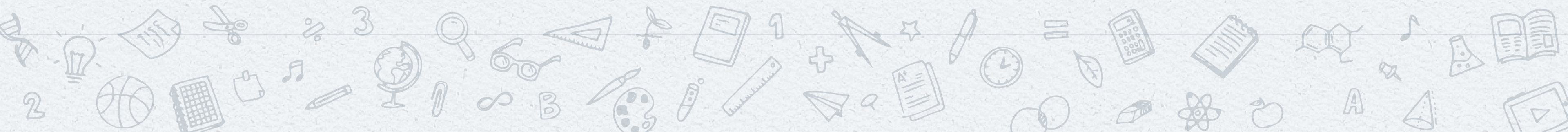


# AIMS OF THE SESSION

- Provide information on how Maths is taught at Honeywell
- Share the key mathematical concepts that your child will learn in Year One
- Suggest ways in which you can support your child at home

# PLANNING AND TEACHING

- National Curriculum for **what** to teach
- National Centre for Excellence in the Teaching of Mathematics for **how** to teach
- *Teaching for Mastery* approach (TfM)
- Work closely with the National Maths Hub on teaching research projects



# TEACHING FOR MASTERY

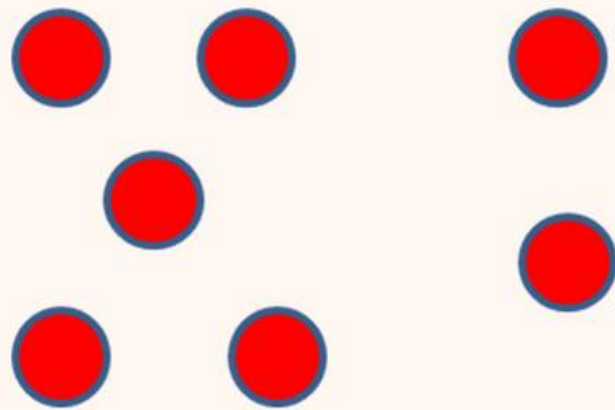
MASTERY APPROACH: ACQUIRING A DEEP, LONG-TERM, SECURE AND ADAPTABLE UNDERSTANDING OF THE SUBJECT.

- Fluency
- Reasoning
- Problem Solving

# MASTERING NUMBER

## Fluency

Automatic recall. Not just knowing but understanding securely enough that it frees up brain space.



## Reasoning

$$5 + 6 = 11$$

Using this fact, how can you work out what  $5 + 7 =$

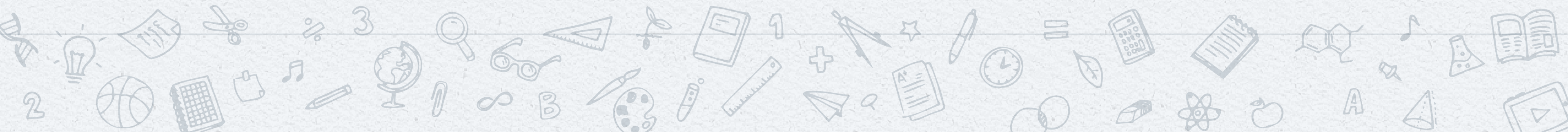
## Problem Solving

Can you solve this Fruit Math equation?

$$\begin{aligned} \text{Apple} &= 7 \\ \text{Grapes} &= 5 + \text{Apple} \\ \text{Apple} &= 1 + \text{Banana} \\ \text{Apple} + \text{Grapes} + \text{Banana} &= ? \end{aligned}$$

# AREAS OF THE NATIONAL CURRICULUM

- Number: Number and Place Value
- Number: Addition and Subtraction
- Number: Multiplication and Addition
- Number: Fractions
- *Measurement*
- *Geometry: Properties of Shape*
- *Geometry: Position and Direction*



# NUMBER: NUMBER AND PLACE VALUE

Pupils should be taught to: □

- count to and across 100, **forwards and backwards**, beginning with 0 or 1, or from any given number □
- count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens\*

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

Can you work out the missing numbers in each pattern?

19		21	22		
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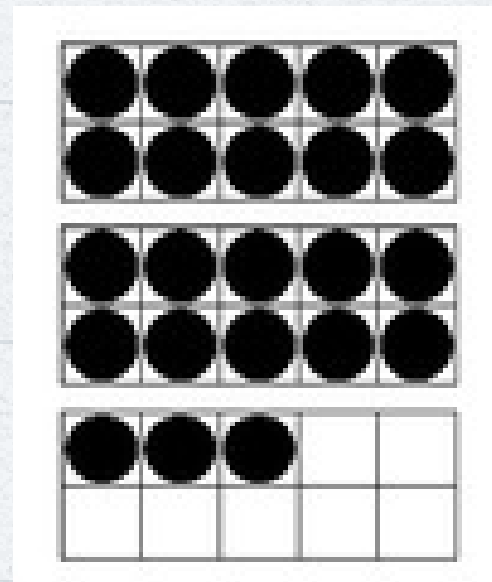
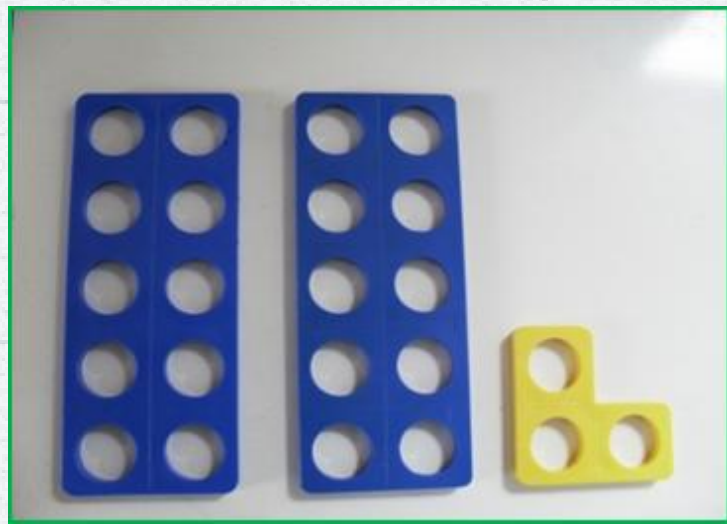
5	10				30
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	4	6			12
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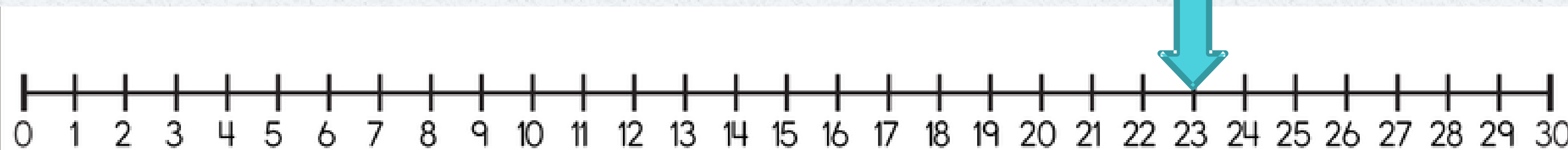
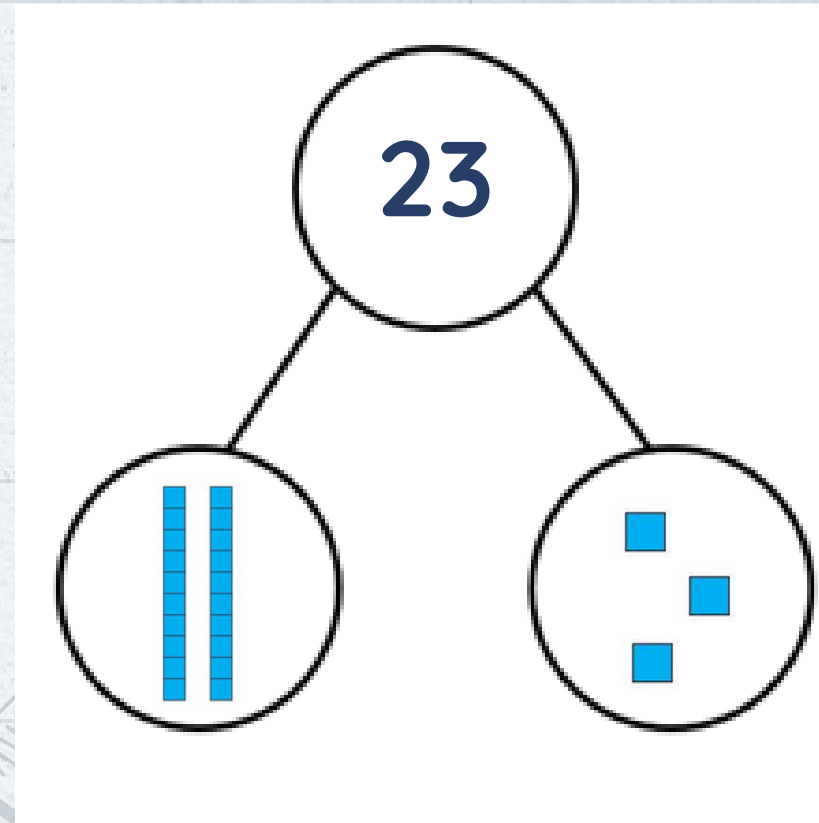
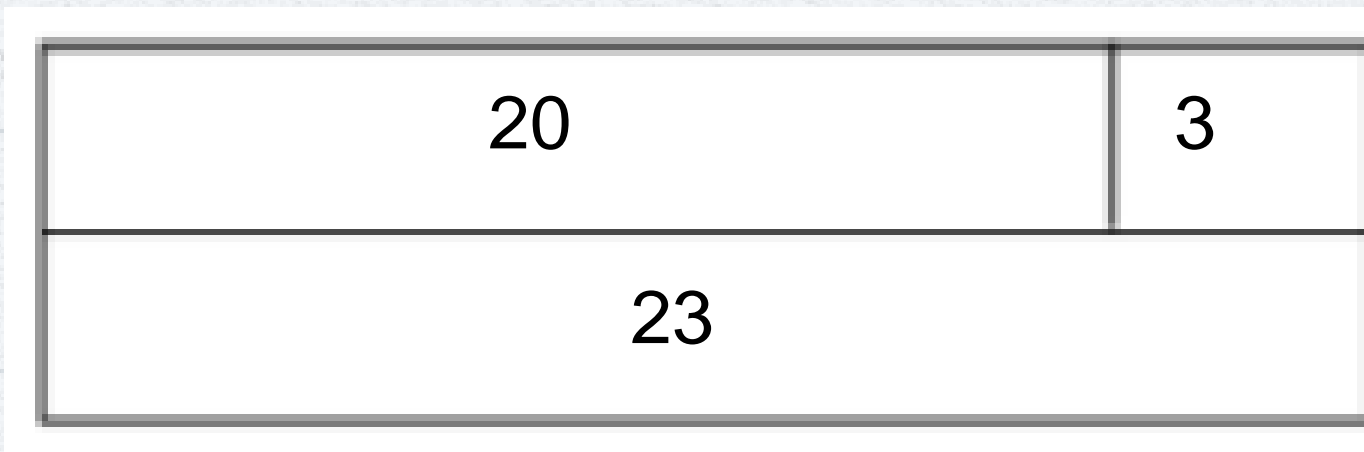
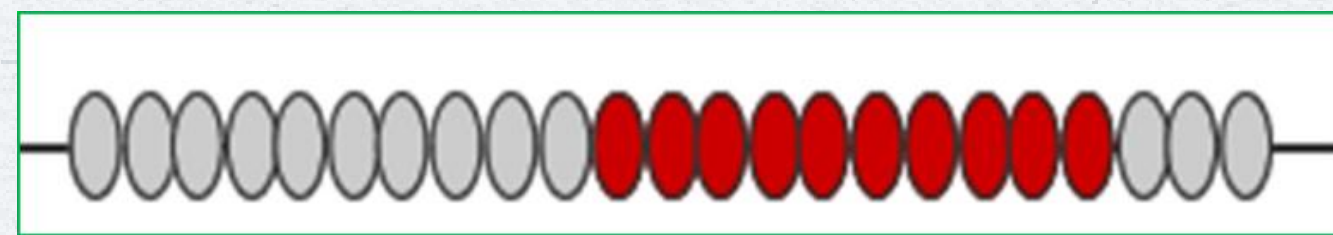
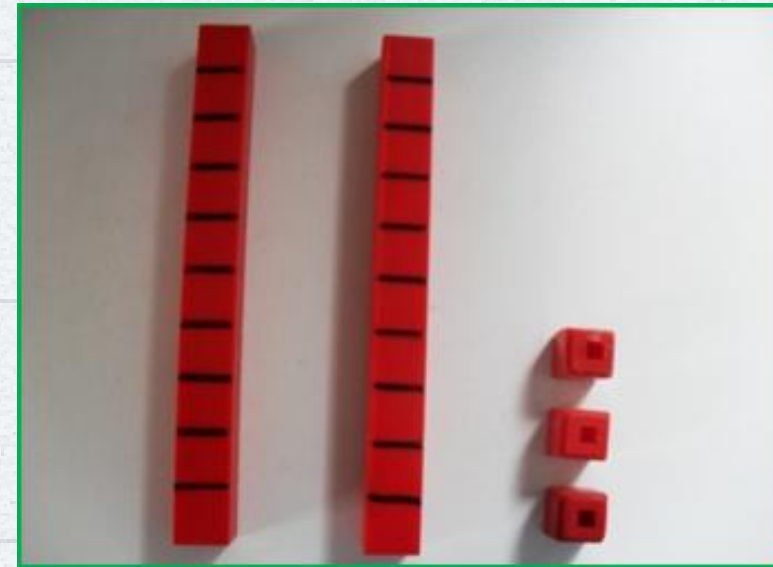
			40	50	60
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# NUMBER: NUMBER AND PLACE VALUE

identify and **represent numbers** using objects and pictorial representations including the number line



23



# NUMBER: NUMBER AND PLACE VALUE

## Mastery with Greater Depth



Use two of the digit cards to make a number greater than 50.

Use two of the digit cards to make a number less than 30.

Use two of the digit cards to make an odd/even number.

Use two of the digit cards to make a number between 47 and 59.

What is the smallest 2-digit number you can make?

What is the largest 2-digit number you can make?

Explain your reasoning.

# NUMBER: NUMBER AND PLACE VALUE AT HOME



- Play games that involve counting on and back from any given number, e.g. Snakes and Ladders, number track games, etc
- Practise counting in 2s, 5s and 10s (there are lots of fun songs online that can support this).
- Ask lots of questions about numbers, e.g.
  - How many tens are in that bus number? How many ones?
  - Can you write down the ages of everyone in the house? Can you order the numbers you have?
  - Let's read the door numbers on our street, if they built one more house what would it's number be?
- Play mental maths games like, 'can you guess my magic number?'
  - My number has two tens
  - My number has 5 ones
  - My number is 1 less than 26
  - If you count in 5s you will say my number
  - What is my number?

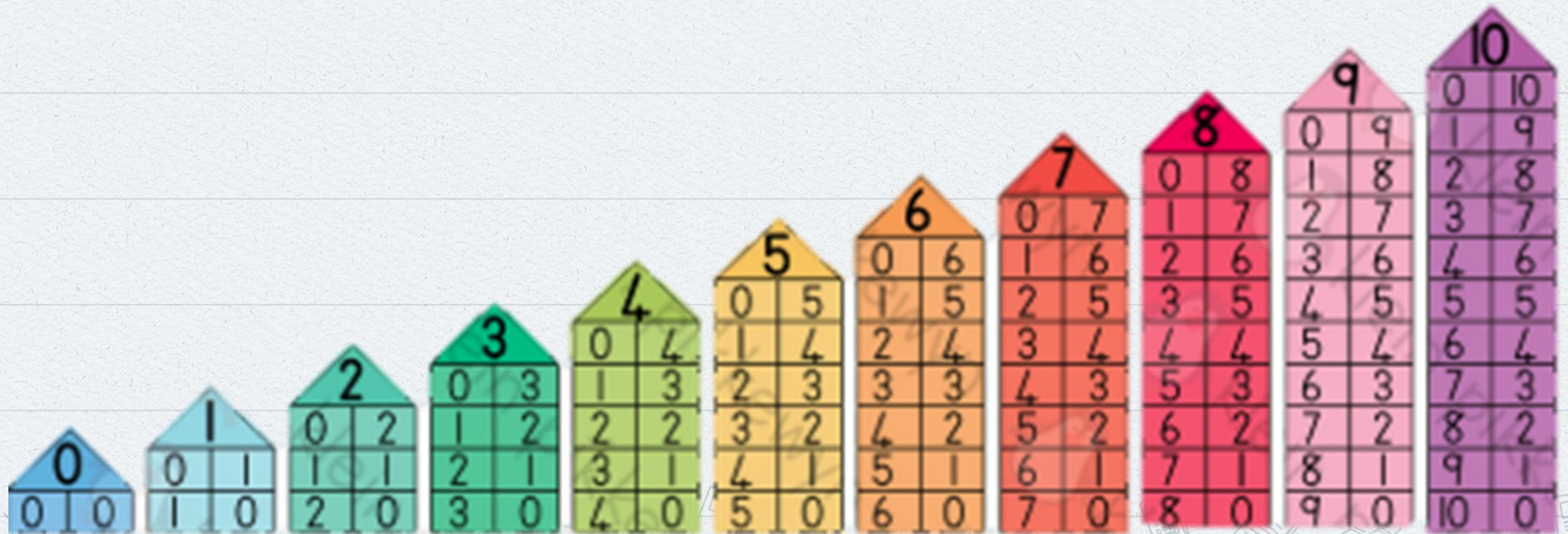




# NUMBER: ADDITION AND SUBTRACTION

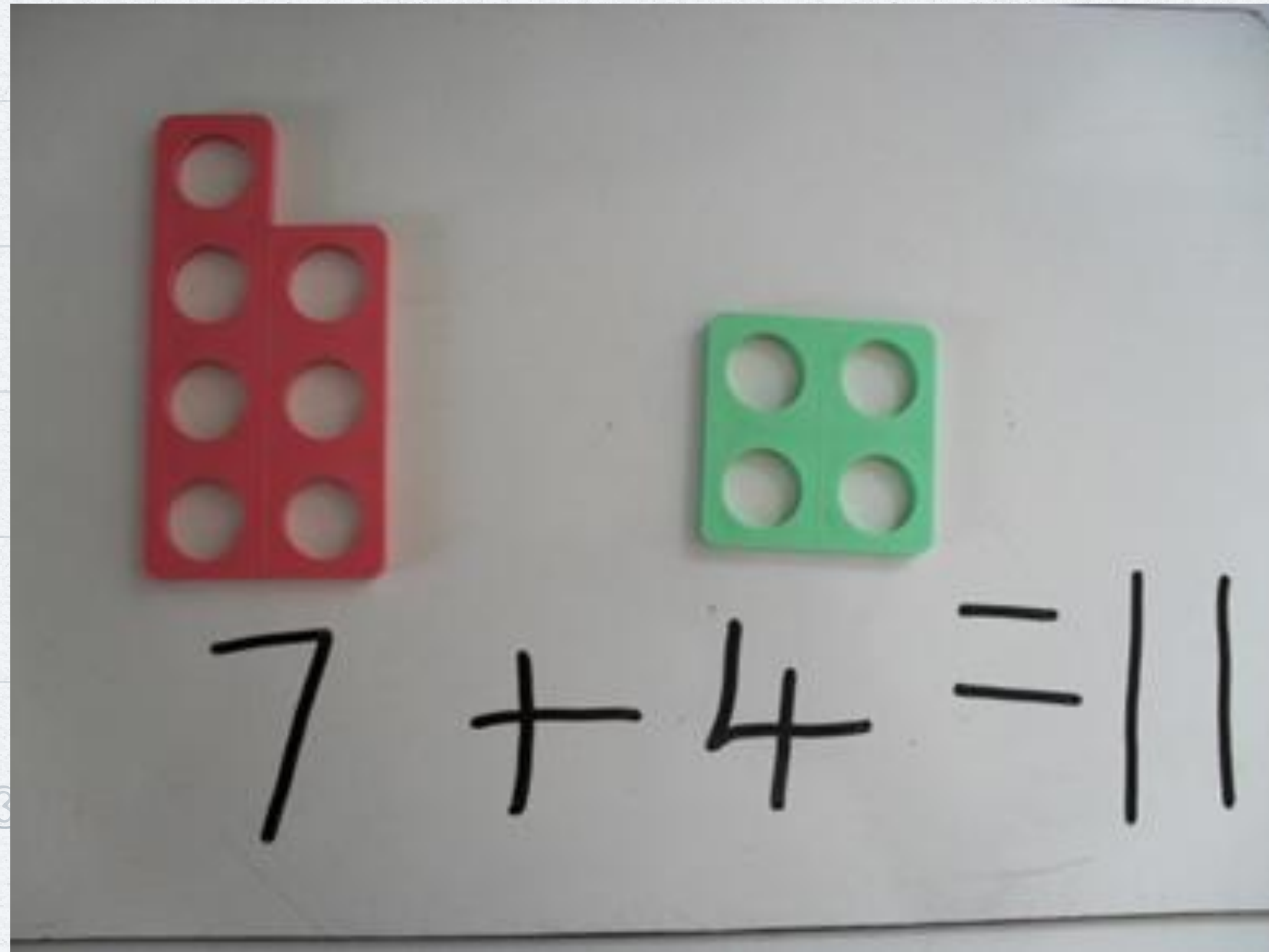
Pupils should be taught to: □ □

- represent and use **number bonds** and related subtraction facts within 20
- add and subtract one-digit and two-digit numbers to 20, including zero



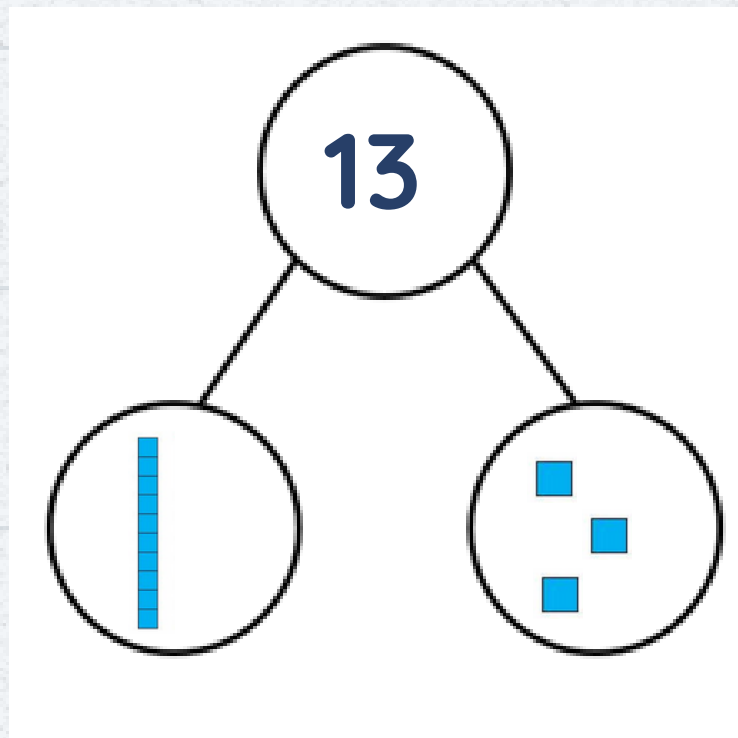
# NUMBER: ADDITION AND SUBTRACTION

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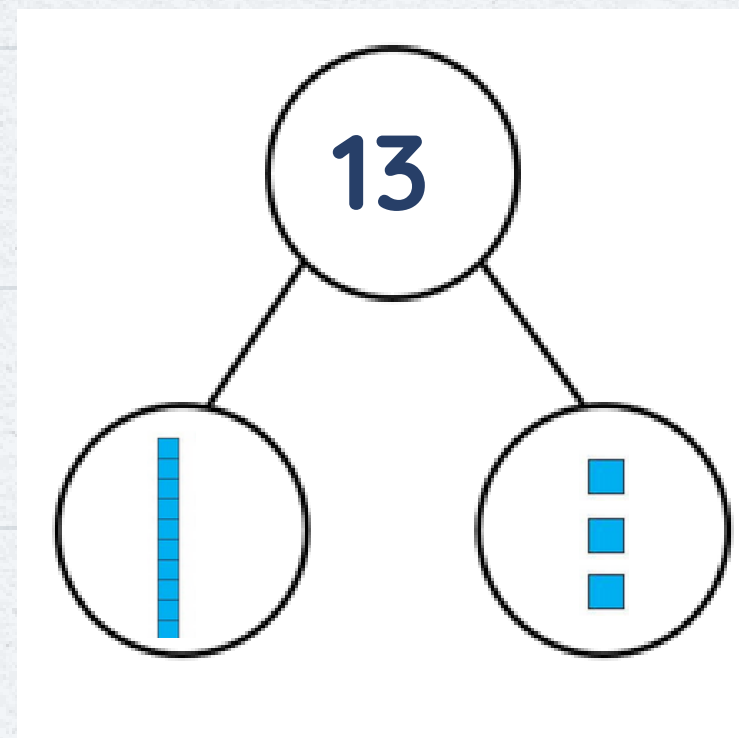


# NUMBER: ADDITION AND SUBTRACTION

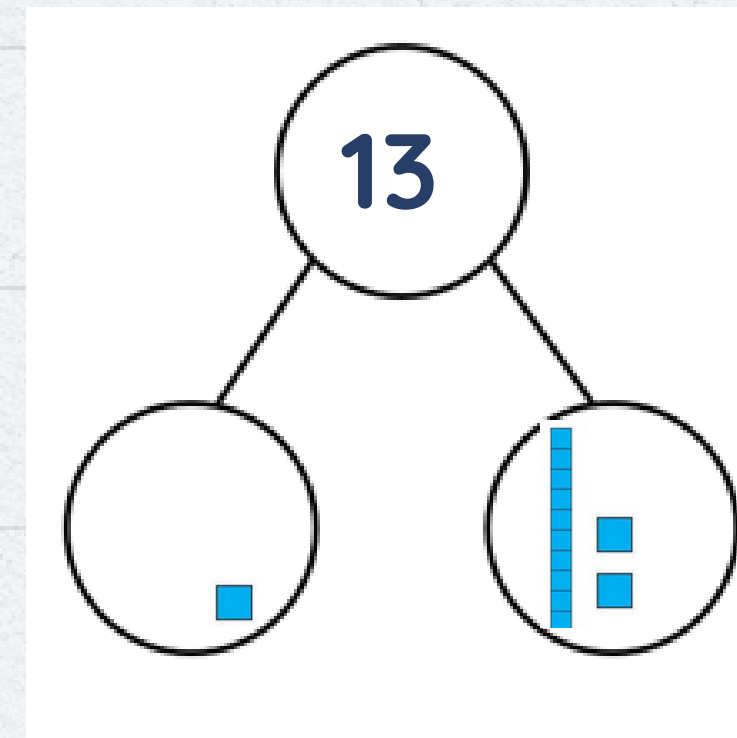
- add and subtract one-digit and two-digit numbers to 20, including zero



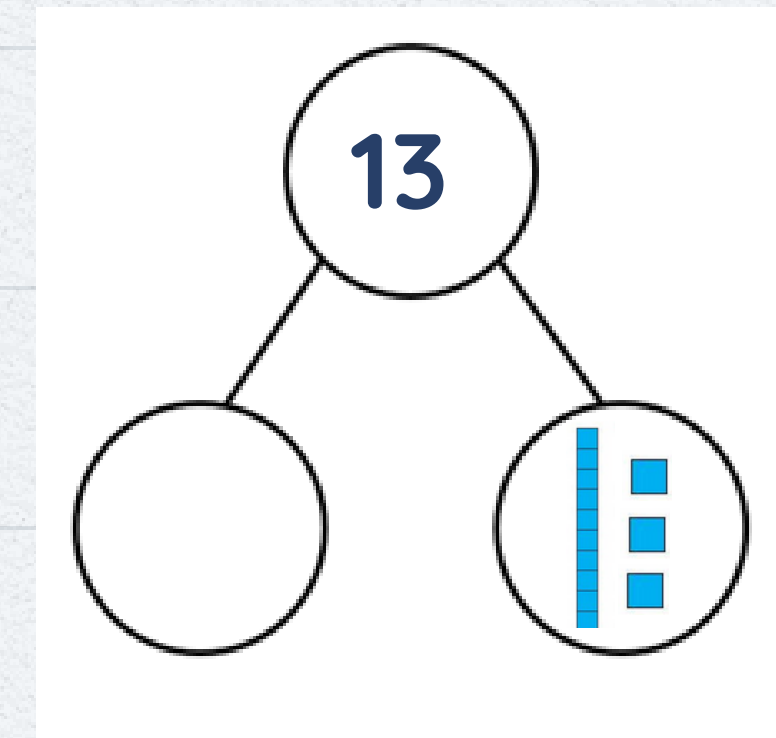
$$10 + 3 = 13$$
$$3 + 10 = 13$$
$$13 = 10 + 3$$
$$13 = 3 + 10$$
$$13 - 3 = 10$$
$$13 - 10 = 3$$



$$13 = 10 + 3$$



$$13 = 1 + 12$$



$$13 = 0 + 13$$

# NUMBER: ADDITION AND SUBTRACTION

solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as  $7 = \square - 9$

I'm thinking of a number. I've subtracted 5 and the answer is 7. What number was I thinking of? Explain how you know.

I'm thinking of a number. I've added 8 and the answer is 19. What number was I thinking of? Explain how you know.

I know that 7 and 3 is 10. How can I find  $8 + 3$ ? How could you work it out?

Show children a price list with items costing up to 20p.

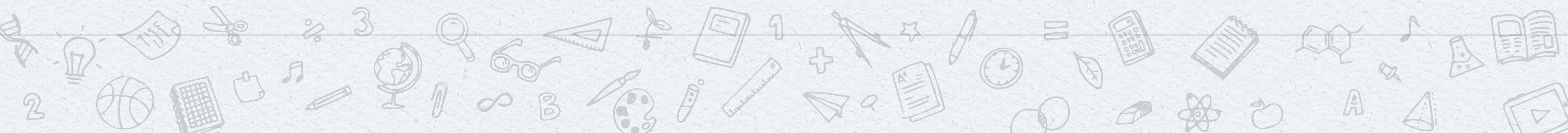
I have 20p to spend. If I spend 20p exactly, which two items could I buy?  
And another two, and another two.

If I bought one of the items how much change would I have? And another one,  
and another one.

# NUMBER: ADDITION AND SUBTRACTION AT HOME



- Play mental maths games like ‘number bond tennis’ to help your child memorise key number facts.
- Encourage them to practise the number bond songs and chants we learn at school, e.g. Farmer Pete’s Sheep (most are available online).
- Read, write and complete addition and subtraction sums using practical apparatus (anything you can count with) at home.
- Practise calculations that involve counting on or counting back, e.g.  $9 + 6 =$ , Children put the 9 in their head and count on with their fingers to find the total.
- Have a go at making a ‘number stories’ together.
- Encourage children to solve everyday problems that involve addition and subtraction. Tom had 12 sweets. His dad gave him 7 more. How many sweets did he have?



# NUMBER: MULTIPLICATION AND DIVISION

Pupils should be taught to: ▣

- solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher



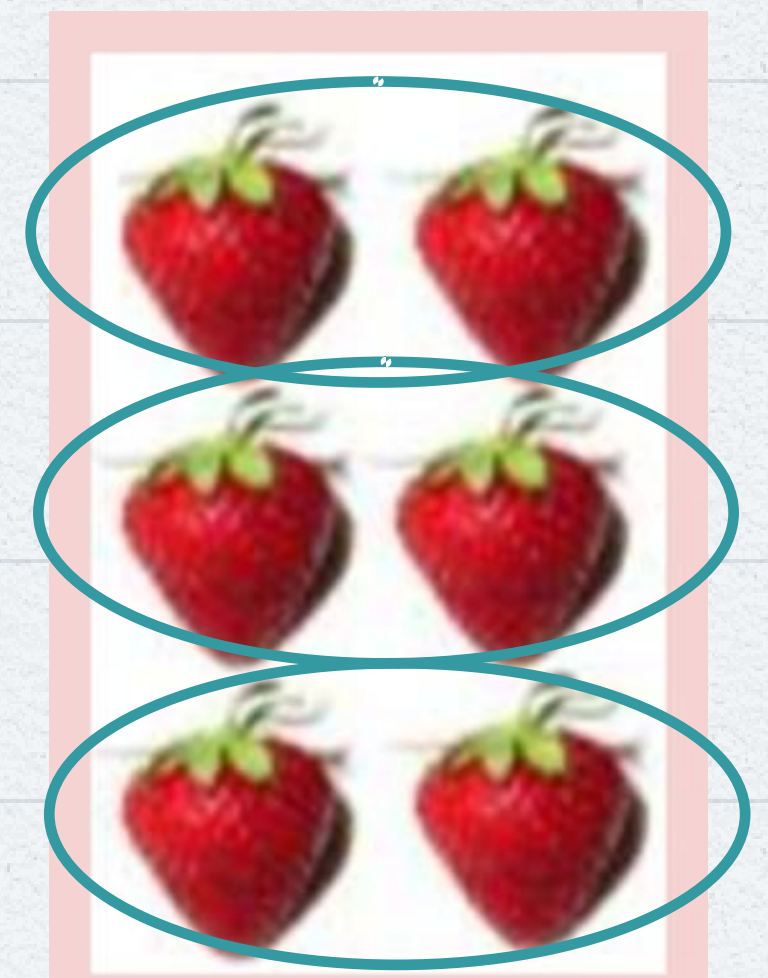
2 groups of 5  
 $2 \times 5$

There are 6 pairs of socks,  
how many altogether?

$2 + 2 + 2 + 2 + 2 + 2 = 12$   
 $6 \times 2 = 12$



2 groups of 3  
 $2 \times 3$



3 groups of 2  
 $3 \times 2$



# NUMBER: MULTIPLICATION AND DIVISION

Pupils should be taught to:

- solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher

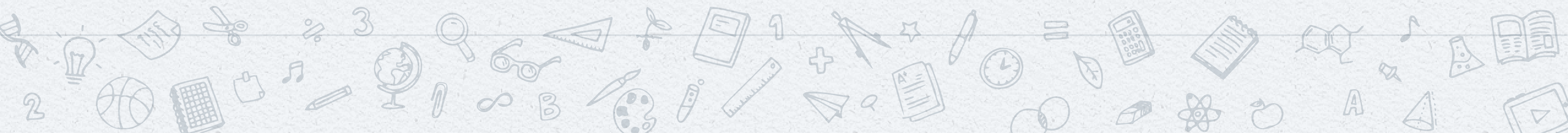
## Mastery

Ali buys 3 bags of apples. Each bag has 4 apples in it.  
How many apples does he buy?

## Mastery with Greater Depth

How else could 20 sweets be put into bags so that every bag had the same number of sweets?

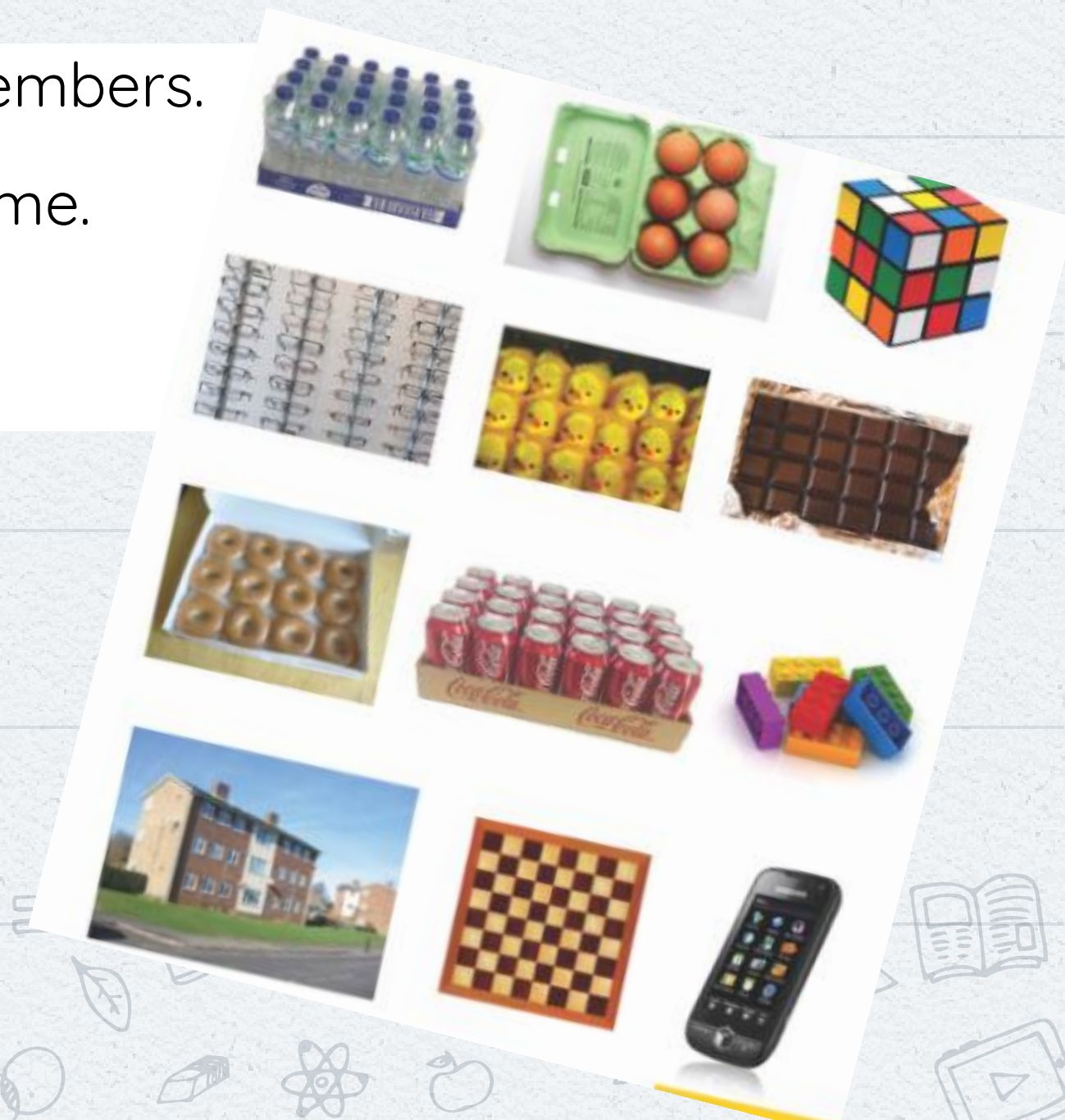
How many bags would be packed each time?



# NUMBER: MULTIPLICATION AND DIVISION AT HOME

Pupils should be taught to: ▣

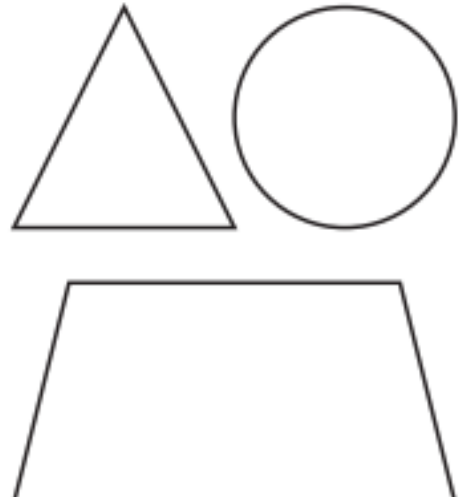
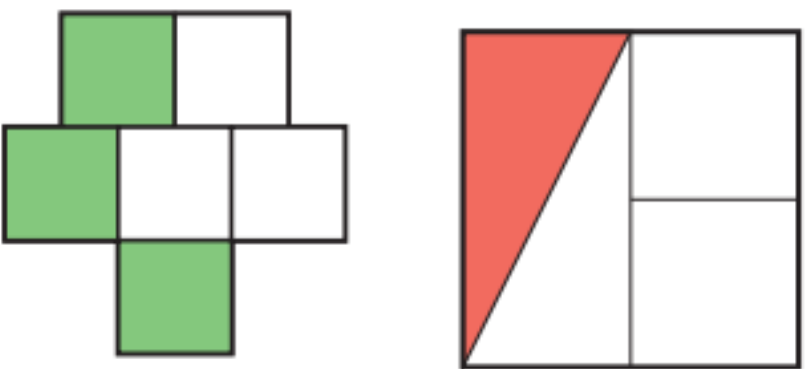
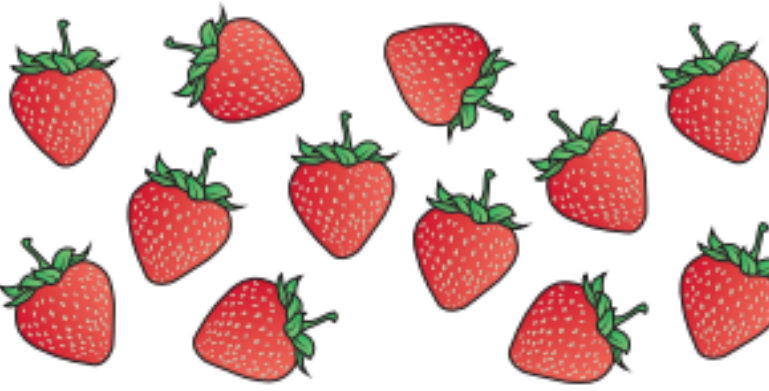

- solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher
- Ask your child to share fruit/sweets out equally between family members.
- Look for arrays that you can count in 2s, 5s and 10s around the home.
- Count 2 pence, 5 pence and 10 pence coins to find totals.



# NUMBER: FRACTIONS

Pupils should be taught to: □

- recognise, find & name a half as one of two equal parts of an object, shape or quantity
- recognise, find & name a quarter as one of four equal parts of an object, shape or quantity.

Mastery	Mastery with Greater Depth
<p>Colour half of each whole shape:</p> 	<p>What fraction of the whole shape is shaded?</p> <p>Explain your reasoning.</p> 
<p>Circle half of this group of strawberries.</p> 	<p>What is half of this amount?</p> 

# RESOURCES FOR HOME / GENERAL

1 minute Maths App- White Rose

<https://nrich.maths.org/teachers/primary>



