Tonight we will discuss...

- The Primary Curriculum
- What does a maths lesson look like?
- How can I help my child at home?

All of tonight's materials are available on our website under :

'Key information' → 'Curriculum' → 'Maths'

Our curriculum

Fractions

Geometry - shape, space

Number and place value

Addition and Subtraction

Statistics

Geometry-position,direction

Multiplication and division

Measurement

Year group coverage

Coverage of skills Reception - Year 6

The Lanes PRIMARY SCHOOL

Year 1

	I can	✓	Date
Number and Place Value	Count forwards in 1s, 2s, 5s and 10s up to 100 starting at any number		
	Count backwards in 1s, 2s, 5s and 10s up to 100 from any number		
	Read and write numbers from 1 to 20 in digits and words		
	Count in multiples of twos, fives and tens		
	Say a number which is one more than any given number up to 100		
	Say a number which is one less than any given number up to 100		
	Make numbers using objects and number lines		
	Use the language of: equal to, more than, less than (fewer), most, least		
	Count, read and write numbers to 100		
+ and -	Understand the words add, total, sum and find the difference		
	Add 2 single digits up to 20		
	Add a single digit number to a 2-digit number up to 20		
	Add 3 single digits up to 20		
	Subtract a single digit from a 2-digit number up to 20		
	Answer addition number bonds to 20		
	Answer subtraction number bonds to 20		
	Solve one-step problems that involve addition up to 100 using apparatus		
	Solve missing number problems that involve addition using apparatus		
	Solve one-step problems that involve subtraction using apparatus		
	Solve missing number problems that involve subtraction using apparatus		

	I can	✓	Date
x and ÷	Solve one-step times table and division problems up to 20 using objects, graphs, charts and arrays with my teacher's help		
	Understand the x and ÷ sign		
	Tell you what halving and doubling are		
Fractions	Tell you what happens if you add two equal halves of a shape together		
	Tell you what happens if you add four equal quarters of a shape together		
Measurement and Geometry	Measure and compare lengths and heights and write my results in centimetres and metres		
	Measure and compare mass and weights and write my results in grams and kilograms		
	Measure and compare capacity and volume and write my results in millilitres and litres		
	Measure how long things take and write my results in minutes, seconds and hours		
	Recognise the value of different coins and notes		
	Sequence events in time order using correct language		
	Tell you the difference between days, months and years in the date		
	Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times		
	Identify squares, rectangles, circles and triangles		
	Identify cuboids, cubes, pyramids and spheres		
	Describe things which are either top, bottom, middle, next to and directions		
	Describe things which have made half, quarter and three-quarter turns		

Mastery and conceptual understanding

Fluency → Reasoning → Problem solving

3 + 2 = 5

3 + 2 = 5

2 + 3 = 5

5 - 3 = 2

5 - 2 = 3

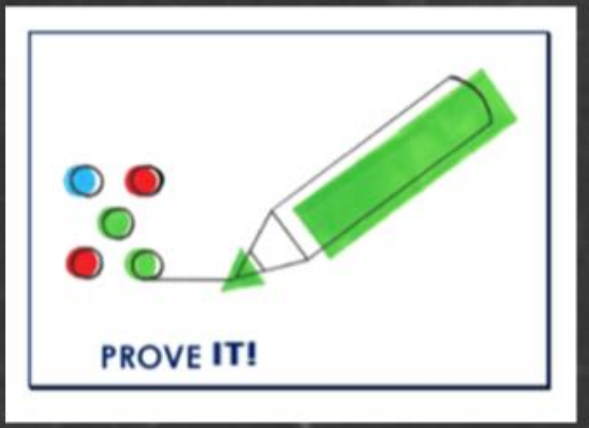
Sophie has 5 friends coming for tea.

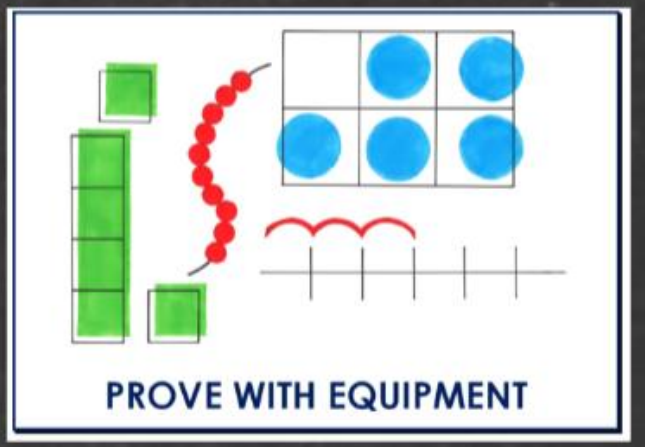
Does she have enough sausages?

How many more will she need?

Students with conceptual understanding know more than isolated facts and methods.
They understand why a mathematical idea is important and the kinds of contexts in which is it useful.

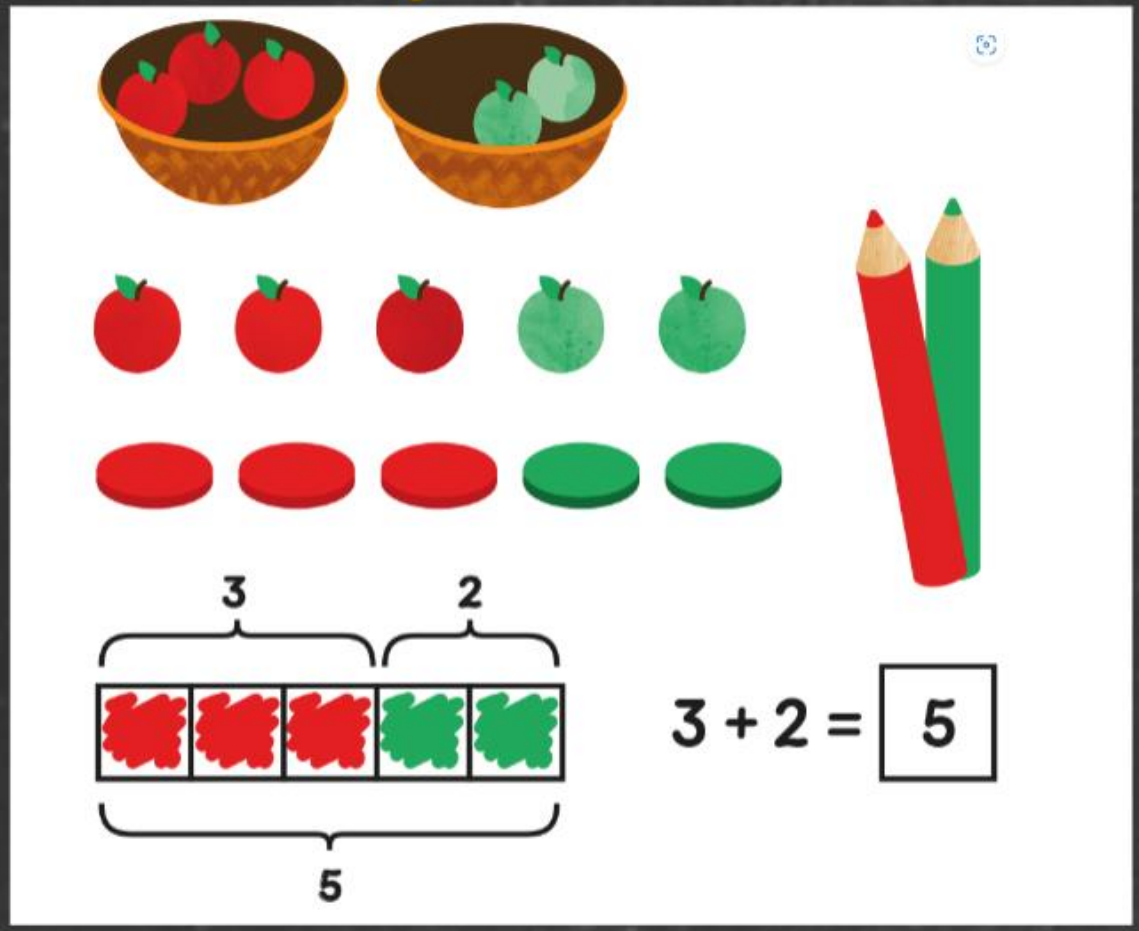
Mastery prompts





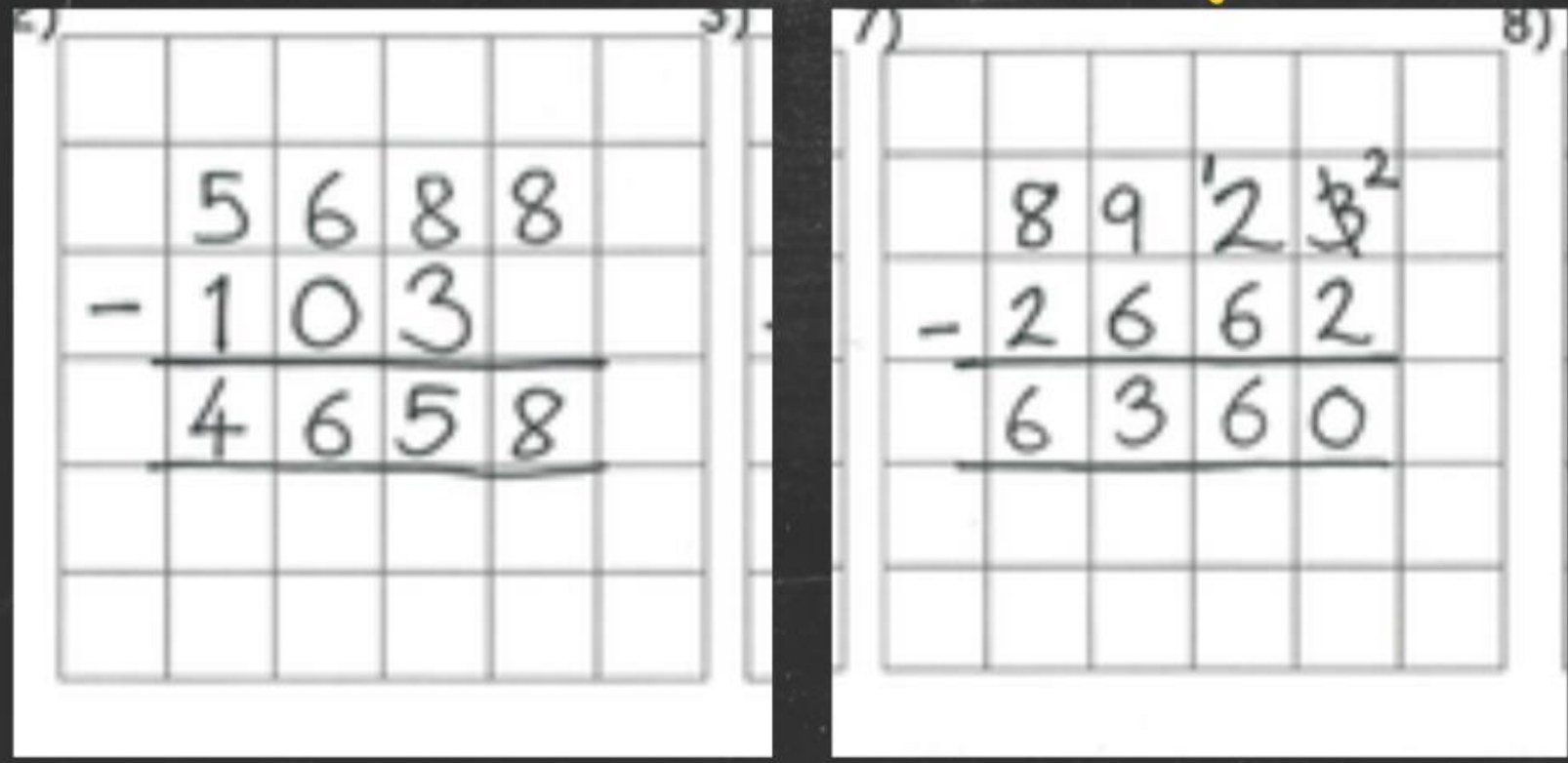
Maths mastery is a teaching and learning approach that aims for pupils to develop deep understanding of maths rather than being able to memorise key procedures or resort to rote learning.

Concrete , pictorial , abstract



The CPA approach builds on children's existing knowledge by introducing abstract concepts in a concrete and tangible way. It involves moving from concrete materials, to pictorial representations, to abstract symbols and problems.

Common misconceptions

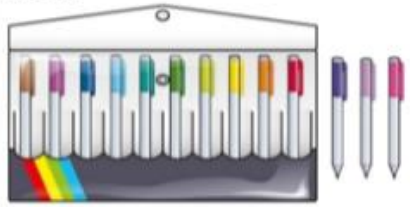


We teach a mastery curriculum to address these errors in understanding

Year 1

Concrete

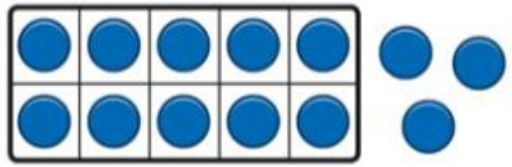
Understanding teen numbers as a complete 10 and some more
Complete a group of 10 objects and count more.



13 is 10 and 3 more.

Pictorial

Understanding teen numbers as a complete 10 and some more
Use a ten frame to support understanding of a complete 10 for teen numbers.



13 is 10 and 3 more.

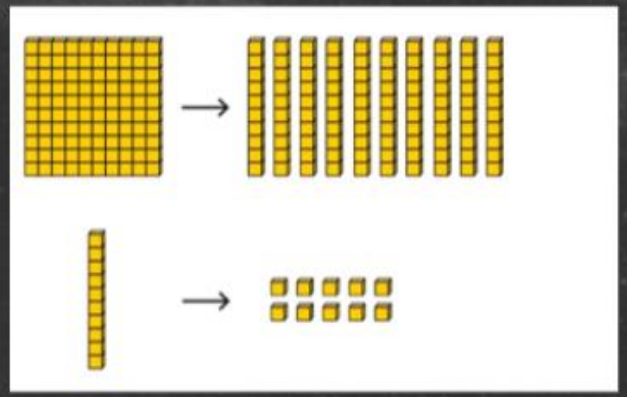
Abstract

Understanding teen numbers as a complete 10 and some more.

1 ten and 3 ones equal 13.
10 + 3 = 13

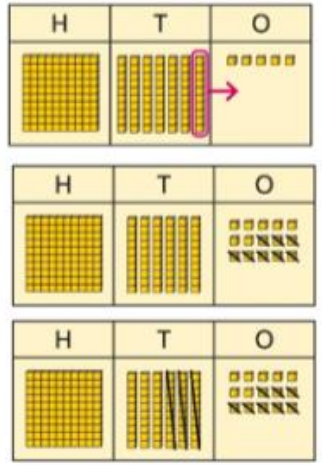
Year 4

Concrete



Pictorial

175 − 38 = ?
I need to subtract 8 ones, so I will exchange a ten for 10 ones.



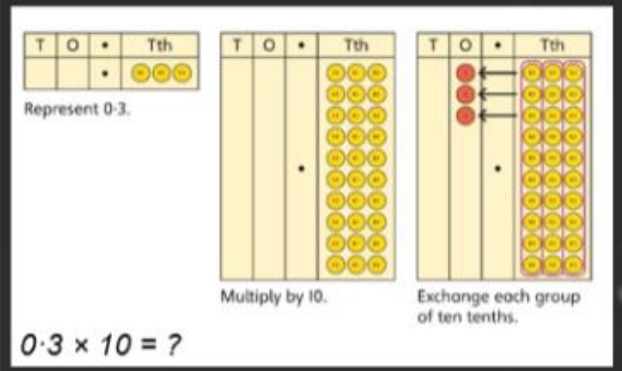
Abstract

H	T	O
1	~~7~~ 6	15
−	3	8
1	3	7

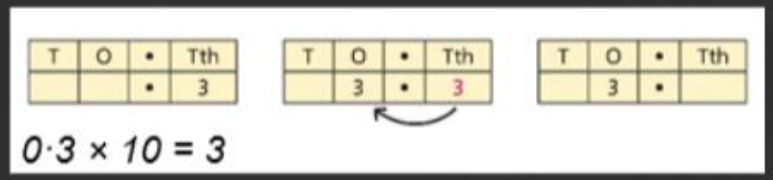
175 − 38 = 137

Year 6

Concrete



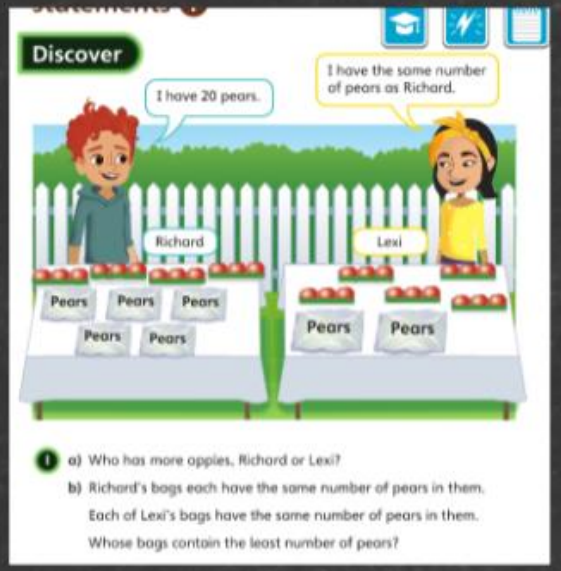
Pictorial

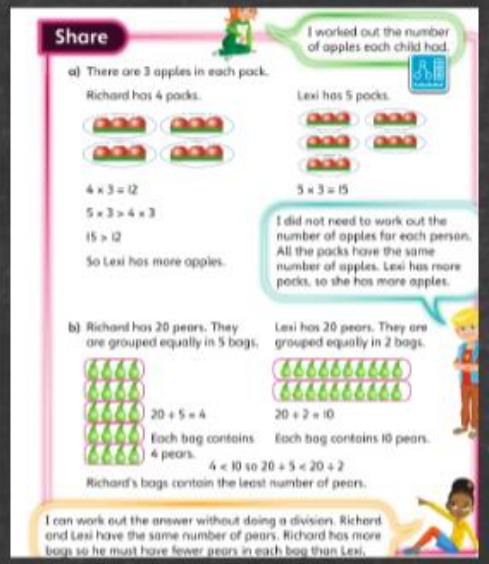


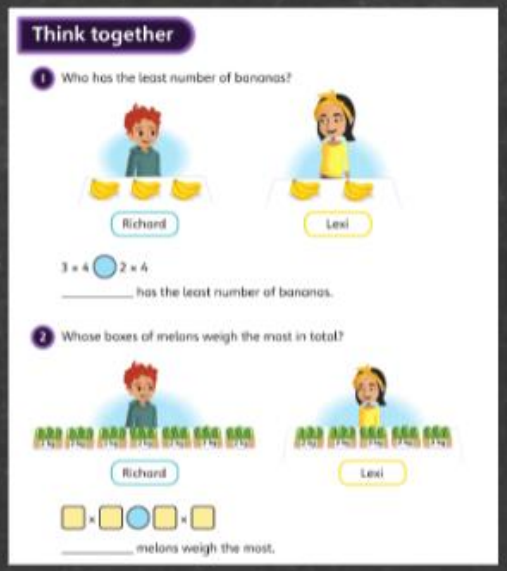
Abstract

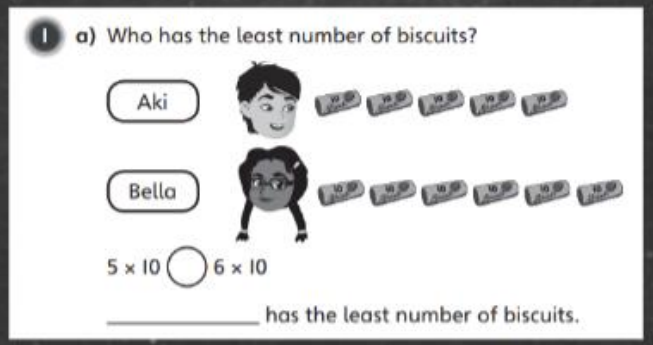
$$0{\cdot}3 \times 10 = 3$$

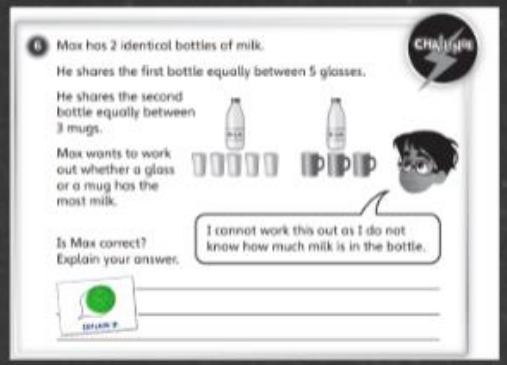
What does a lesson look like?





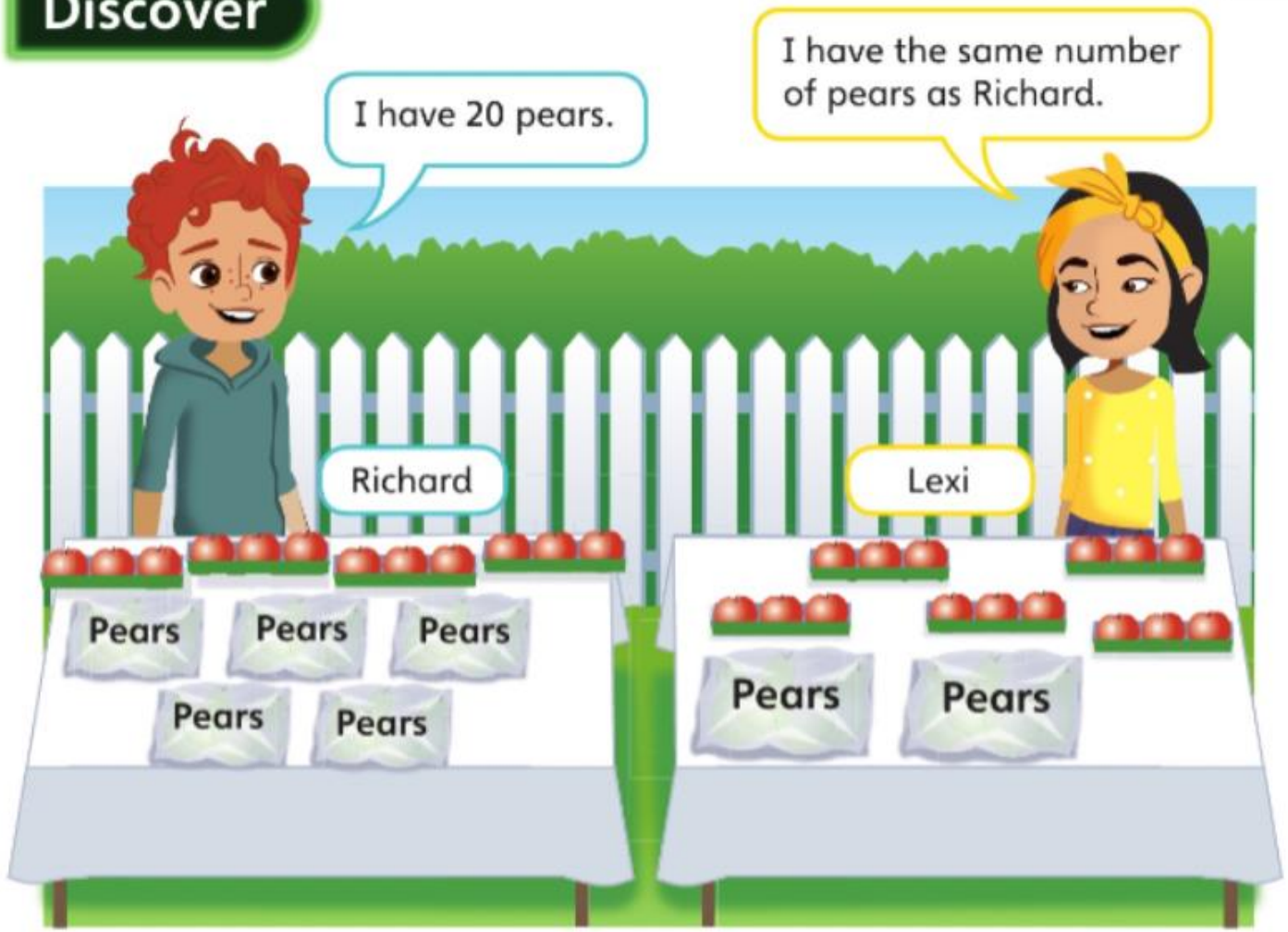






POWER MATHS

Discover



1 **a)** Who has more apples, Richard or Lexi?

b) Richard's bags each have the same number of pears in them.

Each of Lexi's bags have the same number of pears in them.

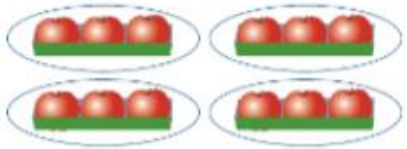
Whose bags contain the least number of pears?

Share

I worked out the number of apples each child had.

a) There are 3 apples in each pack.

Richard has 4 packs.



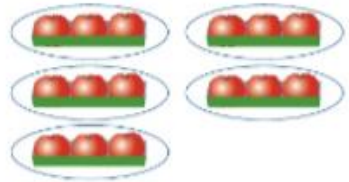
$4 \times 3 = 12$

$5 \times 3 > 4 \times 3$

$15 > 12$

So Lexi has more apples.

Lexi has 5 packs.



$5 \times 3 = 15$

I did not need to work out the number of apples for each person. All the packs have the same number of apples. Lexi has more packs, so she has more apples.

b) Richard has 20 pears. They are grouped equally in 5 bags.

$20 \div 5 = 4$

Each bag contains 4 pears.

Lexi has 20 pears. They are grouped equally in 2 bags.

$20 \div 2 = 10$

Each bag contains 10 pears.

$4 < 10$ so $20 \div 5 < 20 \div 2$

Richard's bags contain the least number of pears.

I can work out the answer without doing a division. Richard and Lexi have the same number of pears. Richard has more bags so he must have fewer pears in each bag than Lexi.

Think together

1 Who has the least number of bananas?

Richard

Lexi

3×4 ◯ 2×4

_____ has the least number of bananas.

2 Whose boxes of melons weigh the most in total?

Richard

Lexi

□ × □ ◯ □ × □

_____ melons weigh the most.

1 **a)** Who has the least number of biscuits?

Aki

Bella

5×10 ◯ 6×10

_____ has the least number of biscuits.

6 Max has 2 identical bottles of milk.

CHALLENGE

He shares the first bottle equally between 5 glasses.

He shares the second bottle equally between 3 mugs.

Max wants to work out whether a glass or a mug has the most milk.

I cannot work this out as I do not know how much milk is in the bottle.

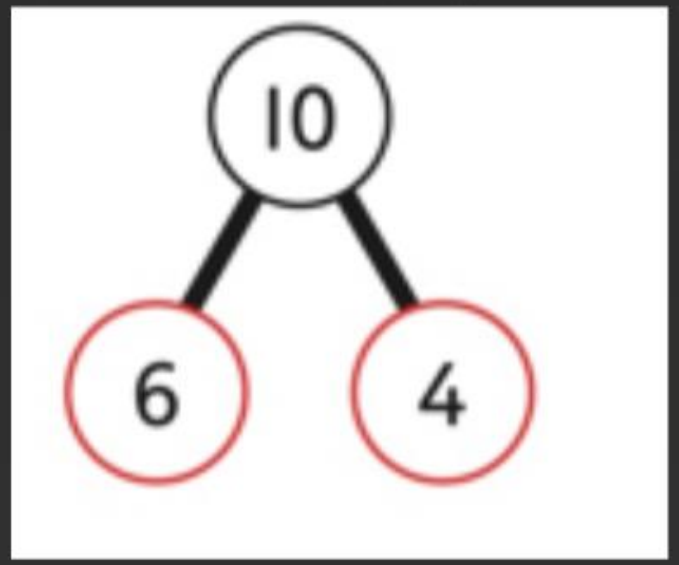
Is Max correct?
Explain your answer.

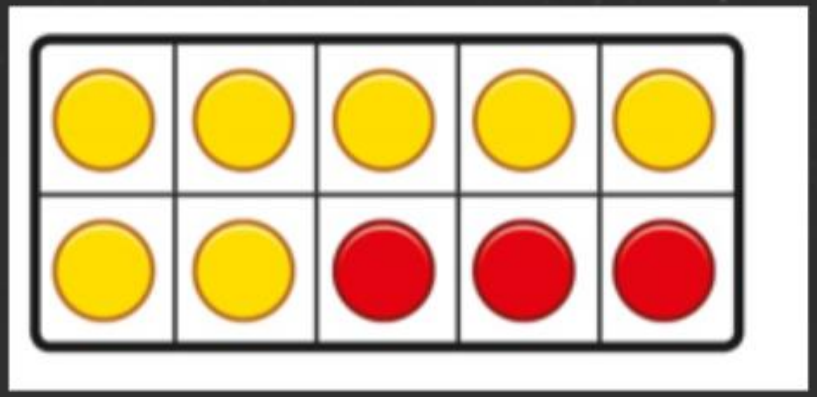
_____

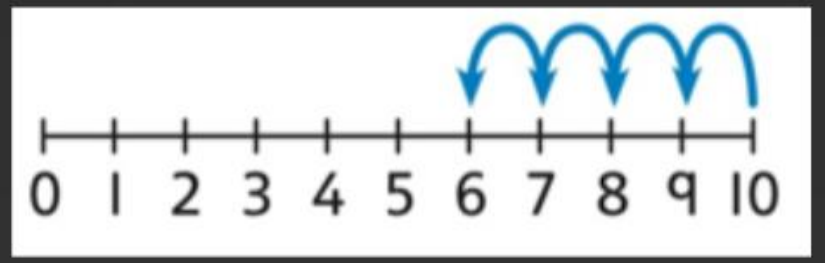
_____

_____

Calculations policy

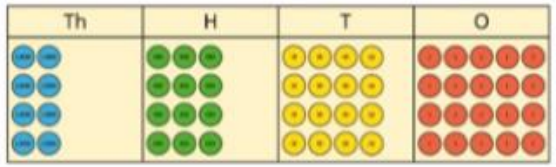
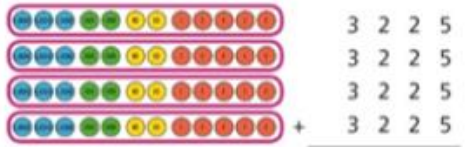
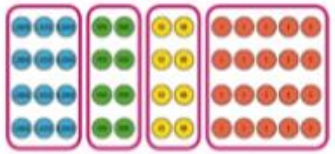






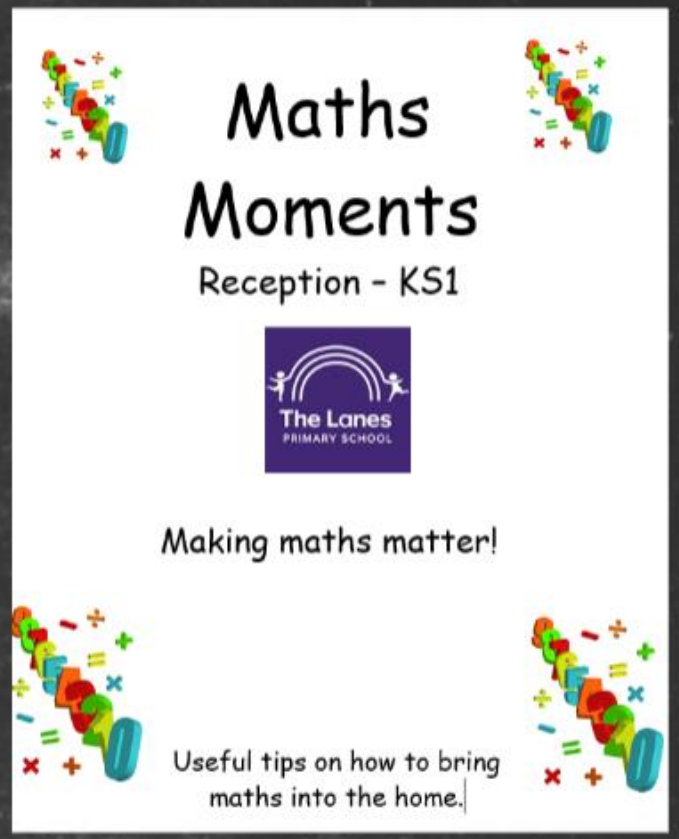
School Webiste → Key information →
Curriculum → Maths

Calculations policy

Multiplying up to a 4-digit number by a single digit number	Use equipment to explore multiplications.  *4 groups of 2,345* *This is a multiplication:* *4 × 2,345* *2,345 × 4*	Use place value equipment to compare methods. **Method 1**  3 2 2 5 3 2 2 5 3 2 2 5 + 3 2 2 5 1 2 9 0 0 1 1 2 **Method 2**  4 × 3,000 4 × 200 4 × 20 4 × 5 12,000 + 800 + 80 + 20 = 12,900	Understand area model and short multiplication. Compare and select appropriate methods for specific multiplications. **Method 3** 3,000 200 20 5 4 | 12,000 | 800 | 80 | 20 12,000 + 800 + 80 + 20 = 12,900 **Method 4** 3 2 2 5 × 4 1 2 9 0 0 1 2

Spend some time looking at the methods we use and the equipment used to support understanding.

How can you support at home?



School Webiste → Key information →
Curriculum → Maths

How can you support at home?

- Play games , sing songs - make maths fun
- Talk about maths - find the maths moments
- Deepen their learning - ask questions
- Model a growth midnset
- Continue to use TT Rockstars and other websites to promote fluency