


Maths - Year 3

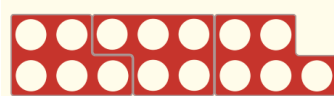
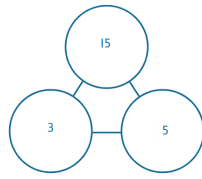
Calculating 11: Introducing the sharing structure of dividing

Key Vocabulary		Mathematical Skills
Remainder	Something that has been left over when other parts have been used e.g. $25 \div 2 = 12$, remainder 1.	<ul style="list-style-type: none"> - Model a sharing problem with structured apparatus or on an empty number line. - Use the \div symbol appropriately and know that when writing dividing sentences, the amount shared is always written first. - Write dividing sentences using the short division form. $3 \overline{)18} =$ - Explain the inverse relationship between multiplying and dividing from an array. - Use inverse relationships between multiplying and dividing to solve sharing problems.
Equal groups/parts	2 or more groups with the same value in each.	
Inverse	The reverse of the opposite.	
Array	A rectangular arrangement of numbers in rows and columns. 	

Mathematical Methods

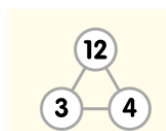
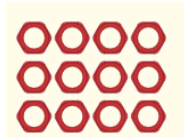
- Understand dividing in a sharing context, and see the relationship between multiplication and division.

Number of children	Number of cartons each	Multiplying sentence	Dividing sentence
5	1	$5 \times 1 = 5$	$5 \div 5 = 1$
5	2	$5 \times 2 = 10$	$10 \div 5 = 2$
5	3	$5 \times 3 = 15$	$15 \div 5 = 3$
5	4	$5 \times 4 = 20$	$20 \div 5 = 4$



I share 15 cakes between 3 people.

- Understand the relationship between multiplying and dividing using arrays.

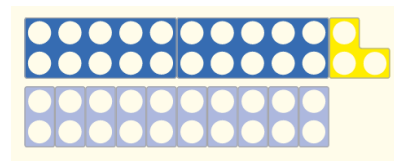


$$3 \times 4 = 12$$

$$4 \times 3 = 12$$

$$12 \div 4 = 3$$

$$12 \div 3 = 4$$



- Find remainders in a sharing situation e.g. $23 \div 10 = 2$, remainder 3.

Can you..?

- If $24 \div 3 = 8$, what is 3×8 ? Can you explain how you know?

- Is $12 \div 3$ the same as $3 \div 12$? Can you explain?

- 18 sandwiches are shared equally between 6 friends. How many sandwiches can they have each?

- Can you write four number sentences for this array?



- I have 12 marbles in 5 bags. How many marbles can I put in each bag if I share them equally? How many do I have left over?

- $\div 6 = 3 \text{ r } 1$