

## Maths - Year 3

### Calculating 16: Making connections between dividing into equal parts and calculating with fractions

#### Key Vocabulary

Share into equal parts	Dividing an amount into group of the same size.
Remainder	Something that has been left over when other parts have been used.
Horizontal	A straight line, parallel to the horizon.
Partitioning	Splitting a number in different ways e.g. $27 = 20$ tens and 7 ones, $20 + 7$ .
Halve/Half	Divide an amount into two equal parts.
Quarter	Divide an amount into four equal parts.

#### Mathematical Skills

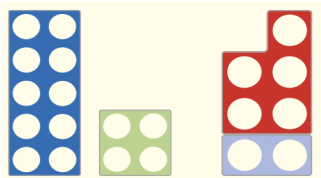
- Understand that equal numbers can be shared into two equal parts.
- Understand that odd numbers can't be shared into two equal parts and there will always be 1 remaining.
- Understand that, when halving odd numbers, the remaining 1 can't always be physically cut in half in a real life context.
- Understand that dividing by 2 or 4 is the same as finding a half or a quarter.

#### Mathematical Methods

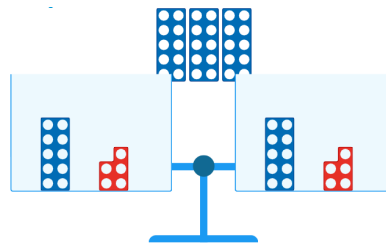
- Introducing fractions in a dividing context e.g. sharing carrots out between to rabbits.

Number of carrots to share	Number of carrots for each rabbit	Dividing sentence	Fraction sentence
5	$2\frac{1}{2}$	$5 \div 2 = 2\frac{1}{2}$	$\frac{1}{2}$ of 5 = $2\frac{1}{2}$
6	3	$6 \div 2 = 3$	$\frac{1}{2}$ of 6 = 3
7	$3\frac{1}{2}$	$7 \div 2 = 3\frac{1}{2}$	$\frac{1}{2}$ of 7 = $3\frac{1}{2}$
8	4	$8 \div 2 = 4$	$\frac{1}{2}$ of 8 = 4
9	$4\frac{1}{2}$	$9 \div 2 = 4\frac{1}{2}$	$\frac{1}{2}$ of 9 = $4\frac{1}{2}$

- Halving numbers, and multiples of 10.



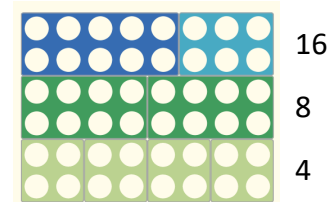
$$14 \div 2 = 7$$



$$30 \div 2 = 15$$

- Finding a quarter by dividing by 4 (or halving and halving again).

$$16 \div 4 = 4$$



#### Can you..?

- Molly has 2 horses and 5 carrots. If she shares the carrots equally, how many carrots will each horse get?
- Solve a) half of 16   b) half of 28   c) half of 54
- Draw the coins you would need if you had half of 50p
- Sarah has two slices of toast. She cuts them both in half and has 4 halves. How many halves of toast would she have if she started with 12 slices of toast?
- What is 1 quarter of 40?
- How many whole oranges will there be if there are 16 quarters?

