Use partitioning to double or halve any number, including decimals to two decimal places

Top Tips

The secret to success is practising little and often. Use time wisely. Can you practise these KIRFs whilst walking to school or during your car journey? You don't need to practise them all at once: perhaps you could have a fact a day. If you would like more ideas, please speak to your child's teacher.

Play games: Ping Pong – In this game, the parent says, "Ping," and the child replies, "Pong." Then the parent says a number and the child doubles it. For a harder version, the adult can say, "Pong." The child replies, "Ping," and then halves the next number given.

Practise online: You can play games online at www.conkermaths.com and www.topmarks.co.uk

Use practical equipment: Using toys like lego or coins at home, can the children double or half the amount given to them?

Using Top Trump cards: Pick a Top Trump card, choose any category and see how quickly you can half and double the number.

Make it real: Use real examples like doubling or halving a recipe when baking/cooking and examples like the ones below.

Doubling

e.g double 189.64
Double 100 = 200
Double 80 = 160
Double 9 = 18
Double 0.6= 1.2
Double 0.04 = 0.08
Therefore double 189.64 = 379.28

Halving

e.g $\frac{1}{2}$ of 265.84 =
$\frac{1}{2}$ of 200 = 100
$\frac{1}{2}$ of 60 = 30
$\frac{1}{2}$ of 5 = 2.5
$\frac{1}{2}$ of 0.8 is 0.4
$\frac{1}{2}$ of 0.04 = 0.02
Therefore $\frac{1}{2}$ of 265.84 = 132.92

Key Vocabulary

What is half of 564?
What is double 523?
How do you know?
Can you tell me why?

In a sponsored swim, Paul swam 150 lengths of the pool. Emma swam half this amount and Karl swam double. How many lengths did they each swim?

Jenny walks 1365.4m to school each day. Laura meets Jenny half way; how far does Kate walk?

- Children will often find numbers such as 35 harder to halve, so practise halving these numbers more often, encourage your child to give the answer using a fraction (17 $\frac{1}{2}$) and/or a decimal (17.5)
- Encourage children to partition the numbers when doubling and halving 2- or 3-digit numbers e.g. 1/2 of 240 is 1/2 of 200 and then 1/2 of 40.
- When halving numbers such as 18.5, encourage children to half the 18 which is 9 and then half 0.5 which is 0.25 therefore the answer is 9.25