Problem Solving in Mathematics

Number

Making Pancakes 2

Solution

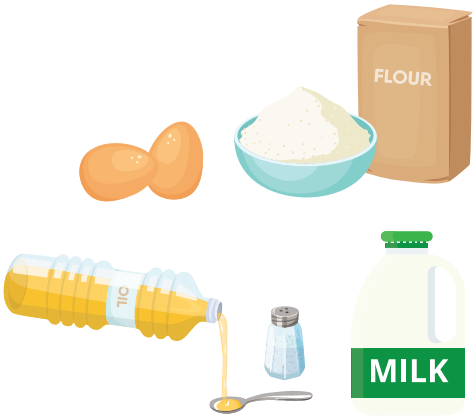
First, pupils need to calculate the cost of each ingredient as follows:

Flour: 80p ÷ 5 16p (they recognise that 500 ml divided by 5 is 100 ml)

Eggs: 15p × 2 30p

Milk: 84p ÷ 4 21p (they recognise that 1000 ml divided by 4 is 250 ml)

Oil: 5p



Pupils need to calculate the total cost by adding up the cost of all 4 ingredients.

16p + 30p + 21p + 5p = 72p

Pupils should note that this is cheaper than the £1.10 required to buy the pancakes. They may also calculate how much cheaper it is.

£1.10 – £0.72 = £0.38 or 110p – 72p = 38p

Pupils may mention the fact that all the ingredients needed to make the pancakes are already in Ellie's house. If Ellie bought 500 g of flour, 1 litre of milk and a bottle of sunflower oil solely for the purpose of making six pancakes (and nothing else) then it would be cheaper to buy the pancakes from the shop.

The teacher should encourage pupils to discuss whether they have considered any other costs such as gas/electricity used when baking. They are not expected to source and/or calculate these costs.

They may also choose to discuss the time involved in making the pancakes.

Pupils could also discuss whether it might be necessary to see how many pancakes one can get with the recipe, and whether the pancakes are the same size.