

## Teacher Notes

### Introduction

The teacher states that:

*'The cost of the bag of flour (50p) and the milk (80p) exceeds the cost of the pancakes (£1.10) and therefore, it is cheaper to buy the pancakes.'*

The teacher then asks the class:

*'Why is this incorrect?'*

Pupils can then work on this problem individually or with others.

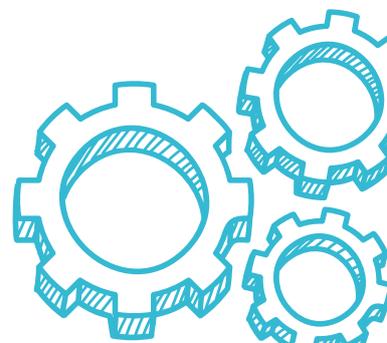
- They can find out whether the teacher statement is incorrect or not.
- They can discuss how they would calculate the cost of each ingredient and how they would total these costs. They use the 2, 4 and 5 times tables in their calculations.
- They can discuss how they will compare the price of making the pancakes at home to the price of pancakes sold in a local shop, noting the difference between pence and pounds.
- They can compare their approach and adapt their own strategy if needed.

This problem deals with a pupil's ability to read through information, cost the ingredients needed to make a recipe and compare this cost to a product bought in a shop. They use number skills in the context of money to make a decision to either make or buy the pancakes, and explain their reasoning.

### What I know (think)

The pupils should know from the given problem:

- Ellie is making pancakes with ingredients she has in the house.
- She wants to know how much it would cost to make the pancakes.
- It costs £1.10 to buy a packet of shop-bought pancakes.
- Ellie has a recipe for making six pancakes.
- She knows the cost of 500 g of flour, 1 egg, 1 litre of milk and the cost of the required sunflower oil.



# Making Pancakes 1 (Continued)

## What I need to know (identify)

Pupils need to identify:

- the cost of 100 g of flour;
- the cost of 2 eggs;
- the cost of a quarter of the milk;
- the total cost of all ingredients;
- whether the total cost is cheaper than £1.10 (shop-bought pancakes); and
- the difference in price.

## What I need to do (employ)

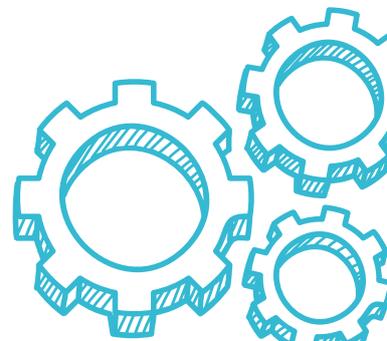
Pupils should use the information they have been given and come up with appropriate steps using Ellie's Mum's recipe to help them solve the problem, for example:

- They recognise that they need to calculate the cost of each ingredient before finding the total cost.
- They begin by calculating the cost of the flour by accurately dividing by 5.
- They multiply by 2 to get the cost of 2 eggs.
- They calculate the cost of the milk by dividing 80p by 4 using their knowledge of the four times tables.
- They total the cost of all ingredients and compare this to the given shop price.
- They deduce that the cost of the ingredients is 45p less than the cost of the packet of pancakes.

## What I did (review)

Pupils will use self-assessment, peer assessment or teacher feedback to decide whether they have approached the problem as intended.

- Did they correctly calculate the cost of each ingredient?
- Did they accurately total all costs to get 65p?
- Did they subtract or 'add-on' to calculate that this was 45p (£0.45) cheaper than the cost of the packet of pancakes?
- Did they consider hidden costs such as energy and time?



# Making Pancakes 1 (Continued)

## Curriculum Objectives

This problem should enable pupils to demonstrate their knowledge, understanding and skills through:

Developing pupils as Contributors to the Economy and the Environment

Apply mathematical skills in everyday financial planning and decision making:

- Pupils will show how to cost ingredients to enable them to make a personal financial decision.

## Thinking Skills and Personal Capabilities

This problem can provide an opportunity for pupils to demonstrate a variety of the following Thinking Skills and Personal Capabilities:

Managing Information

- Plan and set goals and break a task into sub-tasks

Thinking, Problem-Solving and Decision Making

- Examine options and weigh up pros and cons
- Generate possible solutions, try out alternative approaches and evaluate outcomes

Being Creative

- Experiment with ideas and questions
- Learn from and value other people's ideas

Working with Others

- Listen actively and share opinions
- Suggest ways of improving their approach to working collaboratively

Self-Management

- Seek advice when necessary
- Organise and plan how to go about a task

## Cross-Curricular Skills

This problem should enable pupils to demonstrate a variety of the following Cross-Curriculum Skills:



Using Mathematics

