

Pikelets for profit

Related outcomes

- M 2.5: A student estimates, compares and records the mass of objects to the nearest kilogram and recognises the need for a unit smaller than the kilogram.
- N 2.3 (a): A student models and explains patterns related to all number facts for the four operations.
- N 2.4 (a): A student approximates, calculates and represents solutions to addition and subtraction problems involving two-digit numbers, using a variety of informal strategies including mental, written and calculator methods.
- N 2.5: A student uses number skills to solve real life problems (whole numbers only).
- WM 2.1: A student poses questions or problems about mathematical situations.
- WM 2.2: A student uses one or more strategies to solve mathematical problems.
- WM 2.5: A student compares own method of solution to a problem with that of others.
- VA 2: A student demonstrates a positive response to the use of mathematics as a tool in practical situations.
- VA 14: A student appreciates how mathematics is used in a range of aspects of society.

Possible indicators

- A student can:
- use information to complete calculations
 - use appropriate strategies to calculate amounts required and costs
 - locate information in a procedural text.

Syllabus links

Working mathematically	Questioning, Communicating, Problem solving, Verifying, Reflecting (pp 20-37)
Measurement	Mass 10,11 Volume 11,12
Number	Multiplication 8 Division 8

Teaching activity

1. A class has decided to raise money by selling pikelets. Present students with the following recipe for pikelets.



Pikelets
<p>Ingredients</p> <p>1 egg 2 tablespoons of sugar 1 cup of self-raising flour 3/4 cup of milk 1/4 teaspoon of bicarbonate of soda 1 tablespoon of melted butter</p>
<p>What to do</p> <ol style="list-style-type: none"> 1. Beat the egg and sugar. 2. Dissolve the bicarbonate of soda in the milk. 3. Add the flour, then the milk mixture to the beaten eggs and sugar. Beat together until combined. 4. Stir in the melted butter. 5. Using a tablespoon, drop tablespoons of the mixture into a greased electric frypan. 6. Brown both sides, then drain on absorbent paper. 7. Repeat with the rest of the mixture <p>Makes about 12</p>

2. Draw out features of the recipe, such as the list of ingredients, the sequence of instructions, and the quantity of pikelets that the mixture will produce. Discuss whether “Makes about 12” indicates anything about their size. How will this affect the quantity produced?
3. The class wants to make about 200 pikelets. Questions which students will need to consider might include:
 - “How many quantities of the mixture are needed to make 200 pikelets?”
 - “How much of each ingredient will need to be purchased before they are made?”
 - “What will be the total cost of all the ingredients for 200 pikelets?”
 - “What will be the cost of one?”
 - “How much should be charged for each pikelet if a profit is to be made?”
 - “How much profit will be made if all pikelets are sold?”

Extension

4. Provide the ingredients and the necessary equipment.
5. As a class or in small groups, the pikelets are made. Working in groups allows students to discuss why there may be variations between the total number of pikelets produced per batch.

When food is being handled, normal hygiene requirements should form part of classroom practice. Hands should be washed and, when food is handled by more than one child, it should not be eaten. Furniture and floor coverings should also be protected.

Language

recipe, pikelets, procedure, text type, ingredients, batch, batter, measure, pour, gram, millimetre, litre, kilogram, more than, less than, equal to, approximate, cost, profit, loss