



Stage 7: Budgeting

Learning objectives:

- To work within a budget
- To solve multi-step problems

Stage overview:

The following two stages could be completed after or during a block of teaching on written addition and subtraction methods. They allow the children to apply their learning to solve real-life problems and give those who may be disenchanted by Maths an engaging purpose for learning.

The children could find out the cost of their ingredients using a supermarket website, or you could complete this lesson in a supermarket and give them the opportunity to pay for their items themselves.

Materials needed:

- Access to the internet or a supermarket
- Shopping list template

Presentation notes:

Slide 2: The definition of 'a budget'	<ul style="list-style-type: none"> - Ask the children if they understand and can explain the term 'budget'. - A budget is a set amount of money that businesses have to spend over a set period of time. - Explain that their budget will be the amount of money they have to spend on producing their product.
Slide 3: Introduce the task	<ul style="list-style-type: none"> - The children will have a budget of £1 per group member to buy the additional ingredients needed to make the product they have designed. - Explain that the children will be able to use their vegetables when they are harvested but any other ingredients will need to be bought using their budget. - If they find that they cannot afford their original ideas, they will need to adapt their recipes and think of ways to solve this real life problem. This is an excellent opportunity for the children to work on their addition, subtraction, problem-solving and group work skills. - Spoken language skills could also be assessed when listening to the discussions that take place.

Slide 4: Maths with meaning	<ul style="list-style-type: none"> - If completing this stage in the classroom, model how to use a supermarket website to search for ingredients and research their prices. - Ask the children to keep a running total of their costs so that they can manage their budgets effectively. - Encourage the children to think carefully about which written calculation methods they need to use in the context of this problem. - Take suggestions for the methods that have been covered and lead a discussion on the most efficient one to use. - Discuss top tips for calculating with decimals. - Model the method you would like them to use for addition and subtraction with decimals if needed. - Emphasise the importance of accuracy when calculating their total cost to ensure they stay within their budget. Encourage the children to therefore check their working out and take suggestions for methods they could use for this. - If completing this session in the classroom, once the children have calculated the cost of buying their materials and checked they have stayed within their budget, ask them to write their teacher a shopping list for their chosen ingredients.
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Links to the National Curriculum:

Maths	Addition and Subtraction	<ul style="list-style-type: none"> - Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction) - Add and subtract numbers mentally with increasingly large numbers - Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy - Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.
	Multiplication and Division	<ul style="list-style-type: none"> - Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers - Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context - Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 - Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign - Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates
	Measurement	<ul style="list-style-type: none"> - Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling