

TITLE: THE IMPACT OF CONTEXTUALISING FUNCTIONAL SKILLS IN MATHS EARLY YEARS

**AI Generated Contextualised Functional Skills Maths
Resources**



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INTRODUCTION

Throughout the project, provider partners had the opportunity to use artificial intelligence (AI) to develop resources for contextualised Functional Skills maths delivery. They each had a licence to TeacherMatic which allowed them to use AI to generate resources for their learners. TeacherMatic saved providers time and effort to create contextualised resources applicable to the apprentice's role as part of the project. The licences enabled them to create unique, individualised resources appropriate for their learner's needs and requirements.

This booklet is a demonstration of how resources can be used for contextualised Functional Skills delivery and includes some examples created as part of the project. These are unique to learners' specific needs however serve to provide inspiration for contextualised resources beyond the project.

Resources from Rochdale Training

Rochdale Training utilised AI to generate a range of resources that provided examples and ideas to help tutors introduce new perspectives and challenge apprentices to enhance their understanding. Rochdale Training intend to continue to use AI for Functional Skills maths delivery following completion of the project. Topics for contextualised AI generated resources include money and budgeting, a key skill required for Functional Skills maths. These were contextualised to the apprentice's role in the early years sector.

Question and Answer Sheets

Some of the resources produced by AI included question and answer sheets. These can be used as part of the Functional Skills maths delivery to provide learners an opportunity to practice assessment style questions.

Money and Budgeting – Early Years

1. Monthly vs. Weekly Costs

- **Question:** If a nursery charges £150 per week, what is the equivalent annual cost?
- **Answer:** $£150 \times 52 = £7800$ per year.

2. Annual Cost Calculation

- **Question:** If you pay £500 per month for childcare, what is the total cost for a year, including a one-time annual fee of £100?
- **Answer:** $(£500 \times 12) + £100 = £6,100$ per year.

3. Part-Time Care Calculation

- **Question:** Full-time childcare costs £800 per month. If part-time care is offered at 50% of the full-time rate, what is the monthly cost for part-time care?
- **Answer:** $£800 \times 0.50 = £400$ per month.

Calculating amounts of money and simple budgeting in an Early Years environment.

The nursery is planning a picnic for the children, there will be 15 children attending the picnic, and they have a budget to manage. They need to purchase various items for the picnic, including snacks, drinks, and some fun outdoor games.

Details:

- **Budget:** £90
- **Items to Purchase:**
 - **Snacks:**
 - Picnic baskets per child: £2.50 or 3 for £6.00
 - Pack of fruit snacks: £5.50 for 5 children.
 - **Drinks:**
 - Juice bottles: £4.00 for 5.
 - **Outdoor Games:**
 - Frisbee: £7.30
 - Bowling set: £6.20

Question:

1. Calculate the total cost of all items needed for the picnic.

Answer: £72.00

2. Determine how much money will be left from the £90 budget after purchasing all the items.

Answer: £28.00

3. Work out how much has been spent on each child.

Answer: £4.80

Money and budgeting in an Early Years environment – True or False?

1. If you have a £30 budget for new resources and buy three toys costing £8.75 each, you will have £4.75 left.

Answer: False (Total cost = $£8.75 \times 3 = £6.25$.

Amount left = $£30 - £6.25 = £23.75$.)

2. If you have £50 and spend £18.90 on lunch and £21.30 on a book, you will have £10.80 left.

Answer: True (Total spent = $£18.90 + £21.30 = £40.20$.

Amount left = $£50 - £40.20 = £9.80$.)

3. If a toy costs £14.50 and you have a £20 spending limit for the term, you will have £6.50 for the rest of the term.

Answer: True

4. If you have £12 and spend £7.75 on a game, you will have £4.25 left.

Answer: True

5. If you need to buy three items for a party costing £5.90, £8.45, and £3.75, and you have a £20 note, you will have £2.90 left.

Answer: True (Total cost = $£5.90 + £8.45 + £3.75 = £18.10$.

Amount left = $£20 - £18.10 = £1.90$.)

Lesson Plan: Calculating amounts of money and simple budgeting in an Early Years environment

Learning Objectives:

- To understand the concept of money and simple budgeting and how to calculate them
- To apply the concept of money and simple budgeting to real-life situations in an early years environment.

Differentiation:

Strategies to address learners' numeracy skills:

- Provide concrete examples and manipulatives to support understanding.
- Use visual aids and diagrams to illustrate the concept of money and simple budgeting.
- Offer additional practice and support for learners who require it.
- Encourage peer collaboration and group work to enhance understanding.

Bloom's Taxonomy:

Strategies to address the revised (2001) Bloom's Taxonomy:

Understand:

- Engage students in discussions and questioning to encourage comprehension of the concept.
- Provide real-life scenarios and problem-solving activities to promote deeper understanding.
- Encourage students to explain their thinking and reasoning behind their calculations.
- Use formative assessments, such as quizzes or short written reflections, to gauge understanding

Lesson Plan:

Timing

Content

Resources

5 mins	Welcome and Introduction • Greet and welcome the students. • Explain the objectives of the lesson. • Discuss the relevance of understanding money and simple budgeting in an early years environment. • Highlight the importance of numeracy skills in daily life.	Classroom
10 mins	Concept of Money and Simple Budgeting • Define what money and simple budgets are and how they are represented. • Provide examples of calculating money. • Engage students in discussions about real-life situations where money and simple budgeting is used.	Whiteboard, markers
10 mins	Applying Money and Simple budgeting in Early Years Environment • Show visuals and pictures related to an early years environment (e.g., toys, snacks, children). • Discuss different scenarios and ask students to calculate simple budgets based on the given information. • Encourage group discussions and sharing of strategies. • Provide feedback and guide students towards correct solutions.	Visual aids, pictures
5 mins	Recap and Conclusion • Review the main concepts covered in the lesson. • Summarize the importance of understanding money and simple budgeting in an early years environment. • Address any questions or concerns from the students. • Provide additional resources for further practice if desired.	Whiteboard, markers

PowerPoints

As well as lesson plans, AI can be used to generate additional teaching materials such as PowerPoint presentations to make teaching engaging, provide teachers with visual aids, and save time



House Keeping



- Please keep your microphones muted.
- Use the chat box to communicate.
- Raise your hand if you need to ask a question.
- You will be e-mailed with all information after the session and recordings will be made available.



Money and simple budgeting

Understand how to calculate amounts of money.

What is simple budgeting?

- Budgets per room
- Snack Costings
- Arts and Craft Costings
- Trips
- Fees
- Nursery resources



The project requires purchasing various supplies and the cost of each item are as follows

- Pack of crayons = £12.75
- Large sheets of paper = £8.50
- Glue sticks = £3.20 each
- Markers = £5.90 each

The nursery plans to buy
3 x pack of crayons
5 x large sheets of paper
10 x glue sticks
4 x packet of markers

1. Calculate the total cost of each type of item required
2. Determine the total cost of all the items combined
3. How much is left from the budget?

INVOICE

Date: _____

Invoice #

Bill To:

Ship To:

[illegible]

Section 10

Tax Rate

Sales Tax

If you have any concerns regarding this invoice, please contact

Sales Tax

THANK YOU FOR YOUR BUSINESS.

