

Introducing Tokens

**Level A.1: Introduce, sort and select coins up to 5c, 10c & 20c**

Use tokens/counters that are marked with paper dots to illustrate their value in a clear way; one dot stands for a value of one and two dots for a value of two. For extension work, pupils will need tokens with 5 dots. The only way to tell the value of a particular counter should be to count the number of dots on it. Also, ensure that counters are of uniform size, shape and colour. This prevents pupils from being distracted by the properties of the counter and allows them to concentrate on its value. The dots on the counter should also be the same size, shape and colour and fixed to one side of the coin only.

**Single Exchange Game**

Pupils will need a die numbered 1, 1, 1, 1, and 2 and a selection of ‘pre-money’ one dot and two dot coins.

1. Pupils take turns throws die and collects the corresponding number of one dot coins.
2. When they have two one dot coins, they can exchange them for a two dot coin.
3. The winner is the pupil with the most two dot coins at the end of the game

*How many one dot coins do you have? Can you exchange them? How many more one dot coins do you need so you can exchange for a two dot coin?*

Extension: Pupils can progress to play the Double Exchange Game & engage in ‘At the Shop’ activities using the tokens as outlined in at Level A.1 of the Money Learning Trajectory.

**Mathematical Skills:** Understanding and Recalling, Implementing, Applying and Problem-Solving, Communicating and Expressing, Integrating and Connecting, Reasoning

Teacher Observation, Pupil Learning Log, Pupil Portfolio, Teacher Questioning
**Close the Bank**

**Level A.2:** Exchange and use coins up to 10c and calculate change

The game aims to develop pupils’ understanding of exchange; to see that (i) two 1c coins make 2c and (ii) five 1c coins make 5c. To play the game you will need a collection of 1c coins, a base board per pupil, lids to close the piggy bank when it is full; either denoting 2c or 5c depending on the objective of the game. You will also need a die. Five of the faces of the die have the number 1 displayed on them and the remaining face is left blank and means ‘miss a turn’. Pupils take turns to roll the die and collect the coins to fill their piggy bank. When their bank is full, they place the lid on top. The first pupil to fill all of their piggy banks, wins the game.

*How much do you have in your piggy bank? How much more do you need to make 2c/5c? How much money do you have altogether?*

Extension: This activity could be extended to develop pupils’ understanding of exchange up to 10c

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Level D.1: Compare and calculate ‘value for money’ using unitary method and percentages.

Receipts allow pupils to examine prices for discounts and savings. They enable pupils to encounter real world examples of VAT; to calculate the percentage of VAT being added, the price before VAT was added etc. The receipt shown here is a copy of the one resulting from Beyonce’s trip to Nando’s. Questions based on this receipt might include:

- The manager’s discretion was deducted from the bill. What would the bill have cost if he had not done this?
- What percentage of Beyonce’s bill was VAT?
- Beyonce paid for her bill with her credit card, which charges 12.5% interest. How much will her bill actually cost her?
- What profit did the Nando’s make if the cost price of the items sold was 75% of the total?
- If the rate of VAT increased to 11%, what was the full amount Beyonce paid?

Extension: Pupils in groups could study the Nando’s menu, (available online) to create an order for the class and calculate the bill.

Teacher Observation, Pupil Learning Log, Pupil Portfolio, Teacher Questioning

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Nando’s

Dublin - Mary St
Telephone: +35318722011
Your Order Number Is -

BEYONCE

Host: Derek
BEYONCE 10:29 PM
REPRINT# 7 10062
Order Type: Eat In

Jumbo Platter (T #56.96)
(7) Medium
(7) Hot
(7) Large Chios
(7) Large Rice
(7) Lrg Garlic Bread
(7) Lrg Corn
(14) Plain
(7) Large Coleslaw

Jumbo Platter (T #57.25)
(7) Medium
(7) Hot
(7) Large Peri Chios
(7) Large Rice
(7) Large Coleslaw
(7) Lrg Garlic Bread
(7) Lrg Corn
(14) Plain

10 Wing Platter (T #12.75)
(7) Roulette
(7) No Sides

Managers’ Discretion
Name: Derek Swan 80005

Subtotal
803.58
Tax
72.32

Eat In Total
875.90

C Card
€ 870.00
CASH
€ 5.90

9%: 893.58 VAT: 72.32

*****
Welcome to Nando’s
VAT No: 652 8275 13
--- Check Closed ---
Good Deal or Bad Deal

Level D.1: Compare and calculate ‘value for money’ using unitary methods and percentages.

Provide pupils with examples of offers and then ask them to decide which the better deal is. It is important that pupils can give a rationale for their answer.

**Which is better value? Give a reason for your answer**

<table>
<thead>
<tr>
<th>Offer 1</th>
<th>Offer 2</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 oranges for €1.36</td>
<td>6 oranges for €1.08</td>
<td></td>
</tr>
<tr>
<td>6 pack of crisps for €2.40</td>
<td>10 pack for €3.00</td>
<td></td>
</tr>
<tr>
<td>3 pastries for €2.04</td>
<td>6 pastries for €3.90</td>
<td></td>
</tr>
<tr>
<td>9 mini ice lollies for €4.41</td>
<td>6 mini ice lollies for €2.88</td>
<td></td>
</tr>
<tr>
<td>5 scones for €2.35</td>
<td>3 scones for €1.35</td>
<td></td>
</tr>
<tr>
<td>7 chocolate bars for €2.52</td>
<td>4 chocolate bars for €1.44</td>
<td></td>
</tr>
</tbody>
</table>

Extension: Pupils compare similar products on sale in various supermarkets and investigate which is better value.

Teacher Observation, Pupil Learning Log, Pupil Portfolio, Teacher Questioning, Work Samples.

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**Level D.1:** Compare and calculate ‘value for money’ using unitary method and percentages.

You’re sitting in Maths class, when a wealthy business person walks in. She wants to offer you a job for 30 days. She gives you your choice of two payment options:

1. One cent on the first day, two cents on the second day and double your salary every day thereafter for the thirty days; or
2. Exactly €1,000,000

Which option will you choose and why?

*Clár, can you predict which the better option might be? Why do you think this? Does anyone disagree with Clár? Why? Fionn, how did you work out which the better option is? Is there another way you could represent the solution?*

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Teacher Observation, Pupil Learning Log, Pupil Portfolio, Teacher Questioning