

Maths and Me: 2nd Class – Short-Term Plan, Unit 15: Money (May: Weeks 1&2)

Strand(s) > Strand Unit(s) Measures > Money. Number > Sets and Operations.




Learning Outcome(s)

Through appropriately playful and engaging learning experiences children should be able to recognise the value of money and use euro and cent in a range of meaningful contexts; select, make use of and represent a range of addition and subtraction strategies..

Lesson	Focus of Learning (with Elements)	CM	Learning Experiences	Assessment
1	Money Around the World: Articulates and shares prior understanding of money and euro denominations (U&C); Describes similarities and differences between coins and/or notes (C)		D Notice & Wonder L1, 4 D Think-Pair-Share L1, 4 D Reason & Respond L1–6 C Sorting Money L1 C Role-play L1, 6–7 D Choral Counting L2–3 D Three-Act Task L2 C Counting Money L2	Intuitive Assessment: responding to emerging misconceptions
2	Euro: Recognises and knows the value of euro coins/notes (U&C); Uses a variety of strategies to estimate the value of, and to determine, amounts of money, including skip counting in 2s, 10s, 5s and 20s (U&C)		C Write-Hide-Show L3–7 C Lucky Dip L3 D Quick Images L4	Planned Interactions: responding to insights gleaned from children's responses to learning experiences
3	€ and c: Represents and records amounts of money in decimal forms of euro (C)		C Making Exact Amounts L4 C Build it; Sketch it; Write it L5, 7 C Lucky Dip: Would You Rather? L5 D I Do, We Do, You Do L6 D Number Strings L7 D Would This Work? L7	Assessment Events: information gathered from completion of the unit assessment in the Progress Assessment Booklet page 26
4	Exact Money Only: Selects and uses a range of mental strategies to identify coins required (A&PS); Makes and justifies conjectures about combinations of coins/amounts (R)		Print resources Pupil's Book pages 94–100 Home/School Links Book pages 34–35 PCMs 44–48	
5	Comparing and Ordering: Records equivalent and non-equivalent amounts of notes and coins using < > and =(C)			
6	Finding Totals: Selects and uses a range of mental and written strategies to calculate simple bills and totals (A&PS); Records calculations of money as number sentences. (C)			
7	Finding Change: Selects and uses a range of mental and written strategies to determine change from a transaction (A&PS); Calculates the number of items that can be bought with a given sum (A&PS); Records calculations of money as number sentences (C)			
8	Review and Reflect: Reviews and reflects on learning (U&C)			

Key: Elements: (U&C) Understanding and Connecting; (C) Communicating; (R) Reasoning; (A&PS) Applying and Problem-Solving. **CM:** Cuntas Miosúil: please tick when you have completed the focus of learning. **Learning Experiences:** **C** concrete activity; **D** digital activity; **P** activity based on printed materials, followed by lesson numbers.

Additional information for planning

 Progression Continua	See '2nd Class Infants <i>Maths and Me</i> Progression Continua Overview' for a detailed breakdown of how all progression continua are covered.
 Maths Language	See '2nd Class <i>Maths and Me</i> Language Overview', individual lesson plans and the Unit 15 Maths Language Cards.
 Equipment	See '2nd Class <i>Maths and Me</i> Equipment Overview' and individual lesson plans.
Inclusive Practices	<ul style="list-style-type: none"> See Let's Strengthen and Let's Deepen suggestions throughout lesson plans. See Unit 15 Let's Strengthen Suggestions for Teachers. (These address the Common Misconceptions and Difficulties listed below.) See Unit 15 Let's Strengthen PCM. See Unit 15 Let's Deepen PCM.
Integration	See individual lesson plans.

Background and rationale

- This is a two-week block of content which will give the teacher the space and time to set up 'market stalls' in the classroom and have them in situ for the duration of the topic. Coming towards the end of the school year, it enables the creation of meaningful connections between the topic and the children's own experiences of money including saving money to go on trips and holidays; money required to pay fares and tolls when travelling; using currencies in other countries, visiting cashless holiday resorts such as Center Parcs, etc.
- This unit comes after Numbers to 200 and Addition and Subtraction 3. The tasks will review and consolidate many of the concepts covered in Number to this point (including addition and subtraction with and without renaming; and counting strategies including skip counting, comparing, ordering), while also grounding the concepts in real-life contexts.
- In 1st Class the children explored euro and cent separately, with activities and operations involving euro amounts up to 50 and activities and operations involving cent amounts up to 100. In 2nd Class this is extended. The children engage in activities and operations involving euro amounts only up to 100 (still well within the number limits in 2nd Class of up to 200) and engage in activities and operations involving euro and cent amounts up to €1.99.
- This will be the first time they are introduced formally to the decimal point as a symbol alongside the € symbol, to separate amounts of euro from amounts of cent (i.e. no formal discussion of tenths or hundredths until 3rd and 4th Classes respectively).
- While €100, €200 and €500 notes exist, they are rarely seen in circulation so they are not referred to much during this unit.

The theme of this unit is **Holidays**.

Common misconceptions and difficulties

While money is an integral part of modern life and society, children are encountering cash less frequently. Rounding to the nearest 5 was introduced in 2015, and as the phasing out of 1c and 2c continues, the children will be less and less likely to encounter these. Therefore, children are increasingly less familiar with cash.

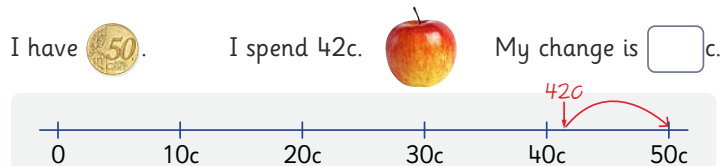
- The children may see paper money and coins as separate types of currency.

- They may confuse the value of the coins and notes, especially if they have the same digits (e.g. 2c, 20c and €2) and/or the number is larger (e.g. incorrectly assume that a 50c coin is worth more than a €1 or €2 coin).
- They may not appreciate that the size of a coin or note is not proportional to, or representational of, its value.
- When drawing coins/notes to make an amount, the children may incorrectly suggest coin or note denominations that do not exist (e.g. to make 8c the child draws a 4c coin and a 4c coin).
- The children may incorrectly assume that amounts made from notes are always greater in value than amounts made from coins (i.e. two €5 notes are not worth more than six €2 coins).
- They may incorrectly assume that amounts made from more notes/coins are always greater in value than amounts made from fewer coins/notes (i.e. two 10c coins are worth more than nine 2c coins).
- They may incorrectly use the € and c symbols and decimal point.
- They may incorrectly assume that to compare you must count all of both sets.
- Some children may experience difficulty with:
 - Exchanging amounts for an equivalent value
 - Converting amounts from euro (using € and the decimal point) to cent (using c) and vice versa
 - Counting coins/notes
 - Identifying/comparing equal and unequal amounts, and using the inequality symbols (<, >)
 - Making change.

The Unit 15 Let's Strengthen Suggestions for Teachers address the common misconceptions and difficulties listed above.

Mathematical models and representations

- Representations of coins and notes
- Number lines for adding and subtracting
- Money arrays



Number line for adding and subtracting



Money arrays

Teaching tip

Coins, Euro Notes, Number Path and Money Arrays manipulative printables are available to support this unit. Click on the resources icon on the *Maths and Me* book cover on edcolearning.ie

Day 1, Lesson 1

Money Around the World

Focus of learning (with Elements)

- Articulates and shares prior understanding of money and euro denominations (U&C)
- Describes similarities and differences between coins and/or notes (C)

Learning experiences

- D** Digital activity: Money Around the World
MAM Routines: Notice & Wonder, with Think-Pair-Share; Reason & Respond
- C** Sorting activity: Sorting Money
- C** Role-play activity: Market Stalls
- P** Pupil's Book page 94: Money Around the World

Equipment

- Play money (coins and notes)
- Materials for class market stalls
- Counting supports such as 100 square, number line, cubes and base ten blocks

Maths language

- money, coin(s), note(s), metal, paper, currency, cent, euro, market, trader, customer, stall(s) and any other language for money suggested by the children.

Teaching tip

This lesson offers great opportunities for the children to connect with their personal experiences, e.g. for children from other countries to share their culture (currency, shopping, foods or items unique to those countries), or for children to share their previous holiday experiences abroad.

Warm-up



- D** Digital activity: Money Around the World
MAM Routines: Notice & Wonder, with Think-Pair-Share

Display the entire poster initially and then zoom in on the image of coins and notes.

Using Think-Pair-Share to collect feedback, ask:

- What do you notice?
- What do you wonder?
- What do you think this unit will be about?

Main event



- D** Digital activity: Money Around the World
MAM Routine: Reason & Respond

Ask or click to play the following questions:



- What is the same and what is different? (size/weight, material, design, denomination, value)
- What do we call money made from metal? (coins)
- What do we call money made from paper? (notes)
- Look at Image A. Is this money used in Ireland? How do you know?
- What is the name of the money or currency that is used in Ireland? (euro)

- What other countries use euro? (Note that children do not need to be able to identify euro and non-euro countries. The purpose is to assess what they know already.)
- What countries do not use euro?
- Why do people use or need money?
- When did you last use money? How did you use it?
- If I went to the shop without any coins or notes, could I still buy something? How?

C Sorting activity: Sorting Money

This could be part of setting up the market stalls (see below), i.e. organising the money. Provide the children with play money and ask them to sort it as

they wish (according to self-selected criteria).

Afterwards, ask:

- How have you organised the money?
- Why did you do it this way?
- What is the same about the coins? What is different about the coins?
- What is the same about the notes? What is different about the notes?
- What is the value of this coin/note? How do you know?

Let's deepen

Challenge the children to identify digits that do not appear on euro money.

C Role-play activity: Market Stalls

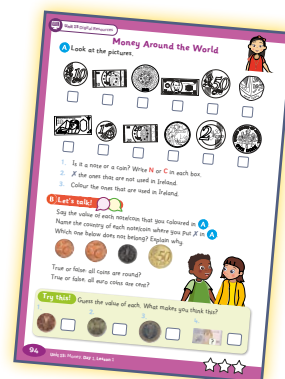
Over the course of this unit, the children set up market stalls in groups. Initially, it might be a good idea to elicit what the children know about markets.

Ask:

- Have you ever visited a market? What about when you were on holiday? Where? Tell me about it. (indoor, outdoor, traders, customers, stalls, fruit, vegetables, clothes, books, etc.)
- What food or items were on sale there that might not be as readily available in Ireland?
- What money did you use to pay for your items?

We are going to set up market stalls in the classroom. With your group, discuss what type of stall you want to set up and what you will need.

P Pupil's Book page 94: Money Around the World



Optional consolidation and extension possibilities

Integration Language: English: theme of shopping, markets and/or holidays; financial literacy, saving, budgeting, etc. Language: Gaeilge: Siopadóireacht agus/nó laethanta saoire/an tsamhraidh. Geography: Travelling and holidaying in Ireland, Europe and other areas.

STEM investigation The children investigate which coins are magnetic and which are not.

Money Display Set up a display in the classroom. This could include examples of various coins and notes from Ireland and elsewhere, price lists, flyers,

catalogues and brochures, as well as appropriate labels (see Unit 15 Maths Language Cards). The children could contribute samples of their own work from the lessons and label them.

Home/School Links Book Page 34 can be completed at any stage after this lesson.

Maths Eyes Have you got any money at home from other countries? Bring it in for show and tell and/or to add temporarily to the Money Display (see above).

Review and Reflect Use the Prompt Questions Poster.

Days 2 and 3, Lesson 2

Euro

Focus of learning (with Elements)

- Recognises and knows the value of euro coins/notes (U&C)
- Uses a variety of strategies to estimate the value of, and to determine, amounts of money, including skip counting in 2s, 10s, 5s and 20s (U&C)

Learning experiences

- D** Digital activity: Skip Counting in 2s, 10s and 5s
MAM Routine: Choral Counting
- D** Digital activity: What Am I? – Money
MAM Routine: Reason & Respond
- D** Digital activity : Florida Fund
MAM Routine: Three-Act Task
- C** Counting activity: Counting Money
- P** Pupil's Book page 95: Euro

Equipment

- Play money
- PCM 44

Maths language

- altogether, total, how much?

Warm-up

Choose one or do both over the two days.

- D** Digital activity: Skip Counting in 2s, 10s and 5s
MAM Routine: Choral Counting

The children count aloud along with the text/images.

- D** Digital activity: What Am I? – Money
MAM Routine: Reason & Respond

This activity contains a set of flip cards, each with a set of audio clues and either a coin or a note on the reverse. Use Reason & Respond to approach the clues and questions. The children use their MWBs to respond.

Main event

- D** Digital activity: Florida Fund
MAM Routine: Three-Act Task

Act 1: Notice & Wonder

Play the video, in which a jar of notes and coins is emptied onto a table. Using Think-Pair-Share, click to play or ask:

- What do you notice?
- What do you wonder?

Record the children's responses to both questions on the board. Allow the children the opportunity to respond to (agree/disagree with or query) others' responses, but do not confirm or reject any of the ideas.

- (Reveal the focus question.) How much money do you think is here?

Act 2: Productive Struggle

Using Think-Pair-Share and Write-Hide-Show, ask:

- Write an estimate that is too high on your MWB.
- Write an estimate that is too low.
- Write a reasonable estimate.

The children work in pairs or small groups to answer the focus question. If necessary, prompt them by clicking to play or asking:

- Do you have enough information? What else do you need to know?

Once the children explain that they need to be able to see the individual notes and coins more clearly and/or to organise the money, click to reveal the second image. Click to play or ask:

- What information do you have now?
- To get an answer, what needs to be done?
- What strategies can you use?

Using Build it; Sketch it; Write it, the children choose their preferred way to mathematically model their strategies/solution(s). In their Maths Journals, the children use images and/or words to record what they built, sketched or wrote. Alternatively, give each group a copy of PCM 44: Florida Fund, on which they can show their workings.

Act 3: The Big Reveal

The children share and discuss their strategies and solutions. Click to play or ask:

- What answer did you get?
- What strategies did you use to get that answer?
- What do you think was the most efficient strategy?



Then, flip to reveal the final image, which shows the total amount. Click to play or ask:

- Is this the answer that you expected? Why or why not?
- What 'I wonder' questions did you answer?
- Do you have any new 'I wonder' questions?

Let's strengthen

The children may benefit from additional supports, such as:

- Allowing them to choose a group of coins/notes to total (i.e. they don't have to total them all).
- PCM 45: Coins and Notes, which is a photocopiable representation of the coins and notes used in the video (it can be cut up and manipulated).
- Counting supports such as a 100 square, a number line, cubes and base ten blocks.

Let's deepen

Challenge the children to calculate the total amount of money.

C Counting activity: Counting Money

Provide the children with random amounts of physical representations of euro (€1 to €50) and/or cent (1c to 50c) and ask them to organise and count them. The children explain how they counted the money.

P Pupil's Book page 95: Euro



Optional consolidation and extension possibilities

Maths Journals The children use images and/or words to record what they built, sketched or wrote.

Role Play Market Stalls. Allow time for setting up market stalls. Allocate amounts of money (e.g. as a float) for the children to organise, count and total.

Games Bank Play 'Money Estimate'.

Review and Reflect Use the Prompt Questions Poster.

Day 4, Lesson 3

€ and c

Focus of learning (with Elements)

- Records amounts of money, demonstrating accurate use of € and c symbols, and decimal point (C)
- Renames amounts of euro and cent (R)

Learning experiences

- D** Digital activity: Skip Counting in 20s
MAM Routine: Choral Counting
- D** Toolkit: Money – € and c
MAM Routines: Reason & Respond, with Write-Hide-Show
- C** Game: Lucky Dip
- P** Pupil's Book page 96: € and c

Equipment

- Play money
- Cloth bag

Maths language

- symbol, decimal point

Warm-up



D Digital activity: Skip Counting in 20s MAM Routine: Choral Counting

The children count aloud along with the text/images, both forwards and backwards.

Extra: Select a random slide (e.g. six 20c coins). Ask the children to record this amount on their MWBs. Do they use the symbols accurately?

Main event



D Toolkit: Money – € and c MAM Routines: Reason & Respond, with Write-Hide-Show

Part 1: Go to the Manipulatives e-Toolkit and open the Money tool. Display 50c and 20c. Using Write-Hide-Show, ask the children to record the value shown. Record their answers on the board. Ask/say:



- What answer are you going for? Explain why.
- Which answer(s) is/are correct? Explain why.
- Which answer(s) is/are not correct? Explain why.
- Which answer is most acceptable/most commonly used?

Display €1 and 50c and 2c, and ask the same questions as above.

Teaching tip

Explain that, when writing amounts of money, we use either the euro symbol (€) or the cent symbol (c) but not both (e.g. €0.70 and 70c). If the amount has both euro and cent, typically the € sign rather than the c sign is used, and we also need to use a decimal point to separate the euro from the cents (e.g. €1.52).

Part 2: Display a number of coins (between two and five coins) with a total of less than €1.

Ask/say:

- Write the amount of money on your MWB in two different ways.
- Are both ways acceptable?
- Which way is more acceptable/most commonly used?

Repeat using an amount of coins with a value of up to €2.

Repeat as required. You could also invite the children up to the board to display an amount of coins for the rest of the class to respond to.

Let's deepen

Challenge the children to repeat the activity, using coins totalling from €1 to €2.

C Game: Lucky Dip

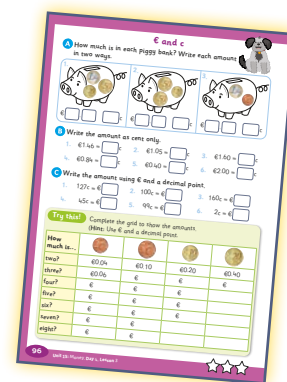
Group work: Using play coins, each child:

- Takes out four coins from the bag without looking.
- Draws, traces or makes rubbings of the coins in their copy.
- Writes the total amount in two different ways.

Let's strengthen

Modify the number of coins taken from the bag and/or the range of coins available to be taken from the bag to make this activity more/less challenging.

P Pupil's Book page 96: € and c



Optional consolidation and extension possibilities

Concrete activity Market Stalls. Label the goods with prices (all in euro or all in cent, but not both). The prices should be less than €50 or less than 50c.

My Maths Fact File Page 125 can be completed at any stage after this lesson.

Games Bank Play 'Money Shuffle' or 'Dip, Dip, Dip'. The children record amounts on their MWBs in two different ways.

Review and Reflect Use the Prompt Questions Poster.

Day 5, Lesson 4

Exact Money Only

Focus of learning (with Elements)

- Selects and uses a range of mental strategies to identify coins required (A&PS)
- Makes and justifies conjectures about combinations of coins/amounts (R)
- Appreciates the purpose/function of cashless transactions and identifies the different cashless methods with which they are familiar (U&C)

Learning experiences

- D** Digital activity: How Much Is Here? (A) and (B) **MAM Routines: Quick Images, with Write-Hide-Show**
- D** Digital activity: Exact Money Only **MAM Routines: Notice & Wonder, with Think-Pair-Share; Reason & Respond**
- D** Video: What Are Bank Cards? **MAM Routine: Reason & Respond**
- D** Toolkit: Money **MAM Routine: Reason & Respond**
- C** Concrete activity: Making Exact Amounts
- P** Pupil's Book page 97: Exact Money Only

Equipment

- Play money

Maths language

- bank card, debit card, credit card, exact amount/change, bus/train fare, contactless (payment), 'same value, different appearance'

Warm-up

- D** Digital activity: How Much Is Here? (A) and (B) **MAM Routines: Quick Images, with Write-Hide-Show**

Display either slideshow (A) or slideshow (B). Slideshow (A) has totals to €0.99 and slideshow (B) has totals from €1 to €1.99. Click to briefly reveal and then hide each image. The children record the total on their MWBs. Ask them to 'show' their answers, and record these on the board. Be careful not to confirm the correct answer. Ask:

- Are there any written answers that are actually the same amount (same value, different appearance)?

- Are there any answers that are unreasonable/not likely because they do not make sense? Which ones? Why do you think this?
- Which answer do you agree with? Explain the strategy you used to get your answer.
- Did anybody use a different strategy?

When there are no new strategies to discuss, reveal the image again and confirm the answer using a variety of possible strategies.

Repeat the process with the second slideshow, if you wish.

Main event

- D** Digital activity: Exact Money Only **MAM Routines: Notice & Wonder, with Think-Pair-Share; Reason & Respond**

Display the poster and, using Think-Pair-Share, ask:

- What do you notice?
- What do you wonder?



Record the children's responses to both questions on the board. Allow the children the opportunity to respond to (agree/disagree with or query) others' responses, but do not confirm or reject any of the ideas. Then ask or click to play the following questions:

- Jay and his family have to go through this toll on their way to Galway on their holidays. How much will they have to pay?
- Show me some different ways to pay the car charge.
- A motorcyclist goes through the toll ahead of Jay's family. How much does she pay?
- How do you know that you are correct?
- Show me some different ways to pay the motorcyclist's charge.
- How do you know that you are correct?
- What other ways could we pay?
- What if we had no coins or notes at all?
- If a bankcard is used, where is the money coming from?
- If an e-tag is used, where is the money coming from?



D Video: What Are Bank Cards?

MAM Routine: Reason & Respond

Before playing the video, ask the children:

- What are bank cards?
- Are there different types?
- When might they be used?
- How do you think they work?



D Toolkit: Money

MAM Routines: Reason & Respond

Go to the Manipulatives e-Toolkit and open the Money tool. Use the tool to model different ways to make €1 and €2.

Open the Money Arrays tabs and click '€1 coin' to display the area model for that coin. Ask the children to suggest equivalent ways to make the same value (i.e. same value, different appearance). Click to reveal the various arrays as suggested by the children and overlay them on top of the €1 coin array to verify that they are equivalent. Repeat to identify equivalent models for €2. (Note that there is not a €2 array, so it is necessary to have two €1 coin arrays side by side.)

Let's deepen

Choose a random amount or euro and cent from €1 to €2. Ask the children to determine how to make the exact amount using the least number of coins.

Repeat using an amount of euro from €100 to €200.

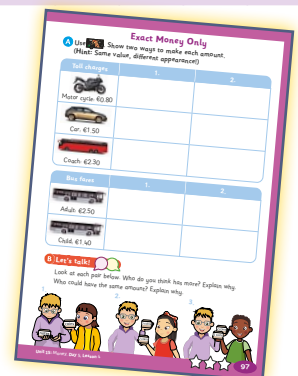
C Concrete activity: Making Exact Amounts

Use the play coins to explore different ways to make €1 and €2.

Let's strengthen

The children may benefit from the additional support of PCM 46: Money Arrays to explore and model different ways to make exact amounts.

P Pupil's Book page 97: Exact Money Only



Optional consolidation and extension possibilities

Role Play Market Stalls. Use play money or draw to show different ways to make up the prices on the goods.

Maths Eyes Can you think of other places where exact change is required?

Games Bank The children could choose to play their preferred game.

Review and Reflect Use the Prompt Questions Poster.

Day 6, Lesson 5

Comparing and Ordering

Focus of learning (with Elements)

- Compares and orders collections of coins and/or notes, including using strategies that do not require counting (R)
- Records equivalent and non-equivalent amounts of notes and coins using $<$, $>$ and $=$ (C)

Learning experiences

- C** Concrete activity: Making Exact Amounts **MAM Routines: Write-Hide-Show, with Built it; Sketch it; Write it**
- D** Digital activity: Would You Rather? (1) **MAM Routines: Reason & Respond, with Write-Hide-Show**
- C** Game: Lucky Dip: Would You Rather?
- P** Pupil's Book page 98: Comparing and Ordering

Equipment

- Play money
- Cloth bag

Maths language

- greater than, less than, more, less, most, least, worth the same, same value

Warm-up

- C Concrete activity: Making Exact Amounts**
MAM Routines: Write-Hide-Show, with Build it; Sketch it; Write it

Write a random amount of money (e.g. 35c, 70c, €1.10) on the board. Tell the children:

- Choose a way to show this amount on your MWB.
- Is your answer correct? Prove it!

Teaching tip

The children could record in their Maths Journals how they represented the amounts.

Let's strengthen

The children may benefit from the additional support of play money to assemble the required amounts.

Main event

- D Digital activity: Would You Rather? (1)**
MAM Routines: Reason & Respond, with Write-Hide-Show

Display the slideshow, which includes images of money boxes, purses and piggy banks containing different amounts of money. Explain that the characters have been saving their money for their holidays. Ask:

- Which would you rather? On your MWB, write 'B' for blue or 'R' for red.
- How can you prove it?
- Does anybody have different proof?
- Did anyone use skip counting?
- Did anyone not use counting at all? What did you do?



Teaching tip

Specifically focus in on the strategies that the children used. If not offered, demonstrate appropriate strategies, such as:

1. Counting strategies:

- Skip counting
- Biggest number (coin value) first.

2. Comparison strategies:

- Locating both totals on a number line/100 square to compare and identify the larger amount
- Ignoring the parts that are the same in both groups and counting or comparing the parts that are different (e.g. ignoring 50c and 50c in one piggy bank and €1 in the other piggy bank, and just comparing the remaining coins).

- C Game: Lucky Dip with Would You Rather?**

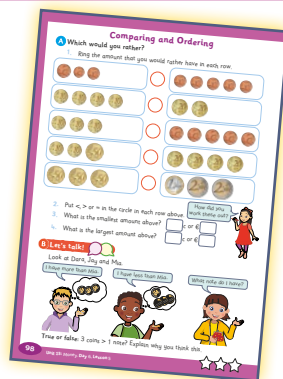
Pair work: Using play coins, each child:

- Takes out four coins from the bag without looking and places them on the table.
- Discusses which amount they would rather have and explains why.

Let's deepen

Modify the number and/or range of coins to be taken from the bag in order to make this activity more/less challenging.

P Pupil's Book page 98:
Comparing and Ordering



Optional consolidation and extension possibilities

Concrete activity Market Stalls. Arrange the items in order according to their price (ascending order).

Review and Reflect Use the Prompt Questions Poster.

Day 7, Lesson 6

Finding Totals

Focus of learning (with Elements)

- Selects and uses a range of mental and written strategies to calculate simple bills and totals (A&PS)
- Records calculations of money as number sentences (C)

Learning experiences

- D** Digital activity: Would You Rather? (2)
MAM Routines: Reason & Respond, with Write-Hide-Show
- P** Pupil's Book page 99: Finding Totals
MAM Routines: Write-Hide-Show; I Do, We Do, You Do
- C** Role-play activity: Market Stalls
- P** Pupil's Book page 99: Finding Totals

Equipment

- Play money
- Materials for class market stalls

Maths language

- total, altogether

Warm-up

- D** Digital activity: Would You Rather? (2)
MAM Routines: Reason & Respond, with Write-Hide-Show

As in Lesson 5, display the images of money boxes, purses and piggy banks containing different amounts of money. Explain that the characters have been saving their money for their holidays. Ask:

- Which would you rather? On your MWB, write 'B' for blue or 'R' for red.
- How can you prove it?
- Does anybody have different proof?
- Did anyone use skip counting?
- Did anyone not use counting at all? What did you do?

Teaching tip

Specifically focus in on the strategies that the children used. If not offered, demonstrate appropriate strategies, such as:

1. Counting strategies:

- Skip counting
- Biggest number (coin value) first.

2. Comparison strategies:

- Locating both totals on a number line/100 square to compare and identify the larger amount
- Ignoring the parts that are the same in both groups and counting or comparing the parts that are different (e.g. ignoring 50c and 50c in one piggy bank and €1 in the other piggy bank, and just comparing the remaining coins).

Main event

P Finding Totals *MAM Routines: Write-Hide-Show; I Do, We Do, You Do*

Display Pupil's Book page 99 on the IWB. (The children keep their books closed.) Invite two children up to play. Child A rolls the dice twice to pick an item from each of the Groups (A and B). Using Write-Hide-Show, all the children mentally work out and present a total value for the two items. (Repeat for Child B.) Ask:



- Are there any answers that are unreasonable? Which ones? Why do you think this?
- Which answer are you proposing?
- How can you prove it?
- Does anybody have different proof?

I Do, We Do, You Do: If the column method of addition is not suggested, use this approach to explicitly explain it as one of the possible strategies (see Calculation Strategy Wall Cards for column addition)

Let's strengthen

The children may benefit from completing the Unit 15 Let's Strengthen PCM which shows the same items as on Pupil's Book page 99, but with simpler prices.

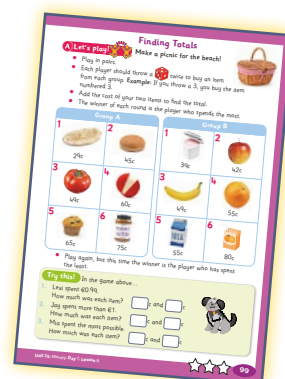
Let's deepen

Challenge the children to complete PCM 47: Finding Totals: Holiday Clothes, in which the items are priced in euro.

C Role-play activity: Market Stalls
MAM Routine: Role Play

A group of children goes to shop at another group's market stall. The children use play money to pay for goods, using the exact amount (not making change). Swap roles and repeat the activity.

P Pupil's Book page 99: Finding Totals



Let's strengthen

The children may benefit from using the appropriate number line inside the cover of the Pupil's Book to aid with counting forwards to find the totals.

Optional consolidation and extension possibilities

PCM 48: Finding Totals: Design your Own This is a blank version of the Pupil's Book page 99, where the children can make up prices for their own items.

Review and Reflect Use the Prompt Questions Poster.

Home/School Links Book Page 40 'Four Throws to €1': Play this game at any stage during the rest of this unit or during the upcoming review week(s). Cover the page with a clear acetate to allow for the game to be played repeatedly.

Days 8 and 9, Lesson 7

Finding Change

Focus of learning (with Elements)

- Selects and uses a range of mental and written strategies to determine change from a transaction (A&PS)
- Calculates the number of items that can be bought with a given sum (A&PS)
- Records calculations of money as number sentences (C)

Learning experiences

- D** Digital activity: 40 – 21 **MAM Routines: Would This Work?, with Build it; Sketch it; Write it**
- P** Pupil's Book page 100: Finding Change
MAM Routine: Write-Hide-Show
- C** Role-play activity: Market Stalls
- P** Pupil's Book page 100: Finding Change

Equipment

- Play money
- Materials for class market stalls

Maths language

- finding change

Warm-up



- D** **Digital activity: 40 – 21 MAM Routines: Would This Work?, with Build it; Sketch it; Write it**

Play the activity. Begin by asking the children to solve the calculation mentally, and collect responses and strategies using Build it; Sketch it; Write it

Then click to reveal in turn the approaches of the characters. Ask:

- Do their strategies work? Explain why you think so.
- How do their strategies compare with your strategies?

Main event

- P** **Pupil's book page 100: Finding Change**
MAM Routine: Write-Hide-Show

Display Pupil's Book page 100 on the IWB. (The children keep their books closed.)

Using Write-Hide-Show, ask the children to mentally work out and present answers to the following:



- Imagine that I have 40c. What items can I afford to buy?
- (Based on one of those items:) How much change will I have left?
- Are there any answers that are unreasonable? Which ones? Why do you think this?
- Which answer are you proposing?

- How can you prove it?
- Does anybody have different proof?

Repeat as required with the other item.

I Do, We Do, You Do: If adding up (complementary addition) on a number line is not suggested, use this approach to explicitly review it as one of the possible strategies (see Calculation Strategy Wall Cards for column addition).

Let's strengthen

The children may benefit from using the Unit 15 Let's Strengthen PCM instead, which has the same items as the Pupil's Book page 100, but with simpler prices.

Let's deepen

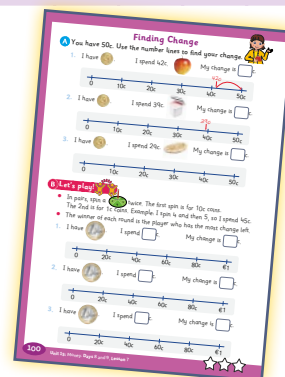
Challenge the children to use instead PCM 47: Finding Totals: Holiday Clothes, priced in euro. Ask them to calculate change out of €100.

C Role-play activity: Market Stalls

A group of children goes to shop at another group's market stall. The children pay for goods using set amounts of play money, from which change will be made. Swap roles and repeat the activity.

Let's strengthen

The children might benefit from the additional support of sketching empty number lines on their MWBs to help them calculate change.

P Pupil's Book page 100: Finding Change**Optional consolidation and extension possibilities**

PCM 48: Finding Totals: Design your Own This is a blank version of Pupil's Book page 99, where the children can make up prices for their own items and choose their own 'I have €__'.

Games Bank Choose a game or play 'Four Throws to €1'.

Home/School Links Book Page 35 can be completed at any stage after this lesson.

Review and Reflect Use the Prompt Questions Poster.

Day 10, Lesson 8**Review and Reflect****Focus of learning (with Elements)**

- Reviews and reflects on learning (U&C)

Warm-up

Carry out a warm-up activity of your choice from one of the lessons in this unit.

Main event

Use this menu of activity ideas to choose how best to structure this last lesson of the unit to suit your needs and the needs of your class.

Let's talk!

Use Think-Pair-Share to review the unit. The children could record what they know in their Maths Journals (e.g. using a concept map). Individual children could present examples of their own drawings/work to the class, and talk about what they have learned.

Let's play!

Role-play the market stalls and/or play any of the money games from the Games Bank.

Maths language Use the Unit 15 Maths Language Cards to revise key terms. For example: if the image and text are cut apart, can the children match them?	Maths strategies and models Ask the children to give examples of the strategies (e.g. counting on to make change) and models (e.g. concrete play money, money arrays, number lines, base ten blocks) that they used in this unit. Which strategies and models did they prefer and why?
Progress Assessment Booklet Complete Questions 56–58 on page 26. Alternatively, these can be left to do as part of a bigger review during the next review week.	Maths eyes Gather a selection of flyers, brochures, catalogues, shop receipts, etc. Allow the children plenty of time to explore and discuss the resources (e.g. using Notice & Wonder). Ask the children to complete various tasks based on the resources and appropriate to their interest and ability, e.g. identify items that cost: (a) less than a euro, (b) between €1 and €2, (c) less than €100, (d) between €100 and €200.
Let's strengthen On their MWBs, ask the children to draw: <ul style="list-style-type: none"> • The coins we use in this country, in order, starting with the one that is worth the least • The notes we use in this country, in order up to €100, starting with the one that is worth the least • A non-example (does not exist) of a coin and a note. Identify children who might benefit from extra practice with some of the key concepts or skills in this unit. Use the Unit 15 Let's Strengthen PCM. Consult the Unit 15 Let's Strengthen Suggestions for Teachers.	Let's deepen Use the Unit 15 Let's Deepen PCM.