Maths and Me: Junior Infants – Short-Term Plan, Unit 14: Money (May: Weeks 1&2)

Strand(s) > Strand Unit(s)	Measures > Money.
Learning Outcome(s)	Through appropriately playful and engaging learning experiences children should be able to develop an awareness of money and its uses.

Lesson	Focus of Learning (with Elements)	CM	Learning Experiences	Assessment
1	**Jack and the Beanstalk:** Begins to develop an appreciation and value of money relative to different objects (U&C); Experiences and/or engages in role-play activities involving exchange (U&C); Begins to explore that coins hold different values (U&C)		C D Reason & Respond L1–9 C Role Play L1–2 C Introducing Cuisenaire Rods L3 D C Choral Counting L4–5, 8 C Swapping Pre-money Counters L4 D Write-Hide-Show L5 C Swapping and Shopping with Pre-money Counters L5 C Sorting Coins L6, 8 C Think-Pair-Share L6 D Quick Images L7 C Shopping with Coins L7 D Notice & Wonder L8 C Game: Coin Drop L8 C Swapping Coins L9 P Game: Money Bingo L9 **Print resources** Pupil's Book pages 75–80 Home/School Links Book pages 34–35 PCMs 51–55	**Intuitive Assessment:** responding to emerging misconceptions **Planned Interactions:** responding to insights gleaned from children's responses to learning experiences **Assessment Events:** information gathered from completion of the unit assessment in the Progress Assessment Booklet pages 26–28
2	**Swap Shop:** Experiences and/or engages in role-play activities involving exchange (U&C); Recognises that some items will cost more than other items, and that some coins are worth more than others (R)			
3	**Cuisenaire Rods:** Engages in a range of transactional activities in which objects (e.g. Cuisenaire rods) are exchanged for notional value (R); Exchanges fairly based on relative value in real-life or role-play contexts (A&PS)			
4	**Pre-money Counters – 1, 2, 5:** Engages with concrete resources (pre-money counters/tokens) as a foundation for understanding the value of coins (U&C); Understands the 'value' of each pre-money counter (R)			
5	**Pre-money Counters – 10:** Recognises the numerical value on the flip side of the pre-money counter (U&C); Uses the counters in transactional activities (A&PS); Experiences the 'new' counter with numerical value of '10' (U&C)			
6	**Coins – 1c, 2c, 5c:** Makes the connection between pre-money counters and coins (U&C); Recognises and understands the value of 1c, 2c and 5c coins (U&C)			
7	**Shopping with Coins – 1c, 2c, 5c:** Recognises that money is necessary to pay or exchange for goods and services (R); Recognises and understands the value of the 1c, 2c and 5c coins (U&C)			
8	**Coins – 10c:** Identifies and understands the value of the 10c coin (U&C); Recognises and demonstrates that lower-value coins can be combined to equal the value of a higher-value coin (U&C)			
9	**Addition Using Coins:** Recognises and demonstrates that lower-value coins can be combined to equal the value of a higher-value coin, e.g. five 1c coins for a 5c coin (U&C); Adds varying amounts under 10c (A&PS)			
10	**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 Míosúil:** 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 'Junior Infants *Maths and Me* Progression Continua Overview' for a detailed breakdown of how all progression continua are covered.
Maths Language	See 'Junior Infants *Maths and Me* Language Overview', individual lesson plans and Unit 14 Maths Language Cards.
Equipment	See 'Junior Infants *Maths and Me* Equipment Overview' and individual lesson plans.
Inclusive Practices	• See Let's Strengthen and Let's Deepen suggestions throughout lesson plans. • See Unit 14 Let's Strengthen Suggestions for Teachers. (These address the Common Misconceptions and Difficulties listed below.) • See Unit 14 Let's Strengthen PCM. • See Unit 14 Let's Deepen PCM.
Integration	See individual lesson plans.

Background and rationale

- At the heart of this unit we are enabling children to discover why we need money in the first place. Of course, their experience of 'cash' is getting more limited with the use of phones, bank cards, Revolut, etc. However, the concept of cash is still a necessary component to understanding the use and value of money.
- Through their exploration of swapping/bartering objects, the children begin to realise the need for money. Key to swapping/bartering is the concept of putting a value on an object. The value that one person places on an object may be different to another person's value, hence the need for a common value system. Fairness is a cornerstone in a value system, e.g. Was a handful of beans a fair exchange for a cow?
- The concept of money itself is introduced by using the Cuisenaire rods. The children gain concrete experience of exchanging like for like, e.g. two white rods for one red rod (two 1c coins for one 2c coin). Further consolidation of money is experienced with the pre-money counters. Many children have difficulty with the 'value' of coins. How can, for example, one 5c coin be the same as five 1c coins? How can the bigger 5c coin have greater value than the smaller 10c coin? The pre-money counters enable the children to 'see', for example, 5 dots on a counter. This helps them to internalise the intrinsic amount or quantity/value of the counter, which leads to their understanding that, for example, a 5c coin contains five times 1c.
- By the end of this unit, the children experience the practical purpose of money and engage in buying and selling activities using both the pre-money counters and coins.

Teaching tip

The vocabulary that relates to money could be used throughout the year. For example: *How much do you have left? How many counters have you got? I'll swap my book for your book. How much did X cost? Was it less or more than ...?* Use the words 'buy', 'sell', 'pay' and 'price' in the classroom shop, but in other more realistic contexts as well, such as: *Where did you buy that pencil/school bag/lunch box?*

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

Common misconceptions and difficulties

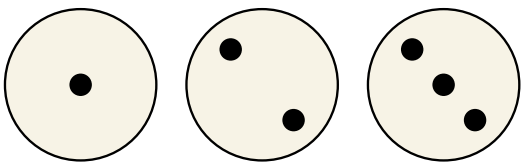
While money is an integral part of modern life and society, children are encountering cash less frequently.

- The children may not appreciate that the size of a coin or note is not proportional to, or representational of, its value.
- They may suggest coin denominations that do not exist (e.g. a 4c coin).
- They may assume that the number of coins equals the total value of those coins (e.g. two 5c coins = 2c).
- They may confuse the amount of coins with the value (e.g. two 1c coins is more than a 5c coin).
- They may struggle to understand that, for example, a 2c coin 'contains' two 1c coins.
- They may confuse the value of euro and cent coins. (While children might be used to seeing/using the €1 and €2 coins, this could lead to confusion with the 1c or 2c coins. There could also be difficulty with, for example, the 5c coin being of lesser value than a €1 coin.)

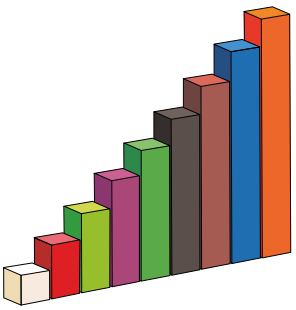
The Unit 14 Let's Strengthen Suggestions for Teachers address the common misconceptions and difficulties listed above.

Mathematical models and representations

- Cuisenaire rods
- Pre-money counters
- Play money (plastic coins)



Pre-money counters



Cuisenaire rods

Teaching tip

A coins manipulative printable is available to support this unit. Click on the resources icon on the *Maths and Me* book cover on **edcolearning.ie**

Day 1, Lesson 1

Jack and the Beanstalk

Focus of learning (with Elements)

- Begins to develop an appreciation and value of money relative to different objects (U&C)
- Experiences and/or engages in role-play activities involving exchange (U&C)
- Begins to explore that coins hold different values (U&C)

Learning experiences

- (C) Class discussion: Is This a Fair Swap? *MAM* Routine: Reason & Respond
- (D) Animation: Jack and the Beanstalk *MAM* Routine: Reason & Respond
- (C) Role-play activity: Is This a Fair Swap? *MAM* Routine: Role Play

Equipment

- A healthy 'treat' (e.g. rainbow carrot, rice cake, protein ball or a treat that you know the children would like)
- Counters or beads

Maths language

- swap, trade, in return, fair, value, worth, same

Teaching tip

Interchange the terms *swap* and *trade* as you see fit. If you feel your class might get confused, choose just one of the terms.

Warm-up

(C) Class discussion: Is This a Fair Swap?
MAM Routine: Reason & Respond

Teaching tip

This discussion could take place before the small break or lunch so that the children have their lunch box to hand.

Show the children a healthy 'treat'. Ask:

- Is this a treat? What would you usually have as a treat?
- What would you swap/trade for this treat?
- If I give you this treat, what will you give me in return?
- I will swap this treat for... (Prompt answers, e.g. 'your apple'.)

List the answers that the children provide on the board. Read them out and ask:

- Which item do you think would be a fair swap?

In daily school life, children often offer to swap an item in their lunch box for an item in their friend's lunch box. You might highlight this action to the class as an example of swapping. (Be aware of food allergies, if you allow the children to swap items from their lunch boxes.)

Main event

(D) Animation: Jack and the Beanstalk
MAM Routine: Reason & Respond

Play the animation. Ask the children:

- Do you think Jack got a fair swap/trade? (You are introducing the concept of value and fairness.)
- Was five beans a fair swap for a cow? What would have been a fair swap?
- Why was Jack's mother angry with him?

Let's deepen

- If Jack had gone to the market, what could he have got for the cow? A horse? (Prompts can be helpful when deepening the discussion.)
- Did the old man get a fair swap? (five beans for a cow) Was the old man happy?
- Did Jack get a fair swap at the end of the story? Was a magic hen and a magic harp a fair swap for the cow?

C Role-play activity: Is This a Fair Swap?
***MAM* Routine: Role Play**

Make an intuitive assessment of the children's understanding of swapping/trading and of fairness and value. Ask the children to play in pairs. Child A plays Jack and Child B plays a person at the market. Jack has a cow (a soft toy). Jack asks: 'What will you swap for this cow?' The person at the market has a handful of beans (counters or beads). The child with the beans specifies an amount of beans. The pair can continue bargaining until they reach an agreement.

Assessment Opportunity

Teaching tip

You could model this by playing Jack and asking a child to play the person at the market. Demonstrate bargaining by asking for more than five beans, e.g. 'I would like one more bean/two more beans.' You could also ask for another animal in return.

Optional consolidation and extension possibilities

Trading Cards The children bring in their trading cards from home and conduct trades within their groups (but return them to their owners after playing). At the end of the activity, ask the children which card was the most popular and why.

Day 2, Lesson 2

Swap Shop

Focus of learning (with Elements)

- Experiences and/or engages in role-play activities involving exchange (U&C)
- Recognises that some items will cost more than other items; and that some coins are worth more than others

Learning experiences

D Digital activity: Swap Shop ***MAM* Routine: Reason & Respond**
C Role-play activity: Swap Shop ***MAM* Routine: Role Play**

Equipment

- Items to swap from the classroom (e.g. from the class drama box), home or a charity shop

Maths language

- worth more/less, buy, sell, pay, pay for, price, cost, how much?

Warm-up

D Digital activity: Swap Shop
***MAM* Routine: Reason & Respond**

Before starting the activity, tell the children that they will be setting up a swap shop today. Ask:

- Do you know what a swap shop might be?
- What do we do at a swap shop?
- How do we know if a swap is fair?

Display the flipcard tool and click to reveal the sets of items to be compared. Discuss the swapping options with the children and help them to come to a class decision regarding a swap (or agree to disagree). It may be interesting to see what value they assign to different items.

The following questions will provide a nice lead-in to the topic of money and why we need it:

- What happens when we go into a toy shop/sweet shop/bookshop?
- Could we bring a teddy into a bookshop and swap it for a book? Why?
- Could we bring a doll to a toy shop and swap it for a junior trampoline? Why?
- Elicit maths language such as 'buy', 'sell', 'price', 'how much?', 'cost', 'pay for'.
- If we want to get a book in the shop, how do we get it?
- What does the shopkeeper do? (He/she sells us the book.)
- How do we know how much the book costs? (The shopkeeper tells us the price or we see the price on the book.)
- When we buy a book, we pay for it. How do we do this? (We use money – no need to mention bank cards/phones, etc.)
- Can you think of anything else we buy/pay for with money? (Food, petrol, sweets, clothing, toys, books, etc.)
- What else do we buy/pay for? What about if we go to the doctor? Swimming pool? Bowling?

Teaching tip

Having set up the swap shop, you could keep it 'open' for shopping activities.

Main event

C Role-play activity: Swap Shop

***MAM* Routine: Role Play**

Depending on the number of children in your class, the swap shop could be set up as a market stall with a child playing a shopkeeper, or a marketplace with groups of children gathering to swap items. Initially, two children could model the market stall activity (or you and a child could model it).

Encourage the children to verbalise what they are doing:

Customer: 'I have a toy car. I don't play with it anymore. May I swap it for that book, please?'

Shopkeeper: 'Yes, I will swap you this book for that toy car. / I will give you this book in return for your toy car.' Or: 'Hmm, I don't think that is a fair swap. I think this book is worth more than your toy car.'

Make an intuitive assessment of the children's understanding of swapping/exchanging/trading and value:

- What did you swap?
- Was it a fair swap?
- Were you happy with your swap? Why or why not?

Let's strengthen

Ensure that all of the children in the class engage in swapping activities, and assist in their use of maths language.

Let's deepen

Ask:

- Did anyone swap a few small items for one large item, for example, 3 marbles for 1 ball? (You could orchestrate this.)
- How many of X did you swap for one Y?
- Was that a fair swap?
- Were you happy with your swap?
- Would, for example, 2 marbles for 1 ball have been a fairer swap?
- How do we know if a swap is fair?

Optional consolidation and extension possibilities

Story Read *Sheep in a Shop* by Nancy Shaw or listen to a reading at: edco.ie/nzpc

STEM Ask for the children's help in setting up the swap shop. Where should it be located in the classroom? Is a table needed? Do we need space behind the table? How many customers could be in the shop at the same time? Will there be lots of swaps happening at the same time? Will there be enough space? How will we organise the 'swaps' between two children? How will we know the swap is fair?

Day 3, Lesson 3

Cuisenaire Rods

Focus of learning (with Elements)

- Engages in a range of transactional activities in which objects (e.g. Cuisenaire rods) are exchanged for notional value (R)
- Exchanges fairly based on relative value in real-life or role-play contexts (A&PS)

Learning experiences

C Concrete activity: Introducing Cuisenaire Rods

D C Digital activity: Cuisenaire Rods

***MAM* Routine: Reason & Respond**

Equipment

- Cuisenaire rods (or the e-manipulative)

Maths language

- worth the same, same value, more, less, taller, short, shorter, shortest, long, longer, longest, tall, tallest

Warm-up

C Concrete activity: Introducing Cuisenaire Rods

Teaching tip

You could start with using the concrete version of the rods before moving on to using the e-manipulative in the Main Event.

Introduce the class to Cuisenaire rods. Ask the children:

- What does this look like? (steps/stairs)

Show the individual rods. Ask:

- Which of these rods would you like? (They might choose their favourite colour or the tallest/biggest/longest rod.)
- Why did you pick that rod?

Let's deepen

Tell the children to look at the white rod and the red rod side by side. Ask:

- What is the difference between these two rods? (colour/size)
- Which rod is taller/longer? Which rod is smaller/shorter?
- How many white rods could I swap for a red rod?

Main event

D C Digital activity: Cuisenaire Rods

***MAM* Routine: Reason & Respond**

Open the interactive Cuisenaire rods resource at: edco.ie/feyx

Assessment Opportunity

Explore the rods using the e-manipulative, mixing them up and arranging the steps/stairs again. Give the children plenty of time to discuss the different lengths/sizes. Ask:

- Which rod is the first step?
- Which colour goes where?
- Why?
- How many white rods would be a fair swap/trade for a purple/red rod? (Continue with this line of questioning.)

Encourage the children to begin making their own swaps (using the concrete versions of the rods) and to verbalise what they are doing. Some children may begin to swap, for example, two red rods for one purple one, and some may swap one white and one red for a green.

Let's deepen

Using concrete Cuisenaire rods, assign one child the role of Banker. The other children go to the Banker and try to swap the rod they have for another rod of equal value.

Find out what swaps the children made and ask them to explain their findings to the class. Assess whether they understood the activities. Ask:

- Was that a fair swap?
- Would you prefer two red rods or one purple rod?
- Does it matter?
- Are they the same?
- How do you know?

Let's deepen

Ask:

- How many white rods for one orange rod?
- How many ... rods for one ... rod?
- If I had ... red rods and one ... rod, which would you prefer? Why?

Use the terms *value* and/or *worth the same*.

Optional consolidation and extension possibilities

Concrete activity The children work in pairs. Child A makes a pattern with the Cuisenaire rods. Child B guesses the pattern and continues it.

Day 4, Lesson 4

Pre-money Counters – 1, 2, 5

Focus of learning (with Elements)

- Engages with concrete resources (pre-money counters/tokens) as a foundation for understanding the value of coins (U&C)
- Understands the 'value' of each pre-money counter (R)

Learning experiences

- (D) Toolkit: Pre-money Counters *MAM* Routines: Choral Counting, with Reason & Respond
- (C) Concrete activity: Swapping Pre-money Counters
- (P) Pupil's Book page 75: Pre-money Counters – 1, 2, 5

Equipment

- Pre-money counters (These are ordinary counters of one colour and size. Stick dots on the counters to represent 'value': one dot on one counter, two dots on another, five dots on another. This represents 1, 2, 5 in a visible way.)
- PCM 51

Maths language

- counter, dots, circle, most, least, how many?

Teaching tip

The counters form the foundation for the use of coins. Misconceptions around value can be alleviated by using pre-money counters before using coins.

Warm-up

(D) **Toolkit: Pre-money Counters *MAM* Routines: Choral Counting, with Reason & Respond**

Ask the children to chant the numbers 1–10. Then, open the Money tool and display a 1-dot, a 2-dot and a 5-dot counter. Introduce the words 'counter' and 'dots' if the children do not already use these words. Ask:

- What can you see?
- How many dots on this counter?
- How much is this counter worth?
- What value is this counter? (You are interchanging the vocabulary of 'how many dots' with 'how much?', 'value' and 'worth'.)
- Are there more dots on this counter?
- Are there less dots on this counter?

Let's deepen

Ask:

- Is this counter worth more/less than this one?
- How do you know?
- Which counter would you prefer?
- Which counter is worth more?
- Which is worth less?
- Which is worth the most?
- How many more dots are there on this counter?

Main event

C Concrete activity: Swapping Pre-money Counters

Distribute the pre-money counters to the class. (You can use PCM 51: Pre-money Counters – 1, 2, 5.) Each child gets a 1-dot, a 2-dot and a 5-dot counter. Encourage the children to examine the counters and describe them. They will need plenty of hands-on experience with the counters. Ask:

Assessment Opportunity

- How many counters have you got? (The number of *dots* and the number of *counters* may be confused, so this is a key question.)
- How many dots are there on this counter? How many are there on this other counter?
- Are there more/less dots on this one?
- Which counter has more/less dots?
- Which counter has the most/least dots?
- Which counter would you prefer? Why?
- Does this remind you of swapping, for example, a book for a teddy? Is there a difference?

Let's strengthen

To provide additional support, ask:

- I have this counter (2-dot). What will you swap me for it? (another 2-dot counter)
- How many dots are there on this counter? (There are two dots but only one counter.)

Continue swapping the counters for the same counter.

Recognising the value of the individual counter is the first stage (e.g. there are two 1-dots 'in' the 2-dot counter). Recognising that a 2-dot counter can be swapped for two 1-dot counters is an extension of this stage. (Interchanging counters with dots for coins is the next stage, e.g. that a 2c coin can be swapped for two 1c coins.)

You could distribute more counters and the groups continue swapping the counters at their own pace:

- 2-dot counter for 2-dot counter
- 2-dot counter for two 1-dot counters
- 5-dot counter for five 1-dot counters

Let's deepen

The children may be able to swap a 5-dot counter for two 2-dot counters and one 1-dot counter.

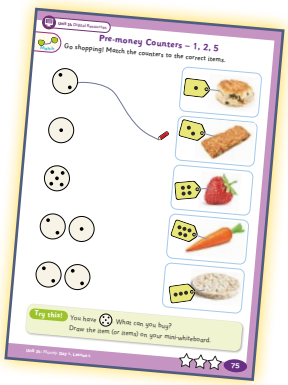
Assess if the children understand the 'value' of the different counters. For example, assess whether they understand the following:

- Does one 2-dot counter have the same 'value' as two 1-dot counters?
- Are three 1-dot counters 'better' than one 5-dot counter (i.e. because there are three counters as opposed to one)?
- Which would you prefer: one 2-dot counter or two 1-dot counters?
- If I give Lexi one 2-dot counter and I give Jay two 1-dot counters, would that be fair?

Let's strengthen

I have one 2-dot counter and Lexi has two 1-dot counters. Who has the most? Do we have the same amount?

P Pupil's Book page 75: Pre-money Counters – 1, 2, 5



Optional consolidation and extension possibilities

Games Bank Play 'Beat the Banker' from the Games Bank.

Concrete Activity Ask the children to work in pairs. Child A makes a pattern with 1-dot and 2-dot pre-money counters. Child B guesses the pattern and continues it. **Optional:** Make patterns with 1-dot, 2-dot and 5-dot pre-money counters.

Silly Simon Read the nursery rhyme 'Silly Simon' to the children:

Silly Simon met a pie-man
Going to the fair.
Said Silly Simon to the pie-man:
'Let me taste your wares.'

Said the pie-man to Silly Simon:
'Show me first your penny.'
Said Silly Simon to the pie-man:
'Sir, I have not any.'

Ask:

- Simon had no money. What could he have done instead?
- Could he have tried to swap something?
- Why did Simon think he would get a pie for free/nothing?

Day 5, Lesson 5

Pre-money Counters – 10

Focus of learning (with Elements)

- Recognises the numerical value on the flip side of the pre-money counter (U&C)
- Uses the counters in transactional activities (A&PS)
- Experiences the 'new' counter with numerical value of '10' (U&C)

Learning experiences

- (D) Toolkit: Pre-money Counters ***MAM* Routines: Reason & Respond, with Choral Counting**
- (D) Digital activity: Pre-money Counters ***MAM* Routines: Reason & Respond, with Write-Hide-Show**
- (D) Image: What Can I Buy? (1) ***MAM* Routine: Reason & Respond**
- (C) Maths Stations: Swapping and Shopping with Pre-money Counters
- (P) Pupil's Book page 76: Pre-money Counters – 10

Equipment

- Pre-money counters – 1, 2, 5 and 10, with the numeral on the reverse (see PCMs 52 and 53)
- Items from the swap shop
- PCM 52
- PCM 53
- PCM 54

Maths language

- same amount, ten

Warm-up

(D) Toolkit: Pre-money Counters *MAM* Routines: Reason & Respond, with Choral Counting

Open the Money tool. Display a selection of pre-money counters. Ask the children to guess what values they represent and to justify their answer.

Introduce the 10-dot counter. Ask:

- Do you notice a *new* pre-money counter?
- Can anyone guess its name?
- How many dots are there on this new counter? Let's count.

Ask the children to chant numbers 1–10.

(D) Digital activity: Pre-money Counters *MAM* Routines: Reason & Respond, with Write-Hide-Show

Click Play to begin the slow reveal of pre-money counters. Ask the children to say the name of the number as soon as they can subitise the amount of dots. Revisit the key language of 'how much?', 'how many?', 'worth' and 'value'. Ask:

- How many dots are there on this counter?
- How much is this counter worth?
- What value is this counter? (You are interchanging the vocabulary of 'how many dots?' with 'how much?', 'value' and 'worth'.)

- Is this counter worth more/less than the previous one?
- Which one is worth more?
- How do you know?
- Which counter would you prefer?

D Image: What Can I Buy? (1)
***MAM* Routine: Reason & Respond**

Display the image, which shows a collection of items 'priced' with either a pre-money counter or a numeral. Ask questions about the prices of the items, such as:

- How much is this book?

The children are engaging in the operation of addition, using the dots on the counters to assist them. In Lesson 9 they will add coins (the 'abstract' version of pre-money counters).

Let's deepen

Ask:

- Which toy costs more/less?
- How many ... costing 1 dot could I buy for one 2-dot counter?
- If I have one 2-dot counter, could I buy ... costing 5 dots?

Main event

C Maths Stations: Swapping and Shopping with Pre-money Counters

Arrange the children into five groups.

Assessment Opportunity

Group 1
The children arrange the counters in order of value. In pairs, the children ask one another to name either the numeral or the amount of dots on a pre-money counter, depending on which side is showing.

Group 2
The children swap the counters among each other, using either side, e.g. 'How many 1-dot counters will you swap me for this 5-dot counter/counter with 5 on it?'

Group 3
Introduce the concrete items with 'prices' already on them. The children use their counters to buy items. (See PCM 52: Pre-money Counters – 1, 2, 5, 10 and PCM 53: Pre-money Counters with Numerals – 1, 2, 5, 10)

Group 4
The children set and stick on their own prices to items from the swap shop. They also use their counters to buy items. (See PCM 52 and PCM 53.)

Group 5
The children use PCM 54: Cards with Prices in Pre-Money Counters for the 'P' (pictorial) stage of CPA, and their counters, to buy items.

Let's deepen

Say/ask:

- I have one 5-dot counter and Sadie has one 1-dot counter and two 2-dot counters.
- Who has the most?
- Do we have the same amount? (You may wish to leave this question out of the pre-money counter stage.)

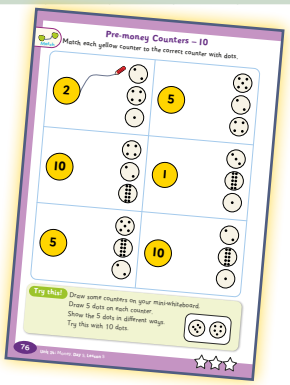
You are intuitively assessing whether the children have grasped that one 5-dot counter is preferable (more valuable/worth more) than, for example, three 1-dot counters.

Ask (using the pre-money counters):

- Which would you prefer, for example, one 5-dot counter or four 1-dot counters? (This will eventually equate to, for example: *Would you prefer one 5c coin or four 1c coins?*)

Using the pre-money counters with dots enables the children to 'see/visualise' the 'value', as opposed to seeing a 5c coin and having to imagine it has five 1c coins 'inside it'.

P Pupil's Book page 76: Pre-money Counters – 10



Optional consolidation and extension possibilities

Games Bank Play 'Throw for Counters' from the Games Bank.

Day 6, Lesson 6

Coins – 1c, 2c, 5c

Focus of learning (with Elements)

- Makes the connection between pre-money counters and coins (U&C)
- Recognises and understands the value of 1c, 2c and 5c coins (U&C)

Learning experiences

- D Toolkit: Pre-money Counters *MAM* Routine: Reason & Respond
- D Toolkit: Cent Coins *MAM* Routine: Reason & Respond
- D Digital activity: Sort the Coins *MAM* Routine: Reason & Respond
- C Sorting activity: Sorting Coins
- C Concrete activity: Coin Rubbings
  MAM Routine: Think-Pair-Share
- P Pupil's Book page 77: Coins – 1c, 2c, 5c

Equipment

- Play money 1c, 2c and 5c coins (or PCM 55)
- Real 1c, 2c and 5c coins
- Monty the puppet

Maths language

- coins, cent

Warm-up

D Toolkit: Pre-money Counters
MAM Routine: Reason & Respond

Open the Money tool. Revise the 1-dot, 2-dot and 5-dot pre-money counters, displaying each in turn. Assess the children's understanding of the 'value' of each counter.

Assessment Opportunity

D Toolkit: Cent Coins
MAM Routine: Reason & Respond

Open the Money tool. Display each of the 1c, 2c and 5c coins in turn. Ask:

- What is the name of this coin? (1c coin: You are focusing on the 1 and the cent. Some children may only have experience of €1 coins!)
- What is the name of this coin? (2c coin: You are focusing on the 2 and the cent.)
- How many cents in this (2c) coin? (2 – just like the 2 dots.)
- What is the name of this coin? (5c coin: You are focusing on the 5 and the cent.)
- How many cents in this coin? (5 – just like the 5 dots.)

Spend as much or as little time as needed on this aspect, depending on the ability of your class.

Main event

D Digital activity: Sort the Coins
MAM Routine: Reason & Respond

Use Monty the puppet alongside this activity. Monty has knocked over a jar of coins ... Let's sort them out! Drag and drop the coins to sort them. Ask:

- Which coin is this?
- Where will we put it? (with the 1c coins)
- Are all of these coins the same?
- Which coin is this?
- What shape is it?
- Are all of these coins the same shape?
- Where will we put this 2c/5c coin?

Let's deepen

Ask:

- How many different types of coins do we have?
- How many sets will we need to sort out these coins?

Sorting activity: Sorting Coins
Distribute play/real 1c, 2c and 5c coins (or use PCM 55: 1c, 2c and 5c Coins) to each group and ask them to sort the coins.

Let's deepen

Ask:

- Can you order the coins according to their value?
- Which coin would you prefer: the 2c coin or the 1c coin? Why? Which coin is worth more/less/the most?
- Which coin would you prefer: the 2c coin or the 5c coin? Why? Which coin is worth more/less/the most?

Let's deepen

The children mathematically model these options, using the coins. Ask:

- Which would you prefer: the 2c coin or three 1c coins? Why?
- Which would you prefer: one 2c coin or four 1c coins? Why?
- Which would you prefer: one 5c coin or three 1c coins? Why?

Concrete activity: Coin Rubbings
***MAM* Routine: Think-Pair-Share**

Ask the children to make coin rubbings with crayons or pencils on paper. Some children might like to cut out the rubbings. Each child can try to guess which coin their partner's rubbing represents.

Pupil's Book page 77: Coins – 1c, 2c, 5c

Optional consolidation and extension possibilities

Buried Treasure Coins are 'buried' in the sand pit. The children find the coins and put them into sets and/or order them. **Let's Deepen:** The children record the coin amounts and count the cents they have.

Game Play 'How Much is This Coin Worth?', in which the children see a picture of a coin and decide how much it is worth from a list of options, at: edco.ie/dke6

Day 7, Lesson 7

Shopping with Coins – 1c, 2c, 5c

Focus of learning (with Elements)

- Recognises that money is necessary to pay or exchange for goods and services (R)
- Recognises and understands the value of the 1c, 2c and 5c coins (U&C)

Learning experiences

- Digital activity: Recognising Cent Coins
  ***MAM* Routine: Quick Images**
- Toolkit: Value of Cent Coins ***MAM* Routine: Reason & Respond**
- Image: What Can I Buy? (2) ***MAM* Routine: Reason & Respond**
- Concrete activity: Shopping with Coins
- Pupil's Book page 78: Shopping with Coins – 1c, 2c, 5c

Equipment

- Play money/real 1c, 2c and 5c coins
- Items from the swap shop with price tags attached (1c, 2c, 3c, 4c, 5c)

Maths language

- There is no new maths language for this lesson.

Warm-up

D Digital activity: Recognising Cent Coins

MAM Routine: Quick Images

Play the Quick Images slideshow. Click to briefly reveal and then hide the images. Ask:

- What coin did you see?
- How did you know it was that coin? (What features of the coin can the children identify?)

Teaching tip

If you feel your class is ready, move on to shopping activities.

D Toolkit: Value of Cent Coins

MAM Routine: Reason & Respond

Open the Money tool and display the 1c, 2c and 5c coins. Ask:

- What do we call this coin?
- What could you buy with this coin?
- What could you buy with this 2c coin? (You are trying to assess if the children have grasped the concept of value.)
- Could you buy a trampoline? A teddy? (You are not looking for 'right' answers; you are assessing their level of understanding of value.)
- How many 1c coins would you swap me for this 2c coin?
- What coins would you swap/trade for this 5c coin? (Try to elicit as many options as possible.)

Main event

D Image: What Can I Buy? (2)

MAM Routine: Reason & Respond

Display the image, which shows a range of items labelled with prices. Hold up each coin in turn and ask:

Assessment Opportunity

- I have 2c. Could I buy ...?
- I have 1c. Could I buy ...?
- I have 5c. Could I buy ...?

Let's deepen

Ask:

- Imagine the price is 3c. What coins do I need?
- I have 1c. What other coins do I need?
- Is there another way to make 3c?
- Is there a 3c coin?
- Imagine the price is 4c. What coins do I need?
- I have 2c. What other coins do I need?
- Is there a 4c coin?
- I have 2c. Can I buy this item for 5c?
- How much more do I need?

You might like to 'count on' from 2c – if you have done sufficient Choral Counting, and the children can count on from a given number.

C Concrete activity: Shopping with Coins

Distribute items from the swap shop, labelled with prices, to each group. (This might best be done at their tables – rather than at the shop – where you can observe what is happening.) The children engage in shopping activities, using their coins. Encourage them to verbalise what they are doing

- 'I have 2c: what can I buy? I could buy this book for 2c.'
- 'I have 3c. I can buy this pencil for 3c. Can I buy this toy for 4c?'

Let's deepen

- I could buy two pencils that are 1c each. Will I use two 1c coins or a 2c coin?
- The car is 3c. What coins do I need: three 1c coins or a 2c coin and a 1c coin?
- The hat is 5c. What coins will I use? I have 3c: what other coin(s) do I need?

Let's deepen

The children may wish to record their shopping in pictorial form and using, for example, 1c, 2c, 5c.

P Pupil's Book page 78: Shopping with Coins – 1c, 2c, 5c

Optional consolidation and extension possibilities

Paper Coins The children use paper coins (use PCM 55 for 1c, 2c and 5c coins, or the coins manipulative printable for 1c, 2c, 5c and 10c coins) to buy, sell, swap and shop.

Day 8, Lesson 8

Coins – 10c

Focus of learning (with Elements)

- Identifies and understands the value of the 10c coin (U&C)
- Recognises and demonstrates that lower-value coins can be combined to equal the value of a higher-value coin (U&C)

Learning experiences

- D Digital activity: Money All Around Us
  ***MAM* Routines: Notice & Wonder; Reason & Respond**
- D Toolkit: Introducing 10c Coins ***MAM* Routine: Reason & Respond**
- C Concrete activity: Cent Coins Chant
  ***MAM* Routine: Choral Counting**
- C Sorting activity: Sorting Coins
- C Game: Coin Drop
- P Pupil's Book page 79: Coins – 10c

Equipment

- Play money/real 1c, 2c, 5c and 10c coins
- Sensory bag
- Piggy bank or money box

Maths language

- There is no new maths language for this lesson.

Warm-up

D Digital activity: Money All Around Us *MAM* Routines: Notice & Wonder; Reason & Respond

Display the poster, which shows different places where we see money being used. Use the Zoom and Spotlight features to focus on specific scenes. Click to play or ask the following questions:

- What can you see on the poster?
- What is the girl doing with coins at the ice cream van?
- What is the girl doing with her piggy bank?
- What is the woman using her coins for?
- Look at the red tub. How does it use coins?
- Look at the bottom middle photo. How many coins do you see?
- Are the coins all the same size?
- Which coin would you prefer? Why?
- Look at the bottom right photo. How many coins in this photo?
- How could you sort the jumble of coins?

D Toolkit: Introducing 10c Coins
***MAM* Routine: Reason & Respond**

Open the Money tool and display a number of 1c, 2c, 5c and 10c coins on the IWB. Ask:

- What shapes do you see? (circles)
- Are they all the same size? (Do the children notice the new addition of the 10c coin?)
- What else do you notice? (There is a numeral on each coin.)

- Is there anything else you notice? (The 10c coin is a different colour.)
- How could we sort out this jumble of coins? (Put the 1c coins together, the 2c coins together, etc.)
- Which coin would you prefer?

C Concrete activity: Cent Coins Chant
***MAM* Routine: Choral Counting**

While looking at the cent coins on the IWB, invite the children to 'compose' a chant using cent: 1c, 2c, 3c, 4c, 5c, 6c, 7c, 8c, 9c, 10c. You could incorporate some body percussion elements into the chant.

Assessment Opportunity

Reassess whether the children understand the value of each coin. Ask:

- I have a 2c coin. What could you swap me for this coin?
- How many 1c coins for this 2c coin?
- Is there a 3c/4c coin? What coins are there?
- What about this 5c coin? What could you swap me for this coin?
- What about this 10c coin? What could you swap me for this coin?

Main event

C Sorting activity: Sorting Coins

Distribute the concrete coins to each group and tell them to sort the coins. Ask:

- Which coin would you prefer?
- Can you put the coins in order of value?

Let's strengthen

Revisit the names, properties, and order of value of all the coins. Use the sensory bag and make a game of identifying the different coins.

Let's deepen

Ask:

- Which would you prefer: the 5c coin or the 10c coin? Why? Which coin is worth more/less/the most?
- Which would you prefer: six 1c coins or one 5c coin?
- Which would you prefer: seven 1c coins or one 10c coin?

They could record their workings on their MWBs. For example: 5c coin (drawn) is the same as (or draw a line to) five 1c coins (drawn).

- How many ways can you make 10c? For example: 5c and 5c. Record the ways.

C Game: Coin Drop

Drop 1c coins into the piggy bank/money box, so that they make an audible sound. The children listen very carefully and mentally count the coins (not aloud). Before going past ten, you suddenly ask:

- How many 1c coins?

The first child to answer correctly wins the game.

Let's deepen

Use 2c coins. This will have a slightly louder sound. Ask the children to mentally count the cents as the coins drop into the money box, so they are now counting in 2s.

P Pupil's Book page 79: Coins – 10c

Optional consolidation and extension possibilities

Let's Strengthen Use the Unit 14 Let's Strengthen PCM and ring the correct coin in each row to consolidate coin recognition.

Coin Shapes In this concrete activity, the children arrange coins in a shape on a piece of paper. What shape can you make? A circle? A necklace? (Linkage with Shape)

Day 9, Lesson 9

Addition Using Coins

Focus of learning (with Elements)

- Recognises and demonstrates that lower-value coins can be combined to equal the value of a higher-value coin, e.g. five 1c coins for a 5c coin (U&C)
- Adds varying amounts under 10c (A&PS)

Learning experiences

- (D) Toolkit: Adding and Swapping Cent Coins
  MAM Routine: Reason & Respond
- (C) Concrete activity: Swapping Coins
- (P) Game: Money Bingo
- (P) Pupil's Book page 80: Addition Using Coins

Equipment

- Play money or real 1c, 2c, 5c and 10c coins
- Money Bingo Cards (see printable)

Maths language

- altogether, and (in the context of addition), another, amount

Warm-up

Teaching tip

When the children are swapping/exchanging/trading coins, they are also engaging in the operation of addition (without the 'distraction' of shopping activities).

(D) Toolkit: Adding and Swapping Cent Coins

MAM Routine: Reason & Respond

Open the Money tool and display the 1c, 2c, 5c and 10c coins on the IWB. Ask/say:

Assessment Opportunity

- I have 2c. What coins will you swap for this 2c? (1c *and* 1c – note the focus on addition.)
- I have 5c. What coins will you swap for this 5c?
- I have a 1c coin *and* another 1c coin? How much have I got altogether?
- I have a 2c coin *and* a 1c coin. How much have I got altogether?
- I have a 2c coin *and* another 2c coin. How much have I got altogether?
- Is 2c and 2c the same as 4c?

Let's deepen

- I have a 2c, another 2c and a 1c coin. How much have I got altogether?
- I have 10c. What coins will you swap for this 10c?

Main event

(C) Concrete activity: Swapping Coins

Distribute coins to each group. Ask:

- What could you swap a 2c coin for?
- Is 1c and 1c the same as 2c?
- What could you swap a 5c coin for?
- What could you swap two 1c coins for?
- What could you swap five 1c coins for?
- What about this 10c coin?
- 2c and 2c and 1c: What swap could you make?
- I have a 1c coin and a 2c coin. How much have I got?
- I have a 2c coin and a 1c coin. How much have I got? (Is it the same amount as a 1c coin and a 2c coin?)

Give the children plenty of hands-on experience of sorting and swapping the coins.

Let's deepen

Judge whether asking about permutations of 10c (e.g. 5c and 5c) is feasible for the ability of some of the children.

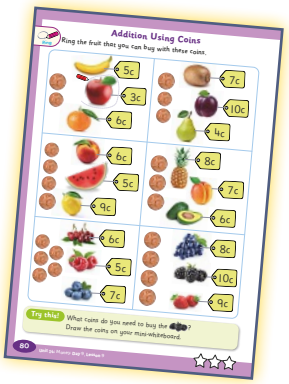
Assess their individual ability in terms of addition of coins: some will be capable of, for example: 5c and 2c; 2c and 2c; adding three or four coins.

Some children may like to record their swaps on their MWBs, using the letter 'c' (e.g. 1c, 2c, 5c, 10c).

P Game: Money Bingo

Using the activity printable Money Bingo Cards, distribute a card and coins to each group. When you call out a coin, the children put the corresponding coin on their card.

P Pupil's Book page 80: Addition Using Coins



Optional consolidation and extension possibilities

Story Read *Money-Go-Round* by Roger McGough.

Home/School Links Book Pages 34 and 35 can be completed any time after this lesson.

Let's Deepen Distribute the Unit 14 Let's Deepen PCM and use addition to see what treats the characters could buy for Monty.

Day 10, Lesson 10

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

Choose from this menu of activity ideas, or choose your own way to best structure this last lesson to suit your needs and the needs of your class.

Let's investigate!

Distribute copies of PCM 54: Cards with Prices in Pre-money Counters and coins to the class. The children decide on a toy they would like to buy and work out the coins needed. They record their choices on their MWBs.

Let's play!

In groups, the children could role-play shopping, using an old credit/debit card or phone. They could imitate an adult swiping the card against the card reader (or tapping the card reader with their phone).

Let's deepen

Stick a certain value on the 'debit' card (e.g. 10c) to begin with. Each child uses the card to buy items, and keeps a record on their MWBs of the amount they spend when a 'purchase' is made.

Maths language

Ask the children to explain the following terms, perhaps using examples or drawings on their MWBs: *swap, trade, in return, fair, value, same counter, dots, circle, ten, worth more/less, buy, sell, pay, pay for, price, cost, enough, catalogue, how much?*

Use the maths language cards for this unit to revise key terms. For example: if the image and text are cut apart, can the children match them?

Let's go shopping!

Teaching tip

These activities might work best at the children's tables (as opposed to the class shop), where you can observe what is happening.

Group 1: Distribute coins, and concrete items (toys/books/crayons) with prices already attached (1c to 10c tags). The children buy single items with the exact coin (e.g. a 2c coin for a toy with a 2c price tag).

Group 2: Distribute coins, and concrete items with prices already attached. The children buy single items with a *combination* of 1c, 2c and 5c coins (e.g. a 2c coin and a 1c coin for a toy with a 3c price tag).

Group 3: Distribute coins, and concrete items with prices already attached. The children buy one or more items with a combination of 1c, 2c and 5c coins.

Groups 4 and 5: Distribute concrete items and blank price tags. The children use the blank price tags to assign prices (1c to 10c) to the items, according to their own ideas of value.

Progress Assessment Booklet

Complete Questions 54–62 on pages 26–28. Alternatively, these can be left to do as part of a bigger review during the next review week.

Maths eyes

Ask the children to watch out for prices on items when they are out with parents/guardians doing the shopping.

Let's strengthen

Identify children who might benefit from extra practice with some of the key concepts or skills in this unit. Consult the Unit 14 Let's Strengthen Suggestions for Teachers and/or use the Unit 14 Let's Strengthen PCM for parallel tasks.

Let's deepen

Use the Unit 14 Let's Deepen PCM.

Notes