

Ordering and adding money

National Curriculum attainment target

- Estimate, compare and calculate different measures, including money in pounds and pence

Lesson objective

- Estimate, compare and calculate with money in pounds and pence

Previous related lesson

None

Prerequisites for learning

Pupils need to:

- have an understanding of decimals
- understand the formal written method for addition with whole numbers

Vocabulary

money, pounds, pence, add, decimal point, decimal places carry

Future related lesson

Unit 11, Week 1, Lesson 3

Success criteria

Pupils can:

- add some amounts of money mentally
- add some using the formal written method
- write out the calculation correctly
- carry from the tenths column to the ones column



Getting Started

- Choose an activity from Number – Addition and subtraction
- Choose an activity from *Fluency in Number Facts: Y3/Y4 – Addition and subtraction*

**Collins
Connect**
Year 4, Unit 9,
Week 2

Teach

Resources

mini whiteboard, pen and eraser (per child)



- Say: **In this lesson we are going to focus on money.** Ask everyone in the class to write an amount of money less than £50 on their boards.
- Choose three children to come to the front and show their amounts to the class. Tell them to put themselves in order from the smallest to the largest.
- Ask: **Who has an amount written down that could go in between these children's amounts?** Choose some children to come up and stand in the right place to be in order. If any children are not sure ask the rest of the class to give them instructions.
- Check with the class that the order is correct.
- Point between two of the children.
- Say: **Write an amount that could go in here and still be in order.**
- Say: **Explain how to order amounts of money.** Listen to some pair's explanations. Establish that first we need to look at the pounds and then the pence.
- Write an amount of money on the board. Ask: **What kind of numbers do we use to write money?** Establish that money is always written as decimals to two places unless it is an amount that is just pounds or just pence.
- Say: **Write some money calculations that you could add mentally.**
- Look at children's calculations and record five on the board.
- Say: **Work these out mentally and jot your answers down on your board.** Ask some children to share their answers and methods with the class.
- Say: **Write some money calculations that you would not be able to add mentally.** Ask some pairs to explain why they would not be able to add their amounts mentally.
- Look at children's calculations and record five on the board.
- Say: **The written method can be used with money.** Write one of the calculations out vertically on the board. Choose one where the tenths do not add up to more than 9. Change digits if needed.



- Say: **Estimate the answer to this calculation.** Give children a short amount of time and then ask some children for their estimates.
- Say: **Remember the written method only works if digits of the same place value are written underneath each other. So with money the tenths and hundredths must be lined up, and the decimal points are underneath each other.**
- Say: **Copy this calculation and work it out using the formal written method.** Watch carefully as children do this and notice any problems when moving from the tenths to the ones column.
- Model the calculation focussing on any aspects you have noticed children found challenging.
- Say: **The method is exactly the same as when we added whole numbers. Write the decimal point in the answer box keeping it in line with the decimal points of the amounts being added.**
- Choose another calculation where the tenths do not add up to more than 9.
- Say: **Add these two amounts. Check children's working out.**
- Repeat, this time choosing an amount where the tenths do add up to more than 9.
- Say: **If there are more than 9 tenths then we get a whole one pound and we carry it to the ones.**

Individualised Learning

Refer to Activity 4 from the Learning activities on page 351.

Pupil Book 4C: – Page 11: Ordering and adding money
Progress Guide 4: – Support: Year 4, Unit 9, Week 2, Lesson 4:
 Adding money on a number line

Plenary



- Say: **Being able to add amounts of money using both the formal written method and mental method are very useful skills.**
- Ask: **The answer is £10.99 what is the question?** Write £10.99 on the board and put a circle around it.
- After a short while ask some children for their questions. Record them on the board around the circle.
- Tell children they can use any operations, and be imaginative with their questions. You may wish to give some examples.
- Ask pairs to think of some more questions.

Overcoming Barriers

- Children may find adding money difficult using columns in the formal written method. If they do, check that they have a secure understanding of how the method works. Use £1 coins, 10p coins and 1p coins to model what happens when the tenths add up to more than 9.