Money - addition word problems

National Curriculum attainment targets

• Read, write and interpret mathematical statements involving addition (+), subtraction (−) and equals (=) signs

• Solve one-step problems that involve addition, using concrete objects and pictorial representations

Lesson objectives

• Solve simple one-step word problems that involve addition in familiar practical contexts, e.g. money

• Interpret and write mathematical statements involving addition

Previous related lessons

Unit 1, Week 2, Lessons 1 and 2; Unit 2, Week 1, Lessons 1,
3 and 4; Unit 2, Week 2, Lessons 1, 3 and 4; Unit 4, Week 1,
Lessons 1, 3 and 4; Unit 5, Week 2, Lessons 1 and 2

Prerequisites for learning

Pupils need to:

• recognise and know the values of different coins: 1p, 2p, 5p, 10p and 20p

• be familiar with handling coins, using them to pay and receive change

• recognise, read and write numbers 0–15, and symbols + and =

• understand how to combine two groups of objects to find a total

**Vocabulary**

zero, one, two, three … fifteen, how many?, count, count out,

money, coin, penny, pence, how much?, buy, sell, spend, pay,

add, plus, makes, equals, altogether, sign, write, more, less

Future related lessons

Unit 7, Week 1, Lessons 1–3; Unit 7, Week 2, Lessons 1, 3
and 4; Unit 9, Week 2, Lessons 1–4; Unit 11, Week 1, Lessons
1–3; Unit 11, Week 2, Lessons 1, 2 and 4

Success criteria

Pupils can:

• solve simple one-step addition problems involving money

• understand and record addition facts within 15, using the symbols + and =

• recall addition facts within 15 with increasing accuracy, and apply this knowledge to practical situations



Getting Started

• Choose an activity from Number – Addition and subtraction.

• Choose a game or activity from *Fluency in Number Facts: Y1/Y2 –* Addition and subtraction.

**Year 1, Unit 5, Week 2**

Teach

Resources

a selection of objects to be ‘bought’, labelled with prices up to 10p and 15p (per class) (optional); collection of 1p, 2p, 5p and 10p coins (per pair); paper and pencil (per child)

• Show 1p, 2p, 5p and 10p coins.

• Point to one of the coins.

• Ask: **Which coin is this? How much is this?**

• Repeat so that children identify all of the coins and their values.

• Display: Slide 1 showing an apple costing 6p and a banana costing 4p. Alternatively, show children two actual objects labelled with these prices.

• Say: **I want to buy these two items.** Agree their prices with the children: 6p and 4p.

• Ask children to work out how much the two items will cost and to use their fingers to show the number of pence (10).

• Next, ask pairs to work out which coins you could use to pay.

• Ask: **Can you find more than one way?**

• Share children’s answers. Display each suggestion: a 10p coin; two 5p coins; a 5p, two 2p coins and a 1p coin, etc.

• Display: Slides 2–10.

• Using Slides 2–10 or actual objects labelled with prices, ask pairs to ‘buy’ items with a total cost between 10p and 15p. The problems on Slides 2–4 involve adding a one-digit number to 10, for children to begin working with ‘teens’ numbers. Pairs use coins, and paper and pencil to work out the totals together.

• For each total, ask children to suggest different ways of paying the exact amount. Display the different combinations of coins suggested.

• Look in particular at suggested combinations in which several coins could be replaced with a single coin (e.g. two 2p coins and a 1p coin could be replaced with a 5p coin). Ask children to identify which coins could be ‘swapped’ for a single coin.

• Invite children to explain how they worked out each total and how to write it as an addition calculation. For example: ‘The apple costs 6p: write 6p. The banana costs 4p: write + 4p. Six pence add four pence makes ten pence altogether’: write = 10.

• Ask: **Does it matter if I buy the objects in a different order? What if I buy the banana first and then the apple? Will I still spend the same amount of money?**

• Establish that the total cost will be the same, regardless of the order in which the prices are added.

Individualised Learning

 **Activity Book 1B** – Page 8: Pocket money spending

**Progress Guide 1** – Extension, Year 1, Unit 5, Week 2, Lesson 3:
What can I buy?

Resources: scissors and glue (per child)

Refer to Activity 3 from the
Learning activities on page 225.

Plenary

• Review and discuss the work children completed in the Individualised Learning activities.

• Emphasise equivalent values by describing different combinations of coins that can be used to pay the same total cost (e.g. 11p can be paid with two 5p coins and a 1p coin, or one 5p coin and three 2p coins) and different combinations of items with the same total price (e.g. 4p and 11p total 15p; so does 8p and 7p).

• Say: **I have ten pence in my pocket. Which coins might I have?**

• Say: **I have two coins in my pocket. They add up to ten pence. Which coins do I have?**

• Say a variety of similar questions. Encourage children to suggest more than one answer (or to identify where there is only one possible answer).

• Ask: **I buy a pencil for four pence, a sweet for two pence and an orange for four pence. How much have I spent altogether?** (10p)

• Ask: **How can I write this as an addition calculation? Does the order that I write the prices in matter?**

• Establish and write the possible addition calculations:

2p + 4p + 4p = 10p

4p + 4p + 2p = 10p

4p + 2p + 4p = 10p

• Display: the Number Line tool. Show each addition on the number line to demonstrate that addition can be done in any order and the answer remains the same.

This is the
commutative law. This is the
 commutative law.

