

## Unit 9

## • SESSION 1 •

## TOTAL TIME

30  
MINUTES

## OBJECTIVE

- Solve simple word problems involving money

## VOCABULARY

coins, money, amount, price, increase/going up, decrease/going down, exactly, how much?

## RESOURCES

Sets of coins from 1p, 2p, 5p and 10p (resource sheets 14 and 15); Set of coins 20p, 50p, £1, £2; a purse; two hoops; 0–9 dice; 0–9 paperclip spinner (resource sheet 1, Unit 1)

## HOMEWORK

Play the *Coins Game* using a paper clip spinner (resource sheet 1, unit 1) and paper coins (resource sheets 14 and 15).

## STARTER

5  
MINUTES

Write on the board:  $14 \square 2 = 28$ ,  $14 \square 2 = 7$ ,  $14 \square 2 = 16$ ,  $14 \square 2 = 12$ . Ask the children to fill in the operation in each case, explaining how they worked it out.

Play *Ping Pong* (see Unit 8, session 2), but this time with numbers that make 20. Aim to keep the pace going.

## KEY QUESTIONS

- Does  $3 + 7 = 10$  help you to know  $13 + 7 = 20$ ?
- If you know  $13 + 7 = 20$ , do you know the answer to  $20 - 13$ ?

## MAIN ACTIVITY

20  
MINUTES

Show the children a full set of coins. Lay out two hoops, one labelled 'more than 10p' and one 'less than 10p'. Is there any coin they cannot place (10p)? Discuss why not.

Before the lesson, place three coins, such as 5p, 2p and 1p, in a purse. Write the total amount (in this case 8p) on the board. Ask the children which three coins you have in the purse.

Repeat the exercise with another combination of coins, say 10p, 5p and 2p. Tell the children you have 17p in the purse. Which three coins do you have?

Split the class into pairs and give each pair a set of coins, one of each denomination to £2. Tell them to make different amounts using four coins. Ask the children to write down the coins used every time as a number sentence, such as  $1p + 2p + 5p + 10p = 18p$ . After a few minutes, ask: *Which four coins make the largest amount? Which make the smallest amount?*



Draw a toy on the board, and label it 25p. *How much do two of these toys cost?*

*The price (25p) increases or goes up by 10p. How much is the toy now?*

*The original price (25p) goes down by 5p. How much does it cost now?*

Draw another toy, this time costing 72p, and repeat the process with the same questions.

Go through the rules of the *Coins Game* shopping game the children will play at home. Explain activity sheet 9.1, which the children should complete before the next session.

### KEY QUESTIONS

- ☐ Which coin is worth the most?
- ☐ What is the least number of coins you need to have 25p exactly?
- ☐ What are they?

### PLENARY

5  
MINUTES

Consider with the children the key questions above.

Now draw a bag of sweets on the board and put on a 47p price label.

*How do you know which coins to give?*

*How do you work out the least number of coins to use to make a particular amount?*

Encourage children to explain strategies, such as starting with the coin of largest value below the amount you want to make.

## Unit 9

## SESSION 2

## TOTAL TIME

30  
MINUTES

## OBJECTIVES

- Solve simple word problems involving money
- Give change and work out which coins to pay

## VOCABULARY

coins, money, amount, price, increase/going up, decrease/going down, how much?

## RESOURCES

sets of 1p – £2 coins;  
a purse;  
a small toy with 16p  
and 65p price labels

## STARTER

5  
MINUTES

Show two coins, 20p and 2p. Ask: 'How much have I got?' Repeat this with two other coins.

Write 28p on the board. *What is the least number of coins I need to make 28p exactly? What are they?*

Repeat with 74p.

## KEY QUESTIONS

- What is the greatest amount you could have if you had three coins?
- What if each coin is different?
- How do you work out which coins to use if you want to pay an exact amount?

## MAIN ACTIVITY

20  
MINUTES

Show the children a purse with three 10p and three 5p coins in it. Tell them you are going to buy a 20p stamp. Ask them how much you will have left. Do not remove any coins. Ask the children how they are going to work out the answer. Will there be more or less in the purse?

Practise giving change. Appoint one child the shopkeeper and another the shopper. Show the toy with the 16p label on it. Tell the children that the shopper has a 20p coin in her purse. How much change will the shopkeeper give her? Stress that 20p is more than 16p. Count on to find out how much change she should have. Establish that it is 4p change.



Relabel the toy as costing 65p.

*What coins could you use to pay for this? What is the smallest number of coins?  
Which coins are they?*

Tell the children you have one 50p and one 20p coin in your purse.

*How much is this?*

*How much change do you get when you use these coins to pay for the 65p toy?*

Encourage the children to count on. Now tell them you have one £1 coin to pay for the toy.

*How much change will you have this time?*

Encourage the children to count on, first in ones to 70 and then in tens to 100.

*How much change do you have altogether?*

Explain activity sheet 9.2, which the children should complete before the next session.

#### KEY QUESTION

■ If we pay more than we need to, how do we work out the change?

#### PLENARY

5  
MINUTES

Show a 20p coin and tell the class you want to buy crisps for 14p.

*How do you find out how much change you need?*

Some children will be able to use their knowledge of number facts but others will need to count on in ones. Now show a £1 coin and tell them you are going to buy a pen for 78p.

*How much change? How do you work it out?*

Encourage children to go to the nearest multiple of 10 first (in this case 80) and then count on in tens to 100.

**Name** .....**Date** .....

Dear Parents/Carers,

We have been looking at the coins we need to make up different amounts of money. Please help your child by playing the game below.

Thank you for your help.

Your child's teacher

### Coins Game

- You need ten 1p, ten 2p, ten 5p and ten 10p coins. This is your bank. Use coins or the cut-outs from resource sheets 14 and 15.
- Take it in turns to spin the spinner twice. Add the scores together; for example 7 and 6 will give you 13. Take that amount from the bank, provided you can make it up exactly with the coins available. Giving change is not allowed.
- Continue taking turns until neither player has been able to withdraw anything from the bank for three turns. The player who has the most money at this point is the winner.

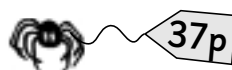
Name .....

Date .....

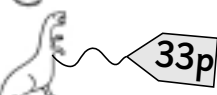
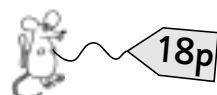
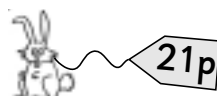
Activity  
sheet

9.1

1. Work out the coins you need to pay for each toy.  
Use the smallest number of coins.



$$20p + 10p + 5p + 2p = 37p$$



2. Now increase the price of each toy by 10p.

$$37p + 10p = 47p$$

3. Work out how much you pay for:

Two spiders .....

Two sheep .....

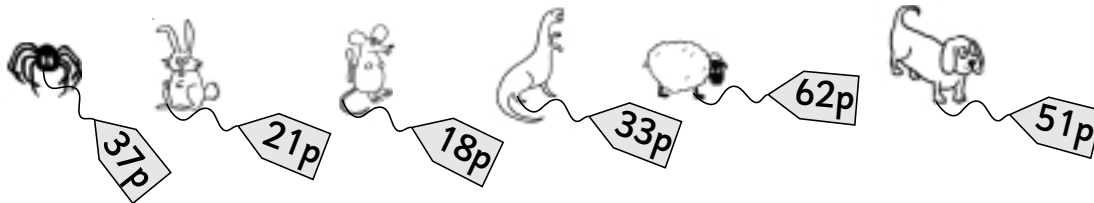
One mouse and two rabbits .....

Name .....

Date .....

Activity  
sheet

9.2



## 1. Work out the change when you buy:

One mouse with

10p 5p 5p

.....

One dinosaur with

20p 20p

.....

One dog with

50p 20p

.....

One sheep with

50p 5p 5p 5p

.....

One spider with

50p

.....

Two rabbits with

50p

.....

2. Write a number sentence to show what to add to these  
amounts to make 50p.

27p + 23p = 50p

46p .....

25p .....

38p .....

33p .....

19p .....



# Unit 9

## RESOURCE SHEET 14



1p	1p	1p	1p	1p
1p	1p	1p	1p	1p
2p	2p	2p	2p	2p
2p	2p	2p	2p	2p
5p	5p	5p	5p	5p
5p	5p	5p	5p	5p

## Unit 9

## RESOURCE SHEET 15

UNIT

9



10p	10p	10p	10p	10p
10p	10p	10p	10p	10p
20p	20p	20p	20p	20p
20p	20p	20p	20p	20p
50p	50p	50p	50p	50p
50p	50p	50p	50p	50p