

2

Broadening horizons

<p>Coverage</p> <p>This unit is about currency conversion. It includes work on using decimals to compare costs and prices. The unit reinforces previous work on percentages. Learners will need to calculate percentages and work out percentage increase and decrease.</p> <p>The unit will increase confidence in the use of calculators. Learners will need to use a calculator throughout the unit. Learners will work to two decimal places, the accepted level of accuracy for currency.</p> <p>At this level learners are expected to build on the skills developed at Level 1. Learners are encouraged to check their answers using another method.</p>	<p>Skills</p> <p>MSS1/L2.1 calculate with sums of money and convert between currencies</p> <p>N2/L2.5 order, approximate and compare decimals when solving practical problems</p> <p>N2/L2.7 order and compare percentages and understand percentage increase and decrease</p> <p>N2/L2.8 find percentage parts of quantities and measurements</p> <p>N2/L2.9 evaluate one number as a percentage of another</p> <p>N2/L2.10 use a calculator to calculate efficiently using whole numbers, fractions, decimals and percentages</p>
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Resources needed for effective teaching of this unit:

Demonstration	Group	Pair	Individual
Calculators	Calculators	Calculators	Calculators
Newspapers	Squared paper	Squared paper	Squared paper
Foreign currency – including euros if possible	Pencil	Pencil	Pencil
			'Post-it' (self-adhesive) notes

Reminder

In the 'Links', H means Help, E means Extension and M means Mini-project.

Remember

Throughout the unit, be aware of the reading needs of learners.

You may need to read out parts of the text.

Words **highlighted in bold** will need particular clarification.

This unit requires learners to remember and use skills of rounding to various degrees of accuracy. Revision of these skills, together with calculator skills, may be beneficial.

Context

- Discuss the scenario in a group.
- Find out about learners' experiences of foreign currencies. Some may have no experience but most will understand the concept.
- Make sure that each learner has a calculator for this unit.
- Stress that learners should check all answers by approximation and mental checks.
- Throughout this unit be aware that some learners may confuse £ and €.

Stimulus questions

- Have you been to another country?
- Do you know where can you buy foreign currency? (Learners may identify banks and the Post Office. Explain that there are specialist places – bureaux de change – usually only located in airports, cities and big tourist areas.)
- Do you know what currency is used in most European countries?
- Have you used any currencies other than pounds? What was it? Where was it from?
- Do you know how to convert from one currency to another?
- Do you know what prices are like in any mainland European countries?
- Do you know how much petrol costs in mainland Europe?

Pages 2 and 3 How much will the money cost?

Introduction to activity 1

- This activity introduces the idea of purchasing foreign currency.
- Ask learners for suggestions of places where foreign currency can be bought.
- Ask if learners have bought currency for any country – which country? What was the currency? Some may have bought travellers cheques – you may need to explain what they are and how they work.
- Some may use debit/credit cards abroad.

- Ask how banks etc. display their rates.
- Explain how to order numbers.
- Work through the example.
- Go through some more questions on the board/flipchart if necessary.

Activity 1

- Work through choosing the smaller of pairs of whole numbers, numbers to one decimal place, numbers to two decimal places. Discuss how to choose the smaller number.
- Learners work in pairs.

Introduction to activity 2

- Will exchange rates be the same across the country? Why may they differ?
- Collect examples of exchange rates at different banks etc. on one day. These could be used as an alternative to the data provided.

Activity 2

- Ask learners to work in pairs to arrange the costs in order of size. Report findings back to the group.
- Some learners may benefit from using 'Post-it' notes (one with each value) to order the amounts.

Introduction to activity 3

- How many learners have bought currency? Did they have to pay commission? Some places advertise commission-free exchange rates.
- Discuss how to calculate a percentage of an amount:
 - using a calculator
 - using the 1% method.
- Work through the example.
- Go through some other similar questions.

Activity 3

- Learners complete the activity individually or in pairs.

Links: H1, H2, M1

Pages 4 and 5 Money changing

Introduction to activities 4 and 5

- Discuss foreign currencies.
- Discuss the euro and the euro area.
- If possible, have some examples of foreign currency for learners to handle – particularly euros.
- Discuss the proportional method for converting, as illustrated in the 'currency conversion' box. Try some other conversions based on the generalisation.
- Emphasise the good practice of checking the calculations.
- Discuss why the number of euros is always larger than the number of pounds.
- Work through some of the entries already in the ready reckoner.

Activity 4

- Learners complete the activity individually or in pairs.

Activity 5

- Discuss why a ready reckoner might be useful for currency conversion.
- Make sure learners are confident of the process before they work either in pairs or individually to complete the ready reckoner.

Introduction to activity 6

- How will you know if goods are cheaper or more expensive abroad?
- How can you compare prices?
- Discuss converting from euros to pounds. Would you expect more or fewer pounds than euros?
- Check that learners realise that a different conversion calculation is required when changing pounds to euros. (This comes in activity 14.)
- Discuss the proportional method of converting euros to pounds shown in the 'currency conversion' box.
- Work through question 1.

Activity 6

- Learners complete the activity individually or in pairs.
- Some learners will find the concept of converting euros to pounds difficult to grasp. These learners might benefit from carrying out a physical exchange of euros for pounds.

Activity 7

- Discuss how to convert euros to pounds.
- Work through some of the conversions already in the ready reckoner.
- Learners complete the ready reckoner table individually or in pairs.

LINKS: H3, H4, E1, M1, M3

Pages 6 and 7 Pitching the tent

Introduction to activity 8

- Discuss learners' experiences of camping.
- Campsites usually charge for the pitch, the car and for each person.
- Have any learners camped abroad?

Activity 8

- Make sure learners understand how to read the table of charges.
- Work through the example.
- Check that learners understand the meaning of the symbol @ (at).
- In a group, work out the costs for campsite B, making sure that all learners are confident in tackling the problem.
- In pairs, learners work out the costs for campsite C.
- Learners complete the table individually.

Activity 9

- Discuss what is meant by percentage decrease.
- Revise rounding numbers.
- Work through the example.
- Work through similar examples if necessary.
- Work through question 1 as a group.

- Learners complete question 2 in pairs.
- Learners answer question 3 individually.

LINKS: E2

Pages 8 and 9 Bring or buy?

Introduction to activity 10

- How do you know if goods abroad are more expensive than goods at home?
- Give learners examples of prices of basic items in France.
- www.day-tripper.net contains surveys comparing English and French supermarket prices.

Activity 10

- Discuss why some goods are more expensive in France.
- Discuss how to calculate a given percentage of an amount of money, both with and without a calculator (Level 1, unit 2) and a percentage increase.
- Work through the example. Explain how the information fits into the table.
- Work through question 1 as a group.
- Learners work through the rest of the activity individually or in pairs.

Activity 11

- Discuss why some goods are cheaper in France.
- Discuss how to calculate a given percentage of an amount of money (with and without a calculator) and percentage decrease.
- Make sure learners understand the table.
- Work through the example of butter and explain how the figures are entered in the table.
- Work through the figures for tomato soup and enter them into the table.
- Learners complete the activity individually or in pairs.

LINKS: H5, M2

Pages 10 and 11 Counting the cost

Introduction to activity 12

- Discuss different types of petrol (4-star, unleaded, diesel) and price variation.
- Do learners think petrol will be cheaper or more expensive in France?
- Discuss why percentages are used to make comparisons.
- Discuss how to write pounds as pence, for example 79.5 pence as a decimal of a pound.
- Explain that although 0.5 pence does not physically exist, it can be rounded to the nearest penny after the purchase of multiple litres of petrol.
- Why do you divide by 100?
- Work through the example. Check learners understand each step.
- Work through another example if necessary.
- Why use the UK price when working out the percentage saving? We want to find the percentage saved when buying petrol in France.

Activity 12

- Learners complete the activity individually or in pairs.

Activity 13

- Learners work out the percentage increase in fuel prices in the UK compared with France.
- Work through the example and check learners understand each step.
- Work through another example if necessary.
- Why use the French price when working out the percentage increase? We want to find the percentage extra paid when buying petrol in the UK.
- Learners complete the activity individually or in pairs.

LINKS: H5, M4

Page 12 Changing back

Introduction to activity 14

- Introduce the idea of selling back unused currency.
- Provide examples of bank buying and selling rates.

Activity 14

- Learners should be aware of the difference between the bank exchange rates for selling and buying currency.
- Who will profit – the bank or the customer? Learners can estimate how much they will lose on the transaction.
- Revise how learners converted pounds to euros (activity 4).
- Discuss how to convert euros to pounds.
- Work through the example using the bank buying rate to convert euros to pounds.
- Discuss how to convert euros to pounds. This is different to activity 6 when using $1 = £0.63$. Here it is necessary to divide by the bank selling rate.
- Work through the example using the bank selling rate to convert to pounds.
- Work out how much is lost on the exchange.
- Are learners surprised at the amount?
- Learners complete the activity individually or in pairs.
- Discuss the results with the group.

LINKS: H3, E1, M1

Pages 13 and 14 Help

H1

- Remind learners how to order decimal numbers.
- Learners work individually or in pairs.

H2

- Remind learners that they will need to work out the percentage indicated and add it on.
- Remind learners how to calculate a percentage of an amount.
- Work through the example.
- Learners work individually or in pairs.

H3

- Remind learners how to complete the ready reckoner.
- Learners work individually or in pairs.

H4

- Discuss the difference between this ready reckoner and the one in activity H3.
- Remind learners how to use the ready reckoner.
- Work through the entry for cheese.
- Learners work individually or in pairs.

H5

- Remind learners how to change pounds to euros.
- Remind learners how to calculate the percentage saving.
- Learners work individually or in pairs.

Page 15 Extension

Activity E1

- Discuss the table. How do you find the relevant exchange rate?
- Work through examples, converting £100 to two or three of the currencies.
- Learners work individually or in pairs.

Activity E2

- Discuss the campsite price list. Who pays the holiday tax?
- Remind learners how to work out the percentage of an amount.
- Learners work individually or in pairs.

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Mini-projects

M1

- Learners research exchange rates.
- Learners can collect information from banks etc., newspapers and the Internet.

M2

- The Big Mac index is published by *The Economist* and can be found at www.oanda.com.
- Fuel prices make an interesting and illuminating study!
- Information can be found on the website www.see-search.com.

M3

- Learners can plan a trip to e.g. Pakistan, the Caribbean, Eastern Europe etc.
- They will need to investigate currency.
- They can produce a currency ready reckoner.
- They could check out hotel prices in local currency – from travel agents, websites etc.

M4

- Learners research comparative prices between the UK and a country of interest.
- Learners could present their findings to the rest of the group.

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Check it

Use these questions to assess how learners have coped with the skills in this unit. Ask learners to indicate the areas in which they would like more help.

How am I doing?

To be completed by learners individually, with teacher support.