

5

A load of rubbish

<p>Coverage</p> <p>This unit is about extracting simple information from lists such as shopping lists, directories and opening/closing times. Further work develops the task to sorting and classifying information and constructing simple representations or diagrams arising from real-life situations. Learners are introduced to various lists, and activities are introduced to encourage learners to identify information ranging from the number of items in the list to identifying particular attributes such as most, first, last, most frequent etc. The final section of this unit looks at sorting information according to a particular criterion and constructing simple representations to illustrate the data, such as ordering content in lines, ultimately leading to pictograms.</p>	<p>Skills</p> <p>HD1/E1.1 extract simple information from lists</p> <p>HD1/E1.2 sort and classify objects using a single criterion</p> <p>HD1/E1.3 construct simple representations or diagrams</p>
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Resources needed for effective teaching of this unit:

Demonstration	Group	Pair	Individual
Crisp packets – various flavours, makes, sizes Bottles (different colours and types) Cans (different brands etc.)	Simple telephone lists, contents lists and directories	Examples of pictograms	'Post-it' (self-adhesive) notes Ruler

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.

Context

Discuss the scenario in a group.

Be aware that some learners will have little idea about recycling rubbish.

Stimulus questions

- Do you recycle rubbish?
- What different ways are there to get rid of rubbish?
- What kinds of rubbish can you recycle?
- What kinds of rubbish can you not recycle?
- What numeracy skills are required for recycling rubbish?
- What are the advantages of recycling rubbish?
- What are the disadvantages of recycling rubbish?

Pages 2 and 3 On my list

Introduction to activity 1

- Discuss the idea of lists.
- Why are lists useful?
- What sort of lists might you make? Shopping list, Christmas list, packing list etc.
- What do you do when you complete an item on a list? (Tick off, cross out etc.)

Activity 1

- Discuss Arfan's list.
- Learners work in pairs to answer the questions.
- How useful is the list?
- How could it be improved?
- Can learners explain why one of the boxes is ticked off?

Activity 2

- Many learners will need require literacy support for this activity.
- Help learners to make their own list of things to do today.
- Discuss what might be included on the list. Suggest time for study etc.

- Learners discuss their lists with another person, and ask each other questions:
 - How many items are on the list?
 - What is the first item on the list?
 - What is the second item on the list?

Introduction to Activity 3

- Many learners will need require literacy support for this activity.
- Discuss the idea of weekly lists.
- How do you prioritise?
- Use the opportunity to revise days and dates.

Activity 3

- Discuss Arfan's list.
- Learners work in pairs to answer the questions.
- Identify activities on different days.
- Support learners in filling in the table with other events.

Activity 4

- Help learners to make their own list of things to do for the week.
- Discuss what might be included on the list – what is important and what is not.
- Encourage learners to include time for study etc.
 - How many items on the list?
 - What are you doing on Monday? ... Tuesday?
- A study timetable for the week/month might be supportive.

LINKS: H1

Pages 3 and 4 Contacting the Council

Introduction to activity 5

- Discuss places to find information.
- A selection of directories might be useful.
- Further practice and consolidation of using directories will be helpful.
- Show learners how to use a ruler (or straight edge) to line up details.

Activity 5

- Learners work in pairs to answer the questions.
- Discuss the picture. How helpful is it?
- What pictures might be used for other departments?

Introduction to activity 6

- Discuss different forms of information.
- A selection of directories might be useful.
- Provide learners with further practice and consolidation of using directories.

Activity 6

- Learners work in pairs to answer the questions.
- Ask further questions.
- Get learners to ask each other questions based on the information given.

Introduction to activity 7

- Explain the format of the information on opening times.
- Discuss time. (Make sure learners are secure with this.)

Activity 7

- Learners work in pairs to answer the questions.
- Ask other questions based on the information given.

LINKS: H3, M1

Pages 6 and 7 Paper chase

Introduction to activity 8

- Possible discussion point: Did you know that over 90 million trees are cut down every year to make paper and cardboard? That's roughly a forest about the size of Wales.
- Talk about different forms of paper (newspaper, magazines, cardboard etc.).
- Discuss the difference between newspapers and magazines.
- What paper is most suitable for recycling?

- How do you think recycling works?
- Who lives in an area where newspapers/magazines are collected for recycling?

Activity 8

- Explain how the exercise is to be done. An example is given.

Introduction to activities 9 and 10

- Talk about different types of bottles (e.g. beer bottles, wine bottles, milk bottles).
- Introduce difference in terms of colours.
- What colour bottles can you get (green, brown, clear, blue, etc.) It may be helpful to provide your own selection to demonstrate.
- Why do bottles need to be separated into different colours?

Activities 9 and 10

- Learners work in pairs to answer the questions.

Introduction to Activity 11

- Introduce the idea that items can be sorted in different ways, e.g. bottles could be sorted as:
 - Wine bottles, beer bottles, milk bottles, ...
 - Green bottles, brown bottles, clear bottles, ...
 - Tall bottles, short bottles, ...
 - Corked bottles, screw-top bottles, ...
- Explain use of bottle banks and the need to sort bottles by colour.

Activity 11

- Explain how the exercise is to be done. An example is given in the exercise.

LINKS: H2, M2, M3

Pages 8 and 9 Giving to charity

Introduction to activities 12 and 13

- Introduce the idea that packets can be sorted in different ways (e.g. according to brand, flavour, size etc.).

- Discuss other ways in which packets of crisps might be sorted.
- Crisp packets or representations of these may be helpful for this work.
- Reinforce that Crispy Crisps is donating money to charity in both activities (12 and 13).
- ‘Crunchy’ and ‘Crispy’ are similar words and may be confused by some learners. It may be beneficial if learners highlight these two words in different colours before completing the activity.

↑ **Activities 12 and 13**

- Learners work in pairs to answer the questions.
- Questions 6 and 7 in Activity 12 and question 4 of Activity 13 require identification of Crispy Crisp packets only. There is potential for confusion here so make sure learners know exactly what they are doing before they start.
- Ask learners to make up their own questions based on the information given.

LINKS: E1, M2

Pages 10–12 Sorting the rubbish

Introduction to Activity 14

- Discuss the sort of things you might find in a rubbish bin.
- Discuss different types of rubbish bins (lounge, kitchen, office etc.).
- How might you classify rubbish in a bin? (paper, metal, glass, plastic and food)
- For more able learners, discuss different classifications of paper, glass, etc.
- Discuss the content of Arfan’s rubbish bin.
- Discuss the bottles. What colours are there?
- Introduce the concept of a pictogram – sometimes called an ideograph.
- Note that pictograms must be drawn with identical symbols. So, for example, the bottles become the subject of the pictogram, classified by colour.
- Stress that all the bottles drawn on the pictogram are exactly the same size and shape.
- A pictogram has a title – discuss what the title should be here and add it.

- A pictogram needs a key – discuss what the key is here and add it.

Activity 14

- Learners work in pairs to answer the questions from the pictogram.

Introduction to activities 15, 16 and 17

- Discuss the format of pictograms again.
- What symbol could be used? Remind learners that the same symbol is used throughout any one pictogram, and that it needs to be something that is easy to draw
- Remember to stress the need for a key and a title.
- Discuss how pictograms give information.
- As an alternative, create a block graph using ‘Post-it’ notes, each note representing one item.

Activities 15, 16 and 17

- Learners complete the pictograms to describe given information.
- Ensure learners remember to include a key, and that all symbols are the same as far as possible.
- Emphasise that ‘matchstick people’ are acceptable.

LINKS: H4, E2, M3

Pages 13 and 14 Help

H1

- Discuss the shopping list.
- Learners work in pairs to answer the questions.
- How useful is Andrea’s list?
- How could it be improved?
- What other questions might you ask?

H2

- Remind learners that items can be sorted in different ways. For example bottles could be sorted as:
 - Wine bottles, beer bottles, milk bottles, ...

- Green bottles, brown bottles, clear bottles, ...
- Tall bottles, short bottles, ...
- Corked bottles, screw-top bottles, ...
- Explain use of bottle banks and the need to sort bottles by colour.
- Explain how the exercise is to be done. An example is given.

H3

- Discuss the telephone list.
- What other lists might Beth use in her work?
- Learners work in pairs to answer the questions.
- Why is particular care needed when using a list like this? (The numbers are very similar.)

H4

- Explain the use of pictograms.
- You could make use of real resources in this activity.
- Learners work individually or in pairs to draw the pictogram. Make sure that both learners contribute to the pictogram.

Page 15 Extension

⬆ E1

- Remind learners that packets can be sorted in different ways (e.g. by brand, flavour, size etc.).
- Discuss other ways in which packets of crisps might be sorted.
- Crisp packets or representations of these may be helpful for this work.
- Learners work in pairs to answer the questions.

⬆ E2

- Discuss the format of pictograms.
- What symbols could be used?
- Learners complete the pictogram to describe the information given.
- Ensure learners remember to include a key and a title.
- Remind learners that symbols must be as similar as possible.

Page 16 Mini-projects

- Some possible discussion points:
 - Most families throw away 40 kg of plastic a year.
 - We use 6000 million glass containers each year.
 - We use about 45 500 litres of water a year – one-third of this is flushed down the toilet.

M1

- These activities are to be undertaken individually or in groups.
- Other activities might include:
 - bottles to the bottle bank
 - paper to the paper bins
 - clothes to the second-hand shop
 - food to compost bins
 - reusing carrier bags.

Activity M2

- In groups, discuss classifications; learners might also want to use 'other' as a category.
- Learners complete the activity individually.

Activity M3

- This activity is to be undertaken individually or in groups.
- Learners might make use of council directories, the library or the Internet.

Page 17 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 help.

How am I doing?

- Learners complete this individually or with teacher support.

