

Round Table on
Information Access
for People with Print
Disabilities Inc.

**Guidelines on
Conveying Visual
Information
2005**

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The Round Table

These Guidelines are published by the Round Table on Information Access for People with Print Disabilities Inc. The Round Table is an umbrella organisation that brings together producers, distributors and consumers of information in alternative formats to print; blindness agencies, tertiary institutions and government departments in Australia and New Zealand.

Preamble to the 1997 Draft Guidelines

In May 1997, at its annual conference in Hobart, Tasmania, the Round Table held a workshop on the describing of visual material. It became apparent that this was an issue of major concern to a cross-section of member organisations. In response to this perceived need for standards and guidelines, the executive established a cross-discipline working party that included people from a number of the sub-committees: Audio Standards, Australian Braille Authority and Education.

The working party's brief was to 'Write guidelines on how to describe visual information'.

The working party determined that it could not write guidelines on the way in which to produce verbalisations, in isolation from the following two tasks:

(a) It needed to develop an understanding of the way in which visual communication takes place in the sighted world, and a philosophical response from the point of view of the impact for those who are blind and vision impaired.

(b) It needed to develop some guidelines as to the relative merits of verbalisations and tactile diagrams, including the way in which to decide when it was best to make a tactile version of a non-textual element and when it was best to describe it.

The following document, 'Guidelines on Conveying Visual Information' (Version 1.7, 7 April, 1997) represents the outcome of the working party's deliberations. This document should be thought of as a first draft only, and by no means, the final word on conveying visual information.

Members of the 1997 Working Party

Julie Azzopardi	Manager Transcription Royal Victorian Institute for the Blind
Anthony Cooke	Manager Transcription Services Royal New Zealand Foundation for the Blind
Ann Cooper	Studio Coordinator Royal New Zealand Foundation for the Blind
Peg Gosper	Itinerant Teacher for Blind and Vision Impaired Students ACT Department of Education
Shaun McCarthy	Audio Transcription Manager Royal Victorian Institute for the Blind
Bruce Maguire	Proprietor BrailleWays
Nicola Stanbridge	Audio Production Coordinator Royal Blind Society of NSW

Preamble to the 2005 Guidelines

In 2001, a Working Party was reconvened to revise the Guidelines. Wider consultation was sought and in February 2002, a Questionnaire seeking opinions about the Guidelines was distributed widely. The Round Table is greatly indebted to the fifty-nine volunteers who gave their time and invaluable expertise to reply to the Questionnaire. These respondents were drawn from a wide range of individuals, all with extensive experience and expert knowledge in the area of the production and reading of visual information in alternative formats. Respondents included braille users, braille transcribers, print users, teachers, print user transcribers, print user narrators and audio users.

Respondents replies to the Questionnaire

Wide variety of views expressed

The respondents expressed a wide, and sometimes opposing, variety of views on all of the questions and the Working Party was encouraged by the wealth of very positive responses. Generally, responses stated that the initial draft document was useful but required further work. Respondents made many detailed, useful and relevant suggestions leading to decisions to retain, edit, replace or include further examples.

People who are blind or vision impaired should be taught to interpret the symbols and conventions of visual communication

The majority of respondents agreed that people who are blind or vision impaired should be taught to interpret the symbols and conventions of visual communication, but that education in this area was not the responsibility of the Round Table.

Separate guidelines for verbalisations of moving pictures

Mostly, it was suggested that the 'Guidelines on Conveying Visual Information' should not include examples of verbalisations of moving pictures, for example web pages, film and television, but that these should be included in a separate set of guidelines.

The length of verbalisations

Several respondents stated that some of the verbalisations were too long and wordy. While the Working Party acknowledges these views, it believes there may be occasions when the length and detail of a description is required, so the various examples of verbal description have been edited but retained.

Editing of texts before transcription

Many respondents noted the importance of the pre-editing of texts before they are submitted for transcription/narration as an issue in production. It must be noted that there is a difference of opinion on this matter. Not all transcription agencies require the editing of texts before they reach the producer. It is suggested that people should follow the guidelines set by their particular agency.

The tactiles and verbalisations

Respondents offered many very perceptive, practical and most helpful suggestions about the tactiles and verbalisations. In some instances, there were conflicting views about the same tactile or verbalisation. In considering all the advice from participants in the Questionnaire, the Working Party has retained many of the original examples (the majority of which have been edited), changed some examples for ones that appear to demonstrate particular points better, and added some new examples. Respondents made a list of over forty suggestions about subjects that they would like covered, but it was not possible to include all of them.

Suggested additions

At the suggestion of respondents, a 'Handy Hints' and 'Resource' section have been added at the end of the document.

In 2003, a Project Officer was employed to join the Working Party to analyse the replies to the Questionnaire and assist in the revision of the Guidelines, taking into account the suggestions made by respondents. These Guidelines were presented to the meeting of the Round Table for comment by participants in May 2004 as the 'Draft Guidelines on Conveying Visual Information' (Version 2, 15 May 2004). The Guidelines were then circulated and the Working Party took account of advice received and final amendments and corrections were made, resulting in this edition: 'Guidelines for Conveying Visual Information - 2005'.

Members of the 2001-2004 Working Party

Maureen Ward:	Statewide Advisory Visiting Teacher – Vision
Convenor	Impairment, Disability Services Support Unit, Education Queensland
Gillian Gale:	Project Officer 2003-04, private & RVIB Educational Consultant
Alison Banks:	Production Officer, Queensland Narrating Service
Josie Howse:	Manager, New South Wales State Braille & Large Print Service
Tom Macmahon:	Statewide Advisory Visiting Teacher - Assistive Technology, Disability Services Support Unit, Education Queensland
Leonie Swainston:	Community Information Program, Queensland Narrating Service (from September 2002)
Bruce Maguire:	Proprietor, Brailleways NSW (April 2001 – April 2003)
Elisabeth Wegener:	St Edmund's School NSW (April 2001 – April 2003)
Diane Francis:	Royal Society for the Blind South Australia (April 2001 – April 2003)
Debra Murphy	Braille transcriber, National Information and Library Service (February 2002 – April 2003)

Consultant Advisor

Anthony Cooke:	Braille transcriber, consultant & editor of first version of Guidelines
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Definitions

Alternative formats

Refers to the technologies used to convey information to people who are blind or visually impaired. Examples include audio-cassette, braille, CD, computer disk for synthetic speech or braille output and large print. These 'formats' are regarded as being a genuine 'alternative' to, and an accurate representation of, print.

Non-textual elements

Visual elements in printed material including pictures, charts, diagrams, maps, photos, mind maps.

Verbalisations

Word equivalents of information expressed in non-textual form. These verbal equivalents of printed diagrams or pictures may be written down or spoken aloud.

Tactile diagrams

Raised diagrams that can be felt with the fingers and that convey the information in a picture or chart.

Introduction to the Guidelines

In addition to physical and sometimes attitudinal barriers, people who are blind or vision impaired also confront barriers in the format in which today's information is provided. These Guidelines offer some suggestions and twenty-five examples of ways in which non-textual information can be presented in a format accessible to people who are blind or vision impaired. All the examples in this document have been scrutinised and proofread by both touch and sighted readers. These people have offered invaluable advice to ensure that the finished product is as readable, pertinent and user-friendly as possible.

It would be impossible to provide examples to meet every contingency. Rather, an attempt has been made to provide guidelines in a wide variety of areas to demonstrate some principles to guide transcribers and narrators in their work. It is important that people, who use this publication do not regard the information provided as a hard and fast set of 'rules', but rather, as implied in the title, a set of guidelines or as a reference and resource manual.

The Changing Nature of Communication

The advent of multimedia and Multiple Literacies

The methods of presenting information to people who are blind or vision impaired were developed in an age in which text was the primary medium. In that world, audio cassette and braille effectively communicated printed material.

We have now moved into an age which is increasingly characterised by multimedia approaches to communication and information processing. The traditional distinctions between text and graphics and between print, audio and video are blurring and most young children in school are now exposed to learning through Multiple Literacies. The rapidly changing nature of communication means that we need to reconsider the way in which information is presented to people who are blind or vision impaired.

The increasing importance of non-textual elements

Non-textual elements used to be included in books largely for adornment and to augment the printed matter, but the text was primary. This is less true today. Graphical or non-textual elements are increasingly integral to the total message being communicated and sometimes replace the text.

For sighted readers non-textual elements fulfil a number of functions

1. They may add little to what is conveyed by the text, apart from colour and interest.
2. Conversely, they may present critical information that is not available from reading the printed text alone.
3. They may also show what is conveyed by the text in another way, for example, for readers with different learning styles.

Non-textual elements aid understanding

In print, information is often read and understood more efficiently if non-textual elements are used in addition to or, in some cases, instead of text. For example, maps, diagrams, graphs, tables, flow charts, illustrations and cartoons may enable the sighted reader to immediately grasp the essential components of an issue, a chemical compound or a statistical trend, in a way that a detailed authorial description cannot. While such visual communication may be beneficial for sighted readers, it presents difficulties for those who do not read visually. Certainly, some visual elements can be presented effectively in a tactual form; however, in other cases there may be fundamental and inherent difficulties with representing visual information in non-visual forms. For example, an oil painting can be described to someone who cannot see the picture, but it is very difficult to accurately convey the subtleties of colour and texture in an oil painting.

The Future

These Guidelines offer some suggestions for some of the dilemmas that face narrators and transcribers today. However, the speed and efficiency with which technology and multimedia are advancing and expanding will likely mean that many new difficulties as well as solutions will arise. Already reports have been published regarding the development of electronic textbooks for use with a braille notetaker (Baker, 2004). These books provide the student with the freedom to study and learn independently with access to all the information in the book including the graphics, which are described. Certainly, this could provide a cost-effective alternative to hard-copy braille and tactiles, and to narrated texts. Developments such as these may mean that the relevance of this edition of the 'Guidelines on Conveying Visual Information' will have a limited life span or at least require revision on a regular basis.

Reference

Baker, L. (2004). Textbooks for blind students "come alive". Downloaded from Internet, 16/04/2004
<http://www.buffalo.edu/reporter/vol35/vol35n24/articles/BeaverBraille.html>

The Standards

Given the increasing prevalence and importance of non-textual methods of communication:

1. The Round Table states that:

‘Producers of alternative formats should ensure that all information, both textual and non-textual is made accessible to people who are blind or vision impaired. It is no longer appropriate to assume that visual information can be omitted from special format versions of printed matter.’

The Round Table recognises that:

‘There may be practical limitations, such as time pressures and resource constraints, to achieving this goal of representing all visual information. However, the ideal is that all information made available to the sighted reader be made available to the reader with a print disability, and producers work towards achieving this.’

2. The Round Table states that:

‘It is crucial that teachers of people who are blind or vision impaired provide education and training in understanding the symbols and conventions of visual communication such as print punctuation, use of colour, spatial relationships, two dimensional representations of 3 dimensional reality and speech bubbles. This training is essential if people who are blind or vision impaired are to participate fully in the modern and future's increasingly visual world.’

The Round Table recognises that:

‘There may be practical limitations on teachers' ability to educate and train people who are blind or vision impaired in visual communication. Nonetheless, the ideal is that students should be provided with opportunities for learning about visual communication. These opportunities should be provided from an early age and on a continuing basis. People who are blind or vision impaired should be encouraged to take advantage of these opportunities, in order to foster participation in a world that continues to rely increasingly on visual (and in particular, non-textual) elements in communication.’

Guidelines and Examples of Verbalisations and Tactiles

General Guidelines

The following General Guidelines will assist producers to meet the Standards for Conveying Visual Information set by the Round Table.

The responsibility of the person conveying the visual information

The goal of the narrator and transcriber in conveying visual information is to narrate or transcribe printed text into audio or tactile format accurately and faithfully from the printed words and/or visual images, giving a true and correct representation of the text. It may be necessary on occasions to modify the tactile format slightly according to availability of time, expertise or production methods, ensuring nonetheless that the conveying of essential information is not compromised. In such cases, the accompanying verbalisation for the tactile may need to differ slightly from that for the original print format. Example 18 provides an instance where such an approach might be taken and provides the two verbalisations for comparison.

The need to combine tactile diagrams and verbal description

Traditionally, when an attempt has been made to represent non-textual communication, this has involved either preparing a verbal description of the image, or presenting the visual in tactile form. Also traditionally, audio versions of printed material have tended to include verbalisations, while braille editions have contained tactile versions of diagrams.

To adequately represent a non-textual element, it may be necessary to have both verbal description and a tactile diagram. The systems that many special format producers and libraries have in place may preclude them from offering one or other of these options. For example, an organisation may produce only audio material, and have no expertise in the production of tactile diagrams. This is likely to become an increasing limitation to those who choose to operate in only one or other of the special formats in future years.

Multi-media approach

The reality of the multimedia world where there is an increasing intersection of print, audio, video and information accessed from the Internet, is likely to mean that special format production will have to become multimedia in approach. This may mean, for example, that tactile maps or diagrams will accompany an audio book, with 'Narrator's Notes' on the recording providing an explanation of the labels on the diagram. Alternatively, a tactile diagram in a braille book may require a written verbal description to supplement the diagram.

Selecting the appropriate media

There are some circumstances in which either a tactile or a verbalisation is inappropriate or unnecessary. For example, it is rare that a tactile version of a photograph or a picture will add anything to what can be conveyed in a verbalisation. Conversely, there are examples, particularly where spatial relationships are important, where a tactile better achieves the objective of conveying information than does a verbalisation. Both tactiles and verbalisations can become too complex or busy, because they operate at a lower resolution than does visual communication.

Appropriate language

It is essential for narrators and transcribers to constantly be aware of the varying needs of the reader with regard to the level and complexity of language used, as well as the use of language containing visual concepts. For example, perspective and words such as 'foreground' and 'background', may be outside readers' knowledge or experience.

Editing texts

Agencies vary in their requirements for editing. Some prefer to receive texts that have been fully edited and while some prefer texts without any editing. Whatever the requirements of the agency and whoever does the editing, it must be done in accordance with the needs of the end-user.

Respecting the author's choice

It is not the intention of this document to provide hard and fast rules about the correct way certain information should be written. Rather, it is important that those conveying the information should adhere to the way in which it is presented by the author. Examples 12 and 14, for instance, demonstrate how authors vary in their choice to use either capital or lower-case letters for the compass points and such choices should be respected.

'Conveying Visual Information' and 'Tactual Graphics'

In preparing these Guidelines, the Working Party has become increasingly aware that the production methods for tactual graphics are an integral part of conveying visual information for people who are touch readers. However, these Guidelines cannot attempt to provide a treatise on the methods of production of tactile graphics. Inevitably, the two areas are very closely linked and information has been included in the Resource Section particularly for people who need to research further into the area of the production of tactile graphics.

Guidelines for all examples of tactiles and verbalisations

Use 'Narrator's notes' or 'Transcriber's notes' for verbalisations, captions and descriptions.

- Captions, descriptions and verbalisations are parenthetical to the main text and should be included in either 'Narrator's Notes' or 'Transcriber's Notes'.
- Captions should precede any description.
- Readers will understand that information, apart from captions, contained in a narrator's or transcriber's note is an explanation and as such a deviation from the text.

Avoid interpretation

- Any interpretation of the visual should, as far as possible, be avoided in any verbalisation.

Visual material should not be described if:

- The information involved is directly duplicated in the text;
- The description would be so long and convoluted that it would disrupt the main text completely and/or it would be very difficult to understand;
- The material adds little meaning to the text, for example, pull-quotes that are often only used as an editing device to break up the density of the text; or
- It is virtually impossible to describe the material in a comprehensible manner.

Omission

- If it is necessary to omit something from the printed text, the reader should be informed of the existence of the item and the fact that it has not been included. In this case, make a narrator's or transcriber's note and include the caption where possible. For student texts, suggest that the student see his/her teacher or tutor.

Photographs

Guidelines

Photographs should always be cited, and their captions should always be included.

The caption alone may be sufficient description of the photograph, in which case no further description is necessary. If the caption is not detailed, and/or there are important elements of the photograph that are not dealt with in the caption (e.g. features of historical dress or settings), these should be described. If the photograph contains any text (e.g. a photograph of a letter or poster) the text contained in the photograph should be reproduced.

Placement of the note

If the photograph is referred to in the text, the note should be included where the photograph is first referred to. If no mention is made of the photograph in the text, the note should be inserted at a break in the text near where the photograph appears.

Groups of photographs

If the photographs are grouped together, the caption/description should be placed at the end of the chapter, section or book as appropriate to the format. In audio format, a supplementary cassette may also be appropriate.

Example 1

Caption: 'Belinda, Peter and Sarah in the bazaar in Kathmandu'

The original of this photograph is in colour.



Verbalisation

Narrator's/transcriber's note.

This is a full-page photograph of three Western tourists at a display of brightly coloured glass bangles that are for sale and set up on the ground. The setting is a market with many stalls of clothing and materials for sale. The vendor, who is partly visible in this photo is wearing traditional robes and sitting on the ground at the back of the display. She is holding a bangle out to one of the tourists who is squatting near her. They appear to be in conversation. The two other tourists are standing looking down, the man has his hands in his pockets, and the woman, hands by her sides, is carrying a draw string bag. The bangles are threaded on long loops of cord, laid out with the knotted ends of the cord at the vendor's feet.

End narrator's/transcriber's note.

Pictures

Guidelines

Pictures are best verbalised

Pictures should be verbalised rather than produced in tactile form.

Plan the verbalisation

- The verbalisation should be planned and written out before commencing a narration.
- Make the description as short and to the point as possible.

The verbal or written description

- Describe the overall image first so that the reader has a concept or understanding of the whole. This makes it easier for the reader to progressively add the details as they are presented.
- Give the most important details first.
- The verbalisation should describe the elements of the illustration, include all labels and be sufficiently detailed to allow the reader to construct a mental image of the illustration.
- As far as possible, keep the description simple and succinct. Choose words and language carefully and avoid wordiness and unnecessary details.
- Aim to provide a description that enables the reader to form his/her own judgement and impression, rather than imposing the narrator's/transcriber's interpretation on the reader.
- Avoid terminology that implies a judgement or assessment of the material, as not everyone will necessarily interpret the meaning in the same way. (This applies to both the narrator/transcriber as the observer and to the end-user of the narration).
- Descriptive words can be used judiciously but should avoid a personal viewpoint. (For example, even the term 'young children' may mean toddlers or preschoolers to one person, but an older person may interpret it to mean children of 10 or 12 years old).
- Do not make guesses or assumptions if at all unsure of the content.
- Narrators should try to be aware of how the narration will bring meaning to the reader.

Placement of the description

- The description should be included at a point where the illustration is first referred to in the text, or at the end of the paragraph.
- If there are many illustrations grouped together, the descriptions should be placed at the end of the chapter, section or book, as appropriate to the format. In audio format, a supplementary cassette may also be appropriate.

Example 2



Caption: “Toea, daughter of Te Awaitaia, Chief of Waingarua, with a slave carrying water. (G. F. Angus)”

Example 2

“Toea, daughter of Te Awaitaia, Chief of Waingaroa, with a slave carrying water. (G. F. Angus)”

The original of this picture was in colour.

The following detailed verbalisation serves as an example of what might be required for a student sitting an examination.

Verbalisation

Transcriber's/narrator's note.

This is an illustration entitled "Toea, daughter of Te Awaitaia, Chief of Waingaroa, with a slave carrying water." The illustration shows a drawing of two Maori women by G. F. Angus.

Toea is shown in the foreground to the left, holding a grey and white striped blanket around her. The blanket covers her from the neck to the ground, with one foot just visible. The surface of the blanket and the edge surrounding her neck are decorated with red pompoms. The front sides of the blanket are thickly fringed in red, with a small amount of yellow. Toea's hair is black, cut in a short, fringed bob and her skin is a rich dark brown. Fluffy white feathers adorn her right ear, falling onto the right side of her face.

The slave is shown much smaller than Toea, although only slightly further back in the picture. She has a blanket wrapped around her torso, leaving her breasts, lower calves and feet exposed. The blanket is white, with very thin grey stripes and small tufts of coloured fringing down one side and along the bottom. The slave is holding a gourd with both hands. Her skin is considerably paler than Toea's. Her dark brown hair is pulled back off her face, and she has a small feather in her right ear.

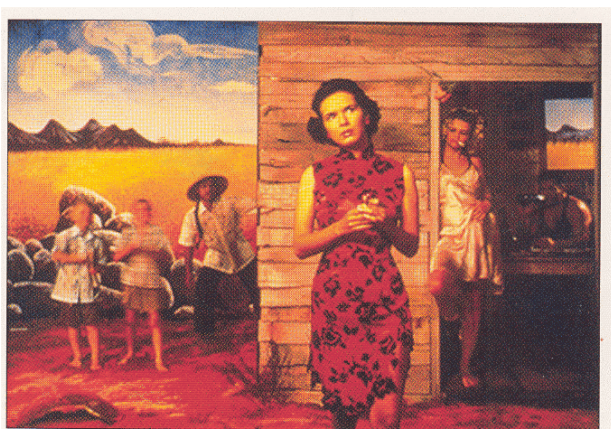
The background shows a palisade fence made of branches bound together, with a gateway-type opening behind the women. A simplified totem pole-like structure appears behind Toea. Beyond the gateway is a strip of water.

End transcriber's/narrator's note

Example 3

***Something More* by Tracey Moffat**

The original of this picture was in colour.



90 × 157 cm

8. Tracey Moffat, *Something More*, image 1 of a series of 9 images, 1989, direct positive colour photograph.

Verbalisation

Narrator's/transcriber's note.

At the front of the picture stands a young dark-haired woman who is holding something in her hands at her chest. From left to right behind her are five people, all are watching her. The woman's head is tilted toward her right shoulder and from the corners of her eyes she is looking sideways at a point outside of the picture on her left. Her lips are slightly parted but unsmiling. She is wearing a fitted red and black sleeveless floral dress.

At her right behind her is a group of three people, standing in front of open pasture and hills in the distance. There are two children about 7-10 years of age, and an Asian male, wearing eastern clothing who appears to be approaching the scene quickly. Their gaze is focussed upon the back of the dark-haired woman in the foreground. Immediately behind the woman stands a wooden structure with an open doorway, against which a young fair-haired woman is leaning. She is wearing a short white loose flowing dress, and has one leg bent at the knee, striking a casual pose as she observes the other woman in front of her. Next to her is a man seated at a table, drinking from a bottle, with his gaze upon the dark-haired woman's back. The colours are vibrant and warm. The blue of the sky contrasts against the warm reds, the orange and yellows in the figures, ground and building.

The following optional sentence could be included:

To this observer, the picture does not reveal in concrete images, what the dark haired woman is (mysteriously) watching or why the other figures are all looking at her, but it poses the question.

End narrator's/transcriber's note.

Art Work

Increasingly, requests are made for the description of artwork. The following description, incorporating the advice of an Art Teacher in a secondary school, has been provided.

Example 4

Garden's Eden by Susan Thayer

The original of this Artwork was shown in colour.



21 × 30 × 10 cm

7. Susan Thayer, *Garden's Eden*, circa 1995, slipcast porcelain, underglaze colours.

Verbalisation

Transcriber's/narrator's note

This is a photograph of an ornately decorated porcelain pouring vessel, like a teapot. The rounded body of the vessel has a lid, handle and spout, supported on a conical base. The surface of the pot is heavily textured with flowers, plants and fruit. The handle and spout appear to resemble a vine. Resting around the spout and extending across the pot to the handle is an asp or snake. The colours are rich blues, greens, yellows and reds. The snake's green-yellow body contrasts against the blue pot.

End transcriber's/narrator's note.

Cartoons

Brevity is the soul of wit

The transcriber's or narrator's note should give the minimum amount of description necessary to make sense of the dialogue. Nothing is less funny than a joke that is excessively explained. So when describing cartoons, the emphasis should 'set the scene' and enable the reader who is vision impaired to follow the storyline.

Example 5

The Wizard of Id

THE WIZARD OF ID

by Brant Parker and Johnny Hart



Two possible examples have been provided. The first is written in a commentary style and the second is in the format of a play.

Verbalisation 1

Narrator's/transcriber's note.

The cartoon strip 'The Wizard of Id by Brant Parker and Johnny Hart' begins with a servant tending a horse in a stable while in conversation with a knight. The servant says 'I've been teaching the horses how to count', the servant then says to the horse 'Count to three for Sir Rodney', the horse is heard to stomp three times. Sir Rodney follows this with the question 'I suppose... now you will want tenure?'

End narrator's/transcriber's note.

Verbalisation 2

Narrator's/transcriber's note

The cartoon strip 'The Wizard of Id by Brant Parker and Johnny Hart' The cartoon is of four boxes showing a servant tending a horse in a stable while in conversation with a knight.

Servant: I've been teaching the horses how to count

Servant to horse: Count to three for Sir Rodney

STOMP STOMP STOMP

Sir Rodney to servant: I suppose ... now you will want tenure?

End narrator's/transcriber's note.

Foreign Language Cartoons

Guidelines

Over the past two decades, there has been a dramatic change in the way in which student textbooks are produced. Many of them now incorporate and rely heavily upon cartoons and pictures to convey the information. Often the books will have characters who appear all the way through one textbook, or even a series of textbooks. The transcriber/narrator must know who the characters are and their names, to be able to describe the cartoon. It is essential for a narrator to be able to speak the language and very helpful for the transcriber to have some understanding of the foreign language to be able to produce these cartoons.

Example 6
German cartoon



Verbalisation

Transcriber's note.

17.

MC [worried to a concert audience]: Meine Damen und Herren. Es tut mir leid, aber das Konzert ist zu Ende. Der Trompeter ist krank. Er kann nicht mehr spielen.

Crowd [angrily]: Oooh! Schade! Was für ein Pech!

18.

Karl [putting his hand up from the crowd]: Entschuldigung! Ich kann Trompete spielen. Kann ich helfen?

19.

[Karl plays the trumpet on stage]

Crowd [smiling and clapping]: Einfach super!

Toll!

Spitze!

Bravo, Karl!

Wirklich stark!

20.

Karl's friend, Monika [among the clapping crowd]: Aber Karl, wir hassen klassische Musik.

Karl [bowing, with flowers being thrown on stage]: Halt die Schnauze, Monika.
End transcriber's note.

Political and Historical Cartoons

Guidelines

Include sufficient but not too much information

The description of these cartoons has to be detailed enough to provide a clear sense of the nature and style of the cartoon, and of the political points being made. At the same time, the description should not include so much extraneous information that it weakens the comic impact of the joke.


Read the surrounding text and provide only enough information to 'set the scene' (Example 7)

In the following example, the description of the setting and the appearance of the people in the cartoon has been kept to a minimum - just the essential details to 'set the scene' are given. The identity of the caricatured political figures depicted is apparent from the accompanying text, so a detailed description of the caricatures is pointless. Nor is it necessary to include additional historical information about the people shown. If the reader does not know who Goebbels was, it is not the job of the narrator/transcriber to tell them. All the narrator/transcriber is required to do is to describe accurately what is there.

If information is lacking it is necessary to provide additional information for the reader to 'get' the joke (Example 8)

However, if there is nothing in the explanatory caption or the surrounding text which identifies the political or historical figures depicted, it will be necessary for the narrator to provide additional information if the reader is to 'get' the joke. In the second example, the English politicians Edward Heath and Roy Jenkins are identified in the caption; the other politicians who appear in the background are not. Since the full comic impact of the joke would be lost without reference to the other figures in the cartoon, the verbalisation should, if possible, include them.

Example 7

 Czechoslovak cartoon from the war. Hitler (on the right) with Goebbels.



'Close that window, Joseph—that factory smoke is choking me.'

Verbalisation

Transcriber's/narrator's note.

There is a cartoon with the caption: 'Czechoslovak cartoon from the war. Hitler (on the right) with Goebbels.' Hitler is depicted in his office at a desk pinning small flags to a map. Goebbels is standing beside him. Both are looking over their shoulders at smoke pouring through the open window. The smoke forms the letters U S A. The dialogue caption reads 'Close that window, Joseph that factory smoke is choking me!'

End transcriber's/narrator's note.

Example 8

A Cartoon published by the *Daily Express* (1971). On the left, British PM, Edward Heath; on the right, Roy Jenkins. They were strong supporters of Britain's entry into the EEC.



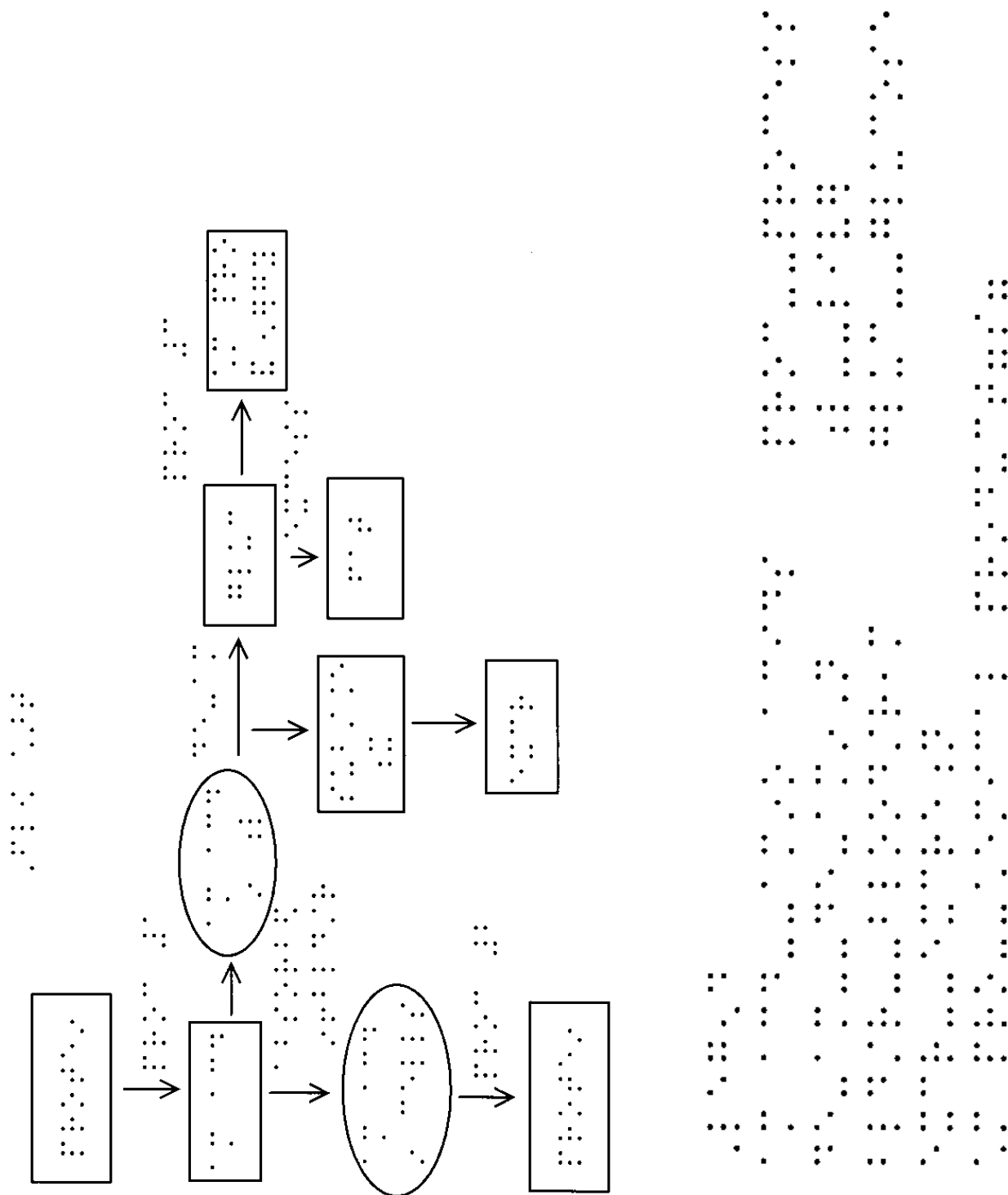
Verbalisation

Narrator's/transcriber's note.

There is a cartoon with the explanatory caption "Cartoon published by the 'Daily Express' (1971)". On the left is British PM, Edward Heath; on the right, Roy Jenkins. They were strong supporters of British entry into the EEC.

The cartoon shows a frightened bride in plumed helmet and draped in the Union Jack being dragged to the altar of the Church of St Parliament by her parents. Her father is Edward Heath and her mother is Roy Jenkins. Above the altar is a banner saying 'Marriage of Britannia to Mr Europe'. The dialogue caption reads 'My dear! One doesn't marry for LOVE! One makes a GOOD marriage arranged by one's parents who know best!'

The figure of Mr Europe at the altar is French politician François Mitterand. The congregation is divided into two groups: bridegroom's friends, including Henry Kissinger and Alec Douglas-Home, and bride's friends, including Harold Wilson and Enoch Powell.
End narrator's/transcriber's note.



Flowcharts

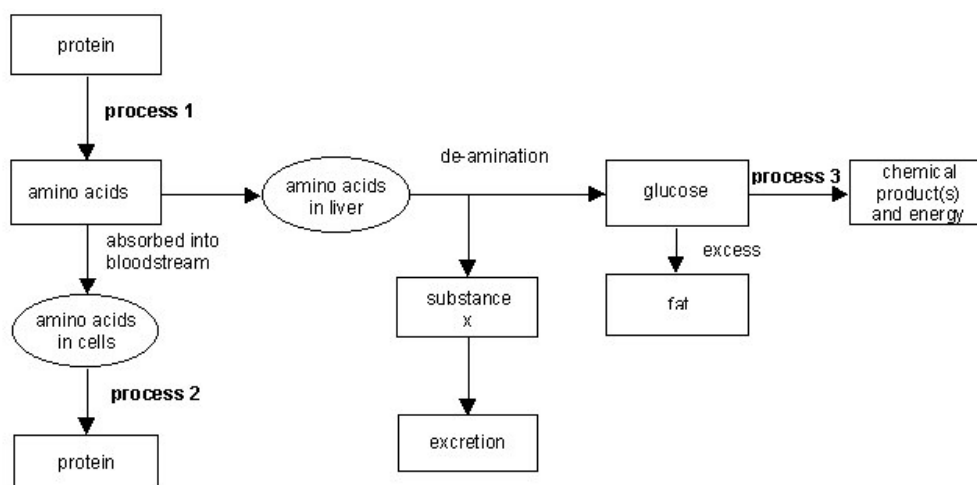
Guidelines

The aim of the description is to give the reader a clear mental image of the layout of the flowchart so the description can be easily followed, while eliminating extraneous detail that will only cause confusion.

- First choice should always be tactual.
- Announce the figure number, title and caption.
- Give a brief overall description of the flow chart before describing the components in detail.
- Establish the main flow routes and work out the best way of describing them succinctly.
- In a circular flow chart, establish a point at which the route descriptions will start and finish.
- Use verbal equivalents of visual conventions, such as 'arrow to' and 'if yes/if no'.
- For easy reference, items in a chart may be numbered.

Example 9

Flow chart to answer questions 8 – 12



Verbalisation

Narrator's/transcriber's note.

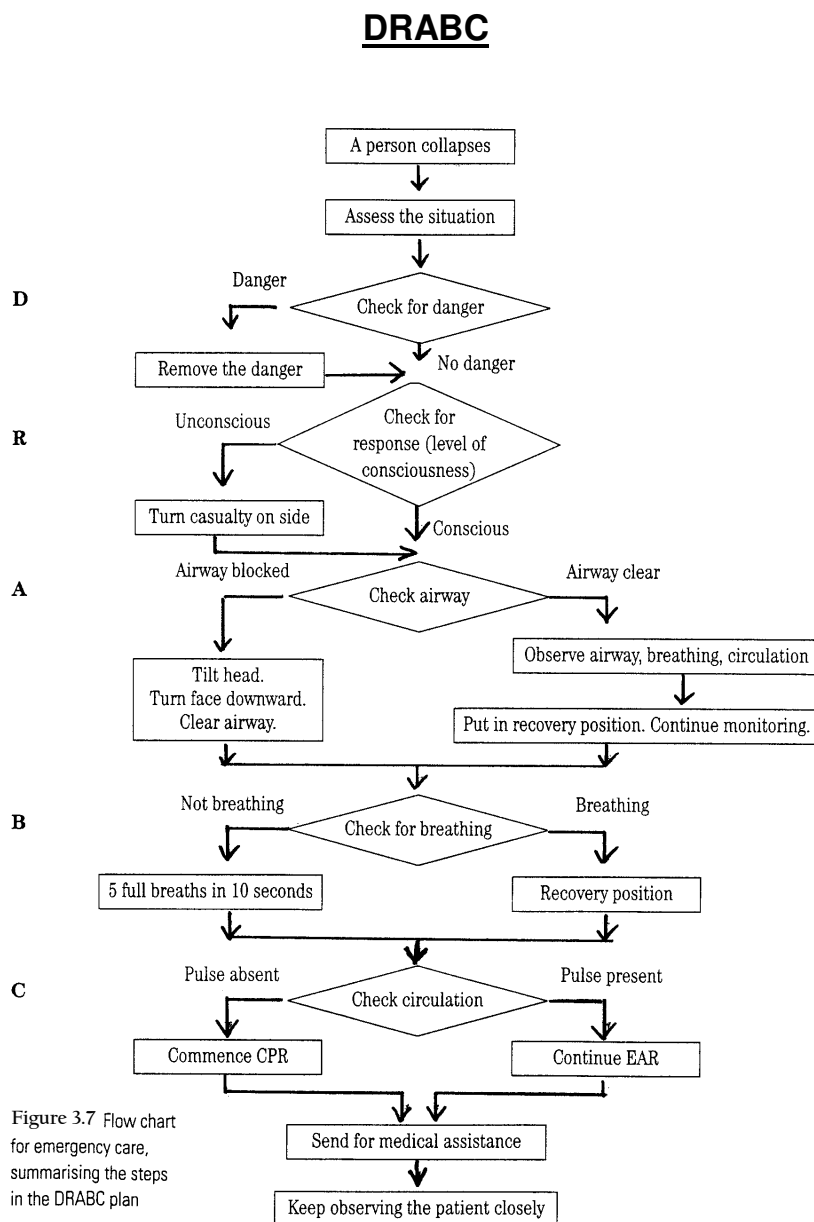
At this point in the text there is a flowchart made up of text boxes joined by arrows. This flowchart outlines three processes which protein undergoes. Starting with protein, an arrow points through process 1 to amino acids. From amino acids there are two directions of flow. One is through absorption into the bloodstream to amino acids in cells and then through process 2 to form protein. The other direction is to amino acids in the liver. These amino acids undergo a process of de-amination to form both glucose and substance X. Substance X is then excreted. An arrow points from glucose depicting that excess glucose forms fat. From glucose another arrow points through Process 3 to form chemical products and energy.

End narrator's/transcriber's note.

Example 10

Flowchart for Emergency Care the DRABC Plan

In this verbalisation the word 'if' has been used to great effect to explain the possible progress of events.



Verbalisation

Transcriber's/narrator's note.

Figure 3.7 is a flowchart with the caption: Flowchart for Emergency Care, Summarising the Steps in the D R A B C plan. This flowchart is a representation of a checklist for determining emergency care. This flowchart has five stages. It will be described by naming the stage then outlining the options for each stage. The first option given will be the one that requires further action, and the second option will be the one that flows to the next stage in the plan. From the top: If a person collapses, assess the situation. First stage: D for danger, check for danger, if there is danger, remove the danger; if there is no danger, Second stage: R for response, check for response (level of consciousness), if the casualty is unconscious, turn casualty on side, if the person is conscious, Third stage: A for Airway, check airway, if airway is blocked tilt head, turn face downward, clear airway, if airway is clear, observe airway, breathing and circulation. Put in recovery position, continue monitoring. Fourth stage: B for breathing, check breathing, if not breathing give 5 full breaths in 10 seconds, if breathing, put into recovery position Fifth and final stage: C for circulation, check circulation, if pulse is absent commences CPR, if pulse is present continue EAR Then send for medical assistance and keep observing the patient closely. End transcriber's/narrator's note.

Maps and architectural plans

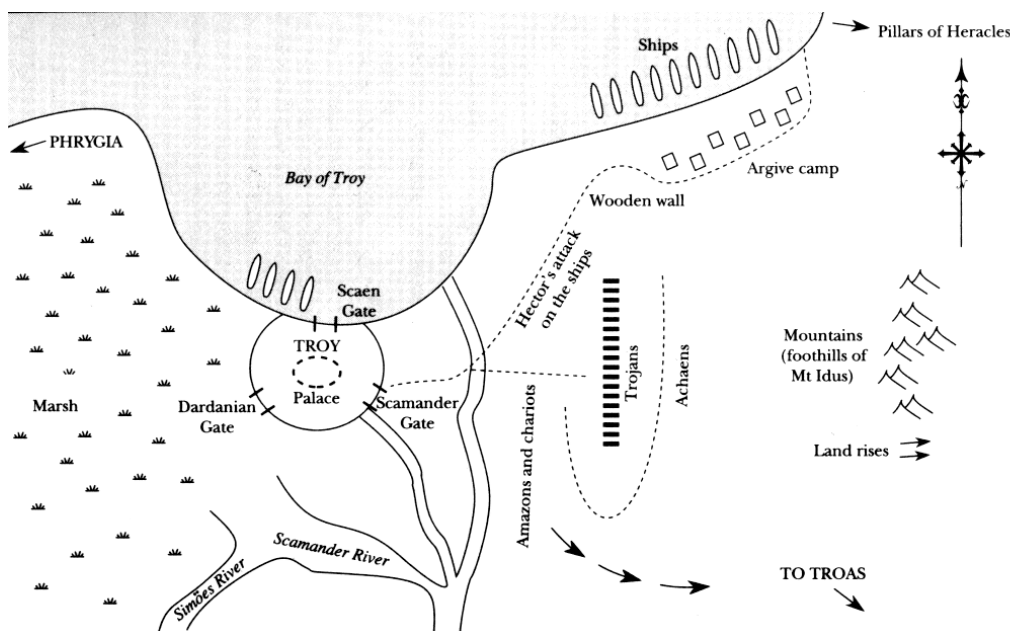
Guidelines

The degree of detail and complexity that needs to be provided for a reader will depend on the specific requirements of the reader. The text may be for recreational reading or for study purposes when the level at which the student is operating must be taken into account.

If there is so much information on a map or plan that it would confuse a reader, it is better to provide separate maps showing, for example, cities, rivers and railway stations respectively. Indicate the scale when it is present.

Example 11

Untitled Map of Troy



For a **braille reader**, such a map would usually be presented in tactile form with a key or legend.

For an audio reader **three alternative verbalisations** are suggested. The three alternative verbalisations have been offered to highlight the need for the narrator to address the amount of detail required by particular readers. Each narration is designed for a different audience and range from most complex and detailed, to least complex and detailed. The most complex and detailed might be for a university student studying a particular battle strategy who might be required to produce an essay on the subject. The second level of complexity might be aimed at a high school student where the details are included in the text. The brief summary might suffice for an upper primary student who would be unlikely to need, or have the comprehension skills to understand the first two descriptions.

Verbalisations

Full description:

Narrator's note.

At this point in the print copy there is an untitled, horizontal, rectangular map. North is at 12 o'clock. It shows a land mass with a coastline running along most of its northern side. This coastline intersects with the left hand frame of the map about one fifth of the way down the side, and with the top frame of the map about four fifths of the way across from the left hand side.

Starting in the north, the map shows the following information:

In the western half of the coastline, and occupying about two thirds of that half, is the opening of a semi-circular bay, labelled "the Bay of Troy". At the centre of the shore of the bay is the city of Troy, marked by a circle, and in the centre of the city is the palace. On the northern side of the city, which is on the waterfront, is the Scaen gate, and to the west of the gate, in the water, close to the shore and parallel to it, four ships are positioned.

Along the eastern half of the coastline, starting near the top frame of the map, in the water, close to the shore and parallel to it, 10 ships are positioned. Parallel to the ships, on the land along the northern quarter of the length of the shore, 7 squares mark the position of the Argive camp. This camp lies between the shore and a dotted line which runs in from the shore above the camp and then turns to run parallel to the shore, curves around the base of the Argive camp, then continues in a south westerly direction all the way to the wall of the city of Troy. This dotted line is labelled "Hector's attack on the ships".

To the south of the Argive camp, next to the dotted line, is a label "Wooden wall".

In the north eastern corner of the map, an arrow on the land mass points to the east and is labelled "Pillars of Heracles". Below this is a symbol indicating north, south, east and west, with the north arrow pointing in the direction of 12 o'clock. Below this, in the centre of the eastern side of the land mass, there are symbols representing mountains, which are labelled "Mountains (foothills of Mt Idus)". Beneath the mountain symbols are two arrows pointing to the east labelled "Land rises". Beneath this again is an arrow pointing in a south easterly direction, labelled "to Troas".

A river runs from the south to the north through the centre of the map. It curves slightly at its northern end to empty into the bay, midway between the city of Troy and the eastern headland of the bay. Near the bottom of the map, the river has two branches, one running in a west-north-westerly direction and one above that running in a north-north-westerly direction. The first of these is labelled the "Scamander River". It joins the Simoes River, which runs from about a quarter of the way along the bottom frame of the map in a north-easterly direction, and both then flow into the western quarter of the land mass which contains symbols depicting, and is labelled, "Marsh". The second of the branch rivers mentioned runs up to join the circle which marks the wall of Troy, at about 5 o'clock. Just to the north of the point where the river joins

the wall, at about 4 o'clock on the circle, is the Scamander gate. At about 8 o'clock on the same circle is the Dardanian gate. In the north western corner of the map, an arrow on the land mass points to the west and is labelled "Phrygia".

To the east of the central river, in the southern third of the map, a series of three arrows labelled "Amazons and chariots" curves to point in a south easterly direction and then an easterly direction. Where the dotted line of Hector's attack on the ships crosses the central north-south river, another dotted line branches off due east. This branch line stops just before it reaches 18 rectangles which are ranged in a north-south line between the river and the easterly mountains and which are labelled "Trojans".

Another dotted line, forming an incomplete oval around the rectangles marked Trojans, sweeps anti-clockwise from about 9 o'clock to about 1 o'clock. To the right of the oval, and so between the Trojans and the mountains, is the label "Achaens".

End of map. End narrator's note.

Shorter description:

Narrator's note.

At this point in the print copy there is an untitled map. It shows a land mass with a coastline on its northern side. A compass point indicates that north is at 12 o'clock.

In the western half of the coastline is a semi-circular bay called the Bay of Troy. In the centre of the shore of the bay lies the city of Troy, at the centre of which is a palace. At 4 o'clock in the circular wall of the city is the Scamander gate, at 8 o'clock is the Dardanian gate, and at 12 o'clock, on the waterfront, is the Scaen gate.

Four ships are moored in a row close to the shore, slightly to the west of the Scaen gate. Ten ships are moored in a row close to the shore at the far eastern end of the coastline, near the edge of the map. Parallel to these 10 ships, the Argive camp is marked on the land, close to the shore.

Arrows on the map indicate that Phrygia is to the west, the Pillars of Heracles are to the east, and Troas is to the south-east. The western quarter of the land mass consists of marsh, the Simoes and Scamander rivers (running from the south in a north-easterly and north-westerly direction respectively) join and empty into the marshland in the bottom third of the map. The Scamander river is one of three branches of a river, the other branches of which run north-north-westerly to meet the wall of the city of Troy just to the south of the Scamander gate, and north, to empty into the eastern half of the Bay of Troy.

The eastern quarter of the land mass consists of mountains labelled "the foothill of Mt Idus" and arrows indicate that the land rises to the east. Between the mountains and the river running south-north, a line of markings running vertically indicates the "Trojans".

A dotted line runs roughly parallel to the coast all the way from the Scamander gate of the city of Troy to just north of the Argive camp, where it joins the coast line. This line is labelled "Hector's attack on the ships". Where this line curves around the Argive camp to its south, there is a label "Wooden wall".

Another dotted line runs directly east from where the first dotted line crosses the south-north river, and stops just to the west of the Trojans. An oval dotted line, not joined to any of the other dotted lines, sweeps around the Trojans in an anti-clockwise direction from about 9 o'clock to about 1 o'clock. To the east of this curved line is a label "Achaens".

Three arrows to the south of the Trojans, which curve to point in a south-easterly then easterly direction, are labelled "Amazons and chariots".
End of map. End narrator's note.

Brief summary:

Narrator's note.

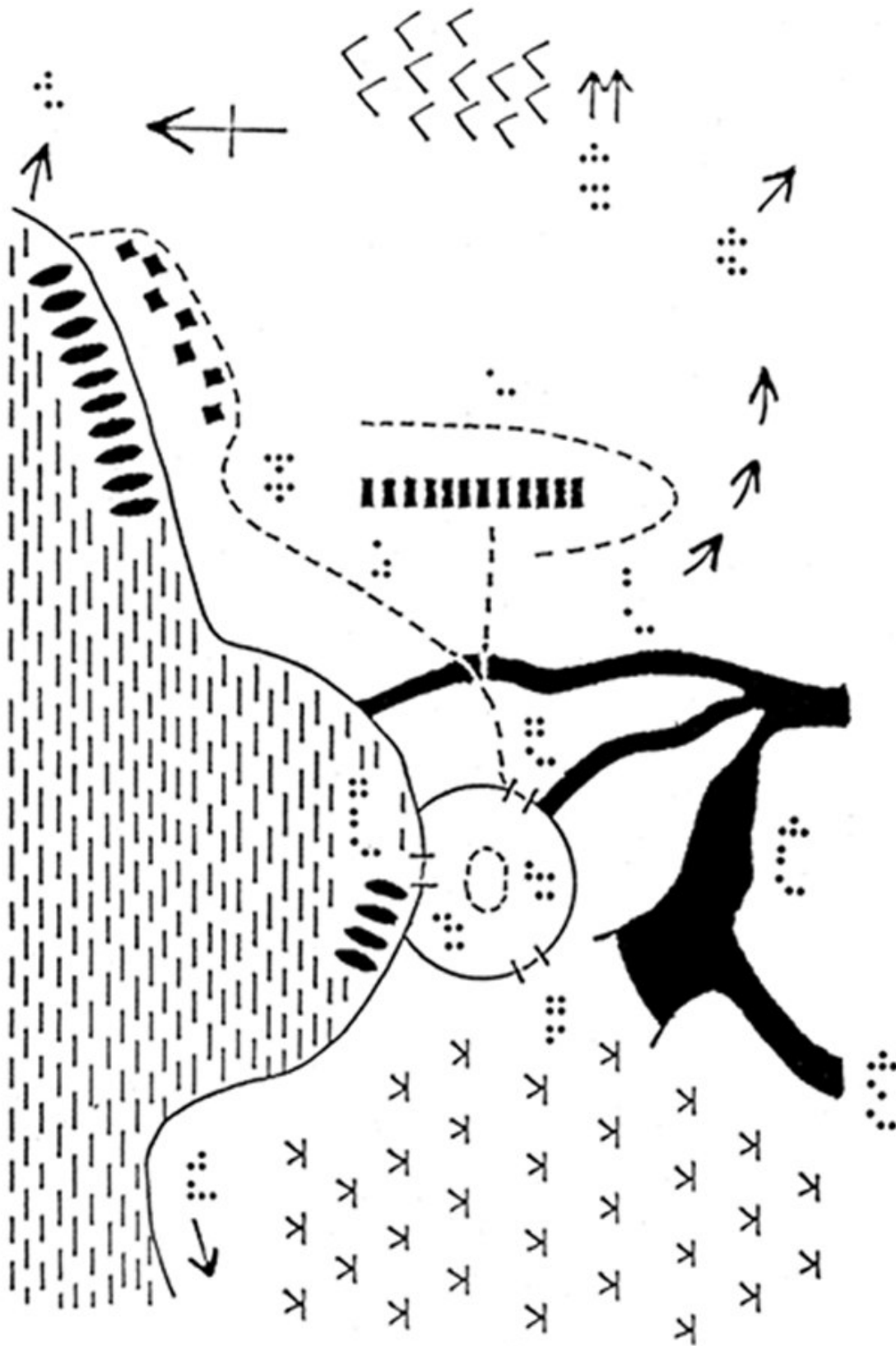
At this point in the print copy there is a map, with north pointing to 12 o'clock. It shows the city of Troy situated on the Bay of Troy. The city of Troy has three gates: the Scaen gate on the waterfront, and the Scamander and Dardanian gates. At the centre of the city is a palace.

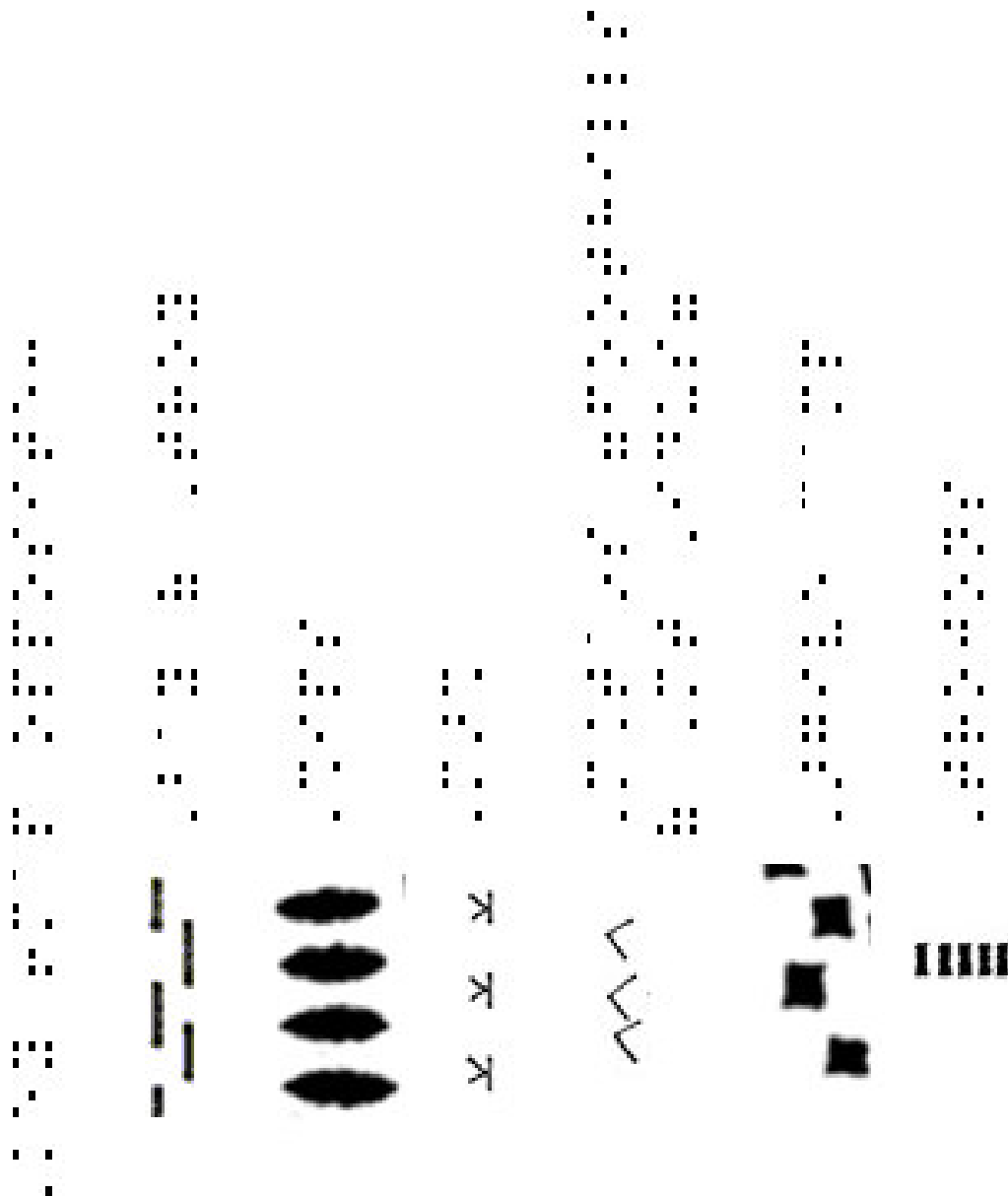
The Simoes and Scamander rivers are to the south and east of Troy. There are ships moored off the coast, slightly to the west of Troy, and further up the coast to the east. Parallel to the second group of ships, on land, is the Argive camp. A dotted line runs from Troy, along the coast, to the north of the Argive camp. It is labelled "Hector's attack on the ships", and a point to the south of the Argive camp is labelled "Wooden wall".

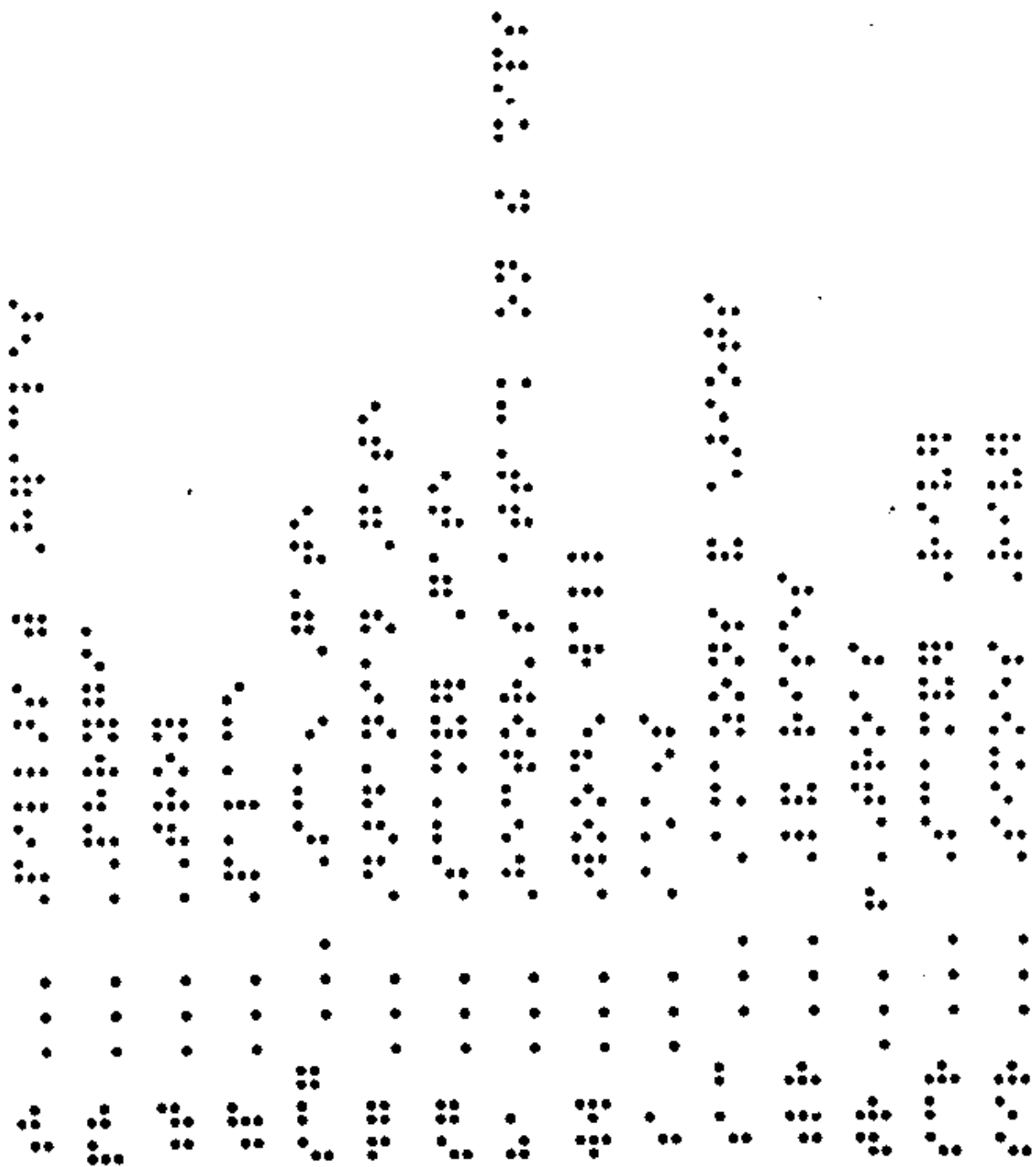
In a vertical line, roughly between Troy and the Argive camp, but slightly south, are the Trojans. A dotted line runs due east towards the Trojans from the dotted line between Troy and the Argive camp. An incomplete oval dotted line sweeps around the Trojans, and to the east of this are the Achaens.

To the south of the Trojans three curving arrows point south east then east and are labelled Amazons and chariots.

There is marsh land in the west, and in the east are the foothills of Mt Idus, with arrows to indicate that the land rises. Phrygia lies to the west, the Pillars of Heracles to the east, and Troas to the south east.
End of map. End narrator's note.

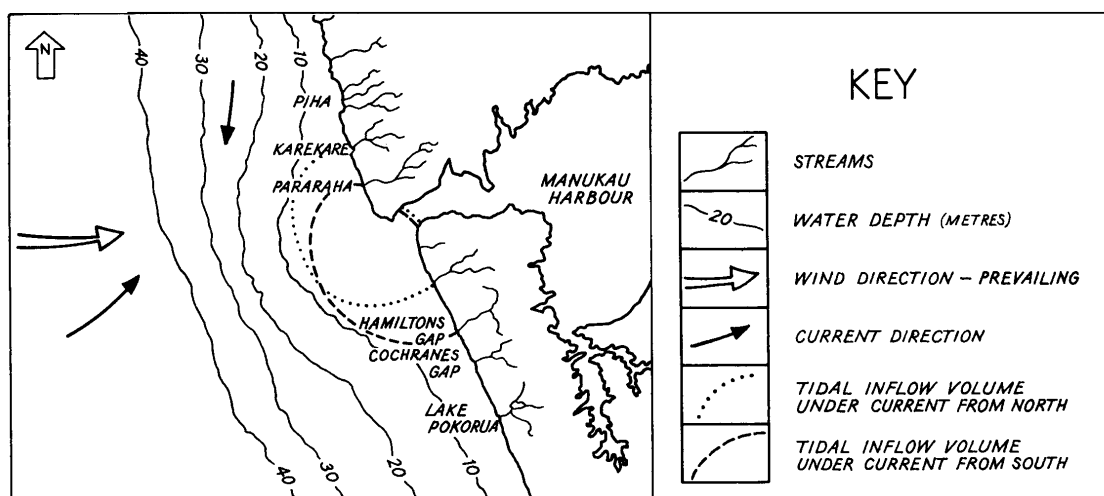






Example 12

Coastal Processes - West Coast – Auckland



4.2 COASTAL PROCESSES – WEST COAST – AUCKLAND

Verbalisation:

Narrator's note

Figure 4.2 is a map entitled Coastal Processes - West Coast - Auckland. The map shows the position of streams, ocean depth, wind direction and tidal inflow volumes for the coastal areas to the North and South of the Manukau Harbour. As no scale is given on the map, distances will be indicated in millimetres, based on the actual measurements of the map. All measurements are approximate.

The map is 85 mm wide and 65 mm high. The coastline runs in a roughly diagonal line, with the land occupying about 45 mm of the width of the map at the top, and 15 mm of the width of the map at the bottom. The land is on the right hand side of the map; the sea is on the left. At the top left of the map is an arrow pointing North.

Starting at the North and moving South, the following seven places are shown on the map:

1. Piha - 15mm from the top, at the coast.
2. Karekare - 20mm from the top, at the coast.
3. Pararaha - 25mm from the top, at the coast.
4. Manukau Harbour - 30mm from the top. The harbour opening is about 5mm wide. The harbour extends inland beyond the edge of the map, widening gradually towards the North, and sharply toward the South. The harbour's widest point from North to South is 35mm. A fjord extends another 20mm down from the Southern end of the harbour, with another 10 mm fjord extending to Southeast off the northeastern end of the larger fjord.
5. Hamiltons Gap - 40mm from the top, at the coast.
6. Cochranes Gap - 45mm from the top, at the coast.
7. Lake Pokorua - 55mm from the top, approximately 5mm inland from the coast.

Starting again from the North and moving South, the following streams are shown entering the ocean:

1. One short stream at the very top of the map
2. One stream 5mm North of Piha.
3. Three streams at Piha, with the southernmost a merging of two smaller tributaries.
4. One stream at Karekare, a merging of three smaller tributaries.
5. One stream at Pararaha, with three smaller tributaries entering it further inland.
6. One short stream 5mm South of the Manukau Harbour entrance.
7. One stream 10mm South of the Manukau Harbour entrance, a merging of two smaller tributaries.
8. One stream at Hamiltons Gap, a merging of two smaller tributaries.
9. One stream at Cochrane's Gap, a merging of two smaller tributaries.
10. One stream coming from Lake Pokorua into the ocean, plus three streams entering Lake Pokorua: one from the North; one from the East; and one from the South

A series of four lines in the ocean, to the West of the coastline, indicate the ocean depth in increments of 10 metres as follows:

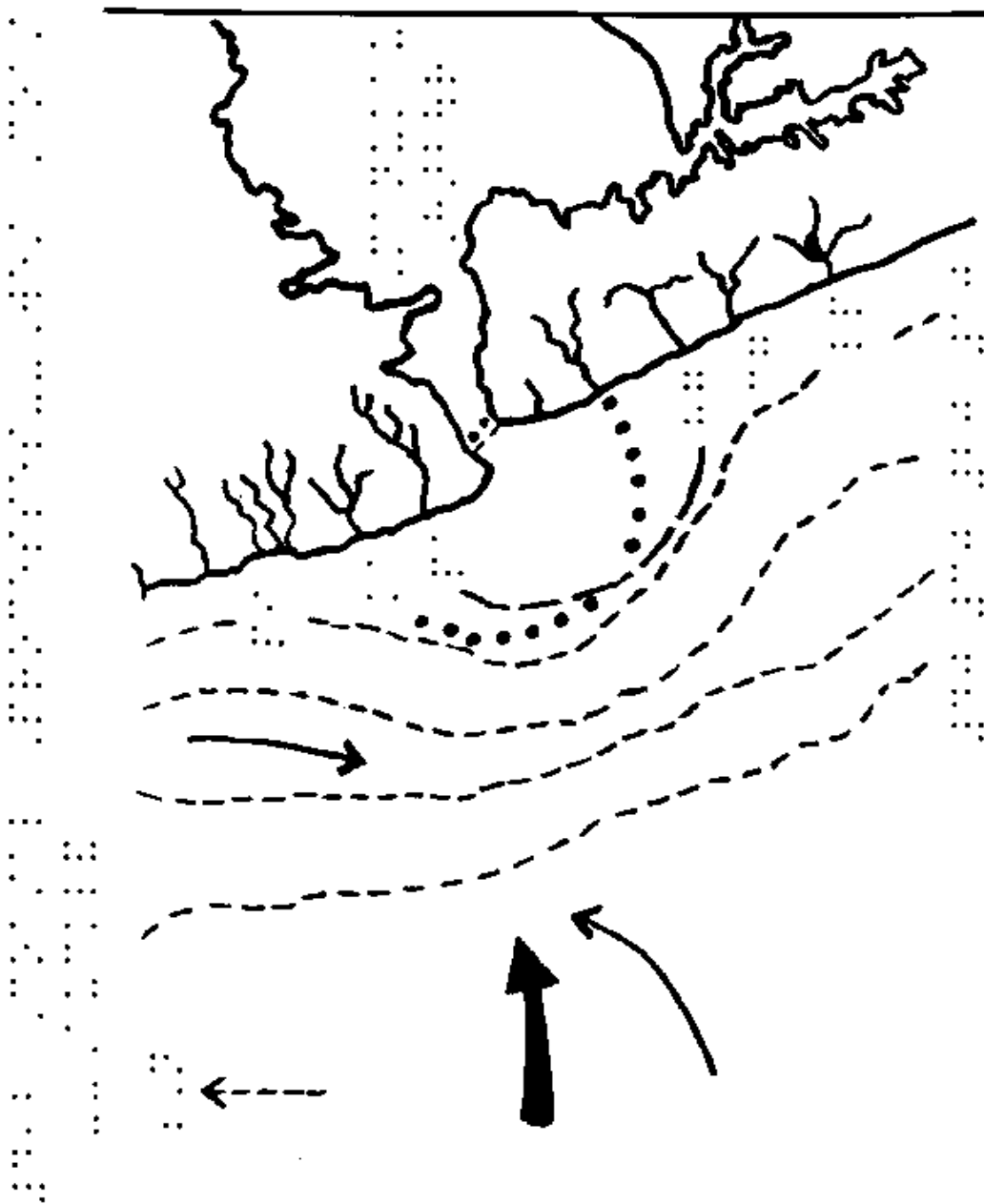
1. The 40 metre line runs roughly parallel with, and 30mm away from, the coastline.
2. The 30 metre line begins 15mm from the coastline in the North, curving away until it is 20mm from the coastline at Piha, and 25mm from the coastline at the harbour entrance. South of the harbour, the line continues to run parallel to, and 25mm from, the coastline.
3. The 20 metre line begins 10mm to the West of the coastline in the North, curving away from the coastline until it is 15mm to the West at Karekare, and 22mm to the West at the harbour entrance. The line then curves back inland, running 15mm to the West of the coastline from Cochrane's Gap South.
4. The 10 metre line begins 5mm to the West of the coastline in the North, curving away from the coastline until it is 10mm to the West at Pararaha, and 15mm to the West at the harbour entrance. The line then curves back inland, running 7mm to the West of the coastline at Cochrane's Gap, and 5mm from the coastline at the very South of the map.

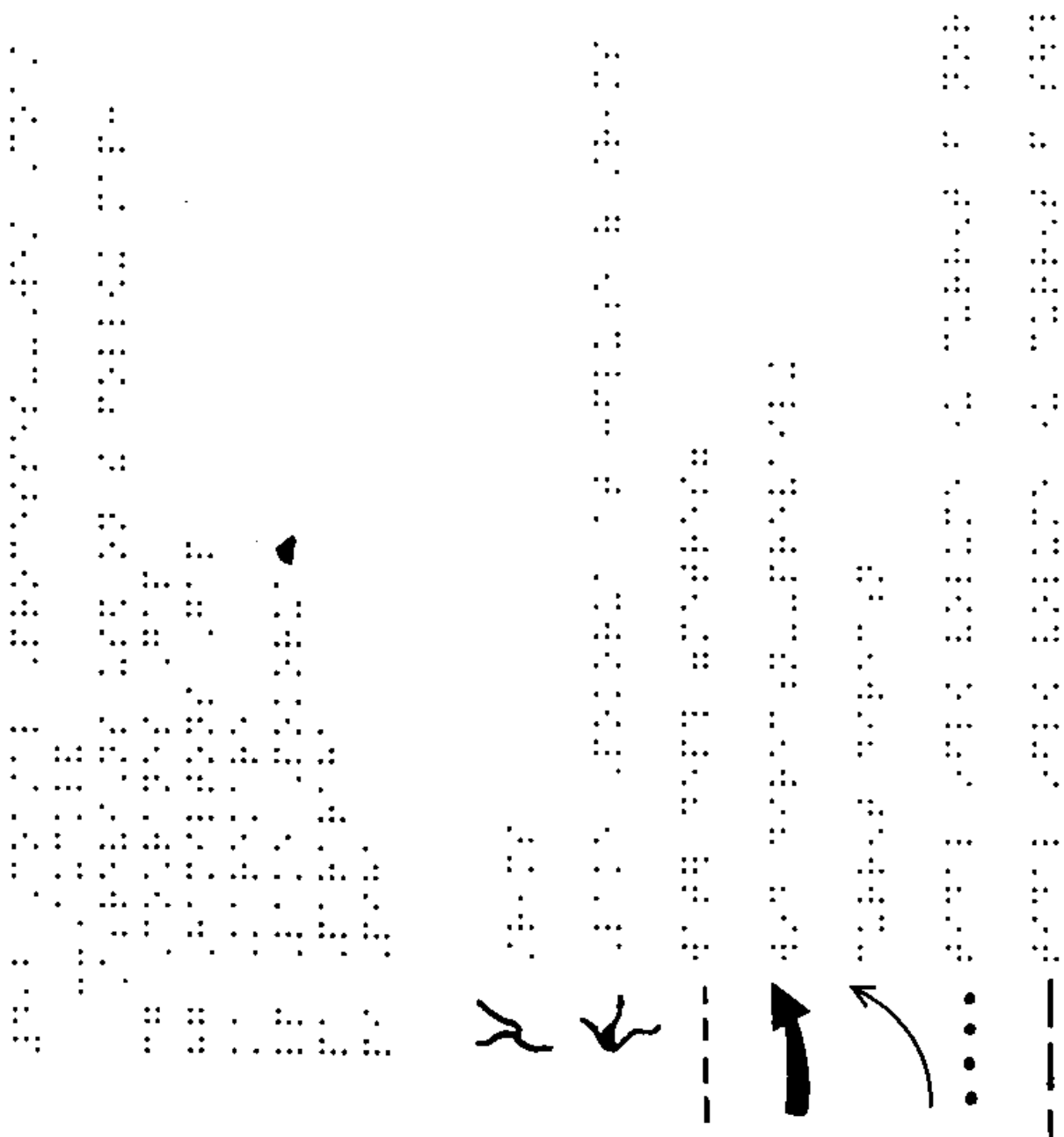
An arrow at the left of the map shows that the prevailing wind direction is from the West. Two additional arrows show that the current wind direction is from the West South West and the North respectively.

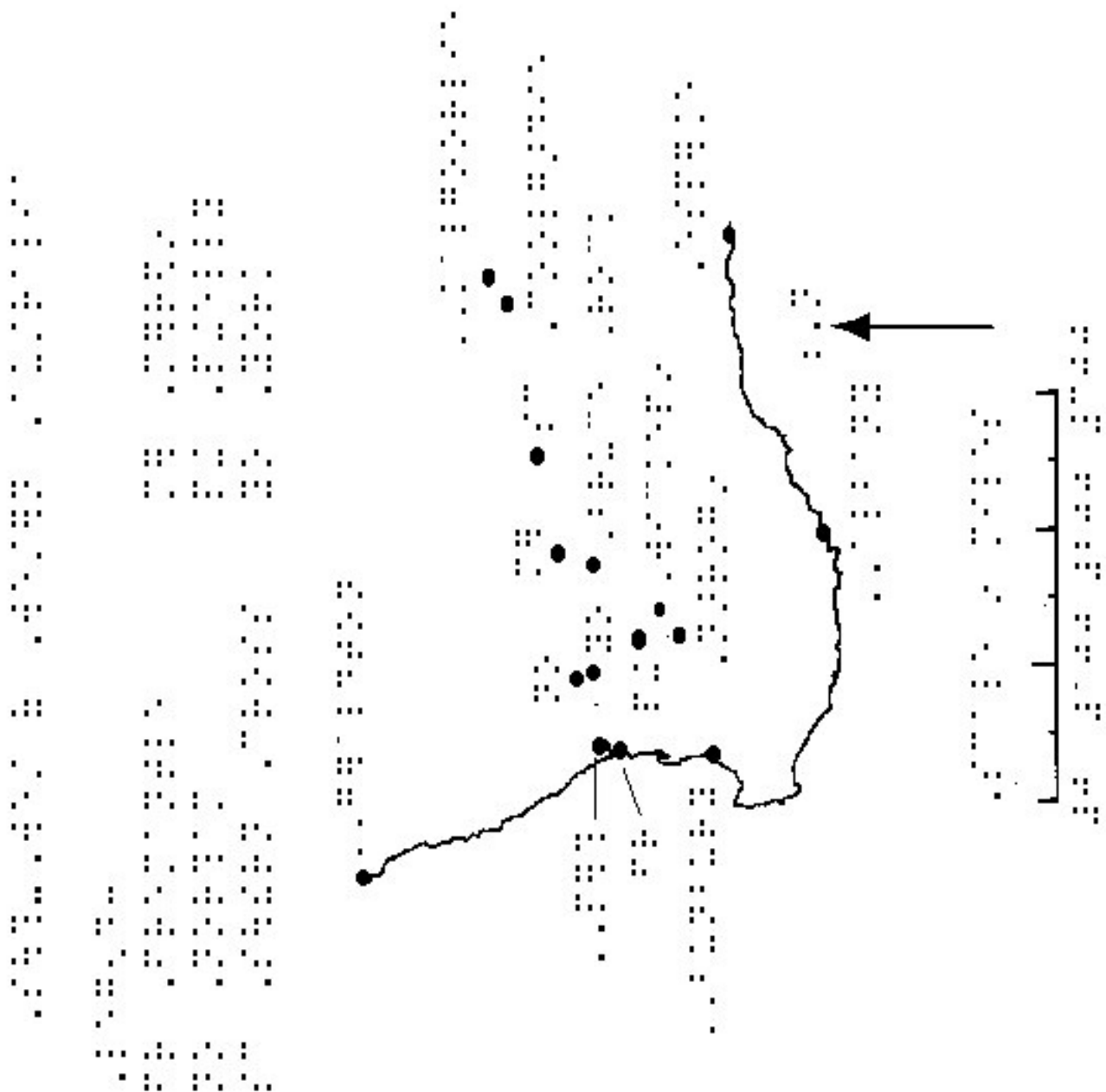
The Tidal inflow volume under current from North is shown by a dotted line extending in a semicircle around the harbour entrance, from Karekare in the North to the second stream South of the harbour entrance in the South. The radius of the circle is 15mm, with the centre of the circle at the Northern edge of the harbour entrance.

The Tidal inflow volume under current from South is shown by a dashed line extending in a semicircle around the harbour entrance, from Pararaha in the North to Hamiltons Gap in the South. The radius of the circle is 15mm, with the centre of the circle at the Southern edge of the harbour entrance.

End of map. End narrator's note.

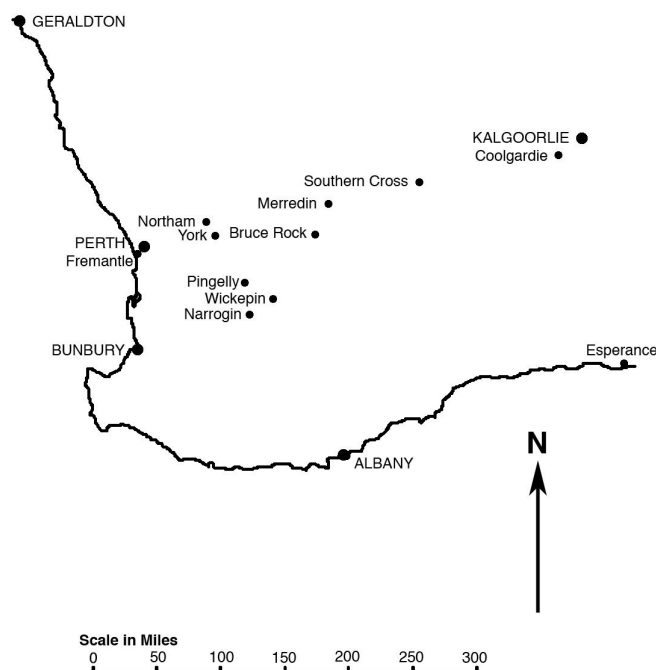






Example 13

SOUTH-WEST OF WESTERN AUSTRALIA



Verbalisation

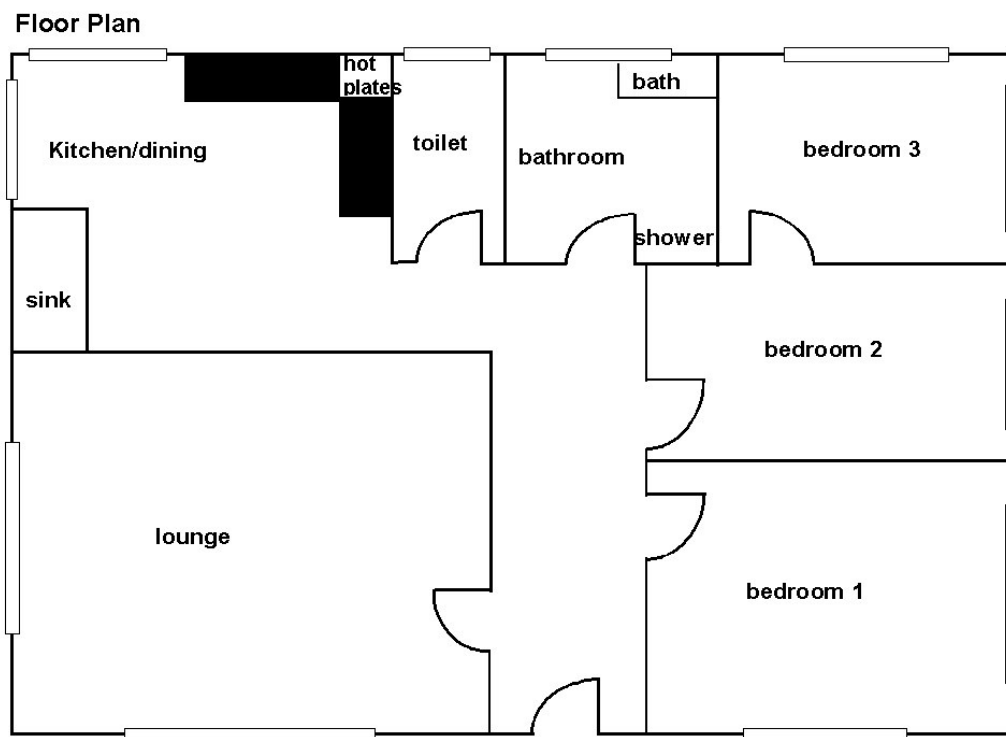
Narrator's note.

At this point in the text there is a map titled South West of Western Australia. The map's scale is in miles and an arrow indicates that north is to the top. This map covers 450 square miles of the south west part of Western Australia. The Western Australian coastline is represented by a black line travelling from Geraldton in the top left corner of the map to Esperance in the Great Australian Bight located to the right side of the map 2/3 of the way down. From Geraldton, the coastline follows a south south east curve 300 miles to Perth, located 10 miles inland. Fremantle is located 10 miles south south west of Perth on the coast. Bunbury is a further 100 miles south along the coast. The coastline then curves south west for 30 miles, turns north west for 15 miles to a point. From here, the coastline moves south for 50 miles, it then moves 200 miles from that point south east to Albany. The coastline then goes north east for 300 miles to Esperance. From Esperance, the town of Kalgoorlie sits inland 250 miles directly north. Twenty miles south west of Kalgoorlie, the town of Coolgardie is located. One hundred and twenty miles west south west of Coolgardie sits the town of Southern Cross. The town of Merredin sits 80 miles west south west of Southern Cross. Forty miles south south west of Merredin, the town of Bruce Rock is located. The town of York sits 70 miles west of Bruce Rock and 50 miles east of Perth. Northam sits 20 miles north west of York. Fifty miles south of York sits a cluster of three towns, the most northerly being Pingelly. Forty miles south east of Pingelly is Wickiepin and 25 miles south west of Wickiepin sits Narrogin.

End narrator's note.

Example 14

Floor Plan



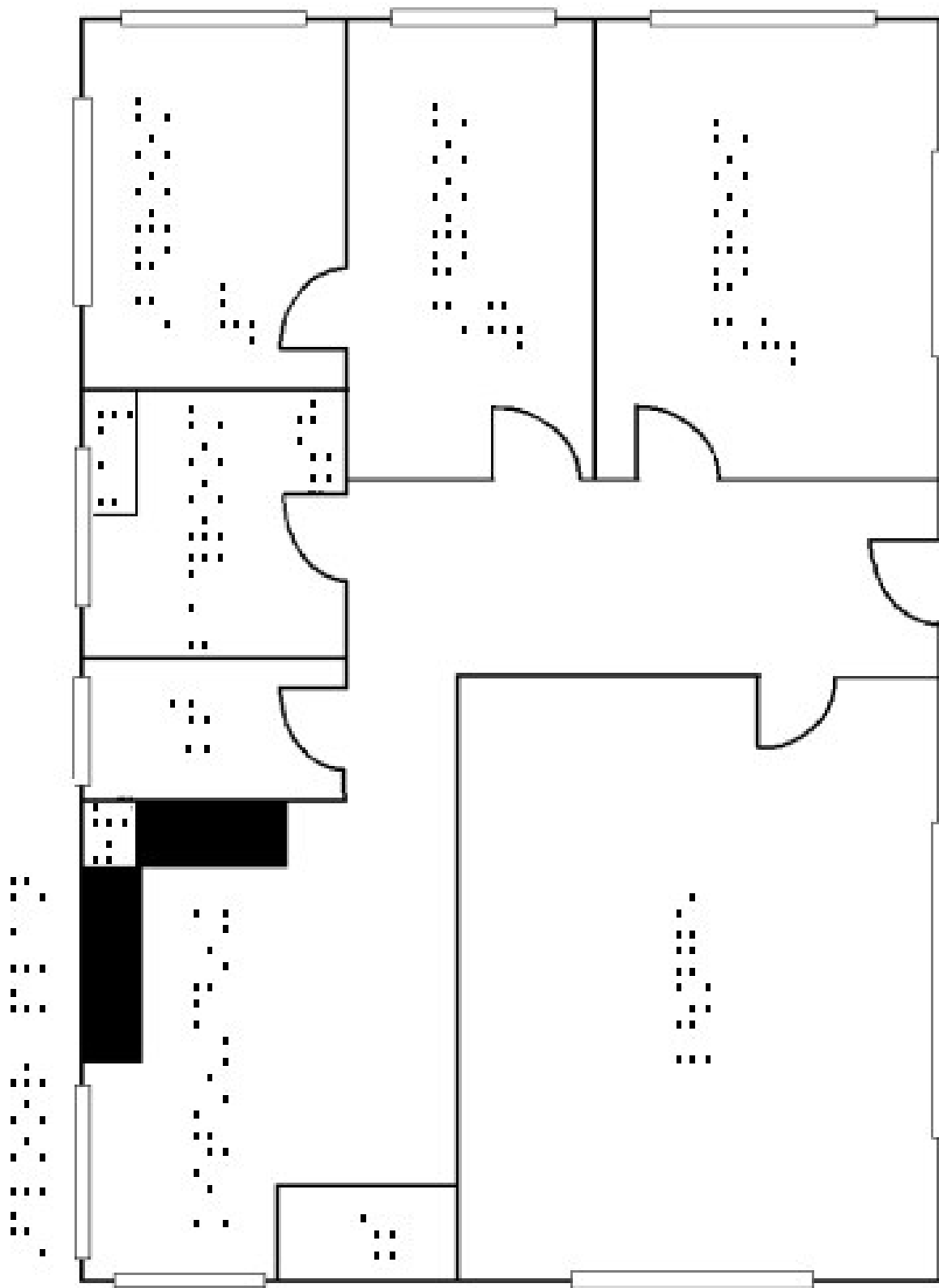
Verbalisation

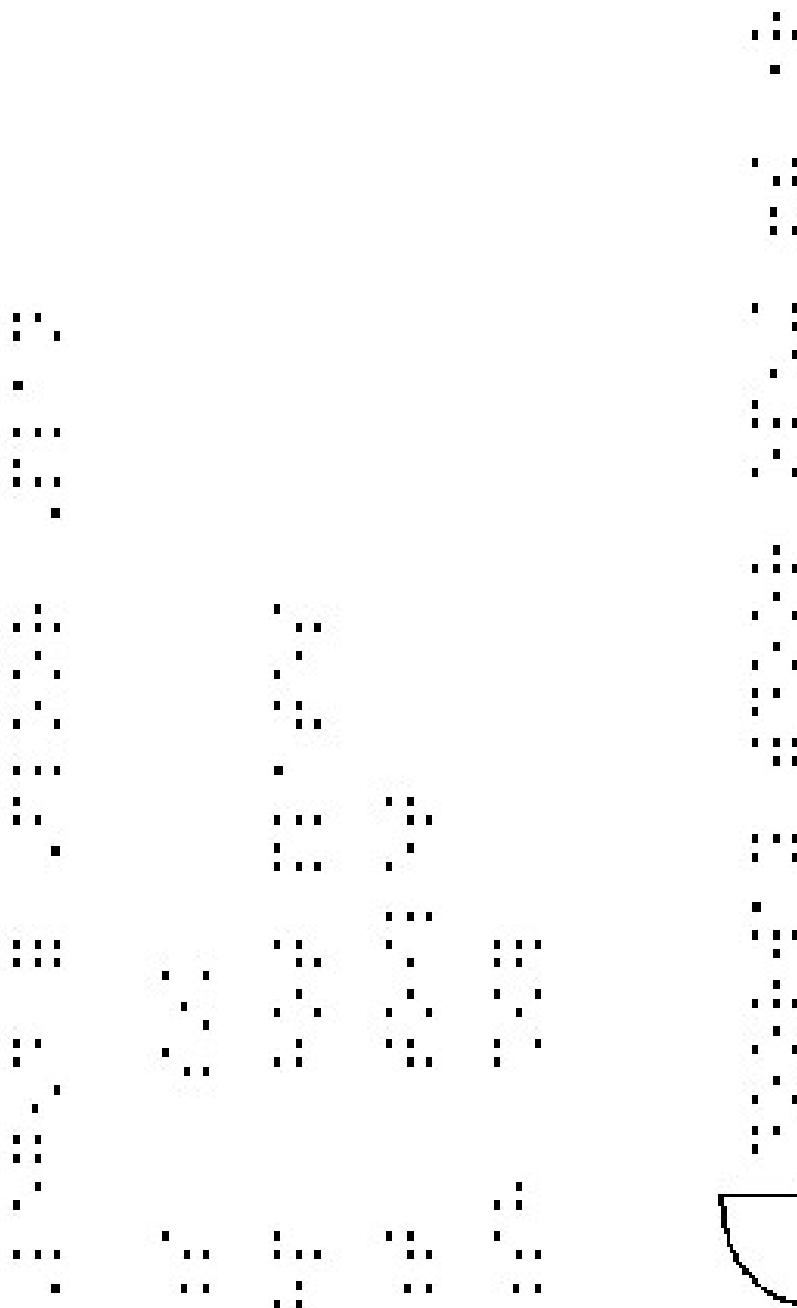
Transcriber's/narrator's note.

At this point in the text there is a simple floor plan of a three bedroom house. No scale or northpoint are given. The shape of the plan is rectangular and the external walls are shown in a thick pen line, broken by narrow rectangles depicting windows. The front wall is 17 cm (the full length of the house plan) and is located at the bottom of the page. The side walls are 14 cm (the width of the house plan). The front and only entrance is just to the right of centre of the front wall. This entrance opens onto a corridor which leads into the centre of the house then turns left, at a right angle and opens into the kitchen, located in the top left hand corner of the plan. The kitchen (5.5 cm by 7.0 cm) has space in the middle for a table, a sink in the bottom left corner facing the corridor and 4 cm long benches forming a right angle at the top right with hotplates in the corner. Located on each exterior wall is a window close to the top left hand corner. 2 cm up from the front entrance, on the left, a doorway opens into a lounge room (8.5 cm by 8.5 cm) occupying the bottom left hand quarter of the plan. A television is located in the bottom left hand corner of the lounge room and there is a centred window in each of the two exterior walls. 4 cm up from the front entrance on the right, a doorway opens into bedroom 1 (5.5 cm by 5.5 cm) which occupies the bottom right hand corner of the plan and has a centred window in each of the two exterior walls. 1 cm further up, there is a doorway to bedroom 2 (4.0 cm by 5.5 cm) which has a centred window in the exterior wall. Bedroom 3 (4.0 cm by 4.5 cm) is in the top right hand corner of the plan and has a doorway opening from bedroom 2 and a centred window in each of its two exterior walls. Between the kitchen and

bedroom 3 are the toilet (2 cm by 4 cm) with one small centred window, and the bathroom (3.5 by 4 cm) with a centred window, both accessed from the corridor.

End transcriber's/narrator's note.





Science diagrams

For example, Biology, Physics, Chemistry, Electronics

Science

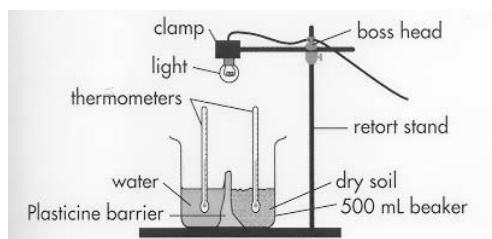
Guidelines

Access to specialist knowledge

When Science diagrams are requested, it is essential that the person providing the tactile and/or the verbalisation should have some knowledge of the subject or at least have access to someone with knowledge in the specialist area. To assist with the provision of Science information, a list of science equipment and electronic symbols have been included in the Resource section at the end of this document.

Example 15

10.6 Experimental set-up

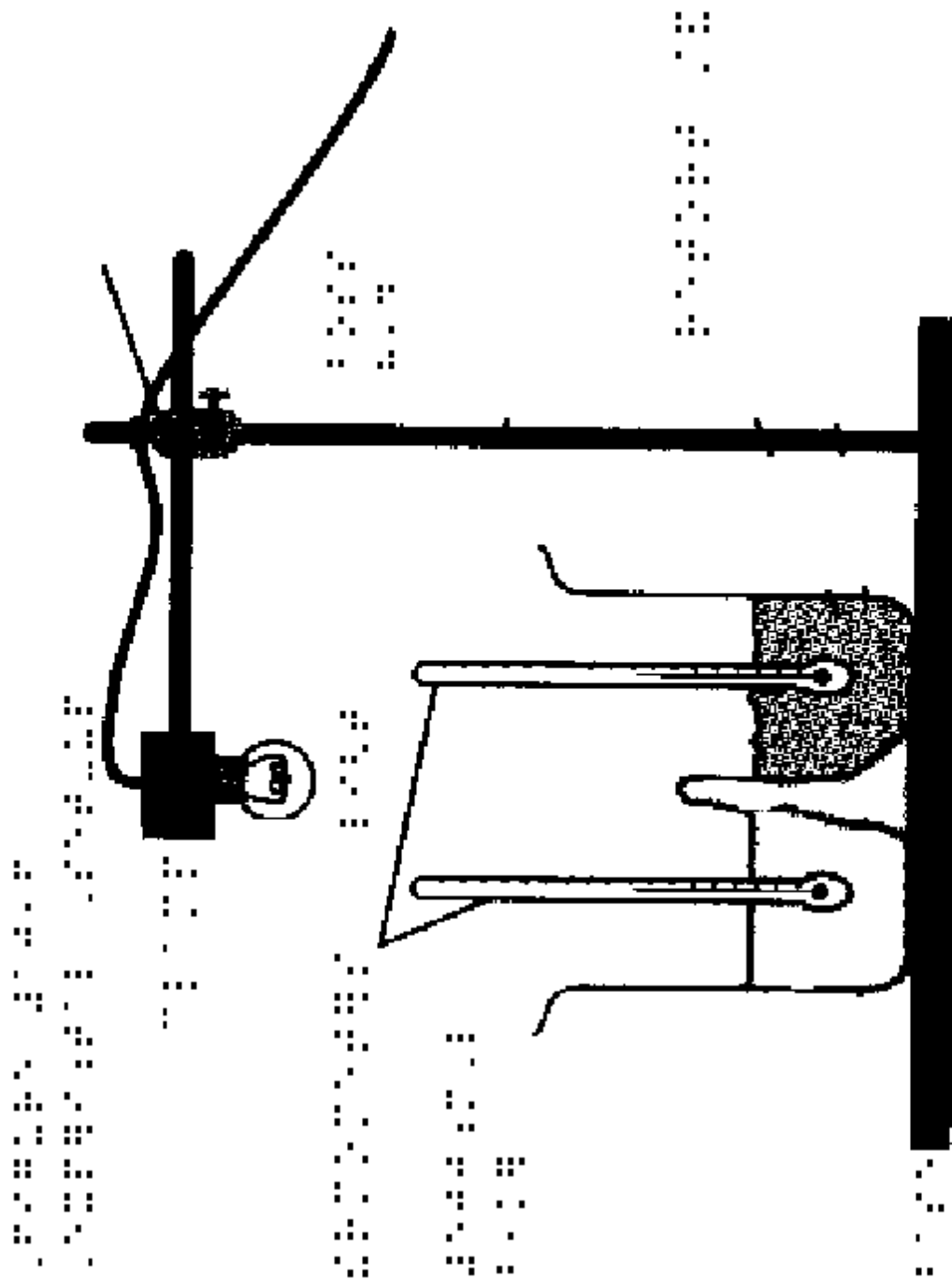


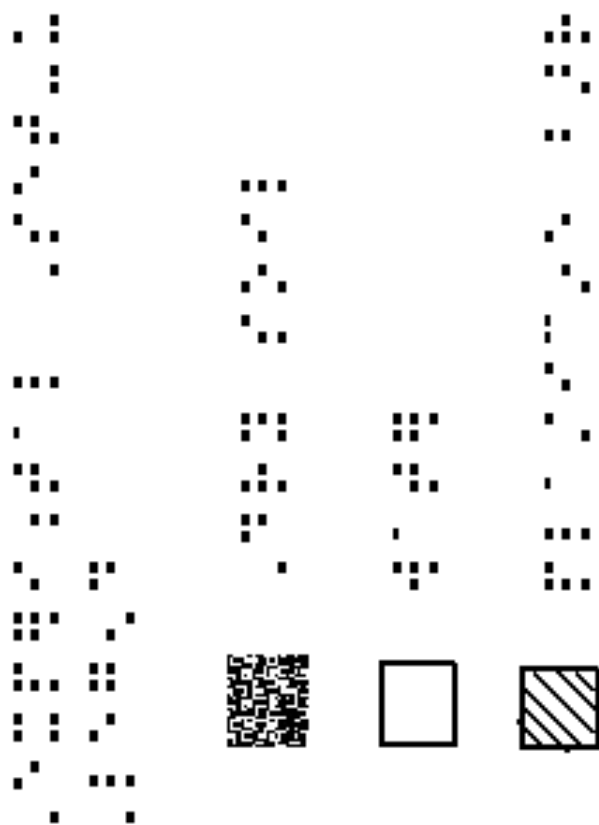
Verbalisation

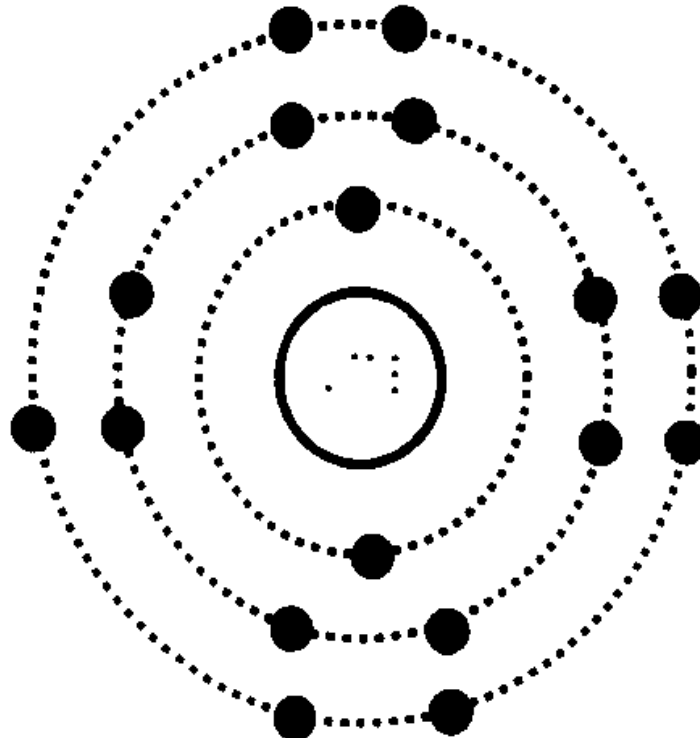
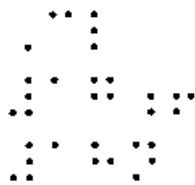
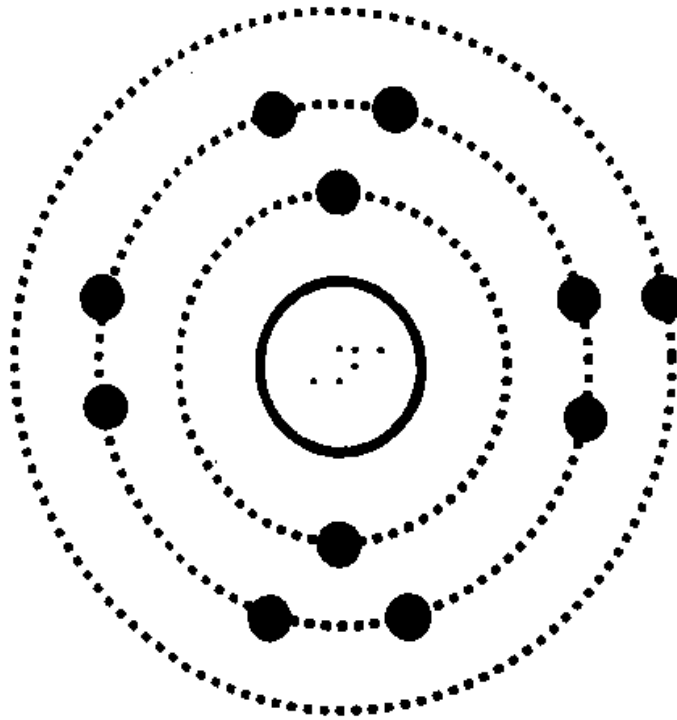
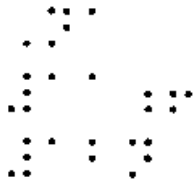
Transcriber's/narrator's note.

The diagram, figure 10.6, captioned 'Experimental set-up' illustrates how the equipment is to be set up. The diagram depicts a cross-section of the beaker which shows a wad of plasticine placed inside it, dividing the interior space in half. The left side holds water and the right side holds dry soil. Each side has a thermometer positioned vertically in it and the thermometers do not touch the beaker or the plasticine. The beaker sits on the base of a retort stand which has a boss head and clamp connected to it, forming a right angle with the stand. The clamp holds the light directly above the beaker, about two beaker lengths away. The diagram is labelled.

End transcriber's/narrator's note.







Chemistry

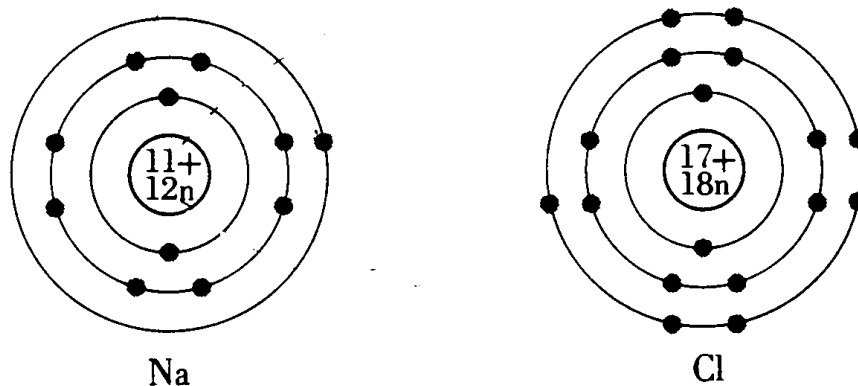
Guidelines

- Read the formula exactly as it appears so the reader can follow and reproduce it step by step.
- Refer to a specialist when necessary.
- Avoid expanding or using chemistry conventions with which the reader may not be familiar. For example, (g) should be read as 'open bracket, lower case g, close bracket' rather than 'gas'.

Reference for braille transcription

For braille transcription refer to the Round Table on Reading Materials for People with Print Disabilities Inc. (1995). *Australian braille chemistry notation*. Sydney: Author.

Example 16 Chemistry diagram



Verbalisation

Transcriber's/narrator's note.

The diagram depicts 2 models that represent atoms. Both models comprise 4 concentric circles spaced 0.5cm apart. The first model is labeled Na. Within the centre circle are the numbers 11+ and, below it, 12n. The next circle has 2 dots, one at the top and one at the bottom. The 3rd circle has 4 groups of 2 dots equally spaced, at the top, bottom, left and right. The outermost circle has one dot on its right side.

The second model is labeled Cl. Within the centre circle are the numbers 17+ and, below it, 18n. The next circle has 2 dots, one at the top and one at the bottom. The 3rd circle has 4 groups of 2 dots equally spaced, at the top, bottom, left and right. The outermost circle has 3 groups of 2 dots at the top, bottom and right and one dot on its left side.

End transcriber's/narrator's note.

Example 17

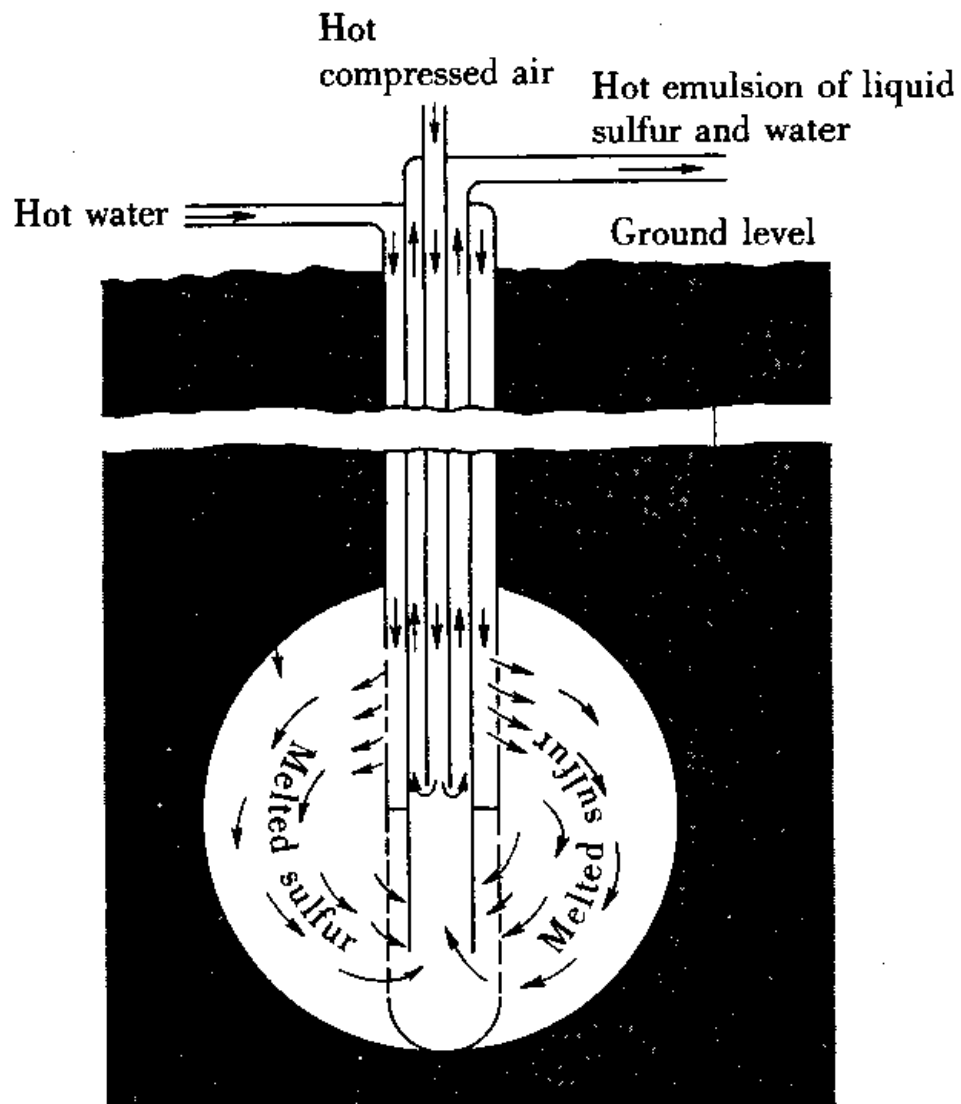


Fig. 25.6 The Frasch process for the extraction of sulfur from underground deposits.

Verbalisation:

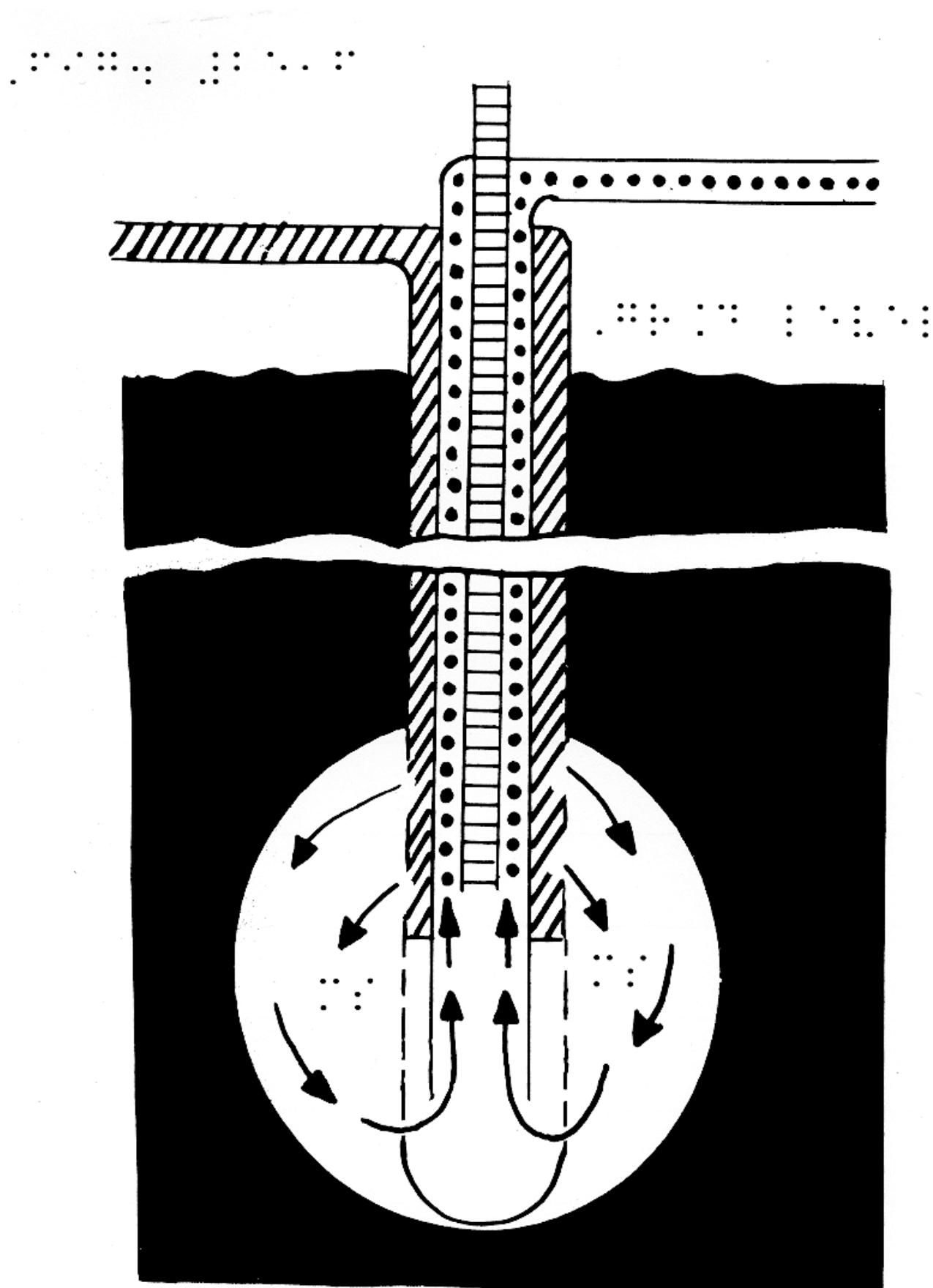
Narrator's/transcriber's note.

The diagram is labelled Fig. 25.6 The Frasch process for the extraction of sulfur from underground deposits.

The diagram is a cross-section of the Frasch process. It shows a dark rectangle depicting the earth from ground level down to approximately 1600 m. The rectangle has a horizontal break of .5cm to represent distance in the cross-section and to show the lack of scale. There are five tubes, side-by-side, which are enclosed in a casing with a curved base. These tubes start just above ground level and are sunk into a 5cm diameter circle, which ends .5cm from the bottom of the rectangle. The circle represents sulfur-bearing rock. Above ground level, hot compressed air is forced down the centre vertical tube, represented by horizontal lines. This tube has an open end. Arrows show that the hot compressed air returns up the tubes (indicated by dots) on either side of the central tube. (These arrows are not shown in the tactile diagram.)

Hot water is forced into the horizontal tube (top left - distinguished by diagonal lines), which separates into the two tubes that run vertically beside the other 3 tubes. The water leaves these tubes through openings on the outside edges into the sulfur-bearing rock, pushing melted sulfur down in a circular motion and up the tubes, which return the compressed air. These outlet tubes merge at a level above the hot water tube and become the single tube (top right) which conveys the hot emulsion of liquid sulfur and water.

End narrator's/transcriber's note.





Electronics

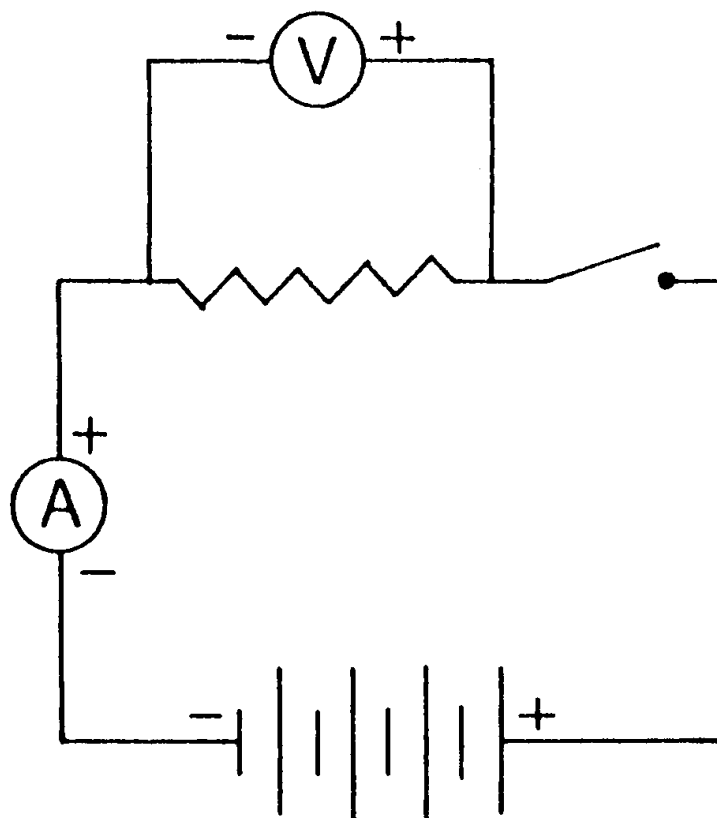
Guidelines

- Where it is not practicable to transcribe the tactile format to exactly reproduce the print, e.g. if a Perkins or Mountbatten braille is being used, items such as circles around letters or zigzag and angled lines can be omitted and alternative symbols employed without compromising the informational content. (Refer to the list of symbols for electronics in the Resources section).

Considerations such as the following may also be relevant in making decisions in these instances:

- If the student has experienced a consistency of presentation of electronic components in diagrams, e.g. power supplies with cells, resistors and switches, then every attempt should be made to use the same symbols in all transcriptions, including those prepared for tests and examinations.
- When preparing tactiles for test situations, it is essential to ensure that references to specific items and features in the questions are consistent with what is depicted tactually. For example, if there were a question about the use of a zigzag line to indicate a resistor, then it would obviously be more appropriate to Braille a series of 'st' or 'ch' signs (or 'en'/'in' signs), or devise another zigzag line depiction, rather than simply using the letter 'R'. Perhaps the length of the resistor could also be significant.

Example 18
Electronic Circuit



Following are two verbalisations, one to accompany the print diagram and one to accompany the braille diagram.

Verbalisation for print diagram:

Narrator's/transcriber's note.

This circuit diagram consists of two joined rectangles, each representing a loop. The main loop includes a power supply, an Ammeter, a resistor and a switch. The secondary loop bypasses the resistor on the main loop, and includes a Voltmeter.

At the base of the lower rectangle, which represents the main loop, is a power supply. The power supply consists of four cells, each represented by two vertical lines: a longer line on the right and a shorter line on the left. The left side of the power supply is the negative pole.

A line goes from the negative pole of the power supply into the Ammeter, on the left side of the lower rectangle. The Ammeter is represented by a circle containing the capital letter 'A'. There is a negative sign at the point where the

line enters the Ammeter, and a positive sign at the point where the line leaves the Ammeter. The line then leads to a resistor at the top edge of the lower rectangle. The resistor is represented by a zigzag line.

The secondary loop, represented by a second rectangle above the first, joins the main loop before the resistor and after the Ammeter, with the resistor on the top edge of the lower rectangle forming the base of the upper rectangle. The line enters a Voltmeter on the top edge of the upper rectangle. The Voltmeter is represented by a circle containing the capital letter 'V'. There is a negative sign at the point where the line enters the Voltmeter, and a positive sign at the point where the line leaves the Voltmeter. The line then rejoins the main loop after the resistor, at the top edge of the lower rectangle.

To the right of the point where the secondary loop rejoins the main loop is an open switch. The open switch is represented by a line protruding approximately 30 degrees from the top edge of the rectangle, causing a break in the shape of the rectangle. There is a dot where the normal rectangle shape continues. The main loop continues down the right side of the lower rectangle, joining the positive pole of the power supply on the bottom edge. End narrator's/transcriber's note.

Verbalisation for braille diagram:

Narrator's/transcriber's note

This circuit diagram consists of two joined rectangles, each representing a loop. The main loop includes a power supply, an Ammeter, a resistor and a switch. The secondary loop bypasses the resistor on the main loop, and includes a Voltmeter.

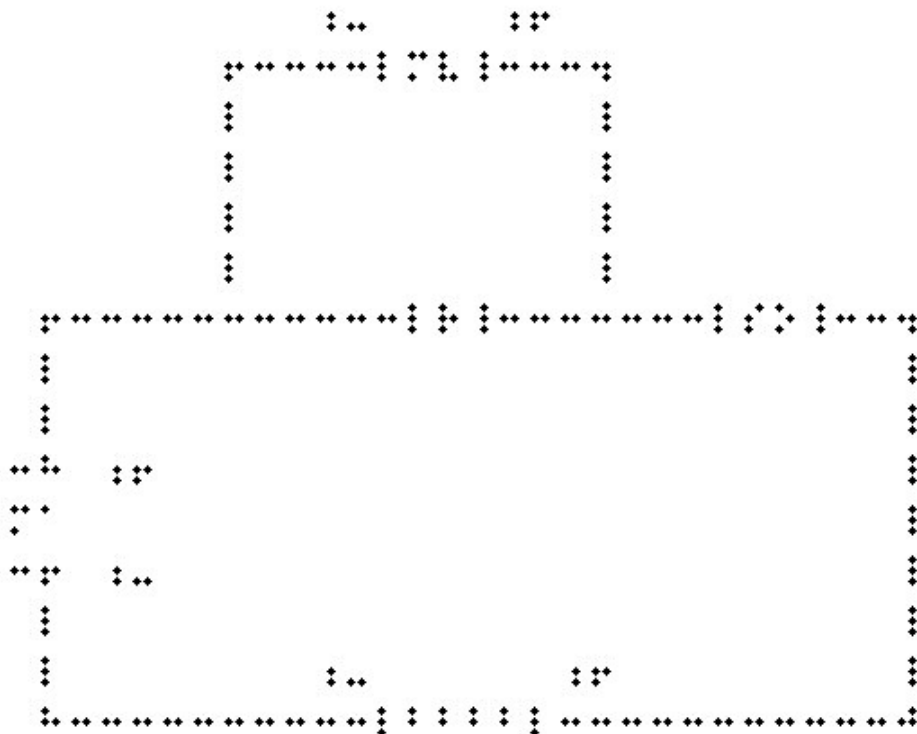
At the base of the lower rectangle, which represents the main loop, is a power supply. The power supply consists of four cells, each represented in Braille by the letter 'b' (and in print by two vertical lines: a longer line on the right and a shorter line on the left). The left side of the power supply is the negative pole.

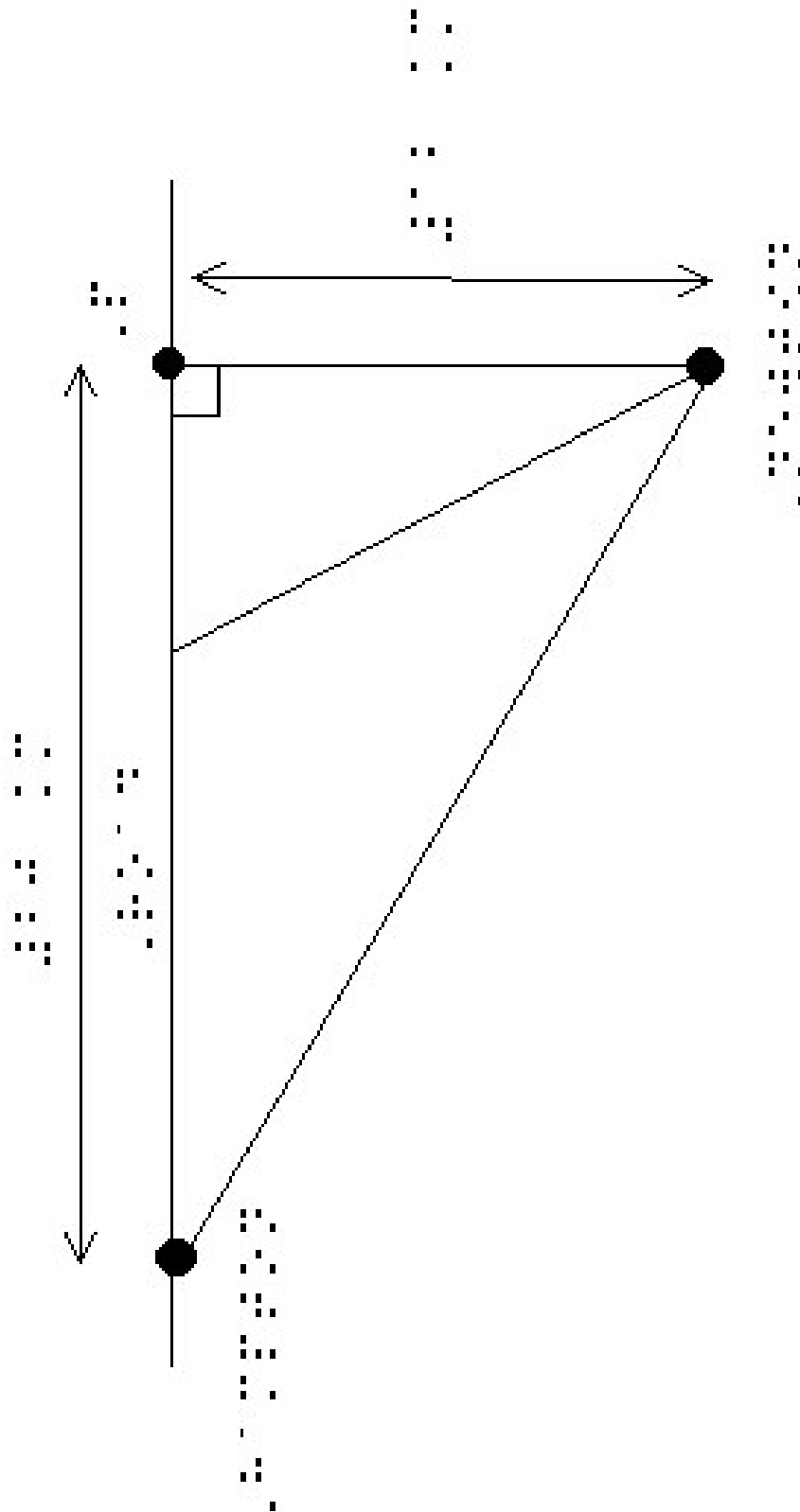
A line goes from the negative pole of the power supply into the Ammeter on the left side of the lower rectangle. The Ammeter is represented by the letters 'ma'. There is a negative sign at the point where the line enters the Ammeter and a positive sign at the point where the line leaves the Ammeter. The line then leads to a resistor at the top edge of the lower rectangle. The resistor is represented by the letter 'r'.

The secondary loop, represented by a second rectangle above the first, joins the main loop before the resistor and after the Ammeter, with the resistor on the top edge of the lower rectangle forming the base of the upper rectangle. The line enters a Voltmeter on the top edge of the upper rectangle. The Voltmeter is represented by the letters 'mv'. There is a negative sign at the point where the line enters the Voltmeter and a positive sign at the point where the line leaves the Voltmeter. The line then rejoins the main loop after the resistor, at the top edge of the lower rectangle.

To the right of the point where the secondary loop rejoins the main loop is an open switch. The open switch is represented in print by a line protruding approximately 30 degrees from the top edge of the rectangle, causing a break in the shape of the rectangle. In the Braille diagram, the line is broken as elsewhere with the letters 'so' to indicate 'switch open'. The main loop continues down the right side of the lower rectangle, joining the positive pole of the power supply on the bottom edge.

End narrator's/transcriber's note.





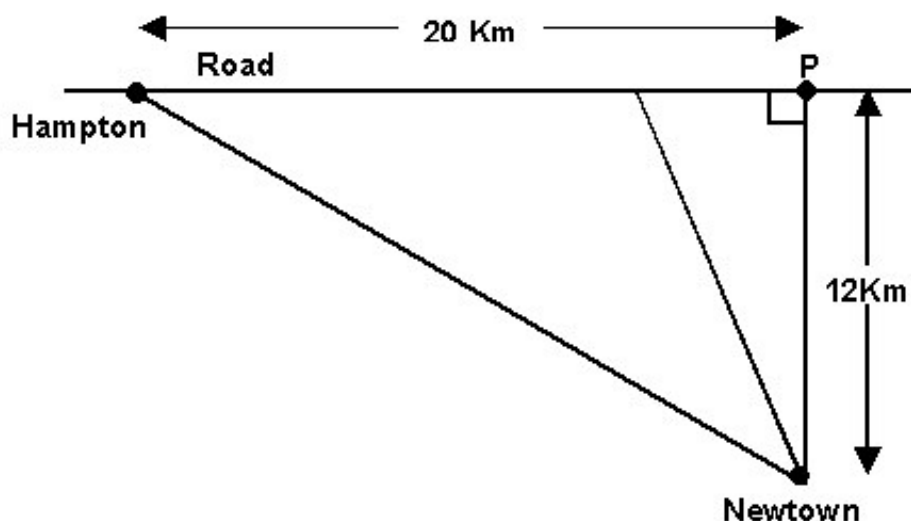
Mathematics

Guidelines

- In the presentation of three-dimensional concepts, more than one format may be required, for example, a three-dimensional model with a verbalisation or a two-dimensional tactile with a verbalisation.
- In some cases it is not always necessary to include tactual representation if a sufficient verbal description can be given. This will depend on the level of the reader.
- Audio should be considered only as a last resort.

Example 19

Diagram showing distance between three points



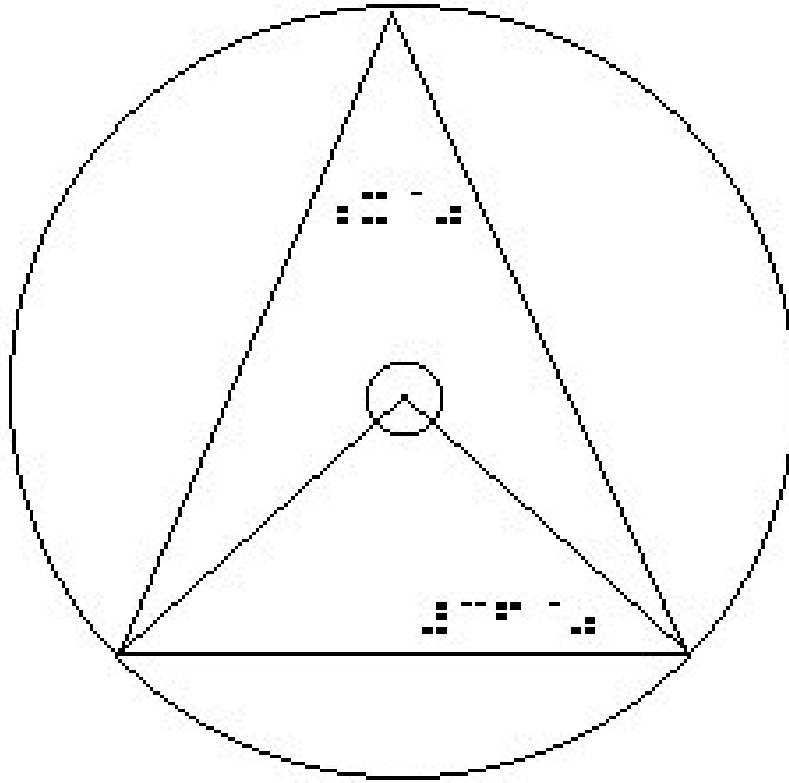
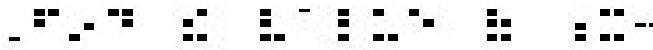
Verbalisation

Narrator's/transcriber's note.

This is a diagram showing the distance between three points. At the left of the diagram is a point labelled Hampton. To the right of Hampton is a second point, labelled P. A horizontal line, labelled Road, runs through both of these points. Point P is joined by a vertical line to a third point, labelled Newtown, forming a right angle with the Road line. The distance between Hampton and point P is 20 km. The distance between point P and Newtown is 12 Km. There are two additional unmarked lines on the diagram:

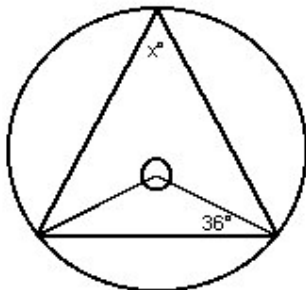
1. A diagonal line from Newtown to Hampton.
2. A diagonal line from Newtown to an unmarked point on the Road line, approximately one third of the distance from point P to Hampton.

End narrator's/transcriber's note.



Example 20

Find the value of x° .

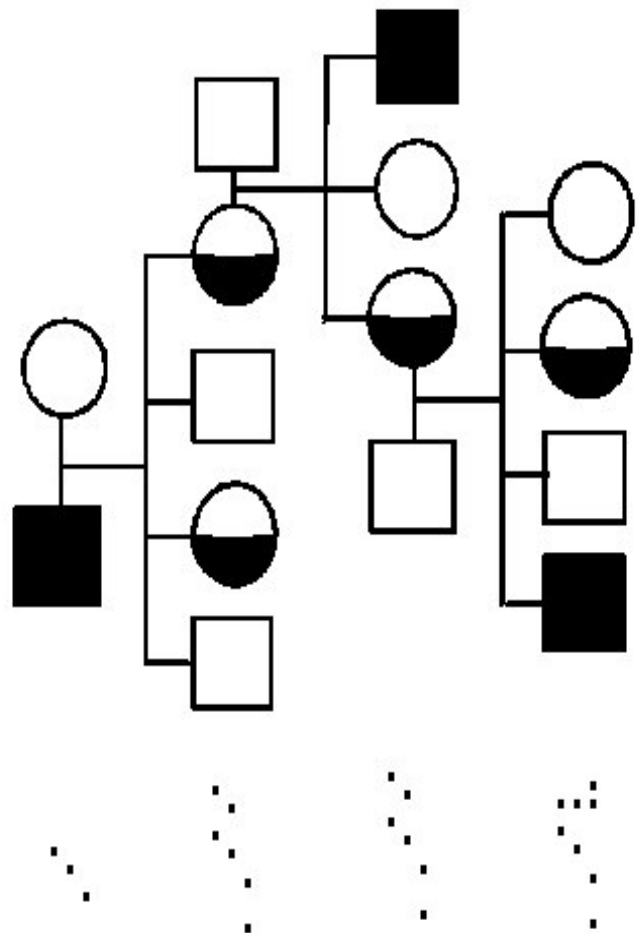


Verbalisation

Narrator's/transcriber's note

This diagram comprises a circle, approximately 3 cm in diameter, containing two triangles. The centre point is marked by a small circle and forms the apex of the smaller triangle. The apex of the larger triangle meets the circle at 12 o'clock and both triangles share the same base which extends horizontally between points at 4 o'clock and 8 o'clock. The right hand angle of the smaller triangle is given as 36 degrees. The top angle of the larger triangle is marked x degrees.

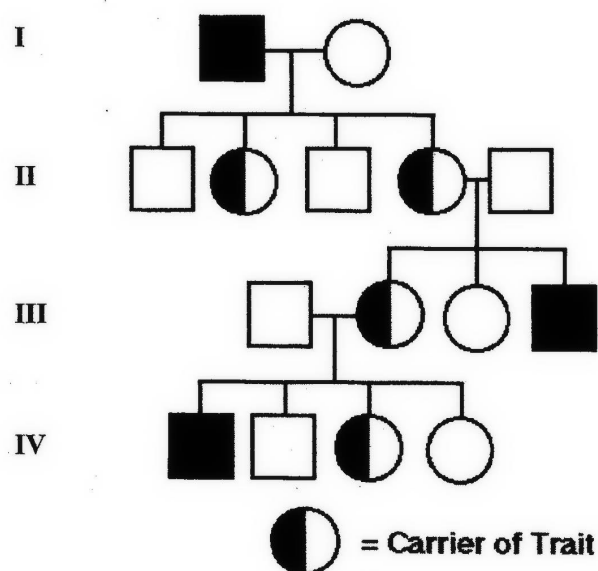
End narrator's/transcriber's note.



Genealogical Tables

Example 21

Figure 3.2 Inheritance of red-green colour blindness: an X-linked recessive trait



Verbalisation

Transcriber's/narrator's note.

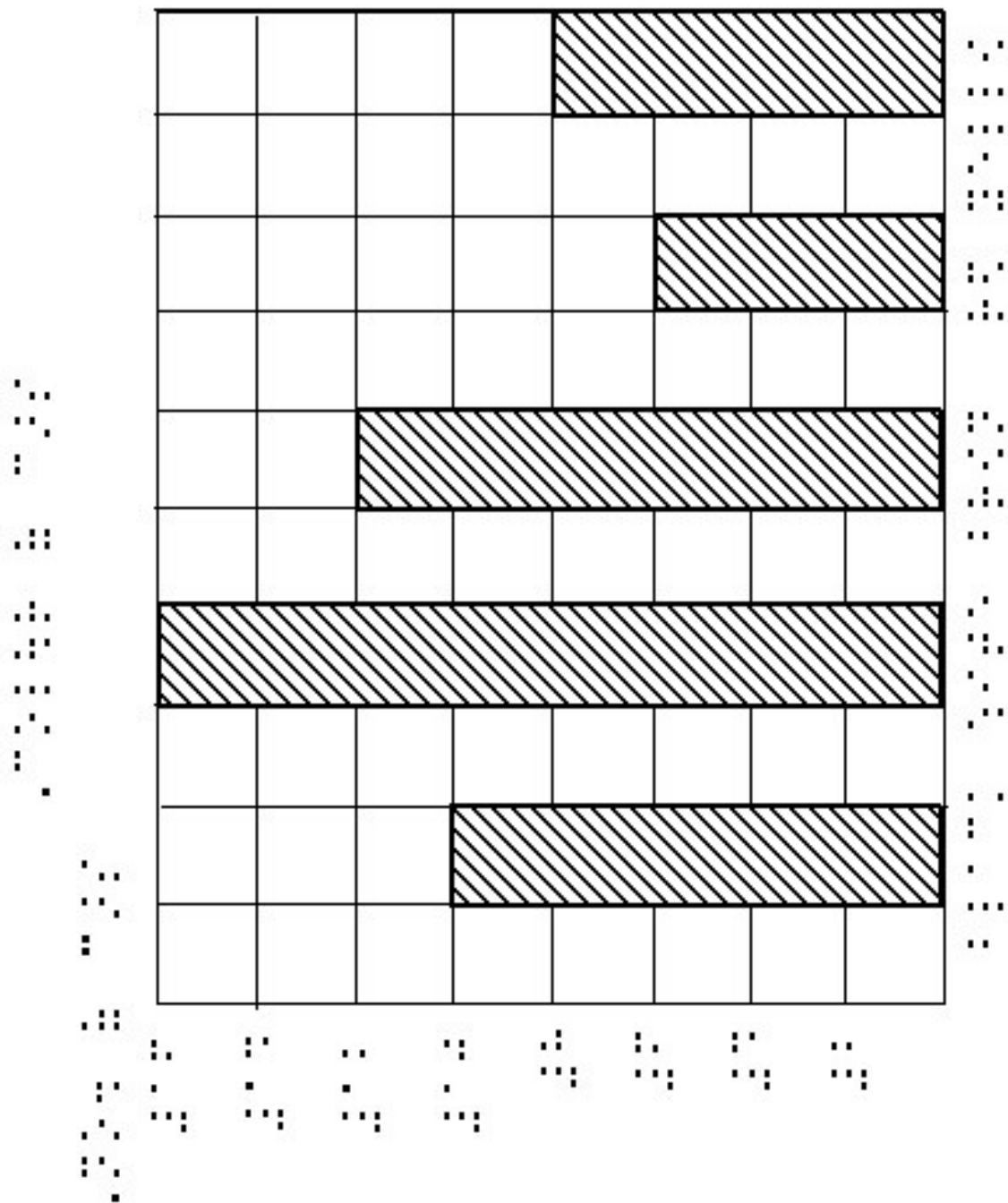
At this point in the text there is figure 3.2 titled 'Inheritance of red-green colour blindness: an X-linked recessive trait'. This diagram is a family tree that shows which members of an extended family have colour blindness or are carriers of colour blindness. The diagram shows four generations labelled with roman numerals I, II, III and IV. The following description will start with generation I at the top and work down to generation IV.

Generation I: male with colour blindness marries unaffected female and has four children

Generation II: of the four children, there are two unaffected males and two females who are carriers. One of the (carrier) females marries an unaffected male and generation III shows the children of this marriage.

Generation III: three children – one male with colour blindness, one unaffected female and one female carrier. The female who is a carrier marries an unaffected male and generation IV shows the children of this marriage.

Generation IV: four children – one male with colour blindness, one unaffected male, one female who is a carrier and one unaffected female.
End transcriber's/narrator's note.



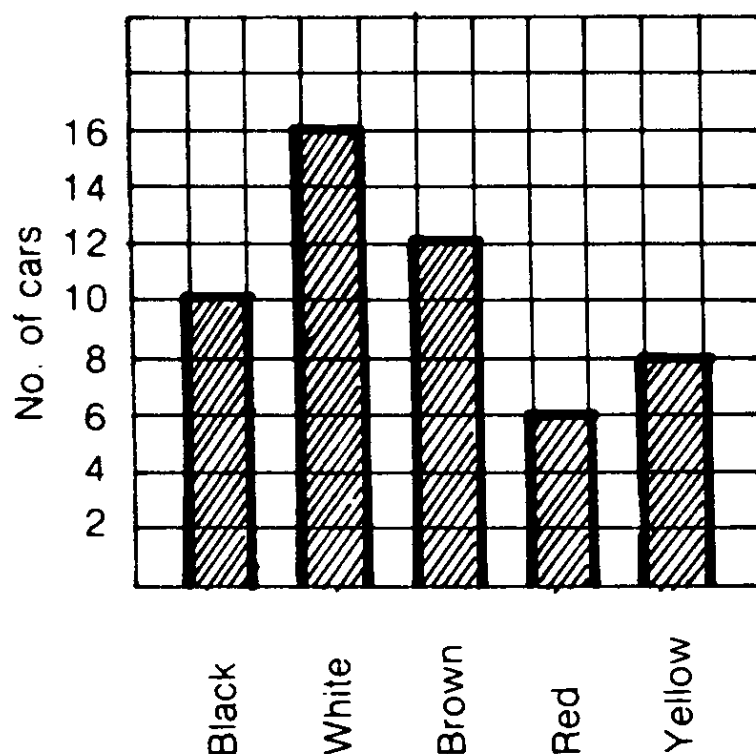
Graphs

Guidelines

Before giving a detailed description of a graph, it is necessary to give a brief description of the overall shape and extent of the graph with the major coordinates or elements, to enable the reader to gain an overall impression of the graph.

Example 22

1. Colour of cars



Verbalisation

Narrator's/transcriber's note.

This is a bar graph showing how many cars are black, white, brown, red or yellow. It is shown on 1cm grid paper. The vertical axis shows the number of cars and reads from 0 to 16 in even number increments. The horizontal axis tells the colours in the above order. There is a 1cm blank column between each filled column.

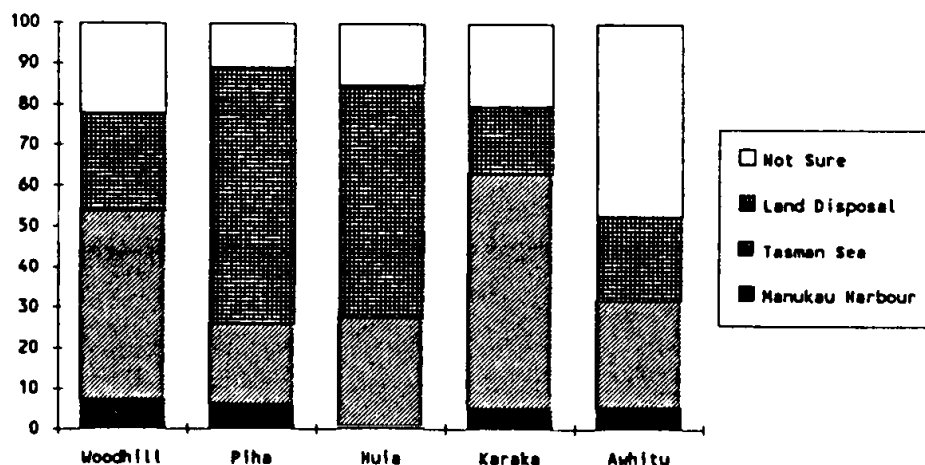
There are 5, 1cm squares filled showing black cars; 8 squares filled showing white cars, 6 squares filled showing brown cars, 3 squares filled showing red cars and 4 squares filled showing yellow cars.

End narrator's/transcriber's note.

Example 23

2.4 Preferred Disposal Option by area of residence (Rural Residents' Survey, N=488)

2.4 PREFERRED DISPOSAL OPTION BY AREA OF RESIDENCE (RURAL RESIDENTS' SURVEY, N=488)



Verbalisation

Transcriber's/narrator's note.

At this point in the text there is figure 2.4 titled Preferred Disposal Option by Area of Residence (Rural Resident's Survey, where N equals 488). This figure is a bar graph which contains 5 bars with data from the following areas: Woodhill, Piha, Huia, Karaka and Awhitu. Each area will be named and then the percentage of people who prefer a particular disposal option.

Woodhill:

Manakau Harbour: 8 %

Tasman Sea: 50%

Land Disposal: 20%

Not sure: 22%

Piha:

Manakau Harbour: 7 %

Tasman Sea: 18%

Land Disposal: 64%

Not sure: 11%

Huia:

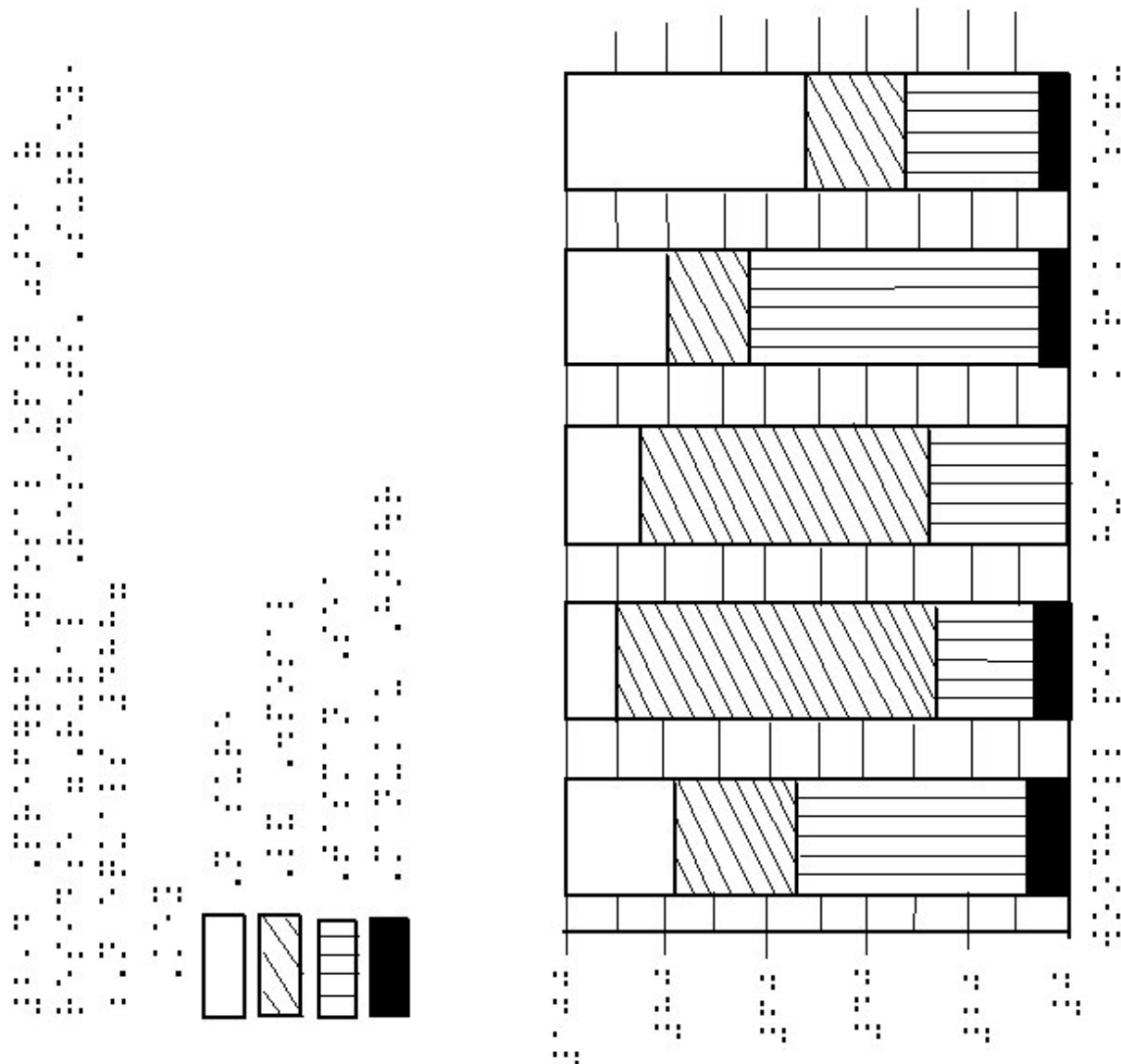
Manukau Harbour: 0%

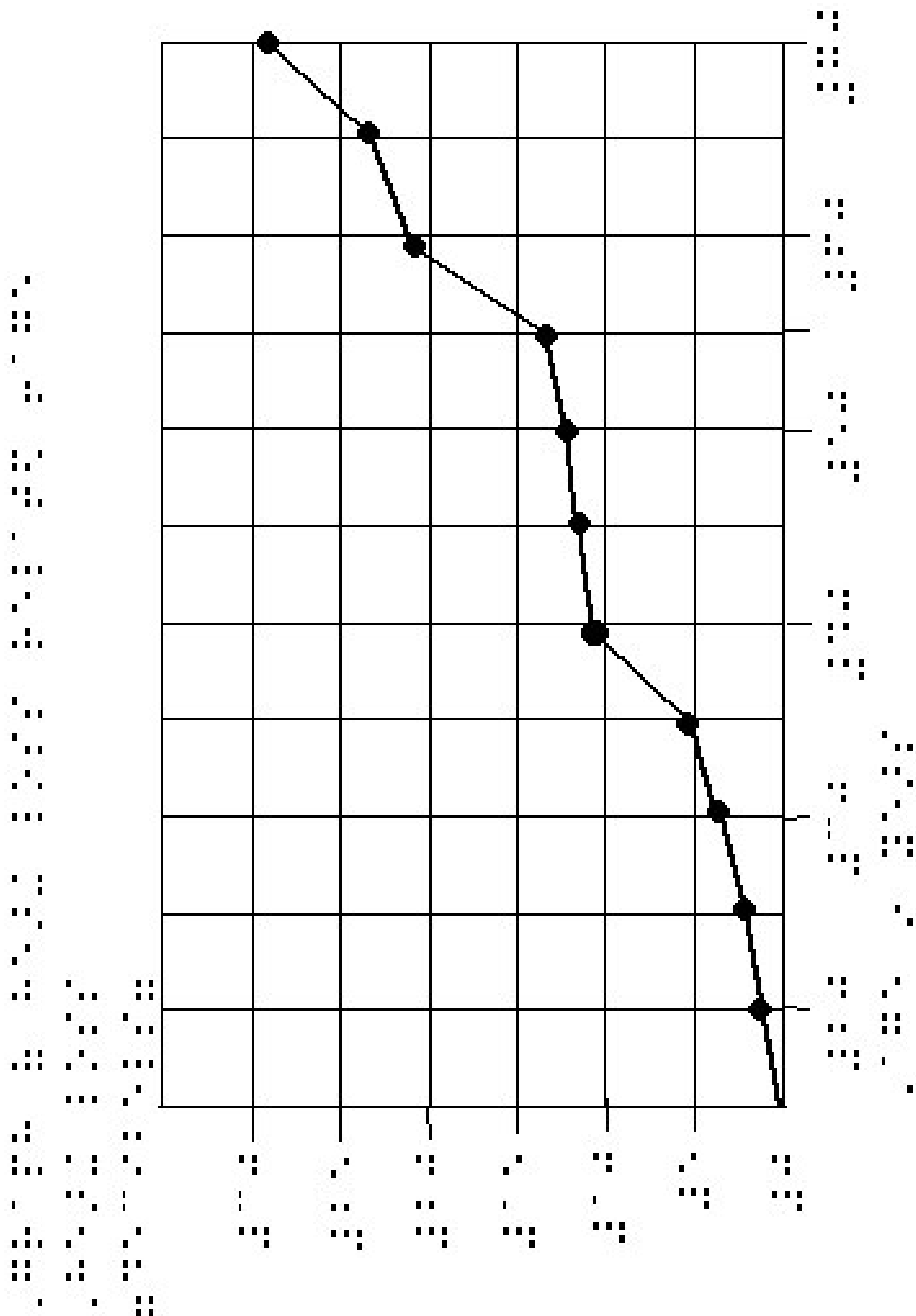
Tasman Sea: 28%

Land Disposal: 57%
Not sure: 15%

Karaka:
Manakau Harbour: 6%
Tasman Sea: 56%
Land Disposal: 18%
Not sure: 20%

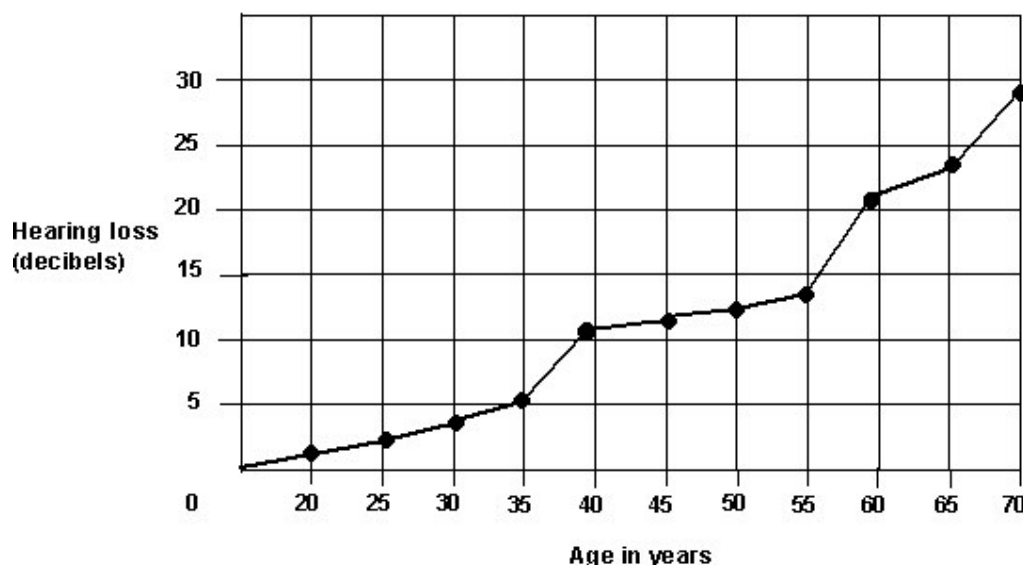
Awhitu:
Manauku Harbour: 6%
Tasman Sea: 28%
Land Disposal: 20%
Not sure: 46%
End transcriber's/narrator's note.





Example 24

Hearing Loss graph

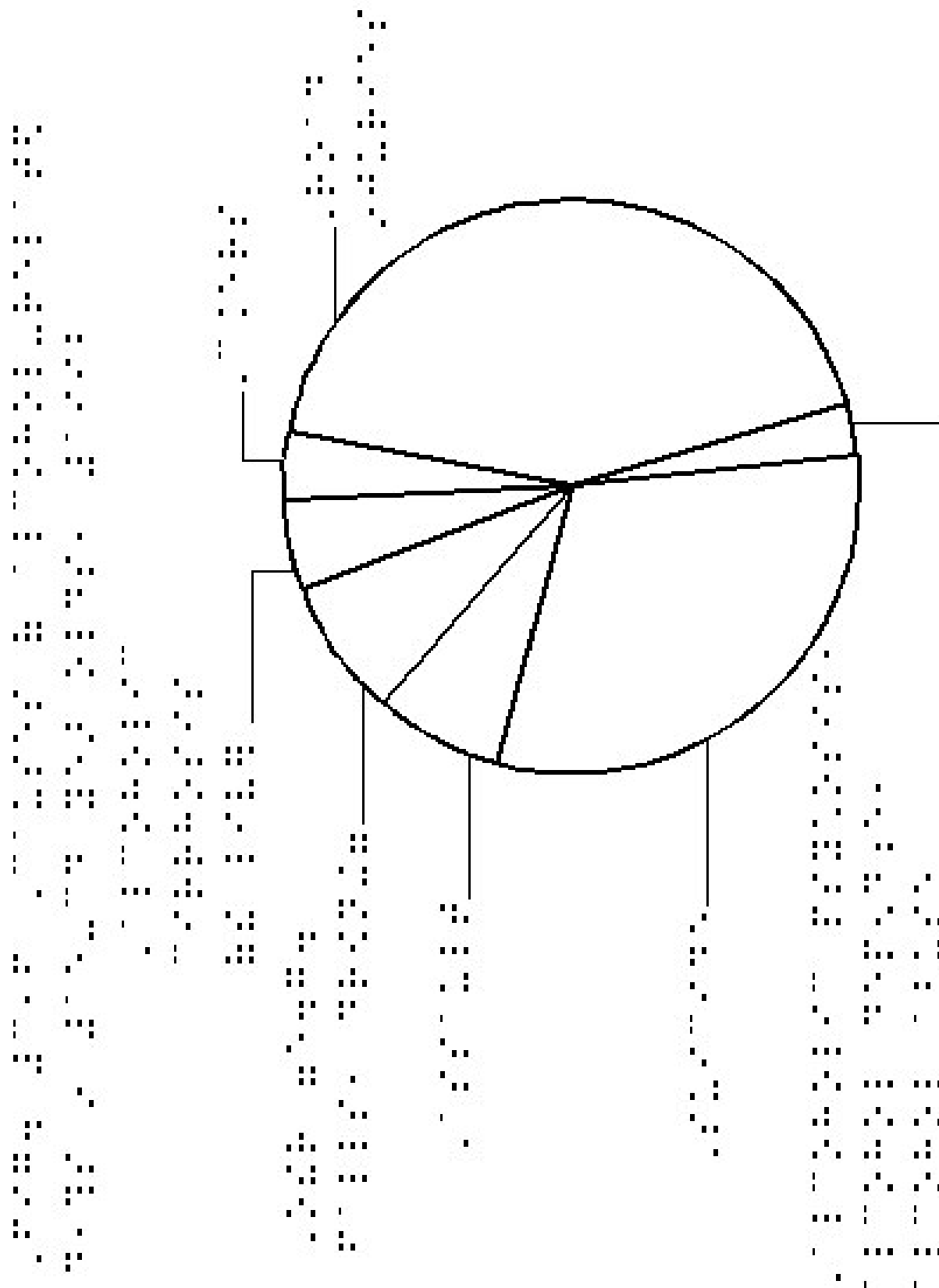


Verbalisation

Transcriber's/narrator's note.

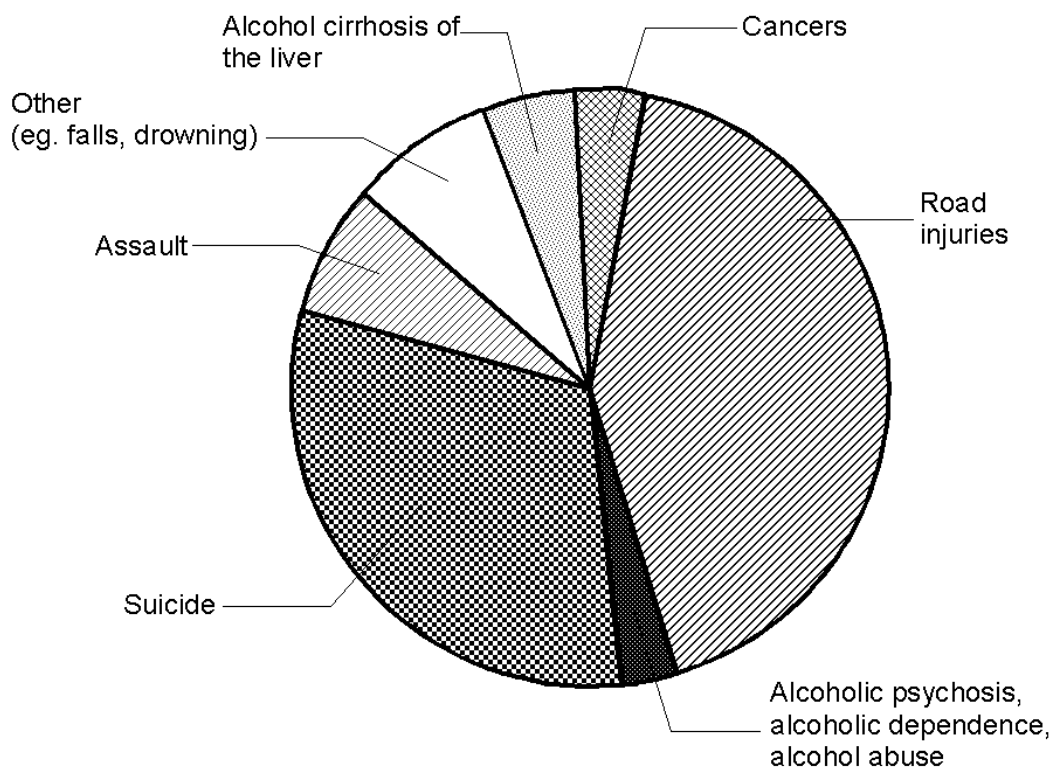
At this point in the text there is a line graph titled 'Graph of Hearing Loss related to Age'. The x-axis shows Age in Years, in increments of 10 from 0 to 70 and the y-axis shows hearing loss in decibels in increments of 5, from 0-30. The line is straight from age to age and begins at the co-ordinates (15,0). At age 20 the line shows a hearing loss of about 1.5 decibels. At age 25, hearing loss is 2 decibels, at 30, 3.5 decibels and at 35, 5 decibels. The line gradient increases at this point so that at age 40, hearing loss is 10.5 decibels. The line gradient then decreases between ages 40 and 55, so at age 45 hearing loss is 11.5 decibels, at 50, 12.5 decibels and at 55, 13 decibels. The line gradient increases and at age 60 hearing loss is 20.5 decibels, at 65, 23 decibels and at 70, the last age given, hearing loss is 28 decibels.

End transcriber's/narrator's note.



Example 25

Pie Graph



Verbalisation

Narrator's/transcriber's note.

At this point in the text there is a pie chart, Figure 3.6 with the caption 'Causes of alcohol-related deaths in 15-34 year olds, 1992'. The pie chart is divided into the following causes, which will be expressed as an estimated percentage of the pie chart.

- Road injuries - around 45%
- Suicide – around 30%
- Assault – around 7%
- Alcoholic cirrhosis of the liver – around 4%
- Alcoholic psychosis, alcoholic dependence, alcohol abuse – around 4%
- Cancers – around 3%
- Other - for example falls and drowning – around 7%

End narrator's/transcriber's note.

Resources

Some Handy Hints for Transcribers and Narrators

1. Read the available information

Find out what written material your agency has to offer, for example, in-house guidelines and books, and read it. If information is not available in these Guidelines it may be found in other Round Table Guidelines Documents such as 'Sound Advice', and the 'Australian Braille Authority Guidelines for Formatting of Braille Material' (see Print and Internet Resources section in this document) all of which contain relevant information. Make sure you keep up-to-date with any new information that becomes available. Such information is constantly posted on the Internet (see the Resource Section for further information).

2. Ask for help and learn from others

Ask for help and use your on-site expertise. In all production agencies there are people who have a wealth of knowledge and experience and often this is the most effective way to learn your craft.

3. Draw on expertise from other agencies and organisations

Communication with other organisations and agencies is a very helpful way to gain knowledge and explore different perspectives and alternative ideas.

4. Read the text before creating a graphic or a description and ensure that the tactile is easy to locate

- (i) It is essential to read the surrounding text carefully to see how much information is included in the text that does not need to be included in the verbalisation or the tactile. Also check the text to ascertain what information it is expected will be gained from any graphical representations.
- (ii) Check any questions that directly relate to a graphic to ensure that the reader is able to obtain the required information to answer any questions. Sometimes these questions occur at the end of a chapter so it is also necessary to read ahead.
- (iii) Ensure that any references made to other pages, text or diagrams are included or changed if necessary, to coincide with the text that you are transcribing, for example:
 - (a) refer to diagram on page 4 (ensure that the specific diagram appears on page 4).
 - (b) see below (ensure diagram or text does appear on the same page).
 - (c) see overleaf (ensure diagram or text appears on the next page).

5. Look at other graphics

If you are having difficulty producing a graphic, first look at other similar graphics for inspiration and ideas.

6. Check work tactually

Close your eyes and check your tactile work by feeling it. If possible consult touch readers and consumers. Beware if someone tells you that your tactile is 'pretty' or 'beautiful' it may look but not feel good!

7. Seek consumer feedback

Request and take note of consumer feedback, it is important to know whether your work is effective and if possible incorporate any suggested changes.

8. The Three C's

Remember the three C's from Polly Edman's book 'Tactile Graphics' (see Resource Section):

- (i) Clarity – keep the graphic representation uncluttered;
- (ii) Consistency – for easy recognition, keep a figure the same throughout a book (same style, texture and size, if possible); and
- (iii) Contrast – use textual variety to accentuate important features in a tactile graphic.

9. Be aware of the level of the reader

Always be aware of the level of the material and whether it is aimed at young children, students, adults, etc. so that the language of descriptions of the surrounding material and the style of tactile diagram are appropriate to the level of the reader.

10. Three-dimensional shapes can enhance or replace a diagram

For some examples, a solid or concrete shape, or three-dimensional object will be preferable to a diagram. If possible, provide these or suggest to the teacher or tutor that these could accompany the text.

11. Editing texts

Agencies vary in their approach to their processes and techniques of production. Make sure that you are fully aware of your agency's procedures. For example, many agencies require texts to be edited before being accepted for transcription but others do not.

12. Occasionally some information may be omitted

In some instances, particularly in student material, it can be difficult to either describe material or provide a tactile because it is uncertain about the way in which the teacher will use the transcribed or narrated material. Thus, in some circumstances, it is permissible for the diagram or other material to be omitted with a transcriber's or narrator's note to 'Ask your teacher/tutor for assistance'. For some work, prior knowledge about the way in which the information is to be used and the depth of understanding required will help overcome this problem.

13. Make the information user-friendly

It is essential for information presented to be as user-friendly as possible. For example, consider whether for audio production, it is better to include the visual diagrams on a separate cassette or CD or for a transcriber to include all the tactiles in a separate volume.

14. The time factor

The time available for transcribers and narrators to adapt materials into alternative formats is often very limited. Rushing through work can lead to mistakes that can confuse the user. It is important to establish a required date for the resource and ask for the work to be forwarded to the organisation or

agency in a reasonable time before the due date. Prioritising is of the utmost importance.

15. The need for specialist knowledge – build up useful resources

Some diagrams require specialist knowledge to describe. As well as establishing contacts with specialists who you can call on for advice, it is useful to compile your own ready reference sheets such as the following:

- pictures of Science Equipment with names
- electronics information

16. Keep several reference folders containing:

- (i) examples of 'best practice' diagrams and write an accompanying note on each, specifying why they were effective and successful and if possible with the feedback given; and
- (ii) examples that have been unsuccessful or difficult to create, again, with an accompanying explanatory note.

17. Try not to reinvent the wheel

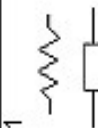

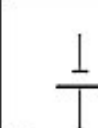
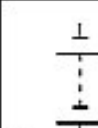
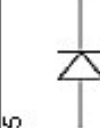
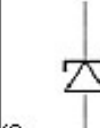

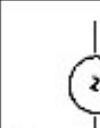

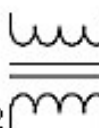


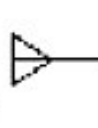
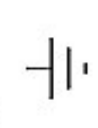

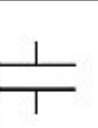





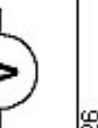

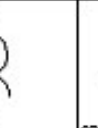
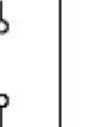
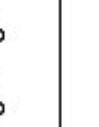

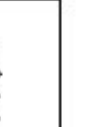
To minimise repetition:














- (i) make a collection of standard diagrams that are constantly requested, for example, a map of Australia, clock faces, the human body and grid lines;
- (ii) build up a collection of other standard diagrams. To do this keep a database or catalogue of all diagram masters with the Source book, page number, diagram number, diagram description, the type of master, etc;
- (iii) keep a photocopy of the print original with the master of the diagrams, this makes it easier to match it to another similar diagram; and
- (iv) when constructing early childhood tactile books – scan or photocopy graphics and keep a record of resources used in case a duplication of the same book is necessary.

Also create your own lists of:

- professionals with whom you can consult (e.g. science teachers, mathematics teachers, university professors, audio technicians);
- reference books for all subjects with regards to setting out; and
- guidelines for transcribing into braille – English, Mathematics, Science etc.

ELECTRONICS

1		2		3		4	
5		6		7		8	
9		10		11		12	
13		14		15		16	
17		18		19		20	
21		22		23		24	
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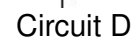
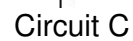
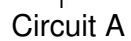
14	Earth ground	
15	Chassis ground	
16	Capacitor	
17-19	Core coil	
20	Lamp/globe	
21	Ammeter	
22	Voltmeter	
23	Fuse	
24	Circuit breaker	
25	NOPB switch	
26	SPST switch	
27	NCPB switch	
28	Light dependent resistor	

13 Antenna/aerial

Other Symbols:

	switch (open)		
	switch(closed)		
	fuse		
	terminal		
	junction of wires		
	plug		
	socket		
	variable capacitor		
	direct current supply		
	connecting wire		light globe
	two wires crossing over one another		ammeter
	resistor		voltmeter
	resistor		2 wires joined
	Battery (single cell)		switch closed
	Battery (two cells in series)		switch open

Some circuit diagram symbols



The diagram shows a rectangular building with a central entrance. The building is divided into several rooms. The central hall is the largest and is located in the middle. To the left of the central hall is a long, narrow room, and to the right is another long, narrow room. At the top of the building is a large room, and at the bottom is a large room. The building is surrounded by a wall, and there are trees and a path outside.

Science Equipment



1.



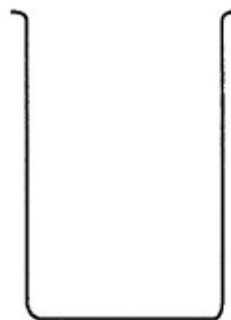
2.



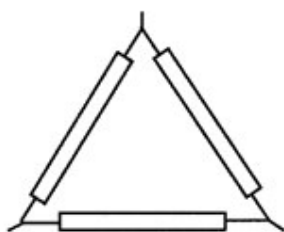
3.



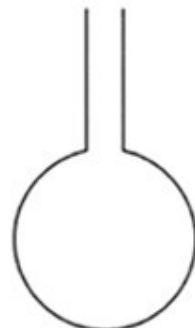
4.



5.



6.



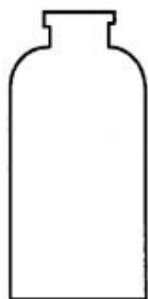
7.



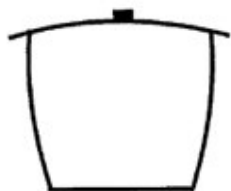
8.

1. Test Tube
2. Measuring Cylinder
3. Retort Stand
4. Test-tube Brush

5. Beaker
6. Pipe Clay Triangle
7. Round Bottom Flask
8. Gas Jar



9.



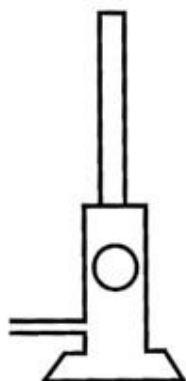
10.



11.



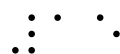
12.



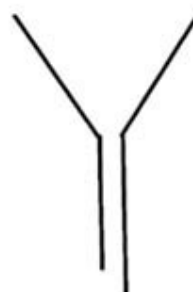
13.



14.



15



16.

- 9. Re-agent bottle
- 10. Crucible
- 11. Evaporating Dish
- 12. Pipette
- 13. Bunsen Burner
- 14. Conical Flask
- 15. Watch-glass
- 16. Funnel

Print and Internet Resources

Relevant Round Table Guidelines (Available from the Executive of the Round Table)

Round Table on Reading Materials for People with Print Disabilities. (1995). *Australian braille chemistry notation*. Sydney: Author.

Round Table on Reading Materials for People with Print Disabilities. (1995). *Guidelines for the Production of Large Print*. Sydney: Author.

Round Table on Reading Materials for People with Print Disabilities. (1995). *Guidelines for the formatting of braille materials*. Sydney: Author.

Round Table on Reading Materials for People with Print Disabilities. (1995). *Guidelines on narration of visual information in student and vocational material*. Sydney: Author.

Round Table on Reading Materials for People with Print Disabilities. (1995). *Sound advice*. Sydney: Author.

Specific information for braille transcription

Australian Braille Authority (1995). Guidelines for formatting of braille material. Sydney: Round Table on Reading Materials for People with Print Disabilities

Smith, B. (1992). *Australian braille mathematics notation*. Enfield, NSW: Royal Blind Society of New South Wales.

Books

Armstrong, J.D. (Ed.) *Mobility monograph no 1: The design and production of maps for the visually handicapped*. Nottingham UK: Blind Mobility Research Unit, Department of Psychology, University of Nottingham.

Edmund, P.K. (1992). *Tactile graphics*. New York: American Foundation for the Blind.

Division of National Mapping & Department of Resources and Energy. (1986). *Symbols for tactual and low vision town maps*. Canberra: Commonwealth of Australia.

Gilbert, C.P. & TABMAP (1991). *Touchdown Sheepville*. Sydney: Royal Blind Society of New South Wales.

New South Wales Tactual and Bold Print Mapping Committee (TABMAP). (1987). *A guide for the production of tactual and bold print maps*. Surrey Hills, NSW: Flexigraphs.

Department of Natural Resources in Conjunction with Tactual Mapping Committee Queensland and Queensland Braille Writing Association. (1999). *Brisbane suburbs braille directory*. Brisbane: Author. (contact: Leona Kitson, Queensland Braille Writing Association)

National Mapping Council of Australia. (1985). *A national specification for tactual and low vision town maps*. Canberra: Author.

Sutton, J. (2000). *A guide to making documents accessible to people who are blind and visually impaired*. Washington, DC: American Council for the Blind. also on the Internet – see below.

Papers

Cooke, A. (2000). Blind students & visual language in New Zealand Schools. *Paper submitted for Post-graduate Diploma of Arts at the University of Auckland, New Zealand, November 2000*.

Mathematical examples. Unpublished papers. NILS

Queensland Narrating Service (ND). *Narrator's guide*. Brisbane, QLD: Author.

Internet sites

A guide to making documents accessible to people who are blind or visually impaired by Jennifer Sutton <http://www.acb.org/accessible-formats.html>

APH Guidelines for Design of Tactile Graphics
<http://www.aph.org/edresearch/guides.htm>

Best practice guidelines for the design, production and presentation of vacuum formed tactile maps <http://www.art.man.ac.uk/Geog/tactileguidelines/>

National Centre for Tactile Diagrams <http://www.nctd.org.uk/index.asp>

Sensible Graphics
<http://www.ks-huseby.no/sensiblegraphics/index.html>

Tactile Maps and Graphics (The Blind Readers' Page)
<http://blindreaders.info/mapgraph.html>

<http://www.aph.org/tc/resguide.html>

<http://www.tsbvi.edu/math/decisions-tg.htm>

<http://www.tsbvi.edu/Education/quality-braille.htm>

It is well worth keeping abreast with the latest information posted on the Internet, for example this Conference and Paper:
Non-Visual Access of Complex Document components [Thematic Session, 11th International Conference on Human Computer Interaction] 22-27 July, 2005 - Las Vegas, Nevada

Email Lists

There are email lists where list members pose and answer questions, some of which are in the area of tactile graphics and related subjects. For example:

Ozbrl: Send a message containing only 'subscribe ozbrl' to
Majordomo@rvib.org.au

AERNET –the Association for Education and Rehabilitation of the Blind and Vision Impaired (USA) send message to Majordomo@list.pitt.edu

EASI: Equal Access to Software & Information:
<http://www.rit.edu/~easi/easi/alleasi.htm>

teachvib - NFBnet Teachers of the Visually Impaired/Blind Mailing List
<http://www.nfbnet.org/mailman/listinfo/teachvib>