The Rules of Unified English Braille

Second Edition 2013

Edited by Christine Simpson

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International Council on English Braille

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The official version of *The Rules of Unified English Braille* is held as a PDF file on the ICEB website. Print and braille versions of the Rulebook may be downloaded from there.

Associated Document:

Unified English Braille <u>Guidelines for Technical Material</u> (available for download from the ICEB website)

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Foreword to the First Edition

It is a great pleasure for me to write the Foreword to *The Rules of Unified English Braille* and to chart the course of the development of Unified English Braille (UEB) over almost 20 years.

It has been an incredible journey! one that began in 1991 when the Braille Authority of North America (BANA) embarked on a research project to determine the feasibility of unifying its literary and technical codes. In 1993 the internationalisation of the project became a reality when the International Council on English Braille (ICEB) accepted the BANA proposal at its first executive meeting in Sydney, Australia. UEB was on the super highway! The destination remained unchanged but much of the journey had to be repeated over uncertain terrain.

The research and development to harmonise English Braille across codes and between countries has been based on six core principles:

- 1. use a 6 dot braille cell;
- 2. encompass Grade I and Grade II braille without making any major changes to the contractions of Grade II braille;
- 3. be usable by both beginning and advanced braille readers;
- 4. be computable to the greatest degree possible, without detriment to readability, from print to braille to print and employing an unambiguous braille representation of each print symbol;
- 5. embed textbook, mathematics, computer and other technical codes (excluding the music code); and
- 6. consider all submitted English braille codes in its formulation.

Braille experts from each of the participating countries of Australia, Canada, New Zealand, Nigeria, South Africa, United Kingdom and United States have from time to time re-examined previous decisions—although the core principles underpinning UEB have remained unchanged—in their painstaking analysis to assign symbols and codify the details of UEB. Each of these experts brought their own perspectives as code developers, educators, transcribers, proof-readers, and braille readers—who were always in the majority. These amazing participants were sustained by faith in their ability to compromise and the soul-searching necessary to leave behind the differences in English braille codes to realize the dream of a unified code for the future.

Recent social and technological changes have had major impacts on the lives of braille readers. Integration at school, at work, and into society in general requires braille that is compatible with print. Rules of the braille codes that served context-based braille in the past became a roadblock to today's automated production methods because of their huge reliance on human intervention. Technology offers accessibility to material produced electronically. UEB, by adhering to its six underlying principles, has provided the braille code for today and tomorrow.

Along the way, the journey involved countless email discussions. There were also face-to-face meetings of the Contractions, Formats, Math and Rules Committees

which devoted several days to resolve many months of electronic debate. Such things as:

- What to do about contraction usage and bridging syllables? The Contractions Committee was occupied for several years with these challenges.
- What were the best ways to use the new UEB symbols to express technical materials? The Math Committee published the <u>Guidelines for Technical Material</u> in 2008.
- Should shortform words be governed by rules, by a list, or by a combination of both? The approach to shortforms was rendered in March, 2010.
- What to do about accents in words? Finally it was decided that the accent would precede the affected letter, and that all accents would be shown.

One of UEB's main roadmaps gives the details for symbol construction. These guide the creation of future symbols and ensure that a symbol's beginning and ending are always identifiable—so important because many braille symbols are more than one cell.

Now, in June 2010, the UEB Rulebook is being published. Those involved in the project did not anticipate the length and complexity of their journey in the intervening years; but they soon discovered that having the principles, although the most important step, was only the first of many. Another factor was that all of the participants in the UEB project did so as volunteers with support obtained by their braille authorities. This truly was the project of a lifetime for them and worthy of the thousands of hours they gave to advancing UEB to its completion.

While this journey is complete, another one has begun as braille authorities in Australia, Canada, New Zealand, Nigeria and South Africa have adopted UEB and implementation has commenced. Many people are excited about UEB's refreshment of the braille code supporting the integration of blind people into the multi-faceted information society.

The UEB Rulebook will give great assistance to all who are currently working with UEB as well as those who will do so in the future. I congratulate the Australian Braille Authority for undertaking this very worthwhile and necessary project and all those who have assisted with its completion in such a short time.

I also extend my very best wishes to all those who will be taking part in the journey of the future of Unified English Braille.

Darleen Bogart Chair, UEB Project Committee 1991–2010

Foreword to the Second Edition

Unified English Braille continues to expand its reach. As this second edition is published, the braille authorities of the United Kingdom and the United States have adopted UEB and are planning its implementation. The Irish National Braille and Alternative Format Association (INBAF) joined ICEB in December 2012, increasing our membership to eight. They will also be implementing UEB.

We are all indebted to Phyllis Landon for the diligent manner in which she has led the continued development of the UEB Rulebook. Her ability to cogently present the precise details of rules and examples is a huge asset to ICEB and I congratulate her and the Code Maintenance Committee on achieving a landmark publication for the ICEB.

Peter Osborne President, International Council on English Braille

Preface to the First Edition

Unified English Braille (UEB) was adopted as Australia's official braille code on May 14 2005 during the Annual Meeting of the Australian Braille Authority (ABA). At the time, there were few teaching and learning resources available for UEB, and although the *UEB Primer* developed by Josie Howse in 2006 continues to be invaluable for anyone learning the basics of UEB, there was clearly a need for an authoritative and complete elaboration of the rules of the new code that could be used by braille educators, producers, and readers.

After preliminary discussion with several organisations involved in the teaching and production of braille, a project brief was adopted by the ABA Executive in August 2007 for the development of what has come to be known as the UEB Rulebook. The proposal included a specification of the work that would be required, as well as a budget for the project. There was discussion by the Executive of the Round Table on Information Access for People with Print Disabilities Inc. (of which the ABA is a subcommittee), and also at the General Assembly of the International Council on English Braille (ICEB) in April 2008. Following some fine-tuning of the original proposal, sponsorship was sought for the project in June 2008, and five organisations contributed funds to allow the project to commence in August 2008.

Christine Simpson was engaged by the Round Table to edit and compile the Rulebook based on the core formulation of the rules of UEB that was being done by the committees of the ICEB responsible for developing UEB. Christine is an experienced teacher of braille to adults, a leading producer of braille materials in Australia, and a lifelong user of braille in all aspects of her personal and professional life. Under the guidance of the ABA Executive, the UEB Rulebook development was supported by a Project Advisory Committee comprising representatives from the ABA Executive, the sponsoring organisations, and ICEB. This Committee has met regularly during the past two years, and has provided invaluable advice on all aspects of the book's development. The members of the Committee were:

- Bruce Maguire (Chair, Australian Braille Authority, and Chair of the Project Advisory Committee)
- Leona Holloway (Vision Australia)
- Josie Howse (Editor UEB Primer, ABA Executive Committee member)
- Bill Jolley (Australia's ICEB Representative)
- Phyllis Landon (Chair, UEB Rules Committee ICEB)
- Janet Reynolds (Royal New Zealand Foundation of the Blind)
- Stefan Slucki (Royal Society for the Blind, South Australia)
- Maria Stevens (Braille Authority of New Zealand)
- Nicola Stowe/Tristan Clare (Royal Institute for Deaf and Blind Children)

RNIB chose not to appoint a member to the Committee. Christine Simpson provided secretarial support for the Committee.

As the UEB Rulebook nears completion, it is invigorating to reflect on the factors that have combined to nourish the project and ensure its success. I have identified three: collaboration, commitment, and convergence.

The development of UEB itself has been a triumph of collaborative endeavour, and it is not an exaggeration to say that with the Rulebook, collaboration has reached its apotheosis. Collaboration between organisations, collaboration between individuals, and collaboration among countries has all been integral to the success of the Rulebook. While some of this collaborative work took place through telephone meetings and face-to-face discussion, much of it was made possible by technologies such as the Internet, computer software, and refreshable braille displays. It is hard to imagine, for example, how the Rulebook could have been developed in such a comparatively short time without email, sophisticated word-processing software, and the Duxbury Braille Translator. Braille and emerging technologies are sometimes portrayed as competitors, especially by those who do not understand, and who thus feel threatened by, the liberating empowerment that braille offers. UEB seeks to equip braille (which, ironically, is one of the first "digital" technologies in every sense of that word) with the flexibility to evolve synergistically with other technologies. Indeed, the Internet and much computer software have evolved at the same time as UEB itself has been developed, and the Rulebook embodies a true technological harmony. We have been able to collaborate much more effectively, and reach a much wider group of braille users for feedback and comment, than would have been possible when the UEB project was begun. The result is that the Rulebook is truly an example of "democracy in action", and it is responsive to the needs of a broad spectrum of braille users.

The Rulebook could not have been developed without the commitment of many people and groups. The organisations who provided financial sponsorship of the project have demonstrated their commitment to UEB and the aims and objectives of the Rulebook. The sponsors are:

- Royal Institute for Deaf and Blind Children (Australia)
- Royal National Institute of Blind People (UK)
- Royal New Zealand Foundation of the Blind
- Royal Society for the Blind, South Australia
- Vision Australia.

In addition to providing financial support, the sponsors have been generous with staff time for attending meetings of the Project Advisory Committee and reviewing drafts as the Rulebook has progressed.

The ICEB has been strongly committed to the UEB Rulebook project since the earliest stages of planning, and has expedited the work of the UEB Rules Committee and the UEB Project Committee to help ensure that the Rulebook could be completed on time and within budget. The ICEB has been represented on the Project Advisory Committee, and ICEB members have provided valuable feedback on the various drafts that have been circulated for comment.

The members of the Project Advisory Committee have all shown a personal commitment to the Rulebook project, and the result reflects their valuable input, advice, and feedback. The Committee met 14 times by teleconference, and all meetings were well-attended, and characterised by enthusiastic and thoughtful discussion.

The Executive of the Round Table, led by Brian Conway in his role of Round Table President, has been committed to the UEB Rulebook Project through the management of its financial aspects, as well as assisting with the design of the Rulebook cover, and arranging for printing.

The Round Table provides a forum for organisations in Australia and New Zealand with an interest in print disability to collaborate on matters of common concern, such as the development of standards and guidelines. The Round Table was successful in obtaining Government funding for UEB workshops that were held throughout Australia in the mid-1990s. The input and feedback provided by these workshops helped to shape the development of UEB in various ways and, ultimately, have influenced the content and structure of the Rulebook.

Many people have worked hard, often behind the scenes, to support and promote the development of the UEB Rulebook. In this sense, the Rulebook has been enriched by the commitment of the braille community, acting individually and together, to renew and consolidate the work that Louis Braille began almost 200 years ago.

In today's world of digital media, the term "convergence" is generally used to refer to a coming-together or blending of previously separate technologies. So we can say that over the past two decades there has been a growing convergence of telecommunications, computing and publishing, to the point where individuals can now create content using their computers, and then publish it on various websites using their mobile phones. However, in the context of the UEB Rulebook, I am using the term "convergence" to refer to a felicitous coming-together of personal attributes, capacities and qualities that have formed a sure foundation for the project. Everyone involved in one way or another with the project bears witness to the notion that ordinary people can accomplish extraordinary things, but three people stand out.

Phyllis Landon has provided constant enthusiasm, leadership and wisdom as she has chaired the UEB Rules Committee, drafted the various rules, and provided a neverending source of ingenious examples that will, I am sure, enlighten generations of UEB students. Phyllis's contribution is imprinted on every page of the Rulebook (even this one), and it has been a privilege to work with her.

Darleen Bogart is almost as synonymous with UEB as Louis Braille is with braille. Darleen has been the Chair of the UEB project initiative since it was internationalised in 1993, and for two years before that she was Chair of the committee established by the Braille Authority of North America (BANA) to investigate the feasibility of creating a unified braille code. In 1993 the expectation was that the development of UEB would be completed within three years. We may have initially under-estimated the magnitude of the task, but during the past 17 years, Darleen has never wavered in her passionate belief that braille deserves the best that we can bring to it, and then some more. She has occasionally cajoled, sometimes persuaded, often encouraged, but always inspired us by her commitment, diplomacy, insight, and focus. Darleen has been an enthusiastic supporter of the UEB Rulebook project from the beginning, and she has nurtured it at every step along the way. Christine Simpson was always the obvious choice as the editor and compiler of the Rulebook. As a braille teacher, she has an in-depth knowledge of UEB itself, and she knows how to communicate that knowledge in ways that lead to effective learning; as a producer of braille, Christine has an unsurpassed knowledge of the intricacies of braille translation and formatting; and as a user of braille, she has the dedication and passion to flow over, under, and around any obstacles and overcome any challenges. The development of the Rulebook has certainly presented some technical challenges. To allow drafts of the Rulebook's individual sections to be produced and updated effectively and efficiently in both print and braille, Christine developed an innovative approach that combined use of Microsoft Word's Styles and Template features with some of the advanced capabilities of the Duxbury Braille Translator. These techniques that Christine pioneered will be of value to anyone who needs to produce complex documents in print and braille through multiple revisions, and they certainly made it possible to provide much greater opportunities for feedback than would have otherwise been the case.

Christine has devoted almost two years of her working life to the development of the UEB Rulebook, and the result is a work of outstanding quality, accuracy, clarity, and value. It is a rich and lasting testimony to Christine's personal dedication to braille, her ability to harmonise different and sometimes quite divergent perspectives into a consensus, and her capacity to think creatively about the teaching, learning and use of braille.

The UEB Rulebook is the culmination of a journey that celebrates the contemporary relevance and vitality of braille. There will, of course, be future editions of the Rulebook as UEB continues to evolve and we gain more experience of using UEB in a variety of situations. No doubt each subsequent edition will have its own particular style in response to particular needs and challenges. This first edition, though, is one-of-a-kind (as first editions are apt to be): it sets a benchmark and establishes expectations of excellence that can only be good for braille and UEB.

We hope that the UEB Rulebook will be a valued resource for anyone who teaches braille, produces braille, or reads and writes braille. It is a book to be used and kept close at hand rather than left to languish on a shelf.

Above all, we hope that the UEB Rulebook will help strengthen braille as the primary literacy medium of people who are blind, and in so doing enable braille users to participate fully in all aspects of life.

Bruce Maguire Chair, UEB Rulebook Project Advisory Committee 2008–2010

Preface to the Second Edition

At the meeting of its Executive in July 2010, responsibility for the maintenance of Unified English Braille was assumed by the International Council on English Braille. At that time, the Code Maintenance Committee (CMC) was established "to ensure that the ongoing work associated with the maintenance of UEB be carried out efficiently, effectively, and with appropriate stakeholder representation."

The members of the CMC since its formation have been:

- Sheila Armstrong (United Kingdom) to December 2012
- Antonnette Botha (South Africa)
- James Bowden (United Kingdom) from January 2013
- Christo de Klerk (South Africa)
- Leona Holloway (Australia) from December 2010
- Phyllis Landon, Chair (Canada)
- Stuart Lawlor (Ireland) from April 2013
- Bruce Maguire (Australia) to November 2010
- Jean Obi (Nigeria)
- Christine Simpson (Australia)
- Maria Stevens (New Zealand)
- Joe Sullivan (United States)

The work of the CMC has resulted in this second edition of the Rulebook. All major additions and substantive changes have been approved by the ICEB Executive.

The following sections of the Rulebook are new:

- <u>Section 14:</u> Code Switching
- <u>Section 15</u>: Scansion, Stress and Tone
- <u>Section 16</u>: Line Mode, Guide Dots

This edition includes two new appendices which are:

- Appendix 2: Word List
- Appendix 3: Symbols List

Also new to this edition are:

- UEB signs for the music accidentals (3.18)
- Nemeth Code indicator (14.6)

Other changes have been made to correct errors in the first edition (of which there were very few) and to clarify issues. Refer, in particular, to:

- 2.3.1 and 2.3.2 (capitalization is not considered ornamentation);
- 2.4.7 (UEB modes may not extend through a switch to another code);
- <u>3.2</u> (the basic arrow signs);
- 4.2 (print representations of the modifiers are now included);

Rules of Unified English Braille

• <u>5.6.2</u> and <u>6.5.1</u> (the grade 1 terminator may be inserted to terminate grade 1 mode when established by the numeric indicator).

The completion of this second edition is thanks to the efforts of many accomplished people. Christine Simpson once again did an outstanding job of editing the print edition and ensuring a consistent appearance. Leona Holloway produced the symbols list and developed a method to provide an accurate representation of the letter modifiers for print readers. The braille edition was produced by CNIB volunteer transcribers. Mary Hughes and Jill Cooter are to be commended for their timely, accurate, and thorough transcription and proofreading. All members of the Code Maintenance Committee at some point contributed to this edition, whether through examples, suggestions, ideas or commentary. We have been fortunate to have the benefit of their time, experience, knowledge and wisdom.

I would like to thank Mary Schnackenberg for her assistance and encouragement, particularly when the Committee was first starting out. Pete Osborne has ensured that all matters brought to the ICEB Executive were dealt with quickly and efficiently.

This second edition reflects the unity of purpose and sense of cooperation within the English braille world. On behalf of the Code Maintenance Committee, I trust the Rulebook will be a valued reference tool which will contribute to a uniform standard and the increased exchange of materials for the readers of English braille.

Phyllis Landon Chair, ICEB Code Maintenance Committee

Acknowledgements

Publication of this second edition of *The Rules of Unified English Braille* is the result of work undertaken by many people over an extended period of time.

Editing and production of the first edition of this Rulebook was sponsored by the following organisations. I acknowledge and thank:

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Phyllis has continued to lead the process of documenting and refining the UEB Rules and has spent countless hours drafting and wordsmithing text. Now, as Chair of the ICEB Code Maintenance Committee, she, along with her Committee, continues to give valuable hours of support and guidance to the development of this publication.

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And finally, a special thank you to my husband John, whose thoughtful assistance with the print layout has been truly appreciated. His many suggestions to refine the visual look of this document have helped to make a complex set of rules and examples appear clear, uncluttered and easily manageable.

Christine Simpson Editor

About This Book

The Rules of Unified English Braille is primarily intended for use by braille transcribers, although it is hoped that it will also serve as a key reference for braille translation software developers and other braille experts.

This publication is not a manual for learning braille. It is a reference that a transcriber may use often and a reader of braille may use occasionally for clarification. Topics are not in an order which allows the reader to learn the braille code. Good braille knowledge is essential for effective use of this publication.

The statement of each "braille rule" is followed by usage examples. Cross-references and notes are also included. The words "Refer to:" indicate text directing the reader to related material and the word "Note:" indicates text that serves to clarify a point, or to remind the reader of something important.

Text in square brackets should be considered as an "editorial note"; included for the purpose of helping the reader better understand an example or a point being illustrated. Text in round brackets is usually part of an example.

The print version has been prepared using SimBraille font for all braille examples, so it does not show the dot locator preceding the symbols under discussion. However, in the braille version the dot locator has been added where required.

Examples in the print version show the text in regular font and then in SimBraille. Examples are shown just once in the braille version. Where more than one example is placed on the same line, multiple spaces have been inserted for separation. In some instances a Transcriber Note has been added to the braille text to ensure that the point being illustrated is clear to the braille reader.

Under the heading "Examples:" readers will see instances of where a particular symbols-sequence or contraction is used, followed under the heading "But:" by a listing of instances where such symbols-sequences or contractions may not be used.

Lists of symbols are mostly in braille order (see <u>Section 1.1.2</u>, Introduction).

Section 11: Technical Material summarises information in *Unified English Braille* <u>*Guidelines for Technical Material*</u> that constitutes rules rather than guidelines. It is presented in a slightly different style from the rest of the Rulebook. Print and braille versions of The Guidelines document can be downloaded from <u>http://www.iceb.org</u>.

<u>Appendix 1</u> presents the shortforms in alphabetic order, together with their associated wordlists. Each shortform wordlist is in two parts: firstly listing words which begin with the shortform, and then listing words where the shortform follows another syllable or syllables.

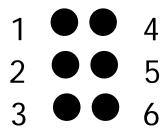
<u>Appendix 2</u> provides an alphabetic list of all example words used in <u>Section 10</u> to show contraction use.

<u>Appendix 3</u> is the complete list of UEB symbols in braille order. It shows, where applicable: UEB symbol, print symbol (print edition only), Unicode value, symbol name, usage and reference.

Section 1: Introduction

1.1 Definition of braille

1.1.1 Braille is a tactile method of reading and writing for blind people developed by Louis Braille (1809–1852), a blind Frenchman. The braille system uses six raised dots in a systematic arrangement with two columns of three dots, known as a braille cell. By convention, the dots in the left column are numbered 1, 2 and 3 from top to bottom and the dots in the right column are numbered 4, 5 and 6 from top to bottom.



1.1.2 The six dots of the braille cell are configured in 64 possible combinations (including the space which has no dots present). The 63 braille characters with dots are grouped in a table of seven lines. This table is used to establish "braille order" for listing braille signs.

Line 1:	•••	• · • ·	••	•• •• ••	• · · • · ·	•• • · · ·	•••	•••	• • • • • •	. • • •
Line 2:	•••	• · • · • ·	•• • • • •	• • • • • •	• · • • • ·	• • • · • ·	•••	•••	. • • : • :	
Line 3:	• · · · • •	• · • · • •	••	• • • •	• · · •	• • • •		• · • • • •	 	
Line 4:	• · · · · •	• • • •	••	• • - •	• • • • • •	• • • • • •	•••	•••	. • • · · •	. • • • • •
Line 5:	•	• • • • • •	• • • •	 • • • •	• • • • • •	••• ••	•••	• • • •	· · · • • ·	
Line 6:	• • • • • •	• • • •	· • · •	· • · •	•••	• • • •				
Line 7:	•	: • •	: • • •	: •	. ● . ●	 •● •●	 . •			

Line 1 is formed with characters in the upper part of the cell, using dots 1, 2, 4 and 5.

Line 2 adds dot 3 to each of the characters in Line 1.

Line 3 adds dots 3 and 6 to each of the characters in Line 1.

Line 4 adds dot 6 to each of the characters in Line 1.

Line 5 repeats the dot configurations of Line 1 in the lower part of the cell, using dots 2, 3, 5 and 6.

1

Line 6 is formed with characters using dots 3, 4, 5 and 6.

Line 7 is formed with characters in the right column of the cell, using dots 4, 5 and 6.

- 1.1.3 An individual may write braille by hand either using a slate and stylus to push dots out from the back of the paper working from right to left or using a mechanical device called a brailler. A person may also use an embosser to reproduce an electronic braille file. These methods all produce embossed braille on hardcopy paper.
- 1.1.4 A person may read an electronic braille file by using a refreshable braille display attached to his/her computer. This employs pins which raise and lower to form the braille characters.
- 1.1.5 Originally developed to represent the French language, braille has been adapted for English and many other languages.
- 1.1.6 Braille is used to represent all subject matter, including literature, mathematics, science and technology. Louis Braille developed the system which is used worldwide today for representing music.

1.2 Principles of Unified English Braille

- 1.2.1 Unified English Braille (UEB) is a system of English braille which represents all subjects except music.
- 1.2.2 The purpose of UEB is to allow the reader to understand without ambiguity what symbols are being expressed by a given braille text.
- 1.2.3 The primary transcribing rule is to produce braille that, when read, yields exactly the original print text (apart from purely ornamental aspects).
- 1.2.4 A print symbol has one braille equivalent in UEB. Use the braille sign for that print symbol regardless of the subject area.
- 1.2.5 In UEB the 64 braille characters including the space are designated as being either a prefix or a root. There are 8 prefixes: i plus the braille characters formed from the dots in the right column of the cell, that is the characters from Line 7 of the table in <u>section 1.1.2</u> above. The other 56 braille characters are roots. The UEB prefixes are:
- 1.2.6 The last two braille characters in the table \vdots and \vdots are special prefixes. A special prefix may be used in combination with another special prefix to form a braille sign. Such braille signs are used only as indicators.

Example:

The passage indicators is is and in it.

1.2.7 Any other braille sign in UEB is constructed from a root or from a root plus one or more prefixes.

Examples:

1.3 Basic signs found in other forms of English braille

Note: In the following sections, only braille signs found in both *English Braille American Edition* and *British Braille* are listed.

Contractions

- 1.3.1 Other forms of English braille write the wordsigns for "a", "and", "for", "of", "the" and "with" unspaced from one another.
- 1.3.2 Other forms of English braille use the following contractions which are not used in UEB:
 - o'clock (shortform)
 - dd (groupsign between letters)
 - to (wordsign unspaced from following word)
 - into (wordsign unspaced from following word)
 - by (wordsign unspaced from following word)
 - ble (groupsign following other letters)
 - com (groupsign at beginning of word)
 - ation (groupsign following other letters)
 - ally (groupsign following other letters)

Punctuation

- 1.3.3 Other forms of English braille use the following punctuation signs which are not used in UEB:
 - e opening and closing parentheses (round brackets)
 - closing square bracket
 - closing single quotation mark (inverted commas)
 - ellipsis
 - dash (short dash)
 - double dash (long dash)
 - opening square bracket

Composition signs (indicators)

- 1.3.4 Other forms of English braille use the following composition signs (indicators) which are not used in UEB:
 - •: non-Latin (non-Roman) letter indicator
 - accent sign (nonspecific)
 - print symbol indicator
 - italic sign (for a word)
 - double italic sign (for a passage)

General symbols

- 1.3.5 Other forms of English braille use the following general symbols which are not used in UEB:
 - pound sign (pound sterling)
 - paragraph sign
 - section sign
 - dollar sign
 - ••• asterisk

- end of foot
- caesura
- short or unstressed syllable
- long or stressed syllable

Technical subjects

1.3.6 Other forms of English braille use special codes to represent mathematics and science, computer notation and other technical or specialised subjects.

Section 2: Terminology and General Rules

2.1 Terminology

- **alphabetic:** designating letters of the alphabet, including modified letters, ligatured letters and contractions, which stand for letters
- alphabetic wordsign: any one of the wordsigns in which a letter represents a word
- braille cell: the physical area which is occupied by a braille character
- **braille character:** any one of the 64 distinct patterns of six dots, including the space, which can be expressed in braille
- **braille sign:** one or more consecutive braille characters comprising a unit, consisting of a root on its own or a root preceded by one or more prefixes (also referred to as braille symbol)
- **braille space:** a blank cell, or the blank margin at the beginning and end of a braille line
- braille symbol: used interchangeably with braille sign
- **contracted:** transcribed using contractions (also referred to as grade 2 braille)
- contraction: a braille sign which represents a word or a group of letters
- **final-letter groupsign:** a two-cell braille sign formed by dots 46 or dots 56 followed by the final letter of the group
- **grade 1:** the meaning assigned to a braille sign which would otherwise be read as a contraction or as a numeral (Meanings assigned under special modes such as arrows are not considered grade 1.)
- grade 1 braille: used interchangeably with uncontracted
- grade 2 braille: used interchangeably with contracted
- graphic sign: a braille sign that stands for a single print symbol
- groupsign: a contraction which represents a group of letters
- **indicator:** a braille sign that does not directly represent a print symbol but that indicates how subsequent braille sign(s) are to be interpreted
- initial-letter contraction: a two-cell braille sign formed by dot 5, dots 45 or dots 456 followed by the first letter or groupsign of the word
- item: any one of a precisely-defined grouping of braille signs used primarily in technical material to establish the extent of certain indicators, such as indices

- **letters-sequence:** an unbroken string of alphabetic signs preceded and followed by non-alphabetic signs, including space
- lower: containing neither dot 1 nor dot 4
- **mode:** a condition initiated by an indicator and describing the effect of the indicator on subsequent braille signs
- **modifier:** a diacritical mark (such as an accent) normally used in combination with a letter
- **nesting:** the practice of closing indicators in the reverse order of opening
- **non-alphabetic:** designating any print or braille symbol, including the space, which is not a letter, modified letter, ligatured letter or contraction
- passage: three or more symbols-sequences
- **passage indicator:** initiates a mode which persists indefinitely until an explicit terminator is encountered
- **print symbol:** a single letter, digit, punctuation mark or other print sign customarily used as an elementary unit of text
- **root:** any one of the 56 braille characters, including the space, which is not a prefix
- shortform: a contraction consisting of a word specially abbreviated in braille
- **standing alone:** condition of being unaccompanied by additional letters, symbols or punctuation except as specified in <u>2.6</u>, the "standing alone" rule; used to determine when a braille sign is read as a contraction
- **strong:** designating contractions (other than alphabetic wordsigns) containing dots in both the top and bottom rows and in both the left and right columns of the braille cell
- **strong character:** designating a braille character containing dots in both the top and bottom rows and in both the left and right columns of the braille cell, which therefore is physically unambiguous
- **symbols-sequence:** an unbroken string of braille signs, whether alphabetic or non-alphabetic, preceded and followed by space (also referred to as symbols-word)
- terminator: a braille sign which marks the end of a mode

- **text element:** a section of text normally read as a unit (a single paragraph, a single heading at any level, a single item in a list or outline, a stanza of a poem, or other comparable unit), but not "pages" or "lines" in the physical sense that are created simply as an accident of print formatting
- **uncontracted:** transcribed without contractions (also referred to as grade 1 braille)
- upper: including dot 1 and/or dot 4
- **word indicator:** initiates a mode which extends over the next letterssequence in the case of the capitals indicator or over the next symbols-sequence in the case of other indicators

wordsign: a contraction which represents a complete word

2.2 Contractions summary

alphabetic wordsigns:								
	but	can	do	every	from	go	have	just
	knowled	0	like	more	not	people	•	rather
	SO	that	us	very	will	it	you	as
strong	wordsig	gns:						
	child	shall	this	which	out	still		
strong	contrac	tions: r	nay be u	sed as gi	roupsigns	s and as	wordsign	S.
	and	for	of	the	with			
strong	groupsi	igns:						
-	ch	gh	sh	th	wh	ed	er	ou
	OW	st	ing	ar				
lower	wordsig	ns:						
	be	enough	were	his	in	was		
lower	groupsig	gns:						
	ea	be	bb	con	CC	dis	en	ff
	gg	in						
initial-	letter co	ontractio	ons: ma	y be use	d as grou	ipsigns a	nd as wo	ordsigns.
	 begir 	ning with	n dots 45	;				
	^o	upon	these	those	whose	word		
	 begir 	nning with	n dots 45	6;				
		cannot		many	spirit	their	world	
	 begir 	nning with	n dot 5;					
		day	ever	father	here	know	lord	mother

		name time where	one under ought	part young work	questior there	n characte	right er	some through
final-le	etter gro	oupsigns	::					
shortfo	 begin begin begin 	ining with ound ining with ence	andots 46 ance n dots 56 ong above afternoo also althoug	sion ; ful on	less tion accordir afterwar almost always	0	ment across again already blind	ity
	braille deceive first himself letter necessa perceivi receivin such tonight yourself should because beneath conceive	iry ng g	could deceivin good herself myself neither perhaps rejoice today itself yourselv thyself before beside conceivi	/es	declare either great immedia much paid quick rejoicing togethe its themsel ourselve behind betweer oneself) r Ves es	declarin friend him little must perceive said tomorro your children would below beyond	e W

2.3 Following print

2.3.1 Follow print when transcribing into braille, including accents, punctuation and capitalisation.

Note: This provision does not apply to print ornamentation as provided for in <u>2.3.2</u> below, or to parts of the braille text which are added by the transcriber, e.g. preliminary pages, page information lines, or transcriber's notes.

2.3.2 When transcribing, it is preferable to ignore print ornamentation which is present only to enhance the appearance of the publication

and does not impart any useful information. Examples of print ornamentation include:

- different typefaces or fonts for headings
- the lowercase of letters with accents in a fully capitalised word
- coloured type used for all example words
- italics used for all variables in a text
- small capitals font used for all Roman numerals
- 2.3.3 When a facsimile transcription is required, reproduce all aspects of print as fully as possible including ornamentation. Examples of circumstances when a facsimile transcription may be requested are:
 - when the reader is responsible for editing the text
 - when the reader is studying typography
 - when the reader is studying original manuscripts
- 2.3.4 In general, do not correct print errors.

2.4 Indicators and modes

- 2.4.1 The purpose of indicators is to change the meaning of the following braille characters or to change an aspect of the following text (e.g. to indicate capitals or a special typeface).
- 2.4.2 Many braille signs have more than one meaning.

Examples:

- the letter "f"; in numeric mode digit "6"; contracted (grade 2) meaning the alphabetic wordsign "from"
- in grade 1 mode arrow indicator; contracted (grade 2) meanings – the strong groupsign "ou" and the strong wordsign "out"
- question mark; opening nonspecific quotation mark; contracted (grade 2) meaning – the lower wordsign "his"
- vertical solid line segment; line indicator, as in poetry
- in numeric mode numeric space followed by digit "4"; contracted (grade 2) meaning – the initial-letter contraction "day"
- Greek letter sigma; contracted (grade 2) meaning the finalletter groupsign "less"

- by its spacing (e.g. the vertical solid line segment)
- by applying the Standing Alone rule (e.g. alphabetic wordsigns)
- by its position in relation to other signs (e.g. opening nonspecific quotation mark, line indicator, final-letter groupsigns)
- by the mode in effect (e.g. digits, arrow indicator)
- 2.4.4 Use an indicator to establish the mode which determines the meaning of the braille signs which follow.

Note: The list below gives the basic indicators and the modes which they set. It does not include indicators for extended modes (e.g. grade 1 word indicator and grade 1 passage indicator), indicators for variations (e.g. bold arrow indicator), subsidiary indicators (e.g. superposition indicator used in shape mode) or terminators.

- sets shape mode: <u>Guidelines for Technical Material</u>, Part 14, Shape Symbols and Composite Symbols
- sets arrow mode: <u>Guidelines for Technical Material</u>, Part 13, Arrows
- sets numeric mode and grade 1 mode: <u>Section 6</u>, Numeric Mode
- opens and sets horizontal line mode: <u>Section 16</u>, Line Mode, Guide Dots
- sets grade 1 mode: <u>Section 5</u>, Grade 1 Mode
- 2.4.5 Use an indicator to change an aspect of the text which follows.

Note: The list below gives the basic indicators of this type.

- subscript indicator: <u>Guidelines for Technical Material</u>, Part 7, Superscripts and Subscripts
- superscript indicator: <u>Guidelines for Technical Material</u>, Part 7, Superscripts and Subscripts
- script symbol indicator: <u>Section 9</u>, Typeforms
- bold symbol indicator: <u>Section 9</u>, Typeforms
- ligature indicator: <u>Section 4</u>, Letters and Their Modifiers
- underlined symbol indicator: <u>Section 9</u>, Typeforms
- italic symbol indicator: <u>Section 9</u>, Typeforms

- capitals word indicator: <u>Section 8</u>, Capitalisation
- 2.4.6 The list below gives other indicators.
 - cursor indicator: <u>Guidelines for Technical Material</u>, Part 17, Computer Notation
 - general fraction open and close indicators: <u>Guidelines for</u> <u>Technical Material</u>, Part 6, Fractions
 - braille grouping opening and closing indicators: <u>Section 3</u>, General Symbols
 - transcriber's note opening and closing indicators: <u>Section 3</u>, General Symbols
 - non-UEB word indicator: <u>Section 14</u>, Code Switching
 - line indicator: <u>Section 15</u>, Scansion, Stress and Tone
 - iii line continuation indicator: <u>Section 6</u>, Numeric Mode
 - dot locator for "use": <u>Section 3</u>, General Symbols
 - dot locator for "mention": <u>Section 3</u>, General Symbols
- 2.4.7 A mode established by a UEB indicator may not extend through a switch to another braille code.

Examples:

SCHWA /Ə/ OR MID-CENTRAL VOWEL

He cried in despair, je suis vraiment désolé, and fell to his knees.

2.5 Grades of braille

Uncontracted (grade 1) braille

2.5.1 The use of contractions is disallowed by certain rules. These include:

- <u>Section 4</u>, Letters and Their Modifiers no contractions following a modifier, no contractions before or after a ligature indicator
- <u>Section 5</u>, Grade 1 Mode no contractions within grade 1 mode
- <u>Section 6</u>, Numeric Mode no contractions within grade 1 mode when set by a numeric indicator
- <u>Section 12</u>, Early Forms of English no contractions in Old English.

In technical material these include: [See <u>Guidelines for Technical</u> <u>Material</u>:]

- Part 1, General Principles no contractions in strings of fully capitalised letters.
- Part 14, Shape Symbols and Composite Symbols no contractions in the description of a transcriber-defined shape.
- Part 16, Chemistry no contractions in letters representing chemical elements.
- Part 17, Computer Notation no contractions in a displayed computer program.
- 2.5.2 Uncontracted (grade 1) braille is different from grade 1 mode.
- 2.5.3 Grade 1 mode exists only when introduced by a grade 1 indicator or by a numeric indicator.
- 2.5.4 Uncontracted (grade 1) braille is a transcription option which may be selected for any number of reasons, including:
 - when the pronunciation or recognition of a word would be hindered: <u>Section 10</u>, Contractions
 - in Middle English: <u>Section 12</u>, Early Forms of English
 - in foreign words: <u>Section 13</u>, Foreign Language
 - in texts for readers who have not learned contracted braille
 - when the spelling of a word is featured, as in dictionary entries

Note: Braille authorities and production agencies may establish policies for the guidance of transcribers in the use of uncontracted (grade 1) braille.

2.5.5 Although contractions are not used in grade 1 mode, uncontracted (grade 1) braille may be employed without the use of grade 1 indicators.

Contracted (grade 2) braille

Note: The use of the contractions in contracted (grade 2) braille is covered in <u>Section 10</u>, Contractions.

Note: UEB contracted braille differs slightly from other forms of English contracted braille. See <u>Section 1.3</u>, Introduction, for basic signs found in other forms of English braille.

Other grades of braille

Note: Other grades of braille have been developed. One of these is grade 3 braille which contains several hundred contractions and is primarily for personal use. Another is grade 1½ braille. Employing only 44 one-cell contractions, this was the official code of the United States from 1918 to 1932.

2.6 Standing alone

2.6.1 A letter or letters-sequence is considered to be "standing alone" if it is preceded and followed by a space, a hyphen or a dash. The dash may be of any length, i.e. the dash or the long dash.

Examples:

 x
 \vdots it
 \vdots was
 i

- 2.6.2 A letter or letters-sequence is considered to be "standing alone" when the following common punctuation and indicator symbols intervene between the letter or letters-sequence and the *preceding* space, hyphen or dash:
 - opening parenthesis (round bracket), opening square bracket or opening curly bracket (brace bracket)
 - opening quotation mark of any kind

- nondirectional quotation mark of any kind
- apostrophe [also see <u>Section 2.6.4</u>]
- opening typeform indicator of any kind
- · capitals indicator of any kind
- opening transcriber's note indicator
- or any combination of these.

```
Examples:
```

```
Ican : : :
{af
          "do 🖬 👯
          'your
'e 'as
          people
          enough
child-safe
          Not Like That
-GREAT
OUT OF TOWN
[open TN]every
-"[Be true.]"
But:
<x, y> :: :: :: :: :: :: ::
          this/that
&c :: : ::
¶d
é
          Ū II II II
~S
          ~st
```

2.6.3 A letter or letters-sequence is considered to be "standing alone" when the following common punctuation and indicator symbols intervene between the letter or letters-sequence and the *following* space, hyphen or dash:

- comma, semicolon, colon, full stop (period), ellipsis, exclamation mark or question mark
- closing parenthesis (round bracket), closing square bracket or closing curly bracket (brace bracket)
- closing quotation mark of any kind
- nondirectional quotation mark of any kind
- apostrophe [also see <u>Section 2.6.4</u>]
- typeform terminator of any kind
- capitals mode terminator
- closing transcriber's note indicator
- or any combination of these.

Examples:

```
very, very still; rather good.
this...
        rejoice!
"Which go-between?"
children."
friends' numbers
Himself or herself?-Neither!
ALWAYS BE YOURSELF
[open TN]His choice was D.[close TN]
But:
t'night
          word(s)
ab/cd
          could/should
section B^2
this.)*
```

2.6.4 A word with an interior apostrophe is considered to be "standing alone" under the specific provisions of <u>Section 10</u>, Contractions, <u>10.1.2</u> (alphabetic wordsigns), <u>10.2.2</u> (strong wordsigns) and <u>10.9</u> (shortforms).

Examples:

'It'II ::::::::::::::::::::::::::::::::::	[X'II :::::::::::::::::::::::::::::::::::
YOU'RE	child's?)
"p's and q's"	
"That's Mr. Little's!"	

Section 3: General Symbols and Indicators

		space (see <u>3.23</u>)
• · • ·		opening braille grouping indicator (see 3.4)
•••		first transcriber-defined print symbol (see 3.26)
•••		shape indicator (see 3.22)
		arrow indicator (see 3.2)
•••	\rightarrow	simple right pointing arrow (east) (see 3.2)
••••	, I	simple down pointing arrow (south) (see 3.2)
	↓ ←	simple left pointing arrow (west) (see 3.2)
· · · · ·	Ì.	simple up pointing arrow (north) (see 3.2)
•••	•	ratio (see 3.17)
••••	•	
		proportion (see 3.17)
• • • • • •		subscript indicator (see <u>3.24</u>)
••• ••	, ,,	prime (see 3.11 and 3.15)
••••••	//	double prime (see 3.11 and 3.15)
•••		superscript indicator (see 3.24)
	4	natural (see <u>3.18</u>)
	b	flat (see <u>3.18</u>)
· • • • • · • · · ·	#	sharp (see <u>3.18</u>)
		second transcriber-defined print symbol
		(see <u>3.26</u>)
•		closing braille grouping indicator (see <u>3.4</u>)
· • • • · · · ·	@	commercial at sign (see <u>3.7</u>)
• • • • • • • • • • • • • •	¢	cent sign (see <u>3.10</u>)
	€	euro sign (see <u>3.10</u>)
	F	French franc sign (see <u>3.10</u>)
	£	pound sign (pound sterling) (see <u>3.10</u>)
	₦	naira sign (see <u>3.10</u>)
	\$	dollar sign (see <u>3.10</u>)
	¥	yen sign (Yuan sign) (see <u>3.10</u>)
	&	ampersand (see <u>3.1</u>)
· • • · · · • • · · · •	<	less-than sign (see <u>3.17</u>)
	Λ	caret (see <u>3.6</u>)

Rules of Unified English Braille

	Didillo	
	~	tilde (swung dash) (see <u>3.25</u>)
		third transcriber-defined print symbol (see 3.26)
	>	greater-than sign (see <u>3.17</u>)
		opening transcriber's note indicator (see 3.27)
		closing transcriber's note indicator (see 3.27)
	†	dagger (see 3.3)
· • · · • • • · · · · • • •	‡	double dagger (see <u>3.3</u>)
	©	copyright sign (see <u>3.8</u>)
	0	degree sign (see <u>3.11</u>)
	¶	paragraph sign (see <u>3.20</u>)
	R	registered sign (see <u>3.8</u>)
	§	section sign (see <u>3.20</u>)
	TM	trademark sign (see <u>3.8</u>)
· • • • • · • · · ·	P	female sign (Venus) (see <u>3.16</u>)
	8	male sign (Mars) (see <u>3.16</u>)
		fourth transcriber-defined print symbol (see 3.26)
	#	number sign (crosshatch, hash, pound sign) (see <u>3.19</u>)
	•	bullet (see <u>3.5</u>)
		fifth transcriber-defined print symbol (see 3.26)
· · · · · · · · · · · · · · · · · · ·	"	ditto mark (see 3.12)
· · · · · · • • •	+	plus sign (see <u>3.17</u>)
· · · · · · • • • · · • •	=	equals sign (see <u>3.17</u>)
· · · · · · • • • · · · • •	×	multiplication sign (see 3.17)
	*	asterisk (star) (see <u>3.3</u>)
	÷	division sign (see <u>3.17</u>)
		sixth transcriber-defined print symbol (see 3.26)
· · · · • • · · • • •	_	minus sign (see <u>3.17</u>)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		dot locator for "use" (see 3.14)
		dot locator for "mention" (see 3.13)
· • · · · · • •	%	percent sign (see <u>3.21</u>)
		seventh transcriber-defined print symbol
		(see <u>3.26</u>)

3.1 Ampersand :: ::

3.1.1 Follow print for the use of the ampersand.

 Examples:

 Marks & Spencer

 Image: State of the sta

3.2.1 Follow print for the use of arrows. In non-technical material, list the complete arrow symbol (without any grade 1 indicator) and its meaning on the symbols page or in a transcriber's note.

Note: The grade 1 indicator may be required before the arrow symbol to avoid it being misread.

Refer to: <u>Section 11.6</u>, Technical Material, and <u>*Guidelines for*</u> <u>*Technical Material*</u>, Part 13, for further information on arrows.

Examples:

Road signs of \rightarrow and \leftarrow mark detours.

Put a \uparrow on the map to indicate north.

Arrow used in the following example:

The ENTER key is the one with \dashv on it.

3.3 Asterisk 🗄 🕴 dagger 🗄 🖬 and double dagger 🗄 😳

3.3.1 Follow print for the use of the asterisk, dagger and double dagger, regardless of meaning.

Note: For example, the dagger may be used as a reference mark, or as the Latin or Christian cross to signify death or a member of the clergy.

Note: Usually the asterisk and sometimes the dagger and double dagger appear raised from the baseline in print. This is not considered the superscript position.

Examples:

Irene V***

foul language such as *#*\$!* or with omitted letters as in D***

New World Hotel ****

brothers Jed* and Ben** Chan

*born in Hong Kong

**born in Canada

Authors: Roy Brown,† Shirley Jones, Walter Smith,† Douglas White

The painter included daisies,* white roses† and ivy‡ in the portrait. *symbolizing innocence †symbolizing virtue ‡symbolizing fidelity

-dash*-or parentheses (round brackets†)

Rev. Robert Lowin†

* * *

3.4 Braille grouping indicators 🤃 🕃

3.4.1 Use braille grouping indicators when necessary to ensure that the preceding braille symbol or indicator applies to all the symbols enclosed by the braille grouping indicators rather than just to the symbol immediately following.

Note: This includes a modifier which applies to more than one letter and a subscript or superscript indicator which applies to more than one "item".

Refer to: <u>Section 4.2.5</u>, Letters and Their Modifiers and <u>Section 11.4</u>, Technical Material.

Examples: spoon

mass_{sun}

3.5 Bullet :: ::

3.5.1 Follow print for the use of the bullet.

Note: At times, other symbols may be used for a similar purpose.

Refer to: 3.22 for shapes and 3.26 for transcriber-defined symbols.

Example:

Nutritional considerations include:

- carbohydrates
- protein
- fat
- cholesterol
- fiber
- sodium

3.6 Caret : :

3.6.1 Follow print for the use of the caret.

Refer to: <u>Section 4.2</u>, Letters and Their Modifiers, for the circumflex accent *above* a letter.

Example:

[caret used as an editing mark to show omissions:]

My favourite pets are my dog n my cat n my hamster. My job n to feed them.

3.7 Commercial at sign 🗄 🗄

3.7.1 Follow print for the use of the commercial at sign.

Examples:

FLASH@lightning.net

3.8 Copyright : registered : and trademark : signs

3.8.1 Follow print for the use of the copyright, registered and trademark signs. Usually the trademark sign appears raised from the baseline in print. This is not considered the superscript position.

Examples:

```
Copyright © 2009
```

© 2009

QuickTax[™] from Intuit[®] Canada Limited

3.9 Crosses

3.9.1 Print uses crosses for a variety of purposes. Select the appropriate braille symbol based on the purpose of the cross.

Note: Use the letter "x" or "X" only when the cross has no mathematical or scientific meaning; for example: to represent a kiss.

Refer to: <u>3.3</u> for use of the dagger as a Latin or Christian cross (e.g. to signify death or a member of the clergy); and to <u>3.17</u> for the multiplication sign which is used to show dimensions, degree of magnification, and crosses between breeds of animals or between varieties of plants.

 Examples:

 With love, XXOO

 Sealed with a X

 Illiterate people usually signed their name with an X.

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3.10.1 Follow print for the use of currency signs.

Note: Some currencies are indicated by a letter or letters (e.g. "DM" for Deutsche Mark, "p" for pence, "R" for Rand).

Refer to: <u>3.26</u>, for transcriber-defined symbols to represent currency signs with no UEB symbols.

 Examples:
 99c
 99c

```
$hop for $aving$
20$00 (20 escudos)
€75
                                                          30,00€
6€50
                                                      F1 .....
1 € = 6.55957F
5F coin
₩0.20 = 20 kobo
f24
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£3m (3 million pounds)

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2p coin
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¥360
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3.11 Degrees : minutes : and seconds :: : :

3.11.1 Follow print for use of the degree sign and the prime signs.

Note: The minute may be shown in print by an apostrophe and the second by a nondirectional double quote. This usage can be followed in braille.

Examples:

 $60^{\circ} = 21^{\circ}C = 21^{\circ$

27

```
250°, 350°, or 450°?

33°51′35.9″S

151° 12' 40" E
```

3.12 Ditto mark 🗄 🗄

3.12.1 Follow print for the number used and the approximate placement of the ditto mark, that is, under the item that it refers to on the line above.

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Examples:
living room: pioneer blue
dining room:
                                                     //
                                                                   //
                                                                  yellow
kitchen:
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Wed " Science " Art
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Joan – 🝬
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3.13 Dot locator for "mention" :::::

3.13.1 Use a dot locator for "mention" to set apart a braille symbol which is under discussion, as in a symbols list, a transcriber's note or in a publication about braille such as this one. Place the dot locator for "mention" before the braille symbol and unspaced from it. When a dot locator for "mention" is used, do not list the dot numbers of the braille symbol.

Note: A braille symbol, e.g. a typeform indicator or a grade 1 indicator, preceded by the dot locator for "mention" does not have its normal effect on the following text.

Examples:

[The dot locator is not shown in the print copy in these examples.] [a symbols list:]

square

script passage indicator

acute accent over following letter

[a transcriber's note:]

[tn open] In the dictionary example below, \vdots is a macron over the following letter and \vdots is a breve over the following letter.[tn close] \vdots is a breve over the following letter.[tn close] \vdots is a breve over the following letter.[tn close] \vdots is a breve over the following letter.[tn close] \vdots is a breve over the following letter.[tn close] \vdots is a breve over the following letter.[tn close]

[from a manual for braille transcribers:]

The capitals passage indicator \vdots \vdots sets capitals mode until it is terminated by \vdots \vdots which is the capitals terminator.

3.14 Dot locator for "use" 🗄 🗄 👪

3.14.1 Use a dot locator for "use" unspaced before a braille symbol to assure that it will be physically recognizable. A braille symbol which has only lower dots and which is isolated from other text may otherwise

be misread. A braille symbol preceded by a dot locator for "use" retains its normal effect on text.

Examples:

[headings of a table about punctuation marks:]

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3.15 Feet :: and inches :: :: ::

3.15.1 Follow print for the use of the prime sign.

Note: The foot may be shown in print by an apostrophe and the inch by a nondirectional double quote. This can be followed in braille.

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3.16 Female (Venus) :: and male (Mars) :: signs

3.16.1 Follow print for the use of the female (Venus) and male (Mars) signs.

Example:

3.17 Mathematical signs: plus :: : equals :: : : multiplication :: : division :: : minus :: : ratio :: proportion :: : less-than :: : and greater-than :: :

3.17.1 Follow print spacing for use of the plus, equals, multiplication, division, minus, ratio, proportion, less-than and greater-than signs when used in non-technical material.

Examples:

a map with a scale of 1:500,000

 Image: Image:

3.18 Music accidentals: natural 👬 🗄 flat 👬 🖬 sharp 👬

3.18.1 Follow print for the transcription of the natural, flat and sharp signs within UEB text.

Examples:

The C[#] pavilion is named for Cecil Sharp.

The scale of G major includes the note F[#].

A jazz 2-5-1 progression in C minor could be Dm7b5 - G7#9 - Cm7.

- The *\approx* sign on a note cancels the effect of any *\pm b* in the key signature.

the dominant chord g-b \$ -d

... we obtain the somewhat more transparent relation

 $X^{\flat}(Y) = \langle X, Y \rangle$

 for all vectors X and Y.

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3.18.2 When the natural, flat and sharp signs are found within musical notation, use the provisions of the <u>New International Manual of</u> <u>Braille Music Notation</u> for their transcription.

3.19 Number sign (crosshatch, hash, pound sign) ::::

3.19.1 Follow print for use of the number sign.

Examples:

 #4
 Image: Im

3.20 Paragraph :: and section :: signs

3.20.1 Follow print for use of the paragraph and section signs.

Examples:

3.21 Percent sign :::

3.21.1 Follow print for use of the percent sign.

Examples:

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3.22 Shapes 🗄

3.22.1 In non-technical material, list the complete shape symbol (without any grade 1 indicator) and its meaning on the symbols page or in a transcriber's note.

Note: A grade 1 indicator may need to be added before the symbol in the text of the document being transcribed.

Refer to: <u>Section 11.7</u>, Technical Material, and <u>*Guidelines for*</u> <u>*Technical Material*</u>, Part 14, for further information on shapes; and <u>3.26</u> for transcriber-defined symbols.

Examples:

[a multi-level organisation chart using bullets, squares and circles:]

- Vice-President Client Services
 - Director Library Services
 - o Manager Braille Production
 - Manager Audio Production
 - Director Rehabilitation Services

[A student textbook uses the following icons (as explained in the text) before certain material: pencil–Write an essay; pointing finger–Remember; question mark in a circle–Research.]

Recycling at my house.

Steps to test acidity.
Recycling in my town.
Image: A state of the st

3.23 Space

3.23.1 A space is a blank area separating words, letters, numbers and punctuation. Whenever there is some amount of space in print, including at the end of a line, there is a space in braille. If there is doubt as to whether a space is present in print, presume one is present. The amount of space present is not considered important.

Note: In print, formatting and other techniques can leave varying amounts of space. In braille, formatting rules may also require varying amounts of space, for example two spaces at the beginning of a paragraph and aligning text in a table.

Refer to: <u>Section 6.6</u>, Numeric Mode, for the special case of a space used as a separator within a number and to <u>Section 11.2.2</u>, Technical Material, for spacing in mathematics.

Examples:

Using a proportional font and setting the paragraph margins to align at the left and the right, produces varying amounts of white space between words in print. This variation is ignored in braille.

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Some nouns have the same spelling for the singular and the plural: deer sheep salmon species Chinese Example words are widely spaced in print.]

3.24 Subscript : and superscript : indicators

3.24.1 Indicate the subscript or superscript position when used in print. In grade 2 braille, use grade 1 mode for the subscript and the superscript indicators.

Refer to: <u>Section 11.4</u>, Technical Material, for superscripts and subscripts and to <u>3.4</u>, for braille grouping indicators.

```
Examples:
```

```
W^m
                                                                                                                                                                                                              H<sub>2</sub>O
3 yd<sup>3</sup>
                                                                                                                                                                                                              4m^2
vitamin B<sub>12</sub>
born in 1682.<sup>3</sup>
born in 1982.<sup>c</sup>
America<sup>3</sup> (America Cubed–name of a sailing ship)

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the clarion<sup>1</sup> horn
                            <sup>1</sup> clarion: loud and clear

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3.25 Tilde (swung dash) 🗄 🗜

3.25.1 Follow print for use of the tilde.

36

Refer to: <u>Section 4.2</u>, Letters and Their Modifiers, for the tilde accent above a letter.

Examples:

[from a dictionary:]

head n. the top part of the body ... –**by a** ~ by the length of the animal's head, as in horse racing –~ **over heels** tumbling as in a somersault

```
~ vt. to be in charge of ...
```

An economist would write $x \sim y$ to indicate that a consumer is indifferent between the goods x and y.

http://www.business.com/~yourname

Some people use the tilde around words to indicate an inflected tone of voice or singing as in ~Happy birthday to you~

3.26.1 Use a transcriber-defined symbol for any print symbol which has no UEB equivalent and which occurs so frequently in the text that the use of a transcriber-defined shape or composite symbol would be

impractical. List each transcriber-defined symbol used and its meaning on the symbols page or in a transcriber's note.

Note: In grade 2 braille, use grade 1 mode for the first transcriber-defined print symbol.

Refer to: <u>Section 4.2</u>, Letters and Their Modifiers, for transcriberdefined modifiers and <u>Section 9.5</u>, Typeforms, for transcriber-defined typeform indicators.

Examples:

Symbols used in the following examples:

- ** % per mille sign, like a percent sign but with two zeroes in the denominator
- **B** Thai Baht currency sign, B with vertical stroke through it
- flower symbol

The average salinity of seawater is 35‰.

The baht was floated and halved in value, reaching its lowest rate of **B56** to the dollar in January 1998.

A list of items in which those that can be recycled are marked with a flower symbol:

aerosol cans 🛞

```
balloons
```

books, magazines *

cans 🛞

ceramics

3.27 Transcriber's note indicators

3.27.1 Use the opening and closing transcriber's note indicators as unspaced enclosures around words of explanation added by the transcriber and embedded within the text. However, do not use transcriber's note indicators for notes on a separate preliminary page set up specifically to list general transcriber's notes.

Examples:

an examination of the tabular information will [open tn]Text continues on page 78.[close tn]

• •			•	•••	•••	•••	• •	•	•	• •	•			•			••	Ξ.	ě.	:	•	• •	•		• •		•••		•	• •	•		 			
		•	•	ě •	•••		• • •		•	••		••	••	 	• •	•	•		•••	•	ě	-		Ξ.		•••		•		••		••	:• ::	•••	-	

[In a workbook the transcriber gives a number instead of listing the blanks shown in print and explains it as follows:] [open tn]The number after each question gives the number of answers needed.[close tn]

[In an elementary workbook, the transcriber decides not to use typeface indicators and inserts the following note:] [open tn]All the punctuation marks are underlined in the paragra

[open tn]All the punctuation marks are underlined in the paragraph below.[close tn]

[open tn]The following three tables appear side by side in the print.[close tn]

[open tn]Braille symbols used on the following page are **:** for eng and **:** for schwa.[close tn]

[open tn]In the table below, the column headings are abbreviated as follows:

emp inc:	Employment Income
payable:	Approximate Tax Payable
aver:	Average Tax Rate
marg:	Marginal Tax Rate[close tn]
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Section 4: Letters and Their Modifiers

4.1 English alphabet

•	•		
•••	letter a	· · • • · · · • · ·	capital letter A
• • • • • •	letter b		capital letter B
••	letter c	· · •• · · · · · • · ·	capital letter C
•• · • · •	letter d	· · • • • · · • •	capital letter D
• · · • · ·	letter e	· · • • · · · • •	capital letter E
• • • · · ·	letter f	· · • • • · · • • · · • • ·	capital letter F
	letter g	· · • • • • • • • • • • • • • • • • • •	capital letter G
• · • • · ·	letter h	· · • • · · · • • •	capital letter H
• • • • • •	letter i		capital letter I
· • • • · ·	letter j		capital letter J
• · · · • ·	letter k	· · • • · · · • • ·	capital letter K
• · • · • ·	letter I	· · • • · · · • • · · • • • ·	capital letter L
•• • • • •	letter m	· · • • • · · · · · · · · · · · · · · ·	capital letter M
• • • • • •	letter n		capital letter N
• · · • • ·	letter o	· · • • · · · • •	capital letter O
• • • · • ·	letter p	· · • • • · · • • · · • • • ·	capital letter P
• • • • • ·	letter q	· · • • • • • • • • • • • • • • • • • •	capital letter Q
• · • • • ·	letter r	· · • • · · · • • •	capital letter R
· • • · • ·	letter s	· · · · • · · • • · · • • • ·	capital letter S
· • • • • ·	letter t	· · · · • · · • • • · • • • ·	capital letter T
• · · · • •	letter u	· · • • · · • • •	capital letter U
• · • · • •	letter v	· · • • · · · • • ·	capital letter V
· • • • · •	letter w	· · · • · · • • · • •	capital letter W
•• ••	letter x	· · • • • · · · · · · • • •	capital letter X
••	letter y	· · • • • · • • •	capital letter Y
•••	letter z		capital letter Z

4.1.1 Follow print for the transcription of letters.

Refer to: <u>Section 2.6</u>, Terminology and General Rules, <u>Section 5</u>, Grade 1 Mode, <u>Section 8</u>, Capitalisation and <u>Section 10</u>, Contractions for more information.

 Examples:

 A boy and his dog were on the path.

 Image: Imag

4.2 Modifiers

- solidus (forward slash) overlay on following letter
- 🗄 💀 👄 horizontal stroke overlay on following letter
- breve above following letter
- i macron above following letter
- cedilla below following letter
- 🗄 🗄 👌 grave accent above following letter
- circumflex above following letter
- ి ring (circle) above following letter
- tilde above following letter
- i diaeresis (umlaut) above following letter
- i acute accent above following letter
- č caron (hacek, wedge) above following letter
- first transcriber-defined modifier on following letter
- second transcriber-defined modifier on following letter
- third transcriber-defined modifier on following letter

- solidus (forward slash) overlay on following capital letter
- 🗄 🗄 😁 horizontal stroke overlay on following capital letter
- Serve above following capital letter
- 🗄 🗄 👬 💿 macron above following capital letter
- cedilla below following capital letter
- 🗄 🗄 🗄 👌 grave accent above following capital letter
- circumflex above following capital letter
- **Find (circle)** above following capital letter
- 🗄 🗄 🐔 🕺 ilde above following capital letter
- 🗄 🗄 🎂 🔅 diaeresis (umlaut) above following capital letter
- 😳 🗄 📩 💧 á acute accent above following capital letter
- 🗄 🗄 📩 🎽 č caron (hacek, wedge) above following capital letter
- first transcriber-defined modifier on following capital letter
- second transcriber-defined modifier on following capital letter
- third transcriber-defined modifier on following capital letter
- 4.2.1 Place a modifier before the letter it modifies in braille, irrespective of whether it appears above, below or overlaying the letter(s) in print. Whenever a transcriber-defined modifier is used, give the print symbol it represents in a transcriber's note or on a symbols page.

Examples:

 Étienne

Bjørnstjerne Bjørnson

Białka River

Öresund Bridge

Shāh Jahān built the Tāj Mahal.

Săpânța, Romania

[In this example, the first transcriber-defined modifier represents a comma under the following letter.]

Ħaġar Qim in Malta

- [In this example, the second transcriber-defined modifier represents a dot above the following letter.]
- 4.2.2 If an indicator is required immediately before a modified letter, place the indicator before the modifier.

Examples:

Ždiar, Slovakia		 • • • •	 	• • • • • • • • • • • • • • • • • • •
À LA CARTE MENU	· · · · · · · · · · · · · · · · · · ·	 • · • · • · · ·		• • • • • • • • • • • • • • • • • • •

4.2.3 Modifiers on letters do not terminate capitalised word mode.

Example:

AOÛT

4.2.4 A modified letter may not form part of a contraction.

 Examples:

 blessèd

 Image: Imag

Prométhée enchaîné

Note: In words such as *théâtre* where the contraction for *the* is not used, the contraction for *th* can be used.

4.2.5 If a single modifier applies to more than one letter, enclose the modified letters in braille grouping indicators. Grade 1 indicators are not required for the braille grouping indicators since the modifier can not be followed by a contraction.

Example:

oo as in tool

4.2.6 Where a modifier is shown in print without an associated letter, as in a dictionary entry or in instructional material, follow print.

Refer to: <u>Sections 3.6</u> and <u>3.25</u>, General Symbols and Indicators, for the caret and the tilde (swung dash); and <u>Section 7.1</u>, punctuation, for the solidus (forward slash) when these are separate characters rather than modifiers.

Example:

the acute (´) and grave (`) accents

- 4.2.7 Use the modifiers listed above only in foreign language words and phrases in English context intended primarily for leisure reading, in English words or in anglicised words and phrases.

Where a significant knowledge of a foreign language is presupposed or is being taught, use signs from the indigenous foreign language braille code.

Refer to: <u>Section 13</u>, Foreign Language, for more guidance.

4.2.8 Use the modifiers in this section for linguistic accents and diacritics only and not for modifiers in mathematics or for symbols in computer programming even if their appearance is visually similar in print.

Refer to: <u>Guidelines for Technical Material</u>.

4.3 Ligatured letters

- igature indicator
- ligature indicator where only following letter is capitalised
- 4.3.1 Place the ligature indicator between two letters which are joined to each other in print. Various methods are used in print to join letters, including but not limited to cross bars between the letters, tie bars or slurs over or under the letters, and letters joined together and printed as one symbol. Describe the method used in a transcriber's note or on the symbols page.

Examples:

4.3.2 The ligature indicator is considered a modifier. It does not terminate capitalised word mode and a letter joined to another by a ligature may not form part of a contraction.

Example:

ŒDIPUS

4.3.3 An indicator before the first letter joined to another by a ligature applies only to the first letter. When an indicator is required for the second letter, place the indicator before the ligature indicator.

Examples:

 Thĕssalōnĭan

4.3.4 When a modifier is required for a letter joined to another by a ligature, place the modifier immediately before the letter to which it applies. When a single modifier applies to both letters, use braille grouping indicators.

Examples:

 āe or aē?
 Image: Im

4.3.5 Do not use the ligature indicator for the ae and oe diphthongs unless the letters are joined as ligatures in print.

Examples:

4.3.6 Use the ligature indicator only when the ligature has meaning and not when it is merely an aspect of the print font being used.

Example: In some fonts the letters appear joined.

4.4 Eng and schwa

ŋ	eng		Ŋ	capital eng
ə	schwa	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Ð	capital schwa

4.4.1 Follow print for the transcription of these pronunciation symbols.

Example:

meningococcus (ma niŋ' go käk' as)

4.4.2 The eng and schwa are also symbols in the International Phonetic Alphabet. When the symbols appear in phonetic material, use <u>IPA</u> <u>Braille</u> to transcribe the phonetic text.

4.5 Greek letters

· • • · · · · ·	a	Greek alpha
· • • · · · • • ·	β	Greek beta
· • • • • • • • • • • • • • • • • • • •	γ	Greek gamma
	δ	Greek delta
· • • · · · · · •	3	Greek epsilon
· • • · · · · · •	ζ	Greek zeta
	η	Greek eta
	θ	Greek theta
	I	Greek iota
· • • · · · · ·	К	Greek kappa
	λ	Greek lambda
	μ	Greek mu
	V	Greek nu
· • • • • · · · · · · · · · · · · · · ·	ξ	Greek xi
	0	Greek omicron
	п	Greek pi
	ρ	Greek rho
	ς or σ	Greek sigma
	т	Greek tau
· • • · · · · ·	U	Greek upsilon
	φ	Greek phi
	Х	Greek chi
· • • • · · · • · • •	Ψ	Greek psi
· • · • · · • •	ω	Greek omega
• • .	٨	applied Creationship
	A	capital Greek alpha
	В	capital Greek beta
	Г	capital Greek gamma
	Δ	capital Greek delta

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Follow print for the transcription of Greek letters. Use the Greek 4.5.1 letters listed above in English contexts or English technical materials.

Examples:

Use π in the equation. For Σ read sum. $\mu\mu$ stands for micromicron. She is a member of ΦBK .

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 the A and the Ω

4.5.2 Use signs from the Greek foreign language braille code for passages where a significant knowledge of Greek is presupposed or where the Greek language is being taught.

Refer to: <u>Section 13</u>, Foreign Language, for more guidance.

- grade 1 symbol indicator
- grade 1 word indicator
- grade 1 passage indicator
- grade 1 terminator

5.1 Mode indicators

Note: A braille symbol may have both a grade 1 meaning and a contraction (grade 2) meaning. Some symbols may also have a numeric meaning.

- 5.1.1 A grade 1 indicator is used to set grade 1 mode when the grade 1 meaning of a symbol could be misread as a contraction meaning or a numeric meaning.
- 5.1.2 The extent of grade 1 mode is determined by the grade 1 indicator in use.

5.2 Grade 1 symbol indicator ::

5.2.1 The grade 1 symbol indicator sets grade 1 mode for the next symbol.

Note: A grade 1 symbol indicator is not required before the letters a, i and o, because they do not have a contraction meaning when they stand alone.

Examples:

the vowels are: a, e, i, o and u

Mrs X and Mr O

J. S. Bach

 22b
 22B
 22p
 Image: Image

Add either ? or ! to each sentence.

[question mark and exclamation mark]

In Smith⁵⁶ we find ...

```
jim@take2.com
```

5.3 Grade 1 word indicator :: ::

- 5.3.1 The grade 1 word indicator sets grade 1 mode for the next symbolssequence or the remainder of the current symbols-sequence.
- 5.3.2 The effect of a grade 1 word indicator is terminated by a space or a grade 1 terminator.

Refer to: <u>5.5</u>, for the Grade 1 Terminator.

5.4 Grade 1 passage indicator :: :: ::

- 5.4.1 The grade 1 passage indicator sets grade 1 mode for the next passage.
- 5.4.2 A grade 1 passage is terminated by the grade 1 terminator.

Examples: He spelt H-o C-h-i M-i-n-h City.

Factorise: $y = x^2 - 4$; $y = x^2 - 2x$; $y = x - x^2$.

5.4.3 To preserve the natural line-by-line arrangement of the text, e.g. in a computer program or a set of equations in mathematics, place the grade 1 passage indicator on a separate line above the grade 1 text

and the grade 1 terminator on a separate line below the text. When this method is used, precede each indicator by the dot locator for "use" 🔅 🔅 🚼.

Refer to: <u>Section 3.14</u>, General Symbols and Indicators, for the dot locator for "use".

5.5 Grade 1 terminator ::::

- 5.5.1 The grade 1 terminator usually follows immediately after the last affected symbols-sequence of a grade 1 passage.
- 5.5.2 Use the grade 1 terminator when it is necessary to terminate grade 1 mode before the end of a symbols-sequence.

Example:

p-p-p-p-p-p-perishing

5.6 Numeric indicator :

5.6.1 Grade 1 mode is also set by the numeric indicator.

Examples:

1st 👬 🗄 🖬

shopping4you

4starhotel@webnet.com

5.6.2 When grade 1 mode is set by the numeric indicator it is terminated by a space, hyphen, dash or grade 1 terminator.

Refer to: <u>Section 6.5</u>, Numeric Mode.

Examples:

I'll go 3rd-you go 4th.

```
3-D
```

5.7 Grade 1 mode avoids confusion with contractions

5.7.1 Grade 1 mode is required to prevent a letter from being misread as an alphabetic wordsign.

Refer to: Section 10.1, Contractions.

Examples:

b-е b-1 B-team ev-er-y-which-way ending in –s or –es V-VII viii-x What have you d-What have you d... p. 7 p.7 p7 the letters "a" to "g" Sections (h) and (i). Did 'e 'n' Ma get to 't? c/o maître d' the people's right p's and g's. letter d

5.7.2 Grade 1 mode is required to prevent a letters-sequence from being misread as a shortform or as containing a shortform.

Refer to: <u>Section 10.9</u>, Contractions.

Examples:

CD-ROM

"Hm!" he mused.

My friends are Fr Ted and Sr Ann.

 Image: Image:

al dente

Use the ALT key.

NEC (National Executive Committee)

ozbrl (Australian listserve)

5.8 Grade 1 indicators and capitalisation

5.8.1 A grade 1 indicator precedes a capitalisation indicator.

Example:

T-SHIRTS FOR SALE

5.9 Choice of indicators

Note: An extended grade 1 mode, i.e. grade 1 word or grade 1 passage mode, may be used for non-literary expressions. This is especially useful in mathematics and computer programming texts. However, keeping in mind the general principle that the resulting braille should be as easy to read as possible, it is often appropriate to use contracted braille with a grade 1 indicator for just those symbols that can be misread as contractions. It is recommended that contracted braille is used for email addresses, filenames and web addresses.

5.9.1 As words are most easily recognised when presented in their familiar contracted form, minimise the number of switches between grades, the number of indicators required and the number of cells used.

Examples:

un-e-mo-tion-al [rather than]
c-h-e-e-s-e
br-r-r :::::::::::::::::::::::::::::::::
d-don't
d-d-don't
about-f-f-face
d-d-dictionary
p-p-please is
s-s-s-super-st-stition

5.9.2 Reduce the indicators within equations. When reading mathematical expressions, passage indicators are less intrusive than interior indicators.

Refer to: <u>Guidelines for Technical Material</u>, Part 1.7.

5.10 Optional use of the grade 1 indicator

5.10.1 When an expression in grade 1 mode would be equivalent to the same text in grade 2 mode because no contractions would occur, a grade 1 indicator may be used although it is not required.

Example:

The engine stuttered rm-m-m-m then rm-mm-mm then settled into r-mmmmmm.

5.11 Use of grade 1 indicators in grade 1 text

5.11.1 In a work entirely in grade 1 braille (that is, using no contractions), grade 1 indicators are not used except as required for other reasons, e.g. for the lowercase letters a-j immediately following digits, and a question mark in an unusual position.

Examples:

C is for candy.

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Section 6: Numeric Mode

· • • ·	digit one
	0
	digit two
• • • •	digit three
· • • • • • • • •	digit four
· • • • • • •	digit five
· • • • • • • • • • • • • • • • • • • •	digit six
· • • • • • • • • • • • • • • • • • • •	digit seven
· • • · · · · · · · · · · · · · · · · ·	digit eight
· • • • · • • • • • · ·	digit nine
· • · • · • • •	digit zero
· • · · · • • • ·	comma (decimal sign)
· • · · · • • •	full stop (period, decimal sign)
ii to 🖸	digit (in numeric mode only)
:• :: to :• ••	numeric space plus digit (in numeric mode only)
· • · •	spaced numeric indicator (before space)
· • · • · • · • • • •	numeric passage indicator (before space)
· • · · · · • · · ·	numeric passage terminator
•	line continuation indicator (at end of line)
· · · · · · · · · · · · · · · · · · ·	line continuation indicator with space (at end of line)
•••	simple numeric fraction line (in numeric mode only)

Note: These twelve symbols are the ten digits and the two symbols which are used as decimal signs. They are also numeric indicators.

6.1.1 Numeric indicators set numeric mode for the remainder of the symbols-sequence.

6.2 Numeric mode symbols

6.2.1 The following symbols may occur in numeric mode:

- the ten digits;
- full stop (period);
- comma;
- the ten numeric space-digit symbols;
- simple numeric fraction line; and
- the two line continuation indicators.

Refer to: <u>Section 11.3</u>, Technical Material, for the definition of a simple fraction and the use of general fraction indicators.

Examples:

62	1959
3,500	8.93
.7	0.7
8,93	,7
0,7	par. 4.2.2

[or when print uses spaces:]

3/8 **.** 53/8 **.** 53/8 **.** 53/8 **.** 5

6.3 Termination of numeric mode

6.3.1 A space or any symbol not listed in <u>6.2.1</u> terminates numeric mode.

Examples: 7:30 a.m. 10:12:2009 9-10 1914–18 2.5-5 8-cab fleet The score was 4–3 7-5=22-1/2 $1/_4 - 1/_2$ tsp 61/4-61/2 1/4 cup model 09/52 on call 24/7 7(2) 7(b) 4—7 4.7 4567

6.4 Placement of numeric prefix with full stop (period)

6.4.1 When a full stop (period) is followed by a number, it precedes the numeric prefix : unless it is clear that it is a decimal point.

Examples: Piano Sonata No.16 in C major is K.545. $3/_8 = .375$

6.5 Numeric indicators set grade 1 mode

- 6.5.1 A numeric indicator also sets grade 1 mode. Grade 1 mode, when set by a numeric indicator, is terminated by a space, hyphen, dash or grade 1 terminator.
- 6.5.2 While grade 1 mode is in effect, a grade 1 indicator is not required unless a lowercase letter a–j follows a digit, full stop/period or comma.

Examples:

32	3b
3B	3m 👬 👯 👯
4.2	4.b
4.B	4.m
report3.doc	
report3.xls	• · • • • • • ·
in the Second World War ² 1939-	–1945. ³

6.5.3 While grade 1 mode is in effect, contractions may not follow a number.

 6.5.4 Grade 1 mode is terminated by a hyphen or dash, thus allowing contractions to be used again. Therefore, a letter or letters that could read as a contraction will need the grade 1 indicator.

Examples: If you go 1st—will I go 2nd? I have a 6-CD boxed set. There are 3 beds in this 4-bed ward. in 1970—about March 3-dimensional 3-D The 6-can pack—under seat 6-c. only 4—more please 4-m 20yr period

Note: The ten symbols $\vdots \vdots \vdots$ to $\vdots \vdots \vdots$ have the meaning "space and following digit" within a number. Spaces should be represented in this way when they are clearly numeric spaces. For example a single telephone number would be considered as one number, even though it includes country, city, and exchange codes as parts. If it is not clear that a space is a separator in a single number it should be treated as an ordinary space.

6.6.1 When spaces are used as separators within a single number use the ten symbols if it to if it to represent the space and its following digit.

Examples:

6.7 Treatment of dates, time, coinage, etc.

6.7.1 When transcribing dates, time, coinage, ordinal numbers, postal codes or telephone numbers: follow print punctuation and order of symbols.

Refer to: Guidelines for Technical Material, Part 2, for more examples.

Examples:
7/11/59
7.11.59
1960's
'70s and '80s
10:30 a.m. 👪 🗄 🕶 🖬 🖬 🖬 🖬 👬 🖬
10.30 am 👪 🗄 🕶 🕶 👯 🖬 👬
\$8.75
£8.75
R8,75
\$1,500.00

6.8 Spaced numeric indicator **:**

6.8.1 The spaced numeric indicator allows one or more spaces to intervene between the numeric prefix and the root that would normally follow immediately to form a digit or a decimal point or comma.

Example:

\$ 4.50	
10.00	· • • · · • • • • • • • • • • • • • • •
.50	· • • • • • • • • • • • • • • • • • • •
	· · · · · · · · · · · · · · · · · · ·
\$15.00	

6.9 Numeric passage indicator **::** and numeric terminator **::**

- 6.9.1 The numeric passage indicator sets numeric mode and grade 1 mode for all text until the terminator is reached.
- 6.9.2 The numeric terminator follows immediately after the last affected symbols-sequence, except as in <u>6.9.4</u> below.
- 6.9.3 Numeric indicators are not used in a numeric passage and any lowercase letter a-j is preceded by a grade 1 indicator.
- 6.9.4 To preserve the general format of the enclosed text the numeric passage indicator may be placed by itself on a line above and the terminator on a line below the text.

Note: A numeric passage may be useful in cases such as a long worked example in mathematics, a series of arithmetic exercises, or a table with mostly numeric content.

Refer to: <u>Guidelines for Technical Material</u>, Part 4, for spatial arithmetic examples illustrating the use of both the spaced numeric indicator and the numeric passage indicator.

6.10 Division of a number between lines

- 6.10.1 Avoid division of a number between lines unless considerable space is saved. If division is necessary use the appropriate line continuation indicator and observe the following rules.
- 6.10.2 When it is necessary to break a long number across lines, place the break in a logical place—at a numeric space, or after a comma which is being used as a separator—not between two digits.
- 6.10.3 When the division occurs after a separating comma, or between two digits in a number which comprises a large string of digits with no separators, use the one-cell line continuation indicator \vdots at the end of the line.
- 6.10.4 When the division takes place at a numeric space, use the two-cell line continuation indicator $\vdots \bullet \vdots \bullet$ at the end of the line.
- 6.10.5 Since the line continuation indicators do not terminate numeric mode a numeric indicator is not required in the next line.

Examples:

[or when print uses spaces:]

69

Section 7: Punctuation

• • • •	1	comma
• • • • • •	•	semicolon
••	:	colon
••		full stop (period, dot, decimal point)
· · · · · · · · · · · · · · · · · · ·		ellipsis
••	ļ	exclamation mark
••	?	question mark [also]
••		opening one-cell (nonspecific) quotation mark
· · · • •		closing one-cell (nonspecific) quotation mark
· • · · · • • •	<i>II</i>	opening double quotation mark
· • · · · • • •	"	closing double quotation mark
· · · · · · · • • ·	1	opening single quotation mark
· · · · · · · · •	1	closing single quotation mark
· • · · · • • •	«	opening Italian quotation mark (small double angle brackets)
· • · · ·	»	closing Italian quotation mark (small double
• • • •	"	angle brackets)
· · · · · · · ••	н	nondirectional double quotation mark
•••		apostrophe, nondirectional single quotation mark
· · • • · · • • •	(opening parenthesis (round bracket)
)	closing parenthesis (round bracket)
· • • · · · • ·	[opening square bracket
· • · • · · · •]	closing square bracket
· • • · · · • • ·	<	opening angle bracket
	>	closing angle bracket
· • • · · • • •	{	opening curly bracket (brace bracket)
	}	closing curly bracket (brace bracket)
	1	solidus (forward slash)
	١	reverse solidus (backslash)
· · · · • •	_	hyphen

Rules of Unified English Braille

fied English	Braille	7: Punctuation	70
· · · · · · · · · · · • • •	—	dash (when distinguished from hyphen(s) in print)	
· · · · · · · · · · · · · · · · · · ·		long dash	
· • · · · · • •	_	low line (underscore)	
		multi-line opening parenthesis (round bracket)	
· · · · · · • · · · • • · •		multi-line closing parenthesis (round bracket)	
· · · • • • · · · · · • • •		multi-line opening square bracket	
		multi-line closing square bracket	
		multi-line opening curly bracket	
		multi-line closing curly bracket	

7.1 General

Follow print for the use of punctuation except for the specific 7.1.1 provisions in the Punctuation rules which follow.

Examples:

U.S.A. W..c.ster What ...? Why? 2.5% 2,5% Yes, please. No, never! Shopping list: red, green and yellow peppers; onions; sweet potatoes (or yams).

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 <t STOP!! 4:30 don't Jones' It's done. rock 'n' roll "Tis late."

(See above.) noun(s) in b) and f) Balance: (\$52.68) Plaintiff stated, "[m]y causes is [sic] just." Jan Swan <swanj@iafrica.com> primary colours {red, blue, yellow}

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 . c:\desktop self-control tied 1-1 forty-one or -two 320-foot wingspan five- or six-pointed star add -s add –s Mr J----"Ask Ms. —, she will know."

7.1.2 Only one blank cell follows punctuation in braille even when print uses more space, e.g. at the end of a sentence.

7.1.3 Place a grade 1 symbol indicator before a punctuation mark which appears in a position where it would be read as a contraction.

Refer to: <u>7.6.4</u> for an opening nonspecific quotation mark.

7.1.4 A string of lower punctuation marks may be surrounded by space.

Exal	mples:	
_"	······································	?" •• •• •• ••
"	· · · · · · · · · · · · · · · · · · ·	H H + + + + + + + + + + + + + + + + + +

7.2 Dash, low line (underscore), long dash and hyphen

7.2.1 Follow print spacing of the dash. However, when the spacing in print is indeterminate or inconsistent, space the dash from adjacent words, unless it is clear that the dash indicates omission of part of a word.

Examples:

He will go when — 🗄 👯 👯 👯 👯 👬

He will go when — 😳 👯 👯 👯 👯 👯

He will go wh—

We want- we need - more br-

[print shows the first dash unspaced from the word "want"].

- 7.2.2 When an unspaced dash indicates an omission, do not separate it from the remainder of the symbols-sequence. In all other cases, a dash may be separated from what precedes or follows it at the beginning or end of a braille line.
- 7.2.3 Regardless of the length of the character in print, use one low line (underscore) is in braille for each print dash below the line of type which indicates a blank to be filled in.

Refer to: <u>Section 9</u>, Typeforms, for information about underlining.

Examples:

7.2.4 Use a long dash : in braille only when print uses both a short and long dash.

Example:

Mr D—— visits P—— regularly — you know that.

Hyphen(s) used as dash

7.2.5 Represent a spaced hyphen in print with a spaced hyphen in braille.

Example: I'll be ready by 3:00 - well - maybe 3:10. 7.2.6 When print uses two adjacent hyphens as a substitute for a dash (e.g. in typing or email), it is permissible to use a dash in braille. Use two hyphens when it is clear that two hyphens are intended, e.g. to represent two missing letters in a word. When in doubt, use two hyphens.

Examples:

an expression--such as this--set apart

[Two hyphens are used in print.]

rec--ve

B-- :::: [print uses hyphens]

7.3 Ellipsis :: :: ::

7.3.1 Follow print for the number of dots used in the ellipsis. When spacing in print is indeterminate or inconsistent, space the ellipsis from adjacent words, unless it is clear that it indicates the omission of part of a word.

Examples:

 I... I don't think"

 I... I don't think"

 I... I don't think"

 I... I don't th....."

7.4 Solidus (forward slash)

7.4.1 When division at a linebreak is necessary following the solidus (forward slash), do not insert a hyphen.

Example:

There were several schoolchildren/teachers/parents present.

7.5 Question mark :

7.5.1 In the majority of cases, a question mark does not require a grade 1 symbol indicator; however, be mindful of the situations covered in Rules <u>7.5.2</u> to <u>7.5.4</u> below.

 Examples:

 What???
 Image: Im

- 7.5.2 Place a grade 1 symbol indicator before a question mark which appears in a position where it would be read as the wordsign "his" or where it would be read as an opening one-cell (nonspecific) quotation mark.
- 7.5.3 Place a grade 1 symbol indicator before a question mark which is "standing alone".

Example:

[?]

7.5.4 Place a grade 1 symbol indicator before a question mark which follows a space, hyphen or dash. Any of the punctuation and indicator symbols listed in <u>2.6.2</u> of <u>Section 2</u>, Terminology and General Rules, may intervene between the space, hyphen or dash and the question mark.

Examples:

?-1750

(?—1750)

Replace each ? with a letter: ?e??u

- 7.6.1 Use one-cell (nonspecific) quotation marks : and : for the predominant quotation marks in the text in all instances where the specific form of the quotation marks ("double", "single", "Italian" or "nondirectional") has no significance, that is, in the great majority of cases. Indicate the print form of the nonspecific quotation marks on the symbols page or in a transcriber's note.

Examples:

[The examples below are taken from different texts, which have differing predominant quotation marks in print.]

"Why is that?" he asked. [or] 'Why is that?' he asked.

[Two print versions – The first has double quotation marks, the second has single quotation marks.]

the play 'Hamlet' [or] the play "Hamlet"

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[Two print versions – the first has single nondirectional quotation marks, the second has double nondirectional quotation marks.]

The letters "b" and "c"

[Double nondirectional quotation marks in print.]

the word 'nice'

[Single nondirectional quotation marks in print.]

```
mother-'in-law'
```

[Single quotation marks in print.]

```
«... in accordance with ...»
```

[Italian quotation marks in print.]

7.6.2 For secondary or inner quotation marks (that is those other than the predominant quotation marks in the text), use the specific two-cell symbols.

Examples:

She said, "Sing 'Happy Birthday'." [where double quotation marks are used predominantly in print] She said, 'Sing "Happy Birthday".'

[where single quotation marks are used predominantly in print]

- 7.6.3 A pair of opening and closing quotation marks should match. For example, when a specific opening quotation mark is required, then the specific closing symbol is also used.
- 7.6.4 When an opening nonspecific quotation mark would be read as the wordsign "his", use the appropriate specific quotation mark instead.

Example:

(" ... that is the question.")

- 7.6.5 Use one-cell (nonspecific) quotation marks when apostrophes are used as the predominant quotation marks in print. Use specific single quotation marks when apostrophes are used as the secondary or inner quotation marks in print. However, when in doubt as to whether a mark is an apostrophe or a single quotation mark, treat it as an apostrophe.
- 7.6.6 Use nondirectional double **: :** or single **:** quotation marks (that is quotation marks without any slant or curl to convey "opening" or "closing") only in the following relatively rare cases:
 - when such symbols are distinguished from directional symbols (as in a discourse on typography)
 - when the symbols are otherwise clearly intended (as in an ASCII listing)
 - when there is no way to infer directionality from context.
 - Otherwise use directional quotation marks.
- 7.6.7 If the opening one-cell (nonspecific) quotation mark appears in grade 1 mode, it will be read as a question mark. To avoid this, place the one-cell opening quotation mark before rather than after any grade 1 indicator. If this isn't possible, use the appropriate specific quotation mark.

7.7.1 Place the appropriate multi-line bracket symbol on each braille line, aligning the symbols vertically. Generally, material is top justified in braille even when it is centred vertically in print.

Refer to: <u>Section 11.8</u>, Technical Material, and <u>*Guidelines for*</u> <u>*Technical Material*</u>, for more information.

Example: I We You They I We I W

Section 8: Capitalisation

to 🗄 🗄	capital letters A to Z
:• :• :• to :• :• ••	capital Greek letters A [Alpha] to Ω [Omega]
· · · · · · · · ·	capitals word indicator
· · · · · · · · · · · · · · · · · · ·	capitals passage indicator
· · · · · · · · · ·	capitals terminator

Refer to: <u>Section 4</u>, Letters and Their Modifiers, for the complete list of capitalised letters in the English and Greek alphabets.

8.1 Use of capitals

8.1.1 Follow print for the use of capital letters.

Note: The transcriber may reasonably reduce the use of capital letters in braille when they are used in print as a visual embellishment – such as for words written in capital letters at the beginning of paragraphs or chapters.

Refer to: <u>Section 9.6</u>, of Typeforms, for how to transcribe small capital letters when used in print as a distinctive typeform.

8.2 Extent of capitals mode

8.2.1 The extent of capitals mode is determined by the capitals indicator in use.

8.3 Defining a capital letter

8.3.1 A capital letter is a two-cell symbol which consists of the prefix (dot six) and the lowercase form of the letter.

Examples:

M MacPherson and O O'Hara

'Twas Dr. Hamilton-Hall.

B-E-L-I-E-V-E

8.3.2 Place the prefix dot 6 before a contraction when only its first letter is capitalised.

Examples:

Father Edmond Anderson

Today, Mr Will Just visited us.

His name is Thomas.

8.3.3 Only a modifier or a ligature indicator can be positioned between a letter and its capitals prefix.

Refer to: <u>Sections 4.2</u> and <u>4.3</u>, of Letters and Their Modifiers, for the list of symbols considered to be modifiers to letters.

8.4 Capitalised word indicator

- 8.4.1 The capitalised word indicator sets capitals mode for the next letterssequence or the remainder of the current letters-sequence.
- 8.4.2 The effect of a capitalised word indicator is terminated by a space, a single capital letter, a nonalphabetic symbol, or a capitals terminator, but not by a modifier or a ligature indicator.

Examples:

PARLIAMENT

```
FRANÇOIS
ΠΒΦ
DipTP
NEW YORK
TVOntario
"GO quickly and TAKE CARE!"
ANGLO-SAXON
McGRAW-HILL
MERRY-GO-ROUND
UPPERCASE-lowercase
LITTLE-RED-RIDING-HOOD-type tales
The d'ARTAGNAN Romances
THAT'S
SHE'LL
JACK'S FO'C'S'LE
WELCOME TO McDONALD'S
OK'd
RSVP or R.S.V.P.
HOTELS.COM
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The N.A.S.D.A.Q. News

ACOXON ACCONNECTION A
```

8.4.3 A fully-capitalised hyphenated compound word is correctly capitalised if it is divided at the hyphen, at the end of the braille line.

Note: This means that the new braille line will begin with the capitalised word indicator (which is already required) following the hyphen.

Example:

ANGLO-SAXON

8.4.4 A hyphen inserted during transcription to indicate word division at the end of a braille line does not terminate capitals word mode.

Example:

8.5 Capitalised passage indicator :

- 8.5.1 The capitalised passage indicator sets capitals mode for the next passage.
- 8.5.2 A passage is three or more symbols-sequences and it may include non-alphabetic symbols.
- 8.5.3 A capitalised passage is terminated by the capitals terminator immediately following the last affected symbols-sequence.

Examples:

```
CAUTION: WET PAINT!
```

THE BBC AFRICA NEWS

PROUD TO BE A ØBK

FOR SALE: 1975 FIREBIRD

A SELF-MADE MAN

BUY FAHRENHEIT 9/11 ON E-BAY

A.A. (ALAN ALEXANDER) MILNE

8.5.4 A capitalised letter or letters-sequence placed adjacent to the beginning or end of a capitalised passage is not necessarily considered to be part of the passage, especially if it is separated from the passage by a space or punctuation.

Examples:

"... at 11:00 AM"—MARKHAM ECONOMIST AND SUN

STOP RUNNING NOW! It's dangerous.

... (See Attachment A). A CSP (Carriage Service Provider) has obligations to ...

Go to point A. BUT NOT YET!

He worked for the ABC. A BBC journalist reported ...

8.5.5 When transcribing a capitalised passage which extends over more than one text element (e.g. a series of paragraphs, or a numbered or bulleted list of points), each text element is preceded by the capitalised passage indicator and the capitals mode is terminated only at the end of the final text element.

Example:

8.5.6 When transcribing a capitalised passage which extends over more than one text element and where the text elements do not constitute a continuous passage (e.g.: a series of headings), each text element is capitalised separately.

Example:

ON HEALTH AND MEDICINE

INDIGENOUS TEAS DELAY AGING

(READER'S DIGEST: August 1998)

Indigenous teas have been linked in recent studies to improved health and ...

8.5.7 A single heading is capitalised as a unit even if it extends over more than one braille line.

Example: LIST OF SURVEY RECIPIENTS ORGANISED BY COUNTRY

8.6 Capitals terminator :

- 8.6.1 The capitals terminator is placed after the final capitalised letter either within or following the symbols-sequence.
- 8.6.2 The capitals terminator may precede or follow punctuation and other terminators but it is best that indicators and paired characters such as parentheses, square brackets and quotes be nested. That is, close punctuation and indicators in reverse order of opening.

Examples:

He shouted "I WILL NOT!"

 Image: Image:

8.6.3 If it is necessary to terminate the capitals mode before the end of a symbols-sequence, place the capitals terminator after the last affected letter of either capitals word mode or capitals passage mode.

Examples:

8.7 Placement of indicators

8.7.1 The dot 6 prefix, the capitalised word indicator or the capitalised passage indicator is placed immediately before the first capitalised letter or modifier to that letter, such as a cedilla, grave accent or circumflex. Only a modifier or ligature indicator may come between the capitals indicator and the letter.

Refer to: <u>Sections 4.2</u> and <u>4.3</u>, of Letters and Their Modifiers, for the list of symbols considered to be modifiers to letters.

Examples:

"So?" (July) [Σ] B-U-S Voyage À Nice 'TIS CD "SHHHH!" Hippity-HOP RESOLVED ÉTUDE Unified English Braille (UEB) AC SMITH V-NECK SWEATERS FOR SALE!

8.8 Choice of capitalised indicators

Note: While the default treatment for a sequence of capital letters is capitals word mode, there are situations where the transcriber has a choice between using either individual capital letters or capitals word mode. If both choices will render an unambiguous transcription, interpret the following rules as guidelines.

8.8.1 Choose the method which retains the usual braille form.

8.8.2 Choose the method which best conveys the meaning. In particular, choose a method that avoids the need for capital indicators or terminators within natural subunits of an expression.

Note: In the examples below such subunits are the chemical element Br in KBr, the abbreviation Sc in BSc or the word Ontario in TVOntario.

Examples:

KBr (potassium bromide)

BSc (Bachelor of Science)

TVOntario

preSENT

PRESent

8.8.3 Choose the method which gives consistency throughout a single title.

8.9 Accented letters in fully capitalised words

8.9.1 When in print an accented letter in a fully capitalised word is shown in lowercase, the lowercase representation may be ignored in braille, except when facsimile transcription is required. Such practice should be explained in a transcriber's note.

Section 9: Typeforms

- italic symbol indicator
- italic word indicator
- italic passage indicator
- italic terminator
- boldface symbol indicator
- boldface word indicator
- boldface passage indicator
- boldface terminator
- underlined symbol indicator
- underlined word indicator
- underlined passage indicator
- underlined terminator
- script symbol indicator
- script word indicator
- script passage indicator
- script terminator
- first transcriber-defined typeform symbol indicator
- first transcriber-defined typeform word indicator
- first transcriber-defined typeform passage indicator
- first transcriber-defined typeform terminator

Note: Typeform indicators consist of two parts: a prefix and a root. The prefix designates the typeform and the root determines its extent. Additional transcriber-defined typeforms may be formed using the following prefixes:

- prefix for second transcriber-defined typeform
- prefix for third transcriber-defined typeform
- prefix for fourth transcriber-defined typeform
- prefix for fifth transcriber-defined typeform

9.1 Deciding when to use typeform indicators

Refer to: <u>9.7</u> for guidance on the placement of typeform indicators and terminators in relation to opening and closing punctuation.

- 9.1.1 Despite wide use of different typeforms in print, it is not always necessary to indicate them when transcribing into braille. For example, print will commonly use a distinctive typeface for headings. This usage is generally ignored in braille where formatting will distinguish the headings from the rest of text. Also the print practice of italicising all variables in technical material is ignored.
- 9.1.2 Typeform indicators are considered necessary in braille when the print change in typeform is significant because it indicates emphasis or shows distinction, e.g. foreign words in English text, titles within text, subject headings on paragraphs, silent thought, computer input distinguished from computer output, or the class of a variable in mathematics.
- 9.1.3 When it cannot be determined whether or not a change of typeform is significant, indicate the change.

Examples:

311

[The lowercase letter I is in a different font only to distinguish it from the numeral 1.]

Go to http://www.iceb.org to learn about UEB rules and examples.

[This example shows two underlined hyperlinks both of which can be activated in the electronic print file. The first is considered a print enhancement which need not be shown in braille. The second marks embedded text and unless shown as such the braille reader is unaware of the presence of the link.]

Let the vector field **v** at *P* be equal to $\mathbf{v}(P)$. Then we can form the scalar product $\mathbf{v}(P)$.d**s**.

[The three letter P's are italicised, but all single capital letters in this text are italicised so it is not considered significant.]

CHAPTER 6

ON TUESDAY, a meeting of portfolio managers was held

```
[The change in typeform for the heading is ignored. The typeform change at the beginning of the paragraph is an embellishment used at the beginning of each chapter in the book and is ignored for this transcription.]
```


9.2.1 A typeform symbol indicator sets the designated typeform for the next letter or symbol.

Examples:

the set of real numbers, \Re

9.2.2 When a typeform symbol indicator precedes a contraction, only the first letter is affected.

Examples:

<u>I have enough knowledge.</u>

("*B*eyond *b*elief!")

Which bowl is broken?

M is for *M*other

9.2.3 If any letter of a contraction other than the first is to be preceded by a typeform symbol indicator, the contraction is not used.

Examples:

mother mother mother mother

[Notice that in a word such as *mother*, where the contraction for *mother* is not used, the contractions for *the, th* or *er* may be used.]

- 9.3.1 A typeform word indicator sets the designated typeform for the next symbols-sequence or the remainder of the current symbols-sequence.
- 9.3.2 The effect of the typeform word indicator is terminated by space (but not by a numeric space or by space at the end of a braille line in a divided symbols-sequence).

Refer to: <u>9.4</u> for more information and examples.

Examples:

Who is <u>for</u> the people?

R.S.V.P.*l'oeil-de-boeuf* (Fr.: bull's eye) [or divided at the end of the braille line] one two-three 1,500,000 1 500 000 1939-1945 [or divided at the end of the braille line] on the paper was written 555 1982 brief/v day<u>time</u> 13.86666 Go to http://www.wikipedia.org for general information.
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 •••</td the ionogenic (ion-forming) form ... referred to as sea waves or (from the Japanese) tsunami. HarperCollins Publishers

96

N(S) is called the empty set or null set.

- 9.4 Typeform passage indicators and terminators
- 9.4.1 A typeform passage indicator sets the designated typeform for the next passage.
- 9.4.2 A passage is three or more symbols-sequences.
- 9.4.3 A passage is terminated by the designated typeform terminator following the last affected symbol.
- 9.4.4 A typeform word indicator may also be terminated within a symbolssequence by the designated typeform terminator.

Refer to: <u>9.7</u>, <u>9.8</u> and <u>9.9</u>.

Examples:

Today's lunchbox note says You can do it!

Charles Dickens wrote *Oliver Twist, Great Expectations* and *A Tale of Two Cities*.

Maybe as an adverb is one word: *Maybe it will rain tomorrow*. **May be** as a verb phrase is two words: *He may be home soon*.

. ••

Click the **Up One Level** button.

When using the typewriter, <u>words were underlined</u> but, when using a word processor, *the italic font is preferred*.

In C:\My Documents\<u>letter to dad 041023</u>.doc, the underlined part is the filename.

```
textbook
```

and/or

syllable emphasis

Radar is from radio detecting and ranging.

Harper Flamingo Canada

the *Globe*'s business section

9.5 Transcriber-defined typeform indicators

9.5.1 Use transcriber-defined typeform indicators for significant print typeform changes other than italics, boldface, underlining or script. This includes but is not limited to: different-sized type; coloured type; crossed-out type; sans serif font; and double, dotted, coloured or wavy underlining. List the transcriber-defined typeform

indicator on the special symbols page or in a transcriber's note giving the print typeform it represents.

Refer to: <u>9.6</u> for discussion and examples of small capitals.

Examples:

In response to the prompt Insert the CD-ROM in drive E:, you put the compact disk in drive E, and press Enter.

In this case the first transcriber-defined typeform is used to indicate a change to a Courier New font.]

Your monday is mutch much busier than my is mine.

[In this case the second transcriber-defined typeform indicates double underlining, the third indicates crossed-out text and the fourth indicates dotted underlining.]

9.6 Small capitals

Note: Small capitals are letters formed as capitals but generally having the same height as lowercase letters such as a, c and e. Print most commonly uses small capitals in two ways as described below.

9.6.1 Although within a document all abbreviations and/or Roman numerals may be in small capitals, in braille these are best transcribed as capitals.

Refer to: Section 8, Capitalisation.

Examples:

9.6.2 Print sometimes uses small capitals for emphasis or distinction. These can usually be recognized by the use of regular size capitals for the letters of the small capitals text which are capitalised. When the change in typeform is significant, use a transcriber-defined typeform indicator in braille.

Example:

The newspaper headline was EARTHQUAKE KILLS THOUSANDS.

In this case the fifth transcriber defined typeform indicates

[In this case the fifth transcriber-defined typeform indicates small capitals.]

9.7 Placement of typeform symbols with punctuation

Note: In determining the placement of typeform indicators and terminators in relation to opening and closing punctuation, interpret the following rules as guidelines.

9.7.1 It is preferred that typeform indicators and terminators and any paired characters such as parentheses, square brackets and quotes be nested; that is, close punctuation and indicators in reverse order of opening.

Examples:

plays (such as Romeo and Juliet)

"Venite exultemus Domino!" his father sang.

9.7.2 When it is clear in the print copy that punctuation is not included in a specific typeform and when a typeform terminator is required for other reasons, place the typeform terminator at the point where the typeform changes. When there is doubt, except for the hyphen, dash and ellipsis, consider the punctuation as being included in the typeform.

9.7.3 For better readability, ignore a change in typeform for closing punctuation when a typeform word indicator is used. Similarly, ignore a change in typeform for incidental punctuation within a passage. However, do not ignore the change when it is important for an understanding of the text, such as when typeforms are being studied.

Examples:

The reading list included: Jane Eyre, Measure for Measure, All Quiet on the Western Front, <u>The New York Sunday Times</u>, **Evangeline**, and from Winnipeg, The Beaver.

 Image: Image:

Foreign words (such as *buon giorno*) are italicized.

[Typeforms are being studied.]

9.8 Multiple typeform indicators for the same text

9.8.1 The order for typeform indicators in braille is not prescribed. Therefore, when braille requires the use of two (or more) different typeform indicators for the same text, the indicators and terminators are best nested – meaning that the first typeform to be opened is the last typeform to be closed.

Examples:

The object of the following sentence is underlined: Lucy Maud Montgomery wrote <u>Anne of Green Gables.</u>

the bank's dictum: *Pecunia Felicitatibus Honoratur. Money* welcomed gladly.

9.9 Typeform passages extending across consecutive same text elements

9.9.1 When transcribing a typeform passage which extends over more than one text element (e.g. a series of consecutive paragraphs), each text element is preceded by the typeform passage indicator and the typeform is terminated only at the point where the typeform changes.

Section 10: Contractions

10.1 Alphabetic wordsigns

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10.1.1 Use the alphabetic wordsign when the word it represents is "standing alone".

Refer to: <u>Section 2.6</u>, Terminology and General Rules, for the definition of "standing alone".

Examples:

When will Will meet us?

Every child from here knows Mr More. "do re mi fa so" That is quite fair and very just. "People, people who need people"
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 < I do not like that watering-can! But, would the people rather do the can-can for us? "You so-and-so-go away!" "I do have some-but I would like more!" You can go-but not yet-just wait! last will and testament a child-like manner will-o'-the-wisp "Do-It-Yourself" come from-not go to (just say so) As You Like It Knowledge is power. But: likes and dislikes childlike and likeness moreover and evermore

10.1.2 Use the alphabetic wordsign when the word it represents is followed by an apostrophe with the following letters: d, II, re, s, t, ve, provided the resulting word is standing alone.

Examples: it'd you'd it'll 🚺 🗄 🗄 🗄 that'll you're you'll people's so's you's can't you've It's not "its" Thomas More's life Mr Just's house I can-you can't! "You've done it!" But: you'm more'n

10.1.3 Preferably do not use the alphabetic wordsign when it is known, or can be determined from the text, or by reference to a standard

dictionary, that the letters the wordsign represents are pronounced separately as in an acronym or abbreviation.

Examples:

10.1.4 Do not use the alphabetic wordsign for a syllable of a word shown in syllables.

Examples:

10.2 Strong wordsigns

• · · ·	••••••••••••••••••••••••••••••••••••••	child
•• ••	· • • • • • • • • • • • • • • • • • • •	shall
•• ••	· • • · · • • • • • • • • • • •	this
• · • • • •	· • • · · • • • • · · • • • • • • • • •	which
•••	• • • • • • • • • • •	out
• • • •	· • · • · • • • • • • • • • • • • • • •	still

10.2.1 Use the strong wordsign when the word it represents is "standing alone".

Refer to: <u>Section 2.6</u>, Terminology and General Rules, for the definition of "standing alone".

Examples:

I shall still find out which **child** did this!

Which CHILD-PROOF lock? still-life and whiskey-still Out-of-the-way (This way out!) "Which way out?" But: childish grandchild outcome without shallot shallow shilly-shally standstill thistle whichever this/that Stillson wrench www.universalchildcare.ca

10.2.2 Use the strong wordsign when the word it represents is followed by an apostrophe with the following letters: d, ll, re, s, t, ve, provided that the resulting word is standing alone.

Examples:			
this'd		which'll	
still's 🕻 🕻 🕯		which've	• • • • • • • • • • • • • • • • • • •
Julia Child's recipe	· · · · · · · · · · · · · · · · · · ·	· · • · · · · • · · · · · · • • · • · •	••••••••••••••••••••••••••••••••••••••
But:			
this'n 🗄 🖬 🖬 🖬			

10.3 Strong contractions

• • • •		and
•••		for
•••	• • • • • • • •	of
· • • •	· • • • • • • • • • • • • • • • • • • •	the
•••	· • · • • • • • • • • • • • • • • • • •	with

10.3.1 Use the strong contraction wherever the letters it represents occur unless other rules limit its use.

Examples:	
andante	England
grandad 👯 🕃 🐮 👯	grandmother
meander ::::::::::::::::::::::::::::::::::::	merchandise
pandemic : : : : : ::	pandowdy
afford	comfort 💠 👬 👪 👪
forgo 👪 👯 🕻	Fortran 🗄 👪 🖬 🗄 🗄
Pforzheimer	
pianoforte	coffee :: : : : : : :
Geoffrey	lofty 🚦 👪 👪 👪
often :::::	profane : : : : : : : :
roof 👪 👪	sofa :::::
tofu 👬 👪 👪	whereof
Athens	bathed
bother 🗄 🕻 🕻	Esther
furthest	Matthew
nevertheless	Parthenon
scythe :::::::::	theatre
thee :::	Theresa : : : : : : : :

Swithin : : : : : : forthwith withe without with a knowledge of and respect for the rules Thelma's roof will withstand the force of the wind and/or the rain. Andy Vandyke proofread the profile.

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10.4 Strong groupsigns

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•• •• ••	· • • • · • · • • • · · ·	sh
•• ••	· • • • · • • • • • · · ·	th
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10.4.1 Use the strong groupsign wherever the letters it represents occur unless other rules limit its use.

aghast 🗄 🗄 🗄 👬
argh!
boredom
cheddar
cough 🗄 😫 🕻
cringed 👯 👬 👪
dingy 🤃 🕄
ed. 👯 🙀
e'er
erase
error 👯 👯 🕻 👯
ginger 👯 🕻 👯
Goering
laugh 🗄 🗄 👪 👫
lowdown
meningitis
meringue
monowheel
nth 🚦 🗄
'ounds
(par) 🤃 🕄 🕻 🏜 👪
psst 🚦 🖬
reroute
sheer :::::::::::::::::::::::::::::::::::

Singh : : : : : :	sou'east
'struth 👬 👬 🕶 🖬	Thomas ::::::::::::::::::::::::::::::::::::
thorough	thou 🗄 🕶
toward	trebled : : : : : : :
wharf ::::	whistle
Xth 🗄 🖬 🗄	xxist ∷ 😳 👀
But:	
ædile	anthill 🗄 👪 🖬 🖬 🖬
blessèd	deshabille
foghorn 👯 🕻 👯 👯 🕻 🕻	kilowatt
noway ::::::::::::::::::::::::::::::::::::	painstaking
parenthood	rawhide
shanghai 😳 😳 🕶 🕶 😳 👀	Stalingrad
viceregal	

ch, sh, th, wh, ou, st

10.4.2 When the use of a strong groupsign for "ch", "sh", "th", "wh", "ou" or "st" would be misread as a word, braille the letters individually.

Refer to: <u>Section 10.2</u>, for further explanation about using these signs to represent words.

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ing

10.4.3 Use the strong groupsign for "ing" wherever the letters it represents occur except at the beginning of a word.

Note: The beginning of a word is defined as the letters-sequence which follows a space, hyphen or dash and which may be preceded by the punctuation and indicator symbols listed in <u>Section 2.6.2</u>, Terminology and General Rules.

Examples:

finger 👯 👪	ginger 👯 🕻 👯	
singe :: .: ::	singeing	
sting	stinging	
brown(ing)	brown <i>i</i> ng	
SmithInge		
Ch'ing Dynasty	• • · • • • • • • • • • • • • • • • • •	
But:		
ingot 🗜 👯 🕻 👯	Ingoldsby	
ingredients	ingrown ∔ 👯 👯 👯	
to-ing and fro-ing		
brown- <i>ing</i>		
Smith-Inge		

10.5 Lower wordsigns

• • • • • •	• • • • • • • • • • • •	be
•••	• • • • • • • • • • • • • • • • • • •	enough
•••	· • • · • · • · • · • · • · • · • · • ·	were
• • • •	• • • • • • • • • • • • • • • • • • •	his
· · • •	· • • • • • • • • • • • • • • • • • • •	in
· · · · · · · · · · · · · · · · · · ·	· • • · · • • • · • • • • • • • • •	was

be, were, his, was

Note: These same signs may also represent punctuation signs.

10.5.1 Use the lower wordsign for "be", "were", "his" or "was" when the word it represents is "standing alone". However, the lower wordsign is not used when in contact with any punctuation sign, including the hyphen and dash, that has only lower dots. For the purposes of this rule, any type of quotation mark which may be present is considered to have only lower dots. When a capitals indicator or a capitals terminator is present, it is disregarded in determining whether to use the lower wordsign.

Refer to: <u>Section 2.6</u>, Terminology and General Rules, for the definition of "standing alone".

Examples:

to be his car Be good. HIS DOG That was right! BE ALL THAT YOU CAN BE Be happy. to be or not to be his hers its "<u>Was</u> that <u>his</u> car?" at my (not his) house He is [was]; they are [were]. (Were there many?) But: his/her What will you be? would-be actor his-and-hers towels

That were–I mean was–mine.

enough

10.5.2 Use the lower wordsign for "enough" when the word it represents is "standing alone". When a capitals indicator or a capitals terminator is present, it is disregarded in determining whether to use the lower wordsign. The lower wordsign is also used in the word "enough's".

Refer to: <u>Section 2.6</u>, Terminology and General Rules, for the definition of "standing alone".

Examples:

in

10.5.3 Use the lower wordsign for "in" wherever the word it represents occurs provided that any sequence in which it occurs includes a sign with an upper dot. For the purposes of this rule, any type of quotation mark which may be present is considered to have only

lower dots. When a capitals indicator or a capitals terminator is present, it is disregarded in determining whether to use the lower wordsign.

Examples: not in here In or out? GO ALL IN in't mother-in-law listen-in Listen!—In this case ... "teach-in" IN-DEPTH ("In no way.") fade in In the box after before between in [open tn]In the table ...[close tn] <in file> in/out But: Come in, stay in. "In any case" 'Is that "in"?'

Lower sign rule

10.5.4 Use the lower wordsigns for "enough" and "in" with any number of lower punctuation signs provided the sequence includes a sign with upper dots. For the purposes of this rule, any type of quotation mark which may be present is considered to have only lower dots. If there is not a sign with upper dots in the sequence, do not use the final lower wordsign.

Examples:

```
It was enough-more than enough.
```

10.6 Lower groupsigns

• • • •	• • • • • • • •	ea
• • • • • •	• • • • • • • •	be
• • • •	• • • • • • • • • •	bb
•••	••• ••• ••• ••• ••• •••	con
••	•• •• · · · · ·	СС
••		dis
•• ••	• • • • • • • • • • • • • • • • • • •	en
• • • • • •	•• •• • • • •	ff
•••	••••• •••••	gg
• • • •	· • • • • • • • • • • • • • • • • • • •	in

be, con, dis

10.6.1 Use the lower groupsign for "be", "con" or "dis" when the letters it represents form the first syllable of a word.

Examples: beatitude Beatrice become begonia behemoth being beneficent beta 🗄 🗄 first-begotten air-conditioned concept congress control re-connect disaster disco dishonest dislike dissect distance self-discipline But: beckon been • belligerent benefit best bethel unbecoming better con :: : : : conch cone inconvenient disc dish : dispirited dishevel : disulphide indistinct

10.6.2 Use the lower groupsign for "be", "con" or "dis" only at the beginning of a word and only when followed by a letter, a contraction, a modified letter or a ligatured letter.

Note: The beginning of a word is defined as the letters-sequence which follows a space, hyphen or dash and which may be preceded by the punctuation and indicator symbols listed in <u>Section 2.6.2</u>, Terminology and General Rules.

Examples:

"Belinda!"

(Contact the *districts*)

'display will minimise'

[extract from computer manual]

But:

McConnell

O'Connor

MetroDisco

be'ave

dis'armony

10.6.3 Do not use the lower groupsign for "be", "con", or "dis", when the letters it represents are followed by a capitals indicator or a capitals terminator.

Examples:	
BeLinda	conCUR
Discord	DISIike

10.6.4 Use the lower groupsign for "be", "con" or "dis" in an abbreviation when it is used in the unabbreviated form of the word and when it is followed by at least one other letter.

Note: If the unabbreviated form is not known and cannot be determined from the text or by reference to a standard dictionary, it is permissible to use the lower groupsign.

 Examples:

 Conn.
 Image: Imag

ea, bb, cc, ff, gg

10.6.5 Use the lower groupsign for "ea", "bb", "cc", "ff", or "gg" when the letters it represents are both preceded and followed by a letter, a contraction, a modified letter or a ligatured letter unless other rules limit its use.

Note: These signs may also represent punctuation signs.

Examples:	
abbé 🗄 🗄 🔆 👬	accept
account	acreage
affirm 🗄 👀 👀 👀	aggressive
agreeable	areas
arpeggio	
baccalaureate	• • • • • • • •
beat 🗄 🗄 👪	begging
borealis	bubble
bureau 🗄 👪 🖬 👯	Caribbean

caveat :: :: :: :: :: ::	create 💠 👬 👬 👬
creation	disease 🔹 🔹 📫
doggone	eggnog
epicurean	flaccid 👯 🗄 👯 👯 👯
genealogy	Hanseatic
head 💀 👀 👯	Judaean 🗄 🥶 👪 👯 👯 👯
likeable	
lineage	mecca : · · · ·
Minneapolis	
Montreal	motheaten ::::::::::::::::::::::::::::::::::::
muffin 👬 👬 🕶 📫	Neapolitan
northeast 🔅 🕻 👯 👯 👬	occupy : : : : :
oceanic	oleaginous
orgeat : : : : :	paean 🚦 🗄 🖬 🖬
pancreas	peaceable
peanut 🚦 🗄 🖬 🖬	rabbi 🚦 🗄 :
really 👪 🗄 🛤 🖬	réchauffé :::::::::::::::::::::::::::::::::::
really :::::::::::::::::::::::::::::::::::	
	réchauffé :::::::::::::::::::::::::::::::::::
Seamus : : : : : : : :	réchauffé : : : : : : : : : : : : : : : : : :
Seamus : : : : : : : : : : : : : : : : : : :	réchauffé : : : : : : : : : : : : : : : : : :
Seamus : : : : : : : : : : : : : : : : : : :	réchauffé : : : : : : : : : : : : : : : : : :
Seamus : : : : : : : : : : : : : : : : : : :	réchauffé : : : : : : : : : : : : : : : : : :
Seamus :: : : : : : : : : : : : : : : : : :	réchauffé : : : : : : : : : : : : : : : : : :
Seamus :: : : : : : : : : : : : : : : : : :	réchauffé : : : : : : : : : : : : : : : : : :

bear 👯 👯	beatitude : ::::::::::::::::::::::::::::::::::
Beatrice	cinéaste
coffee :: :: :: ::	dumbbell
'ead	east : ::
ebb 🤲 👯 👯	ebb-tide
hideaway	idea(s)
Leander	limeade
mah-jongg 🚦 🗄 🖬 🖬 👯 👯 👯	man-eater
pineapple	robb'd
saccharine	sea-green
sheriff's	snuff :::::::::::::::::::::::::::::::::::
sou'east	stiff <i>ly</i>
subbasement	
tea 👪 👯 🗄	theatre

10.6.6 Do not use the lower groupsign for "ea", "bb", "cc", "ff", or "gg" when the letters it represents are preceded or followed by a capitals indicator or a capitals terminator.

ea

10.6.7 Do not use the lower groupsign for "ea" when the letters "ea" bridge a prefix and the remainder of the word.

 Examples:

 deactivate

 geanticline

 i

 i

 i

 i

 i

 i

 i

 i

 i

 i

 i

 i

 i

 i

 i

 i

 i

 i

 i

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 i

 i

en, in

Examples:

10.6.8 Use the lower groupsign for "en" or "in" wherever the letters it represents occur unless other rules limit its use.

LXamples.		
antinode	arena : ::	
been 🗄 🗄 🖬	begin 🐮 👯 🙀	
be'ind	benefit 🗄 🖬 🖬 🖬 🖬	
binary	binomial	
Blakeney	Caen :	
casino 💠 🗄 🖬 🖬	china 🤅 👬	
Chopin 🗄 🗄 🕶 🖬 🕶	citizeness	
deafen 🤲 👯 👯 👯	denote	
deny 🤃 🖬 🕻	disingenuous 👯 🖬 🖬 🖬 🖬	
double-entendre		
e'en 👯 👬 🐔	Einstein	
enceinte	engine 👀 👯 👀	
Enid : • • • •	enormous	
equinox 🤃 👯 🖬 🖬 🖬	faint 🤨 🗄 👪 👪	
feminine	goin' 👯 🕻 🕻	
haven't 🤲 🗄 🖬 🖬 🖬	henna 🤲 👯 👯 🗄	
Inc. :	incline	

```
ingot ....
               in's
               maenad
into
Montenegro
phoenix : : : : : : :
               p(en)
p(in)
               prenatal
queen
               renew
self-induced
shut-ins
              within
to-ing
But:
Athens : : : : : :
               benign
business
               cringed
fenced
               filename
               Francene
forenoon
               ménage
lament
señor
               toenail
```

10.6.9 To prevent it from being misread as "enough", do not use the lower groupsign for "en" when the letters "en" are "standing alone". *Refer to:* <u>Section 2.6</u>, Terminology and General Rules, for the definition of "standing alone".

Examples:

Lower sign rule

10.6.10 Use any number of lower groupsigns and lower punctuation signs following one another provided the sequence includes a sign with

upper dots and no other rules limit their use. For the purposes of this rule, any type of quotation mark which may be present is considered to have only lower dots. If there is not a sign with upper dots in the sequence, do not use the final lower groupsign.

Examples:

10.7 Initial-letter contractions

Dots 45

· • • · · · • · · ·	• • • • • • • • • • • • • • • •	upon
	· • • · • · • • • · • • • • • · • • • •	these
	· • • · • · • • • • • • • • • • • • • •	those
· • • · · · • · •	· • • · • · · • • · · • • · · • • • · •	whose
	· • • · • • • • • • • • • • • • • • • •	word

Dots 456

•

	•• •· •• •• •• •• •• •• •• •• •• ••	cannot
	••••••• •••••••	had
	•• •· •• •• •• •• •• •• •• •• ••	many
	· • • • • • • • • • • • • • • • • • • •	spirit
	· • • · • • • • • • • • • • • • • • • •	their
	· • • • • • • • • • • • • • • • • • • •	world
Dot 5		
· · • • • · • · •	•• •· •• •• •· •• •• •• ••	day
· · • • · · • · •	• • • • • • • • • • • • • • • • • • •	ever
••••	•• • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • •	father

	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	lord
	•• •· •• •• •• •• •• •• •• •• ••	mother
· · •• · • • • · • • •	•• •· •• •• •• •· •• •• •• •• ••	name
	• • • • • • • • • • • • • • • •	one
	•• •· •· •• •· ·· •• •• •· ·· •• ••	part
	••••••••••••••••••••••••••••••••••••••	question
· · • • · · • • • •	• • • • • • • • • • • • • • • • • • •	right
	· • • · • • • • · · · • • • • • • • • •	some
· · · •	· • · • • • • • • • • • • • • • • • • •	time
· · • • · · • • •	• • • • • • • • • • • • • • • • • • •	under
··· •• ·• • ••	••••••••••••••••••••••••••••••••••••••	young
· · · •	· • • · • • • • • • • • • • • • • • • •	there
· · • · · • · ·	••••••••••••••••••••••••••••••••••••••	character
··· •• ·• • ·• ··· •	· • • • • • • • • • • • • • • • • • • •	through
· · • · · • · •	· • • · • • • • • • • • • • • • • • • •	where
· · • • · · • • • •	••••••••••••••	ought
· · · • · • • •	· • • · • · • · • • • • • • • · · · • • • •	work

10.7.1 Use the initial-letter contraction as a wordsign and wherever the letters it represents occur; except for the specific provisions given below; and unless other rules limit its use.

Examples:	
foreword	misworded
sword	word-for-word
Wordsworth	
cannot	
Germany	many-sided
dispirited	spirits
spiritual	
theirs	
SeaWorld	underworld

world-wide worldly Dayton day-by-day G'day Friday father-in-law fatherless grandfather acknowledge knowing Knowles well-known Gaylord lordosis m'lord lordship godmother mother-of-pearl smother motherly : :: :: :: apartheid Bonaparte impartial part-time partake parterre party passe-partout unquestionable questionnaire affrighted aright :::: brighten millwright : • • • • • right-handed righteous Youngstown youngest characteristic characterise throughout is is is in the second sec elsewhere somewhere

whereby	wherein 🗄 🗄
drought 👯 👯 👯	fought 👯 🕴 🐮
Houghton	oughtn't 🗄 👯 🕻 🕻
thoughtful	
coworker :: : : : : : : : :	fireworks 👯 👯 🚺 👯 👯
stonework	unworkable
workday	working
But:	
Dayan 🗄 👯 👯 👬 👬	Sanday 🗄 🕄 🖬 🗄
today :	
chlordane	chemotherapy
Parthenon	where'er
wherever	Dworkin

upon, these, those, whose, there

10.7.2 Use the initial-letter contraction for "upon", "these", "those", "whose" or "there" when its meaning as a whole word is retained.

upon these shores	••••••••••••••••••••••••••••••••••••••
Whose are those?	· • • • • • •
hereupon	whereupon
whosesoever	
thereby	therefore
therein 🗄 👬 👪	thereupon : :: :: :: ::
But:	
coupon 💠 👯 🖬 🖬	Dupont : : : : : : : : : : : : :
hypotheses	Theseus

spathose	Thoseby
bothered	ethereal
isothere	smithereens : : : : : : : : : : : : : : : : : : :
Theresa	withered

had

10.7.3 Use the initial-letter contraction for "had" when the "a" is short, unless other rules limit its use.

Examples:	
Galahad	haddock
Haddon	hadji 🗄 👯 👯 👯
Hadley	hadn't 🗄 🕶 📰 🖬 🖬
But:	
Chad	Hades
Hadrian 🗄 🕶 🗄 🖬 🖬 🖬	menhaden : • • • • • •
shadow	Thaddeus

ever

10.7.4 Use the initial-letter contraction for "ever" when the stress is on the first "e" and when the letters are not preceded by "e" or "i".

```
Examples:
```

asseverate	beverage
Everest	everything
fever ••••••	irreverence
nevertheless	reverend
several	Severn : : : : : : : :
Unilever	

But:

believer
i
i
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here, name

10.7.5 Use the initial-letter contraction for "here" or "name" when the letters it represents are pronounced as one syllable unless other rules limit its use.

Examples: adhere atmosphere cohere hereabout herewith : sphere : : : : : : filename nameable renamed surname But: adhered : : : • • • • bothered coherence elsewhere ethereal heredity Hereford (City) enamel ornament unamended Vietnamese

one

10.7.6 Use the initial-letter contraction for "one" when the letters it represents are pronounced as one syllable, or are in a word ending with the letters "oney", or are in the words "honest" or "monetary" and their derivatives. However, do not use the contraction when the letters "one" are preceded by the letter "o" or when other rules limit its use.

acetone	atonement
baloney 🗄 🗄 🖬 🖬 🖬	bygone 🗄 👪 👯 👪
cone 🗄 🗄 🗄	demonetise
dishonesty	done
everyone	honey 👯 👯 🚼
Jones : · · · · ·	lonesome
Mulroney	one-sided
oneness : : : : :	phone 👪 👯 🗄
scone	stonework
stoney	
But:	
anemone	baroness
baronet 🗄 🕻 🕻 🕻 🕻	Boone
Cantonese	colonel
Conestoga	crooner
cushioned	Donegal
erroneous	Hermione
Indonesia	krone
Monet : ::::::::::::::::::::::::::::::::::	onerous
phonetic : · · · · · · · · · ·	pioneer
poisoned	Rhône : : : : : : : : : : : : : : : : : : :

some

10.7.7 Use the initial-letter contraction for "some" when the letters it represents form a syllable of the basic word.

Examples: blithesome chromosome fearsome handsome lonesomest handsomer somebody somesuch : : : : somewhere twosome But: blossomed (blossom) gasometer 💀 🗄 🖬 🖬 🖬 isometric ransomed (ransom) somersault Somerset

time

10.7.8 Use the initial-letter contraction for "time" when the letters it represents are pronounced the same as the word "time".

Examples:

daytime	maritime
mistimed : : : : : : : : : :	pastime 🚦 🗄 🖬 🖬
sometimes : : : : : : : : :	springtime 🚦 🖬 🖬 📰 🖬
timeously	Timex : : : : : : :

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```
      untimely
      Image: Ima
```

Examples:

10.7.9

blunder 🗄 🗄 🗄	misunderstand
thundered	undergo 🤃 🖬 🖬
underpaid	Wunderhorn
But:	
flounder	laundering
Saunders	underived ::::::::::::::::::::::::::::::::::::
underogatory	

10.8 Final-letter groupsigns

Dots 46

• • • • • • • • • • • • • • • • • • • • • • • • • • • • •	ound
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	ance
· • · • • • • • • • • • • • • • • • • •	sion
• •	less
• · • · • • · • • · • · · · • • • •	ount

Dots 56

	ence
• · • • • • · • · • • • • · • · · ·	ong
	ful

· • · • • • • • • • • • • • • • • • • •	tion
••• ••• ••• ••• ••• ••• ••• ••• ••• ••• ••• •••	ness
••• •• •• •• ••• •• •• •• ••• •• •• ••	ment
· • · • • • • • • • • • • • • • • • • •	ity

10.8.1 Use the final-letter groupsign when the letters it represents follow a letter, a contraction, a modified letter or a ligatured letter unless other rules limit its use.

Examples:	
amount 🗄 👬 🕻 🖬	baroness
bastion	blessing
business 🗄 🖬 🖬 🖬 🖬	
carefully	cement :: :• :• :•
cheerful	chockfull
circuity 💠 👀 💀 👯 🖬	commencement :: : : : : : : : : : : : : : : : : :
comment	confusion 👯 👯 👬 👬
country	county
creation	dancer
deity	Du Plessis
experienced	Du Plessis
-	
experienced : : : : : : : : : : : : : : : : : : :	
experienced : : : : : : : : : : : : : : : : : : :	
expressionless : : : : : : : : : : : : : : : : : :	fences * : : * : *
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expressionless : : : : : : : : : : : : : : : : : :	fences i i i i i i i found i i i i i i i i i i i i i i i i i i i
expressionless is i	fences

```
mongoose
memento
mountain
            noblesse
persuasion
            pity
            prong
pongee
            rotation
rationally
Rountree
            séance
            sinfulness
silenced
            sponge
Spencer
sound
            sublessee
            thence
Tennessee
tongue
            unfulfilled
unless
            unlessoned
Wenceslaus
            wounded
But:
"alone"ness
ancestor
channel-less
congruous 👬 🖬 🖬 🖬
electroencephalogram
encephalitis
            inessential
fiancé
lessee
            moongod
pityard
'ound 😳 💀 💀 [hound]
regardless
```

10.8.2 Do not use the final-letter groupsign when the letters it represents follow a capitals indicator or a capitals terminator.

Examples:

```
AttenTION!
```

ity

10.8.3 Do not use the final-letter groupsign for "ity" in the words: biscuity, dacoity, fruity, hoity-toity and rabbity.

ness

10.8.4 Do not use the final-letter groupsign for "ness" when the feminine ending "ess" is added to a word ending in "en" or "in".

Examples:

```
chieftainess
```

citizeness

10.9 Shortforms

• · • · · · • • · · · · ·	about	• · • · • · · · • • • •	above
•••••• •••••	according	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	across
• • • • • • • • • • • • • • • • • • •	after	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	afternoon
• · • • · • · · • • · • • · · · • · •	afterward	• • • • • • • • • •	again
• · • • · • · · • • • • · · · · · • • • •	against		also
• • • • • • • • • • • • • • • • • • • •	almost		already
• • • • • • • • • • • • • • • • • •	altogether	• • • • • • • • • • • • • • • • • •	although
• • • • • • • • • • • • • • • • • •	always		blind
• • • • • • • • • • • • • •	braille	•• •• · · · • · · · ·	could
••••••• ••••••	declare	•• •• •· •• • • • • • • •• • • • • • • •	declaring

•• •• •		•• •• •	
	deceive		deceiving
• •	either	••••• ••••• •••	friend
	first		good
••••••••••••••••••••••••••••••••••••••	great		him
• • • • • • • • • • • • • • • • • • •	himself	• • • • • • • • • • • • • • • • • • •	herself
· • • • • • • • • • • • • • • • • • • •	immediate		little
	letter	•••••• •••••••	myself
•• • • • • • •	much	•••• •••• ••••	must
•• • • • • • • • • • •	necessary		neither
	paid	•••••••••• •••••••••• ••••••••	perceive
•• •• •• •• •• • •• •• •• •• •• • •• •• •• •• •• • •• •• •• •• ••	perceiving		perhaps
•• • · •• · · • • •	quick	• • • • • • • • • • • • • • • • •	receive
• • • • • • • • • • • • • • • • • • •	receiving	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	rejoice
• • • • • • • • • • • • • • • • •	rejoicing		said
· • • • • · · · • · · •	such	• • • • • • • • • • • • • • • • • • •	today
· • • • • • ·	together	· • • • • • • · · · • · • •	tomorrow
	tonight	• • • • • • • • • • • •	itself
••••• •••••	its	• • • • • • • • • • •	your
••••• •••••• •••••	yourself	••••••••••••••••••••••••••••••••••••••	yourselves
· • • • • • • • • • • • • • • • • • • •	themselves	• • • • • • • • • • • • •	children
•• •• · · · • · • · ·	should	•••••• ••••••	thyself
6 · 6 · 6 · · 6 • 6 • 6 • 6 · 6 · · 6 • • • 6 • 6 ·	ourselves	· • • • • • • · • · • • · ·	would
· · • • • • · · · · • · · ·	because	· · · • • • · • • • · • ·	before
· · • • · • · • •	behind	• • • • • • • • • • • • • •	below
· · • • • • · • • • · • •	beneath	• • • • • • • • • • • •	beside
· · · · ● ● · ●● ● · ● ·	between	· · · • • • • • • • • • • • • • • • • •	beyond
· · • • • • · • • · · • • · · · • • • •	conceive	··· •• •• ••	conceiving
	oneself		

Shortforms as words

10.9.1 Use the shortform whenever the word it represents is "standing alone", regardless of meaning or pronunciation, and regardless of whether the word is used as an ordinary word or as a proper name.

Refer to: <u>Section 2.6</u>, Terminology and General Rules, for the definition of "standing alone".

Examples:

You should receive your letter tomorrow afternoon.

an about-face from the quick-witted go-between

"Good-bye, Miss Little-Smythe!"

(braille-first writing system for blind people)

According to him, *neither Little Rock, Much Hadham nor Port Said* would be much fun.

But:

to-night

above/below

PRINT/BRAILLE

friend@rogers.com

www.living.beyond.myself.org

Shortforms as parts of longer words

- 10.9.2 Use the shortform within a longer word provided that the longer word is "standing alone" (including any affix with an apostrophe) and that the longer word:
 - (a) appears on the Shortforms List given in Appendix 1; or
 - (b) satisfies the provisions of rule 10.9.3.

Note: Rule <u>10.9.2</u> encompasses words which are ordinary words, proper names and artificial or contrived words.

Examples:

aboveground

Image: Image:

Our boyfriends mustn't miss tomorrow's afterdinner speaker!

Mr Letterman could've quickly rebrailled the Aftercare Newsletter.

I am brailling the newsletters' headlines.

But:

[Shortforms are not used in the following examples because the words they represent are not "standing alone".]

```
print/braille
```

unnecessary

```
www.afterschool.gov
```

[These words are not on the Shortforms List pursuant to rules 3–5 of the Rules for List Construction in <u>Appendix 1</u>.]

aftereffect	afterimage
blinded	blinding 🗄 🗄 🖬 🖬

befriended : • • • • • • •	friendy 👯 👯 👯 👯 👯	
abouts 🗄 🗄 🖬 🖬	acrosses	
againe 🗄 🕶 🗄 💽	almosts	
hims 👯 👯 🕻	hereinbefore	
hereinbelow	inbetween	
misconceived		

[These words are not on the Shortforms List, and use of the shortforms they would contain is not allowed under Rule 10.9.3.]

 "couldx"
 Imalayas
 <td

Words not appearing on the Shortforms List

- 10.9.3 Use any of the ten shortforms listed below within a longer word that is not on the Shortforms List, provided the word is "standing alone" (including any affix with an apostrophe) and that any restrictions for the shortform are met.
 - (a) "braille" or "great": Use the shortform wherever it occurs.
 - (b) "children": Use the shortform provided that it is not followed by a vowel or "y".
 - (c) "blind", "first", "friend", "good", "letter", "little" or "quick": Use the shortform if it begins the word and is not followed by a vowel or "y".

Examples:

Braillette board

Marcillat-en-Combraille, France

Greatford Hall

greatgreatgrandchildren

Firstchoice Firstbank "goodz" Mr Feelgreat from Goodge Street Ms Letterkenny's Littleport home. Quicksburg, Virginia But: Blindoc www.braillex.com Firstamerica Goodacre Letterewe Estate Mr Linkletter of Portlittle **Bisquick Pancake Mix** Ted Makegood of Goodena

Avoiding confusion with shortforms

Note: Use the most appropriate of the following rules to avoid confusion if a letters-sequence "standing alone" could be read as a shortform, or as containing a shortform.

10.9.4 Do not use a groupsign that would form part of the shortform.

 Examples:

 Herf gun

 Imst" files

 Imst" files

But:

10.9.5 Use a grade 1 symbol indicator before a letters-sequence that could be read as a shortform when "standing alone", or which occurs at the beginning of a longer letters-sequence.

Examples:

[text message]

10.9.6 Use a grade 1 word indicator before a longer sequence when a letters-sequence after the beginning could be read as a shortform. No other contractions may be used within the longer sequence.

Examples:

10.10 Preference

- 10.10.1 Where there is more than one possible choice in the use of groupsigns, make the selection based on the following principles, unless other rules apply.
- 10.10.2 Give preference to the groupsign which causes a word to occupy fewer cells.

Examples:	
advanced	aright 🗄 🗄 👪
bastion	coherence
Congo 🗄 🕶 🕶 🕻	congratulate
congruity 💀 💀 💀 😳	dancer
dispirited	distinct 🐮 🕻 🕻
disturbed 👀 🖬 🖬 🖬	happiness 👯 🗄 🖬 🖬 🖬
meander ::::::::::::::::::::::::::::::::::::	named : : : : :
oneness : : : : :	thence
timer 🗄 😫 🕃	vengeance
wither :: :	
But:	
captainess :: :: :: :: :: :: :: :: :: :: :: :: :	

10.10.3 Give preference to the strong contractions provided their use does not waste space.

Examples:	
afford	bathed
calisthenics	coffee
effort	gathered 👯 🗄 🖬 👯
Leander : :: :: :: :: ::	offer :::::::::::::::::::::::::::::::::::
office : · · · · ·	other
Parthenon	proffer 👪 🖬 🖬

slithered : : : : : : : :	theatre		
then :::	weathered		
But:			
thence			

10.10.4 Use the lower groupsign for "be", "con" or "dis" in preference to other groupsigns when the letters it represents form the first syllable of a word.

Examples:	
beatitude : : : : : : : : : : : : : : : : : : :	Beatrix
bedraggled	benevolence
benighted	benign : : : : : : :
berated : : : : : : :	
congee •• •• •• ••	congenial 💀 💀 👀 👯
dishonesty	distance
But:	
beach 👯 👯 🚼	beautiful
bed 🗄 👯	benefit 🕴 👀 🐏 👯 🖬
benzene	berth 👯 👯 🚼
dish 🤃 👯 👯	dishevelled

10.10.5 With the exception of 10.10.4 above, use the strong groupsigns in preference to the lower groupsigns.

bacchanal	bear 👯 👯		
fear 👯 👯	heart 👯 👯 🕻		
nearly	nuclear		
saccharine	sting		

But:

egghead

10.10.6 Use the final-letter groupsign for "ence" in the letters-sequences "encea", "enced" and "encer".

Examples:

10.10.7 With the exception of <u>10.10.6</u> above, use the strong groupsigns and the lower groupsigns in preference to the initial-letter contractions and the final-letter groupsigns provided their use does not waste space. [Space-saving takes precedence over this rule.]

adhered	adherent
adherer 🗄 🕶 🕶 🖬	cohered
component :: : : : : : : : : : : :	effulgent
heredity	onerous
opponent : : : : : : : : : : :	Parthian
poisoned	prisoner
shadow	sooner
stoned	telephoned
Thaddeus	toner ::::::::::::::::::::::::::::::::::::
But:	
advanced	

10.10.8 Select the groupsign which more nearly approximates the usual pronunciation of the word and which does not distort the form of the word.

Examples:		
apartheid	asthma	
dishevelled	gingham 👯 🚼 👯 🗄 🚼	
hypotheses	isthmus 🐮 🐮 👬 🖬	
posthumous	stronghold	
towhee it is it it	where'er	
whereas ::::::::::::::::::::::::::::::::::::	wherever	

10.10.9 Do not use a groupsign if its use would seriously distort the pronunciation or hinder the recognition of the word.

Examples:									
chemother	ару		••••• •••••		• · • • • • • • · • • • • •				
chlordane		••••• •••••		• • • • • • • • •		whaddaya	••••••••••••••••••••••••••••••••••••••		• •

Lower sign rule

10.10.10 Do not use the final groupsign or wordsign in a sequence that would otherwise consist wholly of lower signs. For the purposes of this rule, any type of quotation mark which may be present is considered to have only lower dots. When a capitals indicator or a capitals terminator is present, it is disregarded in determining whether to use a lower wordsign.

10.11 Bridging

Compound words

10.11.1 Do not use a groupsign which would bridge the words which make up an unhyphenated compound word.

Examples:

Airedale	Bighorn
blowhard	bottleneck
carthorse	cowherd
dumbbell	egghead
fathead	flearidden 👯 🗄 👀 👀 👀 👀
grasshopper 👯 🖬 🖬 🖬 🖬 🖬 🖬	
hideaway	indiarubber 🔐 👯 👯 🖬 🖬
insofar	Jamestown
kettledrum	
longhand	northeast
painstaking	photoflash 🚦 🖬 🖬 🖬 🖬 🖬 📰
pineapple	rawhide 🕃 🗄 🖬 🖬 🖬
Southend	stateroom
storeroom	stronghold
sweetheart : : : : : : : : : : : : : : : : : : :	tearoom 🖸 🕂 🖬 🕻 🕻
toenail 🚺 🚺 🖬 🖬 🖬 🗄	wiseacre

Aspirated "h"

10.11.2 Do not use the strong groupsigns for "ch", "gh", "sh", "th", or "wh" or the strong contraction for "the" when the "h" is aspirated.

Examples:

mishap 🚦 🖬 🖬 🖬 🗄	mishear : : : : : : : : :
Newhaven	shanghaied : : : : : : : : : : : : : : : : : : :
Sontheim	stronghold
But:	
Brigham 🗄 🗄 💀 👀 🐮 🐮	Chatham
Higham	

Prefixes

10.11.3 Use the lower groupsign for "be", "con" or "dis" when the letters it represents form the first syllable of a word.

Examples:	
bedazzle	bedevil
benighted	benumb ::::::::
berate : : : : : : :	bereave
congeal 💀 💀 🍕	congruent
disharmony	dishonest 💀 💀 😳 📰

10.11.4 Do not use the lower groupsign for "ea" when the letters "ea" bridge a prefix and the remainder of the word.

Examples	S:		
preamplif	fier 🚦 🖬 🗄 🗄 🖬 🖬 🖬 🖬	••	
readjust	• • • • • • • • • • • • • • • • • • •	reappoint	• • • • • • • • • • • • • • • • • • •
reassure	0 · 0 · 0 · · 0 · 0 · 0 · 0 · 0 · 0 · 0		

10.11.5 With the exceptions of <u>10.11.3</u> and <u>10.11.4</u> above, in general use a groupsign which bridges a prefix and the remainder of a word unless its use would hinder the recognition or pronunciation of the word. In particular, use the groupsigns for "ed", "en", "er", "of" and "st".

Examples:

148	3
-----	---

affect 🗄 👀 👯 🖬	aggressive
aqueduct	arise
Benedict	deduce
denominate	denote
denouement	denounce
derail 🤃 🐏 🗄 👀	deregister
derivable	derogatory
edacious	edict
edition	educe
effaceable	effect
enormous	enounce
enumerate	erase
erosion	froward
irredentist 🔅 🖬 🖬 🖬 🖬 🖬 🖬	malediction
mistake 👬 🏥 👬 👬 👬	mistrust
multinomial	
pandemonium	
perinatal	predate
predecease	predecessor
predestine	predicament
prediction	predominate
prerequisite	•
prerogative	
profanity 🚦 🖬 🖬 🗄 🖬 🖬	professor
profile : : : : : : :	profoundly
profusion	redact 👪 👯 🗄 🗄

rededicate redeemable redouble renege renegotiate renewable renumber reread sedate Vandyke But: aerofoil antitype biofeedback centimeter cofounder disulphide filofax gasometer inessential kilowatt infrared microfilm prounion retroflex riboflavin styrofoam subbasement unamended underived

10.11.6 Use a groupsign when the addition of a prefix or the formation of an unhyphenated compound word provides an opportunity to use a groupsign not used in the original word, even if this alters the usual braille form of the original word. However, do not use the groupsign if its use would hinder the recognition or pronunciation of the word.

```
incongruous
indistinguishable
motheaten
redistribution
speakeasy
          spreadeagle
uncongenial
          undisturbed
unfulfilled
          unlessoned
But:
electroencephalogram
```

Suffixes

10.11.7 Generally, use a groupsign which bridges a word and its suffix unless its use would hinder the recognition or pronunciation of the word.

Example.	<i>s:</i>			
		••		
acreage		::		

acreage	agreeable			
arboreal	baroness			
boredom	Brigham : • • • • • •			
changeability 🗄 🗄 🖬 🖬 🖬 🗄 🗄 🗄				
chargeable	Chatham			
delineate	dukedom			
effaceable	European			
finery 👯 🖸 👯 👪	foreseeably			
freedom	genealogy			
governess 🐱 🖬 🖬 🗄	Higham 🗄 🕶 🐏 🖬 📰			
imagery	laureate			
likeable	lineage			

	lioness : : : : : : :
midwifery	mileage : • • • • •
noticeable	oleaginous
orangery	peaceable
permeable	permeate
popedom	rateable : : : : : : : : :
savagery	venereal : · · · · · ·
But:	
biscuity 👯 👯 🐮 👬 👬 👬 👬	chieftainess
Chisholm	citizeness :: •: •: •: •: •: •: •:
fruity 👯 👪 👯 👪 👪	orangeade
rabbity 🚦 🗄 🖬 🖬 🖬	twofold

10.11.8 Use the lower groupsign for "ea", "bb", "cc", "ff" or "gg" at the end of a word when a suffix is added to the word or when it is the first word in an unhyphenated compound word.

 Examples:

 areaway
 Image: Im

Diphthongs

10.11.9 Generally, use a groupsign which bridges a diphthong and an adjoining letter unless the diphthong is printed as a ligature.

```
Betws-y-Coed
Blaenau Ffestiniog
Caernarvon
diaeresis
encyclopaedia
faerie
           Goering
Gruenfeld
           Judaean 🗄 🖬 🖬 🗄 🗄 🗄
maenad
Oedipus
           orthopaedic
paean
           phoenix
Schoenberg
           subpoena
But:
færie
```

10.12 Miscellaneous

Abbreviations and acronyms

10.12.1 Preferably, when it is known, or can be determined from the text or by reference to a standard dictionary, that letters within an abbreviation or acronym that would make up a contraction are pronounced separately as letters, do not use the contraction. In case of doubt, use the contraction.

Examples:

10.12.2 Except as provided for in <u>Rule 10.12.1</u>, use contractions in abbreviations and acronyms, following the provisions of <u>Section 5.7.1</u> and <u>5.7.2</u>, Grade 1 Mode, as well as those of <u>Section 10.1 to 10.11</u>.

Examples:

Alphabetic wordsigns; See <u>Sections 5.7.1</u> and <u>10.1</u>: Xft. G.B.S. C. P. E. Bach J-P. Sartre V & A c 1600 3 N m Macbeth V i 8 or V.i.8 U. of K. Can : [Canada] It. : It. It. It. It. Strong contractions; See Section 10.3: FORTRAN AFofL AFOF prof

Strong groupsigns; See <u>Section 10.4</u>:

ch.7 ch. 7 par3 4-Hers awerty radar BEd : • • ed. Ariz NOW BCer :: • • • St 🗄 🖬 St. CHUM Radio START START Strategic Arms Reduction Treaty] Lower wordsigns; See <u>Section 10.5</u>: 9-in dia. 1 in. Lower groupsigns; See Section 10.6: Belg. : • • • • • cont. nem. con. Dist. ASEAN SEATO 7 ins Gov. Gen. Minn. MiniPC INXS ::::: [rock band "in excess"] 1-800-INFO

 Shortforms; See <u>Sections 5.7.2</u> and <u>10.9</u>:

 CD
 Image: Image:

Computer material

10.12.3 Use contractions in computer material, such as email addresses, web sites, URLs, and filenames when it is embedded in regular text. Use uncontracted braille for computer material, such as computer program code which is displayed on separate lines, as well as any nearby excerpts from the program.

Refer to: <u>Section 11.10.2</u>, Technical Material.

Examples:

[These examples are assumed to be within regular text.]

braille_it_better@learn.org

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children-do-great@teach.net

world@large.com

www.rubberchicken.com/menus

www.one.in.a.hundred.org

http://www.99chances.com

c:\brailledocuments\letters.txt

c:\contractions\wordsigns.doc

c:\InfoForSteven\PhoneNumbers.xls

c:\ideas\child-of-the-sea.doc
c:\poem ideas\my child's smile.doc
c:\2010DIARY\March.txt

Dialect

10.12.4 For words in dialect, follow the contraction rules, <u>10.1 to 10.11</u>.

Examples: coulda :: :: :: [could have] mebbe :: :: :: [maybe] th' **!** [the] pinny [: [penny] somers : : : : : [somewhere] wher **!!!** [where] theirselves if themselves] dint 👯 👬 🚼 [didn't] bofe • both fayther **fayther father** distruction **distruction** [destruction] musta **:** [must have] fer **[for**] goodun : [good one] lyedee : [lady]

Fragments of words

10.12.5 For fragments of words, follow print and follow the contraction rules, <u>10.1 to 10.11</u>.

Examples:		
th- ::::::::::::::::::::::::::::::::::::	say pl 🐮 🗄 👪	••••••••••••••••••••••••••••••••••••••

Tell me wh	
-tion	-ccio
-ean	-ence
-ing 👬 👬 🏜	-ount 👪 🖬 🖬
-in	-est 👪 🤨 👪
-ed	-ar 👬
ar- 📑 👬	be- 👯 👯 👬
-es	-S :
~S	

Guidelines when pronunciation or syllabification is unknown

10.12.6 Several contraction rules are based on the pronunciation and/or syllabification of the word. The Preference rule states that a contraction is not to be used when it would "hinder the recognition of the word". <u>Sections 10.10.8</u> and <u>10.10.9</u> (the Preference rule) refer to the pronunciation of a word.

These rules represent best practices to be applied when the transcriber or proofreader is familiar with the word, when the required information about the word can be found in the text itself or when it is readily available in reference material at hand, such as a dictionary or braille word list.

Examples:

Bighorn 🗄 🗄 💀 🖬 🖬 🖬 🖬	chemotherapy		
Hades :	Hermione		
Mortimer	Newhaven		
OED	n Dictionary]		
Stalingrad	US ::::: [United States]		
Vietnamese			

10.12.7 When the word is unfamiliar and when the pronunciation or syllabification is unknown and difficult to ascertain, then it is

permissible for contraction use to be based on the best judgment of the transcriber and/or proofreader. When translation software is being used, its contraction usage may be followed.

 Examples:

 Berea
 Image: Imag

- 10.12.8 The guidelines relating to unknown pronunciation or syllabification apply in particular to proper names, abbreviations, acronyms, contrived words (as in science fiction) and anglicised foreign words.
- 10.12.9 In all cases, consistency within a transcription is required.
- 10.12.10 It is recognized that these guidelines relating to unknown pronunciation and syllabification may result in a particular word being contracted differently from one transcription to another.

Lisping

10.12.11 For lisped words, follow the basic contraction rules of <u>Sections 10.1</u> to 10.11.

Examples:

Medial punctuation and indicators

10.12.12 When punctuation, an indicator or a terminator occurs within a word, follow print and follow the basic contraction rules of <u>Sections</u> <u>10.1 to 10.11</u>.

Examples:

knowledge

ra <i>th</i> er	verY
you'll 🔡 😳 😫	go'n 👯 🕻 🕻
shall i i i i i i i i i i i	child(ish)
this'll	out'a 🤨 🖸 🔛
grandEST 👯 👯 👯 😳 😳	<i>pro</i> fit ::::::::::::::::::::::::::::::::::::
with(er)	"the"s :::::
THIRSTy	ni(gh)t 🕻 👀 🕯 🍋 🕯
tou ch ed : : : : : : : : : : : : : : : : : : :	flow <i>ing</i>
mist- <i>ing</i> :	thou're
enough 💀 🖬 🗄 🖬	wer(e)
his'n 👯 👯 👪 👪	in't 🤃 🕄
<i>in</i> valid :: :: :: :: :: :: :: :: :: :: :: :: ::	(be)long :
dissent	O'Connor
"en"gage : · · · · · · · · · · · ·	un <i>eaten</i>
CliffEdge	dragg(ing)
rubb'd 🚦 🖬 👫 👬 👬	NorthEast
th <u>o</u> se	there(upon)
HANDsome	WordPerfect
founDAtion	boundary
judg"mental"	
count(less)	CarLess
grey'ound	
togetherness : : : : : : : : : : : : : : : : : :	
"be"friend	

Omitted letters

10.12.13 For a word with omitted letters, follow print and follow the rules of <u>Section 5</u>, Grade 1 Mode, and the basic contraction rules of <u>Sections</u> <u>10.1 to 10.11</u>.

Examples:

Speech hesitation, slurred words, vocal sounds

10.12.14 For a word which shows speech hesitation, slurring or a vocal sound, follow the basic contraction rules of <u>Sections 10.1 to 10.11</u>.

Examples:	
we-e-elli •••••••••••••••••••••••••••••••••••	
a-a-ah—ch-o-o-oh	··· •• •• •• •• •• •• •• •• •• •• ••
mmm-more	shhhh
errrr 👯 🕻 🕻	pfft 🚦 👀
doodle-e-do	
the-e-enk	SO-O-O-O
as-s-s-s	aaarrrggghh 🗄 🗄 🖬 🖬 🖬 🖬
hm 🗄 🕶 🐮	br-r-r 👯 👯 👬 👬 👬 👬
cooooountry	ggggood 👯 🖬 👯 🕻 🕻
Illittle	loooong
sisterrr	

Spelling

10.12.15 For a word which is spelled, follow print and follow the rules of <u>Section 5</u>, Grade 1 Mode, and <u>Section 8</u>, Capitalisation.

10: Contractions

Stammering

10.12.16 For a word which is stammered, follow print and the rules of <u>Section</u> <u>5</u>, Grade 1 Mode, and the contraction rules of <u>Sections 10.1 to 10.11</u>.

Examples:

d-d-day y-y-you b. but c-c-conceive qu-quick q-qood m-m-mine wh-where f-f-father th-the de-ce-ce-cease de-ce-cease s-s-s-super-st-stition th-these g-ghost lea-leave gr-ground m-must w-what c-can't w-was ch-ch-children b-b-below

Syllabified words

10.12.17 For a word shown in syllables, follow the basic contraction rules of <u>Sections 10.1 to 10.11</u>. In particular, do not use an alphabetic wordsign for a syllable of a word shown in syllables.

Examples:

10.13 Word division

Note: It is preferable that transcribers do not divide words at the end of a braille line. Be aware that the braille authorities of some countries have specific guidelines on word division and such guidelines if available should be followed. However, when words do need to be divided at the end of a line, observe the following contraction rules.

Note: The examples in this section first give the appearance of the word in print (that is, undivided) followed by the appearance of the word in braille (that is, divided between braille lines). The two spaces following the hyphen represent the space at the end of the braille line.

10.13.1 Divide a word between syllables even if it means that a strong contraction or a groupsign is not used.

Examples:

anteroom
bandanna 🗄 🗄 👪 👬 👬 👬 👬 👬
Catherine
"Freedom!" :. :. :: :: :: :: :: :: :: :: :: :: ::
history
nightingale
profound.)

Hyphenated words

10.13.2 When a hyphenated word is divided at the existing hyphen, retain the normal braille form of the word. However, if this would result in a sequence consisting only of lower signs, do not use the lower wordsign.

Examples: about-face air-conditioned Aix-en-Provence Al-Azar channel-less CHILD-LIKE ebb-tide father-in-law first-begotten for the teach-in. go-between had-enough mood his-and-hers

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in-depth man-eater mother-in-law out-of-the-way part-time self-control shut-ins teach-in.) "to-ing and fro-ing" word-for-word would-be But: "In-depth teach-in.

Alphabetic wordsigns and strong wordsigns

10.13.3 Do not use the alphabetic wordsign or strong wordsign as part of a word divided between braille lines even when the word it represents appears to be standing alone.

```
      Examples:

      childlike

      everything

      everything
```

ing

10.13.4 Do not use the strong groupsign for "ing" when these letters fall at the beginning of the braille line in a word divided between braille lines.

Examples:

Lower sign rule

10.13.5 In a word divided between braille lines, use any number of lower groupsigns and lower punctuation signs following one another provided the sequence includes a sign with upper dots. For purposes of this rule, when quotation marks are present, they are considered to have only lower dots. If there is not a sign with upper dots in the sequence, do not use the final lower groupsign.

Examples:

Dash

10.13.6 Words joined by a dash may be divided at the end of a braille line either before or after the dash.

10.13.7 Do not use the lower wordsign for "be", "were", "his" or "was" before or after a dash, even when separated from the dash by the end of the braille line.

Example:

10.13.8 Retain the braille form of the lower wordsign for "enough" or "in" in conjunction with the dash even when divided from the dash by the end of the braille line. However, it is also necessary to follow the lower sign rule.

Examples:

be, con, dis

10.13.9 Do not use the lower groupsign for "be", "con" or "dis" when the letters it represents precede the hyphen or fall at the beginning of the braille line in a word divided between braille lines.

```
      Examples:

      bacon

      "Disgusting!"

      "Disgusting!"

      isobedient

      isobedient
```

ea, bb, cc, ff, gg

10.13.10 Do not use the lower groupsign for "ea", "bb", "cc", "ff", or "gg" when the letters it represents precede the hyphen or fall at the beginning of the braille line in a word divided between braille lines.

Examples:

eggnog	• • • • • • • • • • • • • • • • • • •	••••••• •••••••	motheaten	••••••••••••••••••••••••••••••••••••••	
peanut	•••••••••••	• • • · • • • • • • • • •	stiffly		

Final-letter groupsigns

10.13.11 Do not use a final-letter groupsign at the beginning of the braille line in a word divided between braille lines.

Examples:

carefully :::::::::::::::::::::::::::::::::::
CEMENT.)
confusion?
expressionless : : : : : : : : : : : : : : : : : :
fundamentally
rotations
vitality 👪 👯 👯 👯 👬 👫 👬

Shortforms

10.13.12 Do not divide a shortform between braille lines. For a word which includes letters which may be represented by a shortform, retain its

usual braille form as to the use of the shortform when dividing the word between braille lines.

Examples:	
aboveground	••••••••••••••••••••••••••••••••••••••
afterimage	••••••••••••••••••••••••••••••••••••••
befriending."	· · · · · · · · · · · · · · · · · · ·
blinded?)	
blindness 🗄 🗄 👪	
friendliness 👯 👪 🔛	• • • • • • • • • • •
girlfriend	• • • • • •
Goodall	· • · • ·
Goodwood	• • • • • • • • • • • • • • • • • • •
grandchildren 👯 👯 👯 👬	● · ● ● · · · ● · ● ● ·
Hapgood	• • • • • • • • • • • • • • • • • • •
hereinafter	•• • •
hereinbelow	
immediately	
Letterman :: : : : : : : : : : : : : : : : : :	● · ● ● · · · ● · · ●
Linkletter	
preconceived	
unnecessary	• • • •

Section 11: Technical Material

11.1 Introduction

This section presents the underlying rules governing the transcription of Technical Material. Some of the more common symbols are defined and simple examples of their use are included.

More detailed examples, lists of symbols and guidance covering a wider range and complexity of technical material are provided in the publication *Unified English Braille*, <u>*Guidelines for Technical Material*</u>.

Refer to: <u>Guidelines for Technical Material</u> when dealing with works of a technical nature, such as educational material in the areas of Mathematics, Science and Computer Studies.

11.2 Signs of operation and comparison

Some common operation signs

· · · · · · · · · · · · · · · · · · ·	+	plus
· · · · · · • · · · · · • •	_	minus (when distinguished from hyphen)
· · · · · · • • • · · · • •	×	times (multiplication cross)
· · · · • · • · · · · • • ·	÷	divided by (horizontal line between dots)

Some common comparison signs

· · · · ·	=	equals
· • • · · · • • · · · • •	<	less than, or opening angle bracket
	>	greater than, or closing angle bracket

Refer to: <u>Guidelines for Technical Material</u>, Part 3, Signs of Operation, Comparison and Omission, for a full list of operation and comparison signs.

Spacing of operation and comparison signs in non-technical material

11.2.1 When isolated calculations appear in a literary text, the print spacing should be followed.

Spacing of operation and comparison signs in technical material

11.2.2 Follow print spacing in any technical notation where spacing is significant. If unsure of its significance, follow the print spacing as long as the presence or absence of spaces is clear. In cases where print spacing is indeterminate or known not to be significant, spacing should be used to reflect the structure of the expression or equation.

Note: In most common mathematics including algebra, operation signs should be unspaced on both sides but comparison signs should be spaced.

Examples:

[from a school mathematics textbook:]

```
3.9 × 4.1 < 16
```

[a valid statement in the C programming language:]

VarsEqual=(x==y);

Refer to: <u>Guidelines for Technical Material</u>, Part 1, General Principles, for more advice on the spacing of technical material.

11.3 Fractions

- simple numeric fraction line
- general fraction line
- general fraction open indicator
- general fraction close indicator

Simple numeric fractions

11.3.1 A simple numeric fraction is one whose numerator and denominator contain only digits, decimal points, commas or separator spaces and whose fraction line in print is drawn between the two vertically (or nearly vertically) arranged numbers. In such a case a numeric fraction line symbol is used between the numerator and denominator and continues the numeric mode.

Mixed numbers

11.3.2 Mixed numbers should be treated as two unspaced numeric items.

Examples:

Fractions written in linear form in print

11.3.3 The numeric fraction line is not used when the print is expressed linearly using an ordinary forward slash symbol. In such a case the same symbol is used as in print.

Example:

3/8 of the class are girls.

General fraction indicators

11.3.4 If the numerator or denominator is not entirely numeric as defined in <u>11.3.1</u>, then the general fraction indicators should be used. Write the opening indicator, then the numerator expression, then the general fraction line symbol, then the denominator expression and finally the closing indicator.

Note: If an opening or closing fraction indicator appears within a grade 2 passage, it may need a grade 1 indicator.

Note: Both numerator and denominator may be any kind of expression whatever, including fractions of either simple numeric or general type.

Examples:

Refer to: <u>Guidelines for Technical Material</u>, Parts 6.4 and 6.5, for more examples of general fractions.

11.4 Superscripts and subscripts

- level change down (subscript)
- level change up (superscript, exponent or power)
- braille grouping open
- braille grouping close

Definition of an item

- 11.4.1 The scope of a level change indicator, that is, the symbol(s) affected by it, is the next "item". An item is defined as any of the following groupings:
 - An entire number, i.e. the initiating numeric symbol and all succeeding symbols within the numeric mode thus established (which would include decimal points, commas and simple numeric fraction lines).
 - An entire general fraction, enclosed in fraction indicators (Section 11.3).
 - An entire radical expression, enclosed in radical indicators (Section 11.5).
 - An arrow (<u>Section 11.6</u>).
 - An arbitrary shape (Section 11.7).
 - Any expression enclosed in matching pairs of round parentheses, square brackets or curly braces.
 - Any expression enclosed in the braille grouping indicators.

If none of the foregoing apply, the item is the next individual symbol.

Superscripts and subscripts within literary text

11.4.2 If a superscript or subscript appears within a grade 2 passage, it may need a grade 1 indicator.

Examples:

The points P_1 and P_2

[The points P sub 1 and P sub 2]

Smith wrote a paper⁵⁶ which says . . .

[Super 56 indicating a footnote]

The formula for water is H₂O

[The formula for water is H sub 2 endsub O]

Algebraic expressions involving superscripts

11.4.3 When transcribing algebraic expressions involving superscripts, braille grouping symbols may be required.

Refer to: <u>11.4.1</u> for the definition of an item.

Examples:

 x^{2y} \therefore \therefore \therefore \therefore \therefore \therefore \therefore x^{2y} \therefore x^{2y} \therefore \therefore \therefore \therefore \therefore \therefore \therefore \therefore x^{2y} \therefore \therefore \therefore \therefore \therefore \therefore \therefore x^{2y} \therefore x^{2y} \therefore \therefore \therefore \therefore \therefore \therefore x^{2y} \therefore x^{2y} \therefore x^{2y} \therefore \therefore x^{2y} x^{2y} \therefore x^{2y} x^{2y} \therefore x^{2y} x^{2y} x^{2y} \therefore x^{2y} x^{2y

Refer to: <u>Guidelines for Technical Material</u>, Part 7, Superscripts and Subscripts, (7.4, 7.5, 7.7, 7.8 and 7.9), for the treatment of superscripts or subscripts which are on multiple levels, left displaced, or directly above or below the item. Also for bars, dots, tildes etc that appear directly over or under items.

11.5 Square roots and other radicals

- open radical (root)
- close radical (root)

Square roots

11.5.1 The expression inside the square root sign in print (the radicand) should be preceded by the open radical sign and followed by the close radical sign. The radicand itself may be any expression whatsoever, and may therefore contain radicals as well as other mathematical structures.

Note: If an open or close radical sign appears within a grade 2 passage, it may need a grade 1 indicator.

Examples:

 $\sqrt{9} = 3$ [the square root of 9 = 3] $\sqrt{x^2 + y^2}$ [the square root of 9 = 3]

[the square root of x squared + y squared end root]

Cube roots etc

11.5.2 In print the radical index, if present, is printed above and to the left of the radical sign. This index is placed in braille as a superscript expression immediately following the opening radical symbol.

Example:

 $\sqrt[3]{8} = 2$ [the cube root of 8 = 2]

11.6 Arrows

Simple arrows

•••		arrow indicator
	\rightarrow	simple right pointing arrow [east]
	←	simple left pointing arrow [west]
	1	simple up pointing arrow [north]
	Ļ	simple down pointing arrow [south]

11.6.1 A simple arrow has a standard barbed tip at one end (like a v on its side, pointing away from the shaft). The shaft is straight and its length and thickness are not significant. These arrows are represented by an opening arrow indicator and the appropriate closing arrow indicator.

Examples:			
ice \rightarrow water		· · • • • • · · • • • • •	· • • · · • • • • • • • • • • • • • • •
step 1	· • • • • • • • • • • • • • • • • • • •	· • • • · · • • · ·	
\downarrow	· · • • • • • • • • • • • • • • • • • •		
step 2	· • • • • • • • • • • • • • • • • • • •	· • • • · · • • • ·	

Arrows with non-standard shafts

- •• single line shaft
- double line shaft
- •: dotted line shaft
- 11.6.2 All shaft symbols can be elongated by repetition, with one cell for a short shaft, two for a medium shaft and three for a long shaft. The shaft symbols are placed between the opening and closing arrow indicators.

Example:

Arrows with non-standard tips

- regular barb, full, in line of direction
- regular barb, full, counter to line of direction
- 11.6.3 If an arrow has unusual tips, decide which is the head before you choose the direction of your closing indicator.

Note: The tip(s) and shaft segment(s) are transcribed between the opening and closing indicators. These items are expressed in logical order, that is starting with the arrow tail and progressing towards the head, even if that runs counter to the physical order (as in the case of a left pointing arrow).

Example:

Less common arrows

11.6.4 Less common arrows can also be indicated in braille.

Refer to: <u>Guidelines for Technical Material</u>, Part 13, Arrows, for the treatment of:

- arrows with shafts which are diagonal, curved or dotted;
- arrows with tips which are half barbed, curved or straight; and
- equilibrium arrows that occur in Chemistry.

11.7 Shape symbols

- shape indicator
- transcriber-defined shape indicator
- shape terminator
- regular (equilateral) triangle
- square
- circle

Refer to: <u>Guidelines for Technical Material</u>, Part 14, Shape Symbols and Composite Symbols, for more examples.

Use of the shape termination indicator

11.7.1 If a shape is followed by a space then no termination symbol is needed. If however the shape symbol is followed by punctuation, or unspaced from a following symbol, then the shape terminator must be used.

Examples:

△ ABC : ABC

Transcriber-defined shapes

11.7.2 The description within transcriber-defined shapes should be a short series of initials or a single grade 1 word. They should not be used if the print symbol is already covered elsewhere in the code. The definitions of all shape symbols should be available to the reader in either a transcriber's note or on a special symbols page.

Example:

A smiling face 🕲 used as an icon throughout a book could be defined as

Physical enclosure indicator

11.7.3 The physical enclosure indicator signals a combining of the item just prior (the outer symbol) with the item immediately following it (the inner symbol), where "item" is as defined in <u>Section 11.4.1</u>.

Example:

Refer to: <u>Guidelines for Technical Material</u>, Part 14.3, of Shape and Composite Symbols, for superposition, horizontal juxtaposition and vertical juxtaposition of print symbols.

11.8 Matrices and vectors

- big (multi-line) opening round parenthesis
- big (multi-line) closing round parenthesis

Placement of multi-line grouping symbols

11.8.1 When a print grouping symbol stretches across several lines of print, use the appropriate enlarged grouping symbol in braille. Repeat the grouping symbols directly under each other on each line. Use blank lines before and after such arrangements for clarity.

Example:

$$I = \begin{pmatrix} 1 & 0 \\ 0 & 1 \end{pmatrix}$$

Refer to: <u>Guidelines for Technical Material</u>, Parts 15.1 to 15.7 of Matrices and Vectors, for more enlarged grouping symbols and examples.

11.9 Chemistry

Use of capital indicators and terminators

11.9.1 The general UEB principles on the choice of single letter, word or passage mode apply; in particular, a capital terminator should not be used within a two-letter chemical element symbol. Using single capital indicators for chemical formulae provides a uniform appearance to the braille; nevertheless, there may be a clear advantage in using capital passage mode in some cases. Letters representing chemical elements should never be contracted.

Examples:

 $2NaOH + H_2SO_4 \rightarrow Na_2SO_4 + 2H_2O$

Refer to: <u>Guidelines for Technical Material</u>, Parts 16.1 to 16.7, of Chemistry, for more examples.

11.10 Computer notation

Definition of computer notation

11.10.1 Computer notation is any text written in a formal syntax that is designed to allow computers to utilize the text directly for technical purposes related to the computer itself. Examples include computer programs written in procedural languages such as Java, C++, COBOL, and various "assembly" languages, nonprocedural scripting and markup languages such as XHTML, and data files prepared to meet the input requirements of specific programs.

Note:

- "Displayed" computer notation is presented in one or more lines separate from the surrounding literary text;
- "inline" computer notation is presented within ordinary literary text, for example, an email address mentioned within a sentence.

Grade of braille in computer notation

11.10.2 A displayed computer program or program fragment should normally be transcribed in grade 1 braille; nearby excerpts from a program

that is displayed in grade 1 should preferably also be in grade 1, for consistency. Other expressions, such as email addresses, web sites, URLs, filenames, and computer expressions not displayed on separate lines, should normally be transcribed in grade 2 braille.

Refer to: <u>Section 2</u>, Terminology and General Rules, for the "Standing Alone" rule; and also to <u>Section 10</u>, Contractions, for examples of email and web addresses.

Refer to: <u>Guidelines for Technical Material</u>, Part 17, Computer Notation, for an example of a program fragment.

Section 12: Early Forms of English

· • • • • • • • • • • • • • • • • • • •	3	lowercase yogh
· · · · • • • • • • • • • • • • • • • •	3	capital yogh
· • · • · • • · ·	þ	lowercase thorn
· · · · • · • · · · • • • •	Þ	capital thorn
• • • • • • • • • • •	ð	lowercase eth
· · · · • • • • · · · · · · · · · · · ·	Ð	capital eth
· • · • · • • •	р	lowercase wynn (wen)
· · · · • • • · · · • • • •	Р	capital wynn (wen)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	æ	ligature ae (ash)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Æ	capital ligature AE (ash)
• • • • • • • • • • • • • • • •	œ	ligature oe
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Œ	capital ligature OE
· • · · · · · · · · ·		macron above following letter

12.1 Follow the provisions of <u>Sections 4.2</u> and <u>4.3</u>, Letters and Their Modifiers for the treatment of ligatured letters and the macron.

Example:

Hwær wære ðū?

12.2 Use uncontracted braille for Old English, that is, English written before about 1100.

Example:

Bēoð gē stille.

12.3 In Middle English (c. 1100 to c. 1450) the use of contractions is optional. When contractions are used, have regard for spelling variations.

Example:

[Luke 2:10 from Wyclif Bible (c. 1380) with uncontracted braille:] & be aungil seide to hem, nyle 3ee dreeden, lo sobli I euangelise to 3ou a gret io3e bat shall be to alle puple.

[examples using contracted braille:]

```
al (all)
bothe (both)
citye (city)
could (cold)
daynty (dainty)
dolefull (doleful)
fful (full)
forthe (forth)
gentillesse
gentlenes (gentleness)
hadde
heathenesse (heathendom)
loue (love)
monethe (month)
onely (only)
ouer (over)
sones (sons)
soone
swolewith (swallows)
```

```
worlde is is is in the second second
```

12.4 Use contracted braille for Early Modern English (c. 1450 to c. 1650) having regard for spelling variations.

Example:

[Luke 2:10 in the original spelling of the King James Bible (1611):] And the Angel said vnto them, Feare not: For behold, I bring you good tidings of great ioy, which shall be to all people.

· · · •	•		•••	•••	•••	 •	••	۰.	••••		•	, ÷	•••		÷.			•				· · · · •		•	÷ •	-	•	•	- ÷ •	•••
		•••	::	• •		 ٠	۰.		•	•		• •		• · • ·	÷.						•• ••	•	•	• •		• • •	•			•
		••		 	٠	 ٠	•••	•			•		•	• • • •		•	•		•••	۰.	• · • ·	•	•	••						

Section 13: Foreign Language

Foreign code signs used in this section (non-UEB symbols)

•	,	
• • • • • •	3	Greek epsilon
• • • • • •	μ	Greek mu
• · · ·	OU	Greek omikron ypsilon
••	Ç	French c-cedilla
••	é	French e-acute
•••	à	French a-grave
•••	á	Spanish a-acute
· • • ·	è	French e-grave
· • • ·	é	Spanish e-acute
 	Ú	Spanish u-acute
•• ••	Î	French i-circumflex
••	Ô	French o-circumflex
• · • •	Ņ	Igbo u-dot-under
· • • · • •	OI	Greek omikron iota
· • • · · •	Ò	Igbo o-dot-under
· · · · •		French opening italic passage
•••	ż	Spanish question mark [opening question mark is inverted in print]
•••	()	French parenthesis (round bracket), opening and closing
• • • • • •	Í	Spanish i-acute
· • · ·	Ó	Spanish o-acute
· •		French closing italic passage
• • • • • •		French capital sign

13.1 Determining what is foreign

13.1.1 A foreign language is any natural or artificial language in use now or in the past other than English. It may be written in Roman or non-Roman script. Any form of English transliterated in non-Roman script is also to be treated as foreign. 13.1.2 In determining whether a word or phrase is foreign or anglicised, consistency within a book is much more important than consistency between books. The publisher's (or where possible the author's) intention, if ascertainable, should be regarded as paramount. Attention should be paid to typography, since italics or (less frequently) bold or quotation marks are often used to distinguish words regarded as foreign from those regarded as anglicised.

Refer to: <u>13.2</u>, for the treatment of contractions in words, phrases or passages, regarded as foreign.

Example:

Her pirouette was lovely but her fouetté en tournant was spectacular.

13.1.3 In doubtful cases the default position is to consider the word or phrase as foreign. Therefore titles (for example) in another language should be regarded as foreign, even though English and foreign titles are not differentiated.

Note: If a standard dictionary is consulted to settle a question which cannot be resolved by reference to the book itself, care should be taken to ensure that the dictionary is actually purporting to answer the question with which the transcriber is confronted. It should also be remembered that even good dictionaries do not agree among themselves as to what words are to be regarded as foreign.

Note: If using a dictionary, ensure that it is less than ten years old. Words or expressions that appear as main entries in the body of the dictionary are considered anglicised unless they are identified as foreign. Consult the usage guide for the dictionary to determine how foreign terms are identified, e.g. by a distinctive typeface or by a special print marker.

Examples:

The newspapers with the largest circulation are *Yomiuri Shimbun* and *Asahi Shimbun* from Japan followed by *The Times of India*.

In 1916, the British *Queen Mary* was sunk by the German *Derfflinger* during the Battle of Jutland.

[entries in a bibliography:]

- 1. Conlogue, Ray. *Impossible Nation: The Longing for Homeland in Canada and Quebec*. Toronto: Mercury Press, 2002.
- 2. Le Roy Ladurie, Emmanuel. "Quand Paris était capitale du monde." *Le Nouvel Observateur*, August 2001.
- 3. Ménard, Marc. *Élements pour une économie des industries culturelles*. Montreal: SODEC, 2004.
- 4. Weber, George. "The World's Ten Most Influential Languages." *Language Today 2*, December 1997.

13.2 Using UEB contractions

13.2.1 Except as provided for in the note below, do not use contractions in words, phrases or passages which are regarded as foreign, including any English words within the expression.

Note: It is permissible to disregard this rule provided that there are appropriate braille authority policies and guidelines in place which transcribers in your country are expected to follow to ensure that ambiguity is avoided.

Examples:

The *foih-chai,* the trains, tugged freight cars that banged together like thunder.

Genji's suitor played the shamisen.

Therese is very chic.

Schwiegervater is the German word for "father-in-law."

The word "demonstrate" comes from the Latin **demonstrare**.

"Un momentito, por favor," said Carlos.

In Nigeria, I prefer to travel by *Ife Sine Chi* long distance buses.

The announcement started: Lord Byron era un poeta muy conocido.

"*Prenons courage, Marguerite,*" Jeanne said, her arm linked firmly in mine.

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We went out for a lekker braai of pap en wors.

[Note the contractions in this example, and refer to the note attached to 13.2.1. above.]

- 13.2.2 Do not use grade 1 indicators for foreign material in uncontracted braille.
- 13.2.3 Use UEB contractions in words, phrases, proper names and personal titles which are regarded as anglicised. However, do not use a contraction that would unduly distort the pronunciation or structure of a word.

Examples:

The expression memento mori is sometimes used with some of the sense of carpe diem.

While he was in Sarajevo, the beautiful Ferhadija mosque had been dynamited.

```
Sr. y Sra. Juarez were impressed with the locally-made pancetta served at the pensione in San Marino, Italy.
```

Murasaki Shikubu wrote The Tale of Genji.

13.3 Guidelines for contracting anglicised words derived from specific languages

- 13.3.1 Greek: In the letter combination "sth", use the contractions "th" or "the" (representing the letter theta) rather than the contraction "st".
- 13.3.2 Scandinavian languages: Use the "ar" contraction in the letter combination "aar" (in which aa represents a with circle above)
- 13.3.3 Welsh: Do not use the contraction "ed" in the letter combination "edd" (dd represents a distinct letter). Similarly use "ff" contraction in the letter combination "off" rather than the contraction for "of".

13.4 Representing accented letters

- 13.4.1 There are two ways to represent accented letters in braille within a UEB context:
 - by means of UEB signs for modifiers (13.5), or
 - by means of the foreign code signs used in braille production in the country where the language is spoken (<u>13.6</u>).

Hybridisation of these two methods is to be avoided since UEB symbols and foreign code signs are different and may conflict.

13.5 Using UEB signs

	i	inverted exclamation mark
• • • • • • •	ć	inverted question mark

- 13.5.1 Use UEB signs to represent accented letters, punctuation or Greek letters where it is judged likely that most readers will be unfamiliar with the foreign code signs, and where the nature of the material does not create a reasonable expectation that they should learn them. UEB signs should therefore be used:
 - for occasional foreign words and phrases occurring in English context;
 - for longer foreign passages such as conversation occurring in English novels or in other English works regarded as primarily for leisure reading.

Refer to: <u>Section 4</u>, Letters and their modifiers, for the complete list of UEB signs for accents and Greek letters.

Examples:

He walked past the great masses of the grandes écoles.

Sietske took out the parcel and handed it to the soldier. "*Ein Geschenk für uns* [A gift for us]," he laughed. Then he opened the tin box.

"*Ah, gute Butter* [butter, delicious]. *Danke, Fräulein* [Thank you, young lady]."

-*¡Qué idea más buena!*-exclaimed Pedro's mother.

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For σ read "standard deviation."

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Use Δv to denote difference or change in velocity.

- 13.5.2 When UEB signs are used, do not use foreign code contractions or other signs from the foreign language code such as punctuation or indicators.
- 13.5.3 When UEB signs are used, do not use code switch indicators.

13.6 Using foreign code signs

- 13.6.1 Use foreign code signs in the representation of foreign language material where there is substantial occurrence of the foreign language, as in:
 - grammars and other instructional materials,
 - English commentaries on foreign works for study,
 - bilingual texts (whether set out in parallel or consecutively) such as official forms, opera libretti and other translations, and
 - any situation where significant knowledge of the foreign language is presupposed or being taught.
- 13.6.2 In a foreign language braille code, it is possible to have six categories of sign:
 - 1. Signs representing the basic elements of the script (whether alphabet, syllabary, or other);
 - 2. Signs representing accents (including indicators of breathing, tone, stress or quantity);
 - 3. Punctuation signs and indicators;
 - 4. Ancillary signs (including any signs liable to occur in literary contexts, which may or may not be more prevalent in technical material, such as the ampersand, asterisk, bullet, at sign, dagger, and the signs representing basic mathematical operations);
 - 5. Technical signs, which are unlikely ever to appear in literary contexts;
 - 6. Contractions.

Refer to: The most recent edition of *World Braille Usage* which lists by country signs used in categories (1) to (3).

- 13.6.3 When foreign code signs are used, do not use UEB contractions.
- 13.6.4 When using foreign code signs for basic elements of the script and/or for accents, that is, categories (1) and (2) above, it is permissible though not required to use the foreign code signs for any of the other categories. Do not use a UEB sign that conflicts with an element in the foreign code. Also do not mix foreign code signs and the equivalent UEB signs for the same language in the same book.

Examples:

[from a textbook teaching Spanish:]							
To indicate profession or vocation:							
Carlos Fuentes es escritor.	Carlos Fuentes is a writer.						
Yo soy músico.	I am a musician.						
Tú eres doctora.	You are a doctor.						

```
[examples in a textbook teaching French:]
Il y a deux crèches en ville.
There are two day-care centers in the city.
Ils se sont mariés il y a deux ans.
They got married two years ago.
[from a textbook teaching Igbo:]
It was delicious.
                                                        O toro uto.
[from a workbook for children learning French:]
Answer the following questions using «il y a ... (que), ca faît ... (que),
depuis» (sometimes there are several possibilities).
Il y a combien de temps que tu vas dans ce collège? (deux ans)

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[from the grammar section of a Spanish-English dictionary:] Asking Questions:

¿está aquí tu hermano? ¿el agua está fría? tú le diste el dinero, ¿verdad?	is your brother here? is the water cold? you gave him the money, didn't you?						

[from a bilingual, English and French, government document:] Make the certified cheque or money order (*for Licence Renewal Fee only*) payable to the Minister of Finance.

Libellez le chèque certifié ou le mandat (*concernant le droit de renouvellement du permis seulement*) à l'ordre du ministre des Finances.

- 13.6.5 List all foreign code signs used on a preliminary page.
- 13.6.6 Use foreign code contractions, i.e. category (6) above, only for a language written in Roman script which is also one of the official languages of the country from which the document originates or for which it is requested. However, in no case is the use of foreign code contractions mandatory.

13.7 Code switch indicators

13.7.1 Code switch indicators are used to enclose non-UEB material, in this case material using foreign code signs. Do not use UEB signs within code switch indicators.

Example:

[from a textbook teaching Greek:] The unemphatic forms, μου, μοι, με, are enclitic.

- 13.7.2 When the nature and extent of the enclosed material can be clearly deduced from formatting or other contextual considerations, as when parallel texts in English and another language are set out in tabular form or when the foreign language is identified by a change of typeface, then code switch indicators may be omitted.

Example:

[from the grammar section of a Spanish-English dictionary:] No article is used after **qué** and **vaya** in exclamations: **¡qué lástima!** what a shame

13.7.3 If the main body of text is in a foreign language with occasional words or passages of English interspersed, e.g. by way of commentary or explanation, it is recommended that the function of the code switch indicators should be reversed, so that they enclose the UEB material. Explain this reversal in a transcriber's note.

Example:

[French:]

Souvent précédé d'une conjonction de subordination telle que "quand", "dès que" (immediately), "aussitôt que".

· • · • • · • · • • • • • • • • • • • •		

13.8 Mixed-language literature

13.8.1 For a literary work in which English and one or more other languages are interspersed freely with no typographical or other distinction, consider the braille codes of the languages involved and the issue of ambiguity in determining whether to use UEB contractions and how to represent accented letters. Do not mix UEB signs and foreign code signs for any particular print character or braille indicator.

Note: The following example is a mix of English and Spanish. In this example, foreign code signs are used for accented letters since it is expected that readers would be familiar with them. Uncontracted braille is used to avoid ambiguity. UEB signs are used for punctuation and indicators.

Example:

We begin to walk away, right next to the foam-flecked horses (they sweat right down to their hooves; rico el olor). Nos damos cuenta de que la perspectiva desde el comienzo de la carrera es, si cabe, even more thrilling. From here, we can sense the anticipation of riders and their mounts; the horses turn and twitch, reluctant or bored, y los jinetes intentan contenerlos, inspirarlos. They take off like a shot, four legs pumping together, rider crouched down on the haunches and then rising up, some of them, nearly vertical. Algunos caballos fustigados to within an inch of their lives, it seems—thwack se escucha el crop—mientras otros run like hell, simplemente porque sí. No látigo required. [from *Killer Crónicas* by Susana Chávez-Silverman]

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Section 14: Code Switching

Code switching indicators

- non-UEB word indicator
- non-UEB word terminator
- opening non-UEB passage indicator
- closing non-UEB passage indicator

Note: The opening non-UEB passage indicator is actually two UEB symbols: \vdots followed by \vdots

Code switching indicators for IPA Braille

	[opening IPA bracket; opening square bracket with switch from UEB to IPA
· • · • · • • • · · • •]	closing IPA bracket; closing square bracket with switch from IPA to UEB
· · · · · · · · · · · · · · · · · · ·	/	opening IPA slash; opening solidus (forward slash) with switch from UEB to IPA
	/	closing IPA slash; closing solidus (forward slash) with switch from IPA to UEB
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		general opening IPA indicator
		general IPA terminator

Note: The closing IPA bracket, the closing IPA slash and the general IPA terminator are IPA indicators, not UEB indicators.

Code switching indicators for music braille

- opening music indicator when following a space
- music terminator when following a space

Note: The music terminator is a music braille indicator, not a UEB indicator.

Code switching indicators for Nemeth Code

- opening Nemeth Code indicator followed by space
- Nemeth Code terminator preceded by space

Note: The Nemeth Code terminator is a Nemeth Code indicator, not a UEB indicator.

Non-UEB symbols used in this section

•••	Y	Greek letter gamma
• · • • · ·	े	Greek rough breathing mark
• • • • • •	I	Greek letter iota
• • • • • •	λ	Greek letter lambda
••	ن	Arabic letter noon
• • • • • •	0	Greek letter omicron
• • • • • •	п	Greek letter pi
••	ق	Arabic letter qaf
••	ँ	Arabic damma
••	é	French e-acute
• • • • • •	(Nemeth left parenthesis
· • • · • •	è	French e-grave
· • • · • •	é	Spanish e-acute
· • • • • •	ط	Arabic letter tah
· • • • • •)	Nemeth right parenthesis
• • • • • •	ê	French e-circumflex
• • • • • •	С	IPA open o
• • • • • •	þ	Music flat sign
• • • •	ſ	IPA esh
• • • • • •	ë	French e-diaeresis
• • • • • •	Ŋ	IPA eng
••• ••	ð	IPA edh
••	ñ	Spanish n-tilde
• • • • • •	OI	Greek omicron iota
•••	1	Nemeth numeral 1
•••	2	Nemeth numeral 2
••	ံ	Arabic sukun
••	¥ A	IPA length mark
••	3	Nemeth numeral 3
· · • • · • • • •	\rightarrow	British Chemistry right arrow
• • • •	4	British Chemistry subscript numeral 4
•••	4	Nemeth numeral 4

 ● • ●	Ð	IPA schwa
	¿?	Spanish question mark
· · · • ·	٢	IPA fish-hook r
•••	7	Nemeth numeral 7
· · · · •	0	Nemeth numeral 0
• • • • • •	I	IPA small capital i
· • · · • •	+	Nemeth plus
· • · ·	Ó	Spanish o-acute
	r	IPA turned r
		Music four-four time signature
· • · •	ä	German a-umlaut
••	-	Nemeth minus
· • · · · · • •	v	IPA wedge above
• • • •		Nemeth superscript indicator
	I	IPA vertical stroke (superior)
· • • • • · • • • · · • • •		BANA Computer Braille Code continuation indicator
		BANA Computer Braille Code end Computer Braille Code
		IPA vertical stroke (inferior)
		BANA Computer Braille Code caps lock indicator
· · · · · · · · · · · · · · · · · · ·		British Chemistry two letter chemical element sign
· · · ● · ·		Nemeth baseline indicator
· • · · · •		French capital sign
· • • · · · · ·	=	Nemeth equals
	θ	IPA theta
· · • • · · • • •	ë	Afrikaans e-diaeresis
· · · · · · · · · · · · · · · · · · ·	+	British Chemistry plus
· · · · · •	1	Nemeth mathematical comma

14.1 Purpose of code switching

14.1.1 The purpose of code switching is to indicate text which is transcribed in a braille code other than UEB. This may include:

- braille codes for languages other than English, such as Afrikaans, French, German, Spanish, Vietnamese
- <u>IPA Braille</u>: An Updated Tactile Representation of the International Phonetic Alphabet [see <u>14.4</u>]
- <u>New International Manual of Braille Music Notation</u> [see <u>14.5</u>]
- <u>The Nemeth Braille Code for Mathematics and Science Notation</u> [see <u>14.6</u>]
- other non-UEB braille codes for subjects such as mathematics, chemistry, computer science (assuming the transcriber has a special reason for switching, which in general is not necessary in UEB)
- historical braille codes
- proposed braille codes

14.2 When to use code switching indicators

14.2.1 When a text is to be read in hardcopy braille, do not use code switching indicators when the nature and extent of the non-UEB text can be determined by the context or format.

Examples:

[Spanish in column format:]

pensión completa	full board								
¿puedo verlo?	may I see it?								
baño compartido	private bath								
	••• •• •• •• •• •• •• •• •• •• •• •• •• •• •• •• •• •• •• •• •• •• •• ••								
	••• •• <t< th=""></t<>								
	••• •• <t< th=""></t<>								

[boldface used only for Spanish:]

No article is used after qué and vaya in exclamations.

14.2.2 In situations where code switching indicators are not used, ensure that the format or position of the non-UEB material is clear to the reader. Often the text itself will make it obvious, for example: when the introduction of a bilingual dictionary explains that the entry word in French is followed by its pronunciation in IPA; when the text has

two columns headed "Spanish" and "English"; or when the text states that the words in German are in bold. If the text does not explicitly draw attention to the non-UEB material, use a transcriber's note to explain the format or position of non-UEB braille codes.

- 14.2.3 Use code switching indicators for non-UEB material when writing braille that will be translated into print or where context and format cues are not obvious or meaningful, for example when a file will be read electronically.
- 14.2.4 Use code switching indicators when the non-UEB braille would be ambiguous and when the nature and extent of the non-UEB text cannot be determined by the context or format.

Example:

[quotes not limited to French:]

"Peut-être" has an alternate expression, "peut-être que".

14.2.5 When code switching indicators with identifiers are used, explain them either on a special symbols page or in a transcriber's note positioned before the affected material. [See <u>14.3.3</u>.]

14.3 How to use code switching indicators

Refer to: <u>14.4</u> for code switching indicators for IPA Braille, to <u>14.5</u> for code switching indicators for music braille and to <u>14.6</u> for code switching indicators for Nemeth Code.

14.3.1 Place the non-UEB word indicator immediately preceding the symbols-sequence to which it applies. Its effect is terminated by the next space or by the next non-UEB word terminator.

Examples:

[Arabic:]

The word "cotton" is derived from the Arabic تُطْن (qutn).

[German:] (For "alongside of" use "längs".)

14.3.2 Use the non-UEB passage indicators when there are three or more symbols-sequences in the non-UEB braille code. The effect of a non-UEB passage indicator continues until the closing non-UEB passage indicator.

14.3.3 When more than one non-UEB braille code is used in a particular text and it is not obvious which one is intended, modify the opening non-UEB passage indicator by augmenting it with an identifier. Before the dot 3, insert a short, mnemonic sequence of letters (no contractions) which is unique within the text. The transcriber determines the abbreviations used. Refer to ISO Standard 639-3 (on the website of SIL International, <u>http://www-01.sil.org/ISO639-3/codes.asp</u>) for a list of two- and three-letter designations for languages.

Examples of commonly-used languages:

- 14.3.4 Identifiers are not used with the non-UEB *word* indicator. If an identifier is required, use the opening and closing non-UEB *passage* indicators, even if it is only for one symbols-sequence.
- 14.3.5 When more than one non-UEB braille code is used in a text, use a non-UEB indicator without an identifier only when its meaning is obvious or when it refers to the same code as the next previous non-UEB passage within the paragraph.

Example:

[Greek with other non-UEB codes used elsewhere:]

Pericles praised government by the many (oi $\pi o \lambda \lambda oi$) rather than by the privileged few (oi $\dot{o}\lambda i\gamma oi$).

14.3.6 Close any non-UEB passage before opening another non-UEB passage. In other words, return to UEB first even if another non-UEB passage will start immediately.

Example:

[English, Afrikaans, German:] The speed limit on all highways is 120 kilometres per hour. Die Spoedgrens op alle snelweë is 120 kilometers per uur. Die Geschwindigkeitsbegrenzung auf allen Autobahnen beträgt 120 Kilometer pro Stunde.

14.3.7 When the non-UEB text is displayed on one or more lines separate from the UEB text, the opening and closing non-UEB passage indicators may each be placed on a line by itself.

Example:

[British Chemistry Code. This example assumes the transcriber has a special reason for switching to this code for chemical notation, which in general is not necessary in UEB.]

- 14.3.8 Except in the previous instance, place non-UEB indicators at the exact point of change from UEB to non-UEB and back, unspaced from the symbols-sequence(s) which they precede or enclose. That is, do not insert spaces which are not already present in the text.
- 14.3.9 When a non-UEB code provides a symbol for switching out of that code, use that symbol in preference to the non-UEB word terminator or the closing non-UEB passage indicator.

Example:

[BANA Computer Braille Code. This example assumes the transcriber has a special reason for switching to this code for computer notation, which in general is not necessary in UEB.]

The macro command will change all occurrences of ROM to RAM, resulting in: WHEN IN RAME DO AS THE RAMANS DO,...

14.3.10 In the rare instance where the closing non-UEB passage indicator could realistically be misread as a symbol within the non-UEB code, instead use an opening non-UEB passage indicator augmented with the identifier "en" (for English) to indicate that UEB is resuming. If even this would be misread, the transcriber may devise a safe indicator to resume UEB.

14.4 IPA Braille within UEB text

Refer to: <u>4.4</u> for the eng and schwa when not used in phonetic or phonemic material.

- 14.4.1 Transcribe phonetic and phonemic material according to the provisions of *IPA Braille: An Updated Tactile Representation of the International Phonetic Alphabet.* The following sections provide for switching between UEB and IPA Braille.
- 14.4.2 Generally phonetic material within a text is identified in print by being enclosed in square brackets. Use the opening IPA bracket and closing IPA bracket. The effect of the opening IPA bracket is terminated only by the closing IPA bracket and not by a space.

Example:

Low vowels became mid vowels [a:] to [e:] as in [na:mə] to [ne:m] *name.*

14.4.3 Phonemic material within a text is normally enclosed in solidi (forward slashes) in print. Use the opening IPA slash and the closing IPA slash.

Example:

Pronounce /l/ and /r/ as described above.

14.4.4 When IPA Braille and one other non-UEB braille code are used in a text, then non-UEB indicators can be used without identifiers for the other non-UEB braille code.

Example:

[IPA and French:] Practice the sound [e] as in the [te] and mélodie [melo'di].

14.4.5 When print does not use square brackets or solidi (forward slashes) to identify IPA material, and when the nature and extent of the material cannot be determined by context or format, then use the general opening IPA indicator and the general IPA terminator to enclose the IPA material.

Example:

Find the symbols č, ə, ∫ in the chart.

14.4.6 To temporarily switch from IPA Braille to UEB, use the general IPA terminator and return to IPA Braille with the general opening IPA indicator.

Example:

[ðə 'nɔıθ ,wɪnd (garbled section) dɪs'pjurɪŋ]

14.5 Music braille within UEB text

Refer to: <u>3.18</u> for the natural, flat or sharp when used within UEB text and not within musical notation.

14.5.1 Transcribe music according to the provisions of <u>New International</u> <u>Manual of Braille Music Notation</u>. Follow its provisions to determine when indicators are needed to switch between UEB and music braille. 14.5.2 To switch from UEB to music braille when an indicator is necessary, leave a space and place the opening music indicator immediately before the musical notation.

Example:

```
The key signature is
```

14.5.3 Follow the provisions of <u>New International Manual of Braille Music</u> <u>Notation</u> for returning to UEB from music braille.

> Example: 4 is the time signature. is in the time signature.

14.6 Nemeth Code within UEB text

- 14.6.1 When technical material is transcribed according to the provisions of <u>The Nemeth Braille Code for Mathematics and Science Notation</u> within UEB text, the following sections provide for switching between UEB and Nemeth Code.
- 14.6.2 Place the opening Nemeth Code indicator followed by space before the sequence to which it applies. Its effect is terminated by the Nemeth Code terminator preceded by space.

Note: The spaces required with the indicator and terminator do not represent spaces in print.

Examples:

The result will be in the form (ax + by)(cx + dy), where ac = 12, bd = -10, and ad + bc = 7.

He said, "4x+3y is the numerator."

Example:

14.6.3 When the Nemeth Code text is displayed on one or more lines separate from the UEB text, the opening Nemeth Code indicator and the Nemeth Code terminator may each be placed on a line by itself.

Solution. Again we group the first two terms and the last two terms. $4x^3 - 12x^2 - x + 3 = 4x^2(x - 3) - (x - 3)$ $= (x - 3)(4x^2 - 1)$ = (x - 3)(2x + 1)(2x - 1).

Section 15: Scansion, Stress and Tone

15.1 Scansion, Line Marking

· • · •		line indicator
		vertical line
	I	double vertical line
	/	solidus (forward slash)
	//	double solidus

15.1.1 Follow print for the foot sign and the caesura to mark the pauses in speech, as in scanning poetry.

Examples:

To BE / or NOT to be, // THAT / is the QUESTion.

To err is human; || to forgive, divine.

15.1.2 When the line by line format of print (as in a poem) is changed to a linear format in braille, use the line indicator to mark the breaks between lines. The line indicator is unspaced from the preceding line and is followed by space before the following line.

Examples:

Rose kissed me to-day,-

Will she kiss me to-morrow?

-Austin Dobson

A mad kingfisher rocketing about in the red fog at sunrise —Malcolm Lowry

15.2 Stress

- primary stress sign
- secondary stress sign
- 15.2.1 Follow print when capitals, letter modifiers, change of typeface and/or symbols written on the line above are used to indicate stress either in the syllables of a word or in the words in a phrase, sentence or poem.

Examples:

or/gan/i/ZA/tion

hót bréath on my ánkles,

-Ezra Pound

Ōvěr thě / sēa, pāst / Crēte, // ŏn thě / Syriăn / shore ...

-Charles Kingsley

counterintélligence

commercial [kə mûr shəl]

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 <t / / x / x Х / Х Х 1 But soft! What light through yonder window breaks? Diagram of poetic metre: . - . - / . . - - / . - . - / . . -

15.2.2 When print uses marks before or after a syllable to indicate it is stressed, use the primary and secondary stress signs and follow print placement. Describe what print sign is used on the symbols page or in a transcriber's note.

Refer to: <u>Section 3.11</u>, General Symbols and Indicators, for the prime sign used for feet and minutes; and to <u>*Guidelines for Technical</u>* <u>*Material*</u>, Part 11 for the prime sign used in technical material.</u>

Examples:

ap' ri hen' shan (apprehension)

[The first stress mark is a prime (or accent) and the second is a bold prime.]

kombi^Ineshn (combination)

[The first stress mark is a low vertical line and the second is a high vertical line.]

met'ə môr"fə sis (met a mor pho sis)

[The first stress mark is a prime and the second is a double prime.]

<u>This</u> station | is <u>Oval</u>.

[The stress marks are high vertical marks.]

15.3 Tone

· • · • • • • • • • • • • • • • • • • •	e.g. 1	high tone
	e.g. ⊦	mid tone
· • · • • · · · · · · · · · · · · · · ·	e.g. ↓	low tone
	e.g. 🕇	high rising
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	e.g. 🔎	low rising
· • · • • • · · · • • · · · • • • • • •	e.g. `	high falling
· • · • • · · · · · · · · · · · · · · ·	e.g. 🔪	low falling
· • · • • • • • • • • • • • • • • • • •	e.g. ≯	global rise
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	e.g. ↘	global fall
· • · • • · · · • · · · ·	e.g. 🔨	rise-fall
$\begin{array}{cccc} \bullet & \bullet & \bullet & \bullet \\ \bullet & \bullet & \bullet & \bullet & \bullet \\ \bullet & \bullet &$	e.g. 🗸	fall-rise
· • · • • • · • · • • • ·	e.g.↓	down step
· • · • • • • • • • • • • • • • • • • •	e.g. ↑	up step

- 15.3.1 Follow print when capitals and change of typeface are used to indicate tonal patterns of speech, as in texts for learners of English as a second language.
- 15.3.2 For other modes of indicating tone, including arrows and position, use the tone symbols in this section.

Examples:

Lhote was the *s*leader.

There was a \sandstorm, v first of all.

[Change of tone is indicated with an arrow before a word.]

[Change of tone is indicated by a change of level and also with arrows. The bullet before a word in braille represents a bullet under the word in print.]

'Alan's not <u>here</u>.

He's gone 'home?

[The stress marks are high vertical marks. The first tone mark is a low left-leaning mark and the second is a high right-leaning mark.]

15.4 Phonetic scansion, stress and tone

15.4.1 When scansion, stress and tone are shown with the International Phonetic Alphabet, use the most recent edition of <u>IPA Braille</u>: An Updated Tactile Representation of the International Phonetic Alphabet.

Section 16: Line Mode, Guide Dots

16.1 When to use line mode

16.1.1 Use line mode when it is advantageous to draw "lines" using standard braille cells. Line mode enables regular text and diagrammatic lines to coexist without ambiguity, even within the same diagram.

Refer to: <u>Section 7</u>, Punctuation, for the hyphen, dash, long dash and low line; <u>*Guidelines for Technical Material*</u>, Part 4, for the lines in spatial calculations and other technical diagrams; and Part 16.7, for the lines and bonds in structural formulae used in chemistry.

- 16.1.2 Use line mode for features such as lines separating column headings from items in the column and for horizontal lines before and after text set apart in boxes.
- 16.1.3 Do not use line mode when the attributes of the lines or their relationship with one another is important, such as in the study of geometry or the measurement of angles.
- 16.1.4 Do not use line mode when the diagram would be too complex to be read by touch.
- 16.1.5 Where the technology is available, it is often better to represent lines in diagrams with tactile graphics.

16.2 Horizontal line mode

- horizontal line mode indicator
- simple (solid single) horizontal line segment
- •: variant horizontal line segment (e.g. dotted or dashed)
- double horizontal line segment
- triple horizontal line segment
- corner with upward vertical
- corner with downward vertical
- crossing with left-leaning diagonal line
- crossing with vertical line
- crossing with right-leaning diagonal line
- horizontal line mode terminator

- 16.2.1 Use the horizontal line mode indicator to open any horizontal line.
- 16.2.2 Within horizontal line mode, use the appropriate horizontal line segments, corners and/or crossings to represent the line.

Examples:

[a solid single horizontal line:]

[a dashed horizontal line:]

_ _ _ _ _

[a triple horizontal line:]

[a line with an upward pointing corner midway and a downward pointing corner at the right end:]

[a line with a vertical crossing:]

[a line with both a left-leaning crossing and a right-leaning crossing:]

16: Line Mode, Guide Dots

[horizontal lines on a balance sheet:]

Income	865.73									
Expenditure	700.41									
Balance	165.32									
	· · · · · · · · · · · · · · · · · · ·									

[horizontal lines following column headings in a table:]

		1		2			
	x	у	x 	У			
mode	7	12	5	7			
median	9	11	6	7			
mean	10	10	6	8			
· • • · · · · · · · · · · · · · · · · ·							
		· · · ·			••••••••		• • •
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16.2.3 When an arrow is continuous with the line, use the arrow indicator to signal the beginning of the arrow. Use the symbols of arrow mode to represent the arrow. Upon completion of the arrow, horizontal line mode continues.

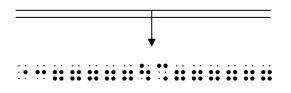
Refer to: <u>Guidelines for Technical Material</u>, Part 13, for rules on constructing arrows.

Examples:

[a line with a right-pointing arrow at the right end:]



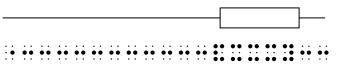
[a double line with a downward-pointing arrow at the mid-point:]



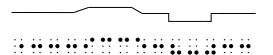
16.2.4 To represent distinctive types of lines, use any valid single-cell UEB symbol in addition to those indicated in <u>16.2.2</u> and excluding the arrow indicator . the horizontal line mode terminator and space. In general, choose a symbol based on the physical shape of the line or feature (such as a junction) rather than the meaning of the symbol in other contexts.

Examples:

[a line with a small rectangle near the right end:]



[a line with different levels and with slanted and right-angle changes of level:]



16.2.5 Terminate horizontal line mode with a space or with the horizontal line mode terminator.

Examples:

[a line with a circle at the right end:]

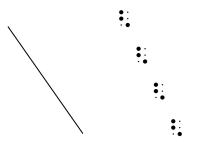
16.2.6 When the variant horizontal line segment is used, describe the line it represents on the special symbols page or in a transcriber's note.

16.3 Diagonal and vertical lines

- vertical single solid line segment
- first variant vertical line segment (e.g. dotted or dashed)
- second variant vertical line segment (e.g. double line)
- left-leaning single solid diagonal line segment
- right-leaning single solid diagonal line segment
- variant left-leaning diagonal line segment
- variant right-leaning diagonal line segment
- 16.3.1 Use the diagonal and vertical line segments to represent diagonal and vertical lines. Group one or more of the symbols together when necessary providing that each group is surrounded by spaces.

Examples:

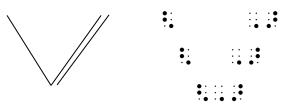
[a single solid left-leaning diagonal line:]



222

[a dotted vertical line:]

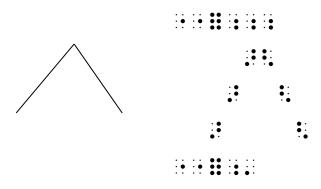
[a left-leaning diagonal line meeting a double right-leaning diagonal line in a v-shape:]



16.3.2 When a line drawing is in a text in contracted (grade 2) braille and when a string of two or more of the line-drawing characters : and : occur in the line drawing in any combination and surrounded by spaces, use grade 1 mode for the line drawing.

Example:

[a right-leaning diagonal line meeting a left-leaning diagonal line in an inverted v-shape:]



16.3.3 When a variant vertical or diagonal line segment is used, describe the line it represents on the special symbols page or in a transcriber's note.

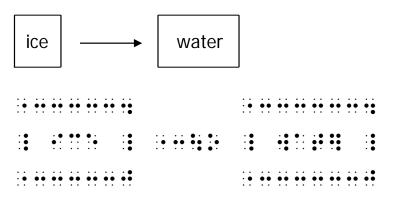
16.4 Combining lines

- 16.4.1 When lines and other elements of a diagram, such as an arrow, are touching or continuous, position the corresponding braille characters adjacent to one another, horizontally, vertically or diagonally.
- 16.4.2 Even when the left end of a horizontal line forms a corner or crossing with a vertical or diagonal line, open the horizontal line with the horizontal line mode indicator.

Examples:

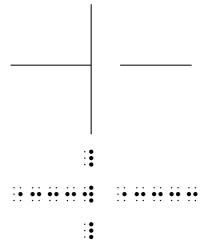
[a box, wider than tall:]

[box diagram:]

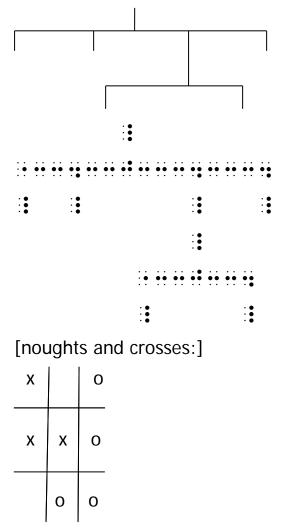


[a vertical line with a horizontal line extending rightward from its midpoint:]

[a vertical line crossing a horizontal line with a gap in the horizontal line to the right of the vertical line:]



[a diagram representing an organizational chart or a family tree:]



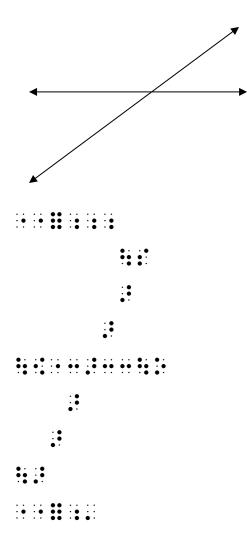
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[a right-leaning line crossing a horizontal line with an arrow at both ends of both lines:]

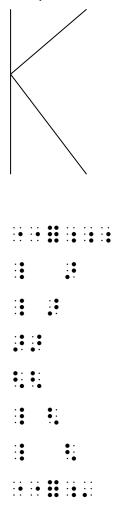


16.4.3 Use a space before and after each vertical line segment, first variant vertical line segment, second variant vertical line segment or combination of such segments. When a vertical line or one of the variant vertical lines crosses a diagonal line or is too close to a diagonal line, use either of the diagonal line segments or variant diagonal line segments.

Examples:

[two vertical lines crossed by a left-leaning diagonal line:] *Note:* This diagram is almost too complex to use line mode.

[a vertical line touched by two diagonal lines on the right to form a K-shape:]



16.5 Guide dots

- guide dots (with space before and after)
- 16.5.1 Use a sequence of guide dots to enable the reader to track across a gap in the braille, as in a table of contents or columned material. Use no less than two guide dots and leave at least one blank cell before and after the sequence.

Examples:	
[excerpt from a table of contents:]	
Slovenia	10
Croatia	16
Bosnia & Herzegovina	29
	• · · • · · •

••	••			•••		•	•••		· •	· •	· •	· •	· •	· •	· •	 .•	· •	· •	· •	· •	· •	· •	• •	• ē	•••	•
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[excerpt from a table of elements:]

Element	Symb.	At. #	
lawrencium	Lr	103	
lead	Pb	82	
lithium	Li	3	
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· · · · · · · · · · · · · · · · · · ·	• • • • •	• • • • • • • • • •	· • • • • • • • • • • • • • •
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Appendix 1: Shortforms List

This Appendix provides the Shortforms List and following it, the rules used to determine whether a word is added to the list. The Shortforms List is maintained by the ICEB Code Maintenance Committee.

Refer to: <u>Section 10.9</u>, Contractions, for the rules on the use of shortforms.

The list

Added "s" and apostrophe "s"

When an "s" or apostrophe "s" is added to any word on the list, use the shortform with the following three exceptions:

abouts	•••	ē	·	•	 				
almosts	•••	ē	·		• · · •	•	•	٠	•
hims		٠	•						

about 🗄 🗄

	aboutface	aboutfaced	aboutfacer
	aboutfacing	aboutturn	aboutturned
	eastabout	gadabout	hereabout
	knockabout	layabout	northabout
	rightabout	roundabout	roustabout
	runabout	southabout	stirabout
	thereabout	turnabout	walkabout
	westabout	whereabout	
above	• • • • • • • • • • • • • • • • • • •		
	aboveboard	aboveground	abovementioned
	hereinabove		
accord	ing 🗄 🗄		
	accordingly	unaccording	unaccordingly
		Second Edition 2013	

across

readacross

after 🗄 🗄

afterbattle	afterbirth	afterbreakfast
afterburn	afterburned	afterburner
afterburning	aftercare	afterclap
aftercoffee	afterdamp	afterdark
afterdeck	afterdinner	afterflow
aftergame	afterglow	afterguard
afterhatch	afterhatches	afterhour
afterlife	afterlight	afterlives
afterlunch	afterlunches	aftermarket
aftermatch	aftermatches	aftermath
aftermeeting	aftermidday	aftermidnight
aftermost	afterpain	afterparties
afterparty	afterpiece	afterplay
aftersale	afterschool	aftersensation
aftershave	aftershock	aftershow
aftershower	aftersupper	aftertaste
aftertax	aftertaxes	aftertea
aftertheatre	afterthought	aftertime
aftertreatment	afterword	afterwork
afterworld	hereafter	hereinafter
morningafter	thereafter	thereinafter
whereafter	whereinafter	
afternoon 🗄 👯 👬		

afternoontea

goodafternoon

midafternoon

afterward 🗄 🗄 😫

again 🗄 👯		
hereagain	hereinagain	thereagain
thereinagain	whereagain	whereinagain
against 🗄 👯 🚼		
hereagainst	thereagainst	whereagainst
almost 🗄 🗄 👯		
already 🗄 🗄 👯		
also 🗄 🗄		
although 🗄 🗄 🚼		
altogether 🗄 🗄 👪		
always 🗄 🗄 👯		
because :		
before 👪 👯		
beforehand		
behind 🔅 👯		
behindhand		
below :		
belowdeck	belowground	belowmentioned
beneath 🗄 🕄		
beneathdeck	beneathground	
beside :		
between 🗄 😫		
betweendeck	betweentime	betweenwhile

beyond ::::

blind :: : [See also <u>Section 10.9.3 (c)</u>]

blindfish	blindfishes	blindfold
blindfolded	blindfolder	blindfolding
blindly	blindman	blindmen
blindness	blindnesses	blindside
blindsided	blindsider	blindsiding
blindsight	blindstories	blindstory
blindworm	colorblind	colorblindness
colorblindnesses	colourblind	colourblindness
colourblindnesses	deafblind	deafblindness
deafblindnesses	purblind	purblindly
purblindness	purblindnesses	snowblind
snowblindness	snowblindnesses	unblindfold
unblindfolded	unblindfolding	

braille :: :: [See also Section 10.9.3 (a)]

brailled	brailler	braillewriter
braillewriting	brailley	misbraille
misbrailled	rebraille	rebrailled
rebrailler	unbraille	unbrailled

children ::: :: [See also Section 10.9.3 (b)]

children'swear	brainchildren	fosterchildren
godchildren	grandchildren	greatgrandchildren
lovechildren	schoolchildren	stepchildren

conceive

conceived

conceiver

conceiving 👯 👯 👯

could 🗄 🗄		
could've	coulda	couldest
couldn't	couldn't've	couldst
deceive 🗄 🗄 👪		
deceived	deceiver	archdeceiver
undeceive	undeceived	undeceiver
deceiving 👯 👯 👯 undeceiving		
declare 👯 👯		
declared undeclared	declarer	undeclare
declaring		
either 🤃		

first ::: [See also Section 10.9.3 (c)]

firstaid	firstaider	firstborn
firstclass	firstclasses	firstday
firstdayer	firstfruit	firstfruiting
firstgeneration	firsthand	firsthanded
firstling	firstly	firstness
firstnight	firstnighter	firstrate
firstrated	firstrating	firststring
feetfirst	headfirst	tailfirst

friend ::: [See also Section 10.9.3 (c)]

friendless	friendlessness	friendlessnesses
friendlier	friendlies	friendliest
friendliness	friendlinesses	friendly
friendship	befriend	boyfriend
defriend	galfriend	gentlemanfriend

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- gentlemenfriends ladyfriend penfriend unfriendlier unfriendlinesses womenfriends
- girlfriend manfriend schoolfriend unfriendliest unfriendly
- guyfriend menfriends unfriend unfriendliness womanfriend

good :: :: [See also <u>Section 10.9.3 (c)</u>]

goodafternoon goodby goodbying goodbyeing gooder goodest goodfellow goodfellowship goodheartedly goodheartedness goodhumored goodhumoredly goodhumorednesses goodhumour goodhumouredly goodhumouredness goodie goodish goodliest goodliness goodlooker goodlooking goodman goodmen goodnature goodnatured goodness goodnaturedness goodnight goodsize goodtempered goodtemperedly goodun goodwife goodwilled goodwives goodyear feelgood supergood

goodbye goodday goodevening goodhearted goodhumor goodhumoredness goodhumoured goodhumourednesses goodlier goodlook goodly goodmorning goodnaturedly goodnesses goodsized goodtime goodwill goody scattergood

great : [See also Section 10.9.3 (a)]

greataunt	greatbatch	greatcircle
greatcoat	greaten	greatened
greatener	greatening	greater

greatest	greatgrandaunt	greatgrandchild
greatgrandchildren	greatgranddad	greatgranddaughter
greatgrandfather	greatgrandfatherhood	greatgrandma
greatgrandmother	greatgrandmotherhood	d greatgrandnephew
greatgrandniece	greatgrandpa	greatgrandparent
greatgrandparenthood	l greatgrandson	greatgranduncle
greathearted	greatheartedly	greatheartedness
greatheartednesses	greatly	greatnephew
greatness	greatnesses	greatniece
greatsword	greatuncle	

herself

him 👯 🚼

himbo	himboes

himself

immediate

immediately immediateness

its ∷ 🗄

itself :: ::

letter : :: [See also Section 10.9.3 (c)]

letterbomb	letterbombed	letterbomber
letterbombing	letterbox	letterboxed
letterboxer	letterboxes	letterboxing
letterbodies	letterbody	lettered
letterer	letterform	letterhead
letterheading	lettering	letterman
lettermen	letteropener	letterperfect
letterpress	letterpressed	letterpresses
letterpressing	letterquality	letterspace

Rules of L	Jnified English Braille	Appendix 1: Shortforms List		236
	letterspaced	letterspacing	lettertext	
	bloodletter	chainletter	hateletter	
	loveletter	newsletter	reletter	
	relettered	relettering	unlettered	
little	See also <u>Sect</u>	ion 10.9.3 (c)]		
	littled	littleneck	littleness	
	littlenesses	littler	littlest	
	belittle	belittled	belittlement	
	belittler			
much	•• •: •: ••			
	muchly	muchness	forasmuch	
	inasmuch	insomuch	overmuch	
must	•• ·• • • •			
	must've	musta	mustard	
	mustier	mustiest	mustily	
	mustiness	mustn't	mustn't've	
	musty			
myse	If 🚼 👪 👯			
neces	sary 👯 👯			
	unnecessary			
neithe	er 🚦 👯 👯			
onese	elf :• :• :•			
ourse	lves 👯 👯 🗱			
paid	•• •• • · • • • · • •			
	highlypaid	illpaid	lowlypaid	
	overpaid	poorlypaid	postpaid	
	prepaid	repaid	underpaid	
	unpaid	wellpaid		

Second Edition 2013

perceive 🚦 👯 🗄 👪		
perceived	perceiver	apperceive
apperceived	apperceiver	misperceive
misperceived	misperceiver	unperceive
unperceived		

apperceiving	misperceiving	unperceiving
11 J	I J	I J

perhaps : : : :

perhapses

quick : [See also Section 10.9.3 (c)]

	quickdraw	quicken	quickened
	quickener	quickening	quicker
	quickest	quickfire	quickfiring
	quickfreeze	quickfreezing	quickfroze
	quickfrozen	quickie	quickish
	quickishly	quicklime	quickly
	quickness	quicknesses	quicksand
	quickset	quicksilver	quicksilvered
	quicksilvering	quicksnap	quickstep
	quickstepped	quickstepper	quickstepping
	quicktempered	quicktime	quickwitted
	quickwittedly	quickwittedness	quicky
	doublequick	superquick	unquick
eiv€	•••••		

receive

received preceive

receiving

preceiving

receiver preceiver receivership unreceived Rules of Unified English Braille

rejoice 🚦 👯 🗄 rejoiced rejoicefully rejoiceful rejoicefulness rejoicer unrejoice unrejoiced unrejoicer unrejoiceful unrejoicefully unrejoicefulness rejoicing rejoicingly unrejoicing unrejoicingly said ∷ 🗄 saidest saidst aforesaid foresaid gainsaid missaid should :::: should've shoulda shouldest shouldn't shouldn't've shouldst such suchlike nonesuch nonsuch somesuch themselves **:** thyself today ::: together : :: :: :: togetherness tomorrow tonight

would

would've	woulda	wouldest
wouldn't	wouldn't've	wouldst

'twould've

'twouldn't've

'twoulda

'twouldn't

'twould

your ∷ 🗄

yourself :: ::

do-it-yourselfer

Rules for list construction

Shortforms as words

1. The 75 shortforms of Unified English Braille are on the Shortforms List.

Shortforms as parts of longer words

- 2. When a shortform is part of a longer word, add the longer word to the Shortforms List provided that:
 - (a) the longer word retains an original meaning and the original spelling of the shortform; and
 - (b) use of the shortform is not prohibited by rules 3–5 which follow.

Examples:

ahimsa 🗄 🕶 🖬 🖬 🖬	braillist
declaration	drafter
lacrosse	marabout
mustache	mustang
muster ::::::::::::::::::::::::::::::::::::	necessarily
rafter 🚦 🗄 🖬 🖬	shoulder

3. Do not add a longer word to the Shortforms List if using the shortform in it would create another word.

Examples:

abouts : : : : : [not] : : : : [abdominal muscles]

```
      acrosses
      Image: Ima
```

after, blind and friend

4. When the shortform for "after", "blind" or "friend" is part of a longer word and is followed by a vowel or a "y", do not add the longer word to the Shortforms List.

be and con shortforms

5. When any of the shortforms that begin with "be" or "con" are within a longer word, do not add the longer word to the Shortforms List unless the letters the shortform represents begin the longer word.

```
Examples:
```

Appendix 2: Word List

This Appendix provides an alphabetic list of the example words used to show contraction use in <u>Section 10</u>: Contractions.

ab initio		<u>10.9.5</u>
abbé		<u>10.6.5</u>
abbreviate	• · · · • • • • • • • • • • • • • • • •	<u>10.11.5</u>
about-face	• • • • • • • • • • • • • • • • • • •	<u>10.9.1</u>
abouts		<u>10.9.2</u>
aboveground		<u>10.9.2</u>
accent	• · · · • • • • • • • • • • • • • • • •	<u>10.11.5</u>
accept		<u>10.6.5</u>
account	• · · · • · • • • • • • • • • • • • • •	<u>10.6.5</u>
acetone	• • • • • • • • • • • • • • • • • • •	<u>10.7.6</u>
acknowledge		<u>10.7.1</u>
acreage		<u>10.6.5,</u> <u>10.11.7</u>
acrosses	• · • • • • • • • • • • • • • • • • • •	10.9.2
adhere		<u>10.7.5</u>
adhered		<u>10.7.5,</u> <u>10.10.7</u>
adherent		<u>10.10.7</u>
adherer	• • • • • · · • • • · · • • • · · • • • · · · • •	<u>10.10.7</u>
advanced		<u>10.10.2</u> , <u>10.10.7</u>
ædile		<u>10.4.1</u>
aerial		<u>10.4.1,</u> <u>10.11.9</u>
aerobic	• • • • • • • • • • • • • • • • • • •	10.11.9
aerofoil		<u>10.11.5</u>
affect	• · · · • • • • • • • • • • • • • • • •	<u>10.11.5</u>
affirm	• · · · • • • • • • • • • • • • • • • •	<u>10.6.5</u>
afford	• • • • • • • • • • • • • • • • • • •	<u>10.3.1</u> , <u>10.6.5</u> , <u>10.10.3</u>
affrighted		<u>10.7.1</u>

5		242
aftercare		<u>10.9.2</u>
afterdinner	0 · 00 00 · · 00 00 · · 0 · · 0 · 0 00 · · · ·	10.9.2
aftereffect	0 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0 1 0 0 0 0 0 0 0	10.9.2
afterimage	• •	10.9.2
againe		10.9.2
aggressive		<u>10.6.5</u> , <u>10.11.5</u>
aghast		<u>10.4.1</u>
agreeable		<u>10.6.5,</u> 10.11.7
air-conditioned	•••••• •••• •••• •••• •••	10.6.1
Airedale		<u>10.11.1</u>
Aix-en-Provence		<u>10.6.9</u>
AI	· · · · · • • · • · · • · · · • · · · • · · · · • · · · • · · · • · · · • · · · • · · · • · · · • · · · • · · · • · · · • · · · · • · · · · • ·	<u>10.9.5</u>
Al-Azar	· · · · · • • • · · · • • • • • • • • •	<u>10.9.5</u>
almosts	• • • • • • • • • • • • • • • • • • • •	<u>10.9.2</u>
alt.	··· •· •· •• •• ·• ··· •· •• ••	<u>10.9.5</u>
altimeter	• • • • • • • • • • • • • • • • • • •	<u>10.7.8</u>
amount		<u>10.8.1</u>
ancestor	• • • • • • · • • • • • · • • • • • · • • • • •	<u>10.8.1</u>
andante	•• • • • • • • • • • • • • • • •	<u>10.3.1</u>
Andy		<u>10.3.1</u>
anemone		<u>10.7.6</u>
anteater		<u>10.11.6</u>
anteroom	•• •• •• •• •• ·• •• •• •• •• ·• •• •• •• •• ·• •• •• •• •• ·• •• •• •• ••	<u>10.4.1</u>
anthill	• · • • • • • • • • • • • • • • • • • •	<u>10.4.1</u>
antinode		<u>10.6.8</u>
antitype	• · • • • • • • • • • • • • • • • • • •	<u>10.11.5</u>
apartheid		<u>10.3.1</u> , <u>10.7.1</u> , <u>10.10.8</u>
appear		10.6.5
aqueduct		10.11.5
arboreal		10.11.7
arccosine		10.6.5

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		= . •
areas		<u>10.6.5</u>
areaway	· • · · · • • • • • • • • • • • • • • •	<u>10.11.8</u>
arena		<u>10.6.8</u>
argh!		10.4.1
aright		<u>10.7.1</u> ,
arise		<u>10.10.2</u> <u>10.11.5</u>
		10.6.5
arpeggio asseverate		<u>10.7.4</u>
		<u>10.10.8</u>
asthma		
Athens		<u>10.3.1</u> , <u>10.6.8</u>
atmosphere	• · · • • • • • • • • • • • • • • • • •	10.7.5
atonement	●···●··●··●·●	<u>10.7.6</u>
baccalaureate		10.6.5
bacchanal	• • • • • • • • • • • • • • • • • • •	<u>10.6.5,</u> 10.10.5
Baedeker		<u>10.11.9</u>
baloney		<u>10.7.6</u>
baroness		<u>10.7.6</u> ,
		<u>10.8.1</u> , <u>10.11.7</u>
baronet		<u>10.7.6</u>
bastion		<u>10.8.1</u> ,
		10.10.2
bathed		<u>10.3.1</u> , 10.10.3
beach	• · · · • · · · · · · · · · · · · · · ·	10.10.4
bear		<u>10.4.1</u> ,
		<u>10.6.5,</u> 10.10.5
beat		<u>10.6.5</u>
beatitude		<u>10.6.1</u> ,
		<u>10.6.5,</u> <u>10.10.4</u>
Beatrice		<u>10.10.4</u>
		10.6.5
Beatrix		<u>10.10.4</u>
beautiful		<u>10.10.4</u>
be'ave		<u>10.6.2</u>

beckon	• · • • • • • • • • • • • • • • • • • •	<u>10.6.1</u>
become		<u>10.6.1</u>
BEd		10.6.4
bed		<u>10.10.4</u>
bedazzle		<u>10.11.3</u>
bedevil		<u>10.11.3</u>
bedraggled		<u>10.10.4</u>
been		<u>10.6.1</u> , <u>10.6.8</u>
befriended		<u>10.9.2</u>
begging	• · • · • • • • • • • • • • • • • • • •	<u>10.6.5</u>
begin		<u>10.6.8</u>
begonia		<u>10.6.1</u>
behemoth		<u>10.6.1</u>
bein'		<u>10.6.10</u>
be'ind	• · • · · · • • • • • • • • • • • • • •	<u>10.6.8</u>
being		<u>10.6.1</u>
Belg		<u>10.6.4</u>
believer		<u>10.7.4</u>
Belinda		<u>10.6.2</u>
belligerent		<u>10.6.1</u>
belowdecks	· · · · · · · · · · · · · · · · · · ·	<u>10.9.2</u>
Benedict	· · • · · · • • • · • • · • • · • • · • • • · • • • · •	<u>10.11.5</u>
beneficent	· · · • • • · • • • • • • • • • • • • •	<u>10.6.1</u>
benefit		<u>10.6.1</u> , <u>10.6.8</u> , <u>10.10.4</u>
benevolence	· · · • • • • · • · • • • • • • • • • •	<u>10.10.4</u>
benighted		<u>10.10.4,</u> <u>10.11.3</u>
benign	••••••••••••••••••••••••••••••••••••••	<u>10.6.8</u> , <u>10.10.4</u>
benumb		10.11.3
benzene		<u>10.10.4</u>
berate		<u>10.11.3</u>
berated	· · · • · • · • • • • • • • • • • • • •	<u>10.10.4</u>

bereave		<u>10.11.3</u>
berth		<u>10.10.4</u>
best		10.6.1
bet		10.6.4
beta		10.6.1
bethel		<u>10.6.1</u>
better		10.6.1
Betws-y-Coed		10.11.9
Bev		10.6.4
beverage		<u>10.7.4</u>
Bighorn		<u>10.11.1</u>
binary		10.6.8
binomial		10.6.8
biofeedback		<u>10.3.1</u> ,
bicquity		<u>10.11.5</u> <u>10.8.3</u> ,
biscuity	• · · • • • • • • • • • • • • • • • • • • • •	<u>10.8.3</u> , <u>10.11.7</u>
Bisquick	· · · • · • • • • • • • • • • • • • • • • • • • •	<u>10.9.3</u>
Blaenau Ffestiniog	· · · · · · · · · · · · · · · · · · ·	<u>10.11.9</u>
Blakeney	· · · • · • · • · • · • · • · • · • · •	<u>10.6.8</u>
BLCUP	· · · · · · · · · · · · · · · · · · ·	<u>10.9.5</u>
blessèd		<u>10.4.1</u>
blessing		<u>10.8.1</u>
Blindcraft		<u>10.9.3</u>
blinded		<u>10.9.2</u>
Blindheim		<u>10.9.3</u>
blinding		10.9.2
Blindoc		10.9.3
blithesome		10.7.7
blossomed		10.7.7
blowhard		<u>10.11.1</u>
blunder		<u>10.7.9</u>
Bonaparte		<u>10.7.1</u>
Boone		<u>10.7.6</u>
	· · · · · · · ·	

brighten 10.7 brougham 11.7 brougham 11.7 bubble 11.7 bureau 11.7 business 11.7 buts 11.7 bygone 11.7 Caen 11.7	
bother iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	<u>6.5</u>
bother i i i i i i i i i i i i i i i i i i i	
bothered is i	
bottleneck immediate <	
boyfriends iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	<u>7.5</u>
Braillette Image: I	11.1
brailling iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	<u>).2</u>
Brigham IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	<u>9.3</u>
brighten iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	9.2
brighteniiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	<u> 1.2</u> ,
brougham iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	
bubble iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	1. <u>1</u>
bureauIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	<u>5.5</u>
10.8 buts 11.1 bygone 11.1 Caen 11.1 Caennarvon 11.1 calisthenics 11.1 CAN Network 11.1 can-can 11.1 cancel 11.1 can't 11.2	<u>5.5</u>
butsIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	
Caen 10.0 Caernarvon 10.1 calisthenics 10.1 CAN Network 10.1 can-can 11.1 cancel 11.1 can't 11.1	
CaernarvonImage: Image: Im	7. <u>6</u>
calisthenicsImage: Sector of the	<u>5.8</u>
CAN Network10.7can-can*********************************	11.9
can-can:::::::::::::::::::::::::::::::::	10.3
can-can:::::::::::::::::::::::::::::::::	l. <u>3</u>
cancel 10.8 can't 10.7	l. <u>1</u>
	<u>3.1</u>
	1.2
	7.6
	10.2
carefully 10.8	<u>3.1</u>
Caribbean	<u>5.5</u>
	<u>11.1</u>
casino 10.0	<u>5.8</u>
caveat	<u>5.5</u>
CD	9. <u>5</u>
cement	<u>3.1</u>

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centime	••••••••••••••••••••••••••••••••••••••	<u>10.7.8</u>
centimeter	••• ••• ••• ••• ••• ••• ••• ••• ••• ••• ••• ••• ••• ••• ••• ••• ••• •••	<u>10.7.8</u> ,
Chad		<u>10.11.5</u> <u>10.7.3</u>
Chad		
changeability		<u>10.11.7</u>
channel-less		<u>10.8.1</u>
characterise		<u>10.7.1</u>
characteristic		<u>10.7.1</u>
chargeable		<u>10.11.7</u>
Chatham		<u>10.11.2</u> , <u>10.11.7</u>
cheddar		<u>10.4.1</u>
cheerful		<u>10.8.1</u>
chemotherapy		<u>10.7.1,</u> <u>10.10.9</u>
cherished		10.4.1
chieftainess		<u>10.8.4</u> , <u>10.11.7</u>
chifforobe		10.3.1
childish		<u>10.2.1</u>
childlike	• •	<u>10.1.1</u>
child-like		<u>10.1.1</u>
child-proof	•• •• •• •• •• •• •• •• •• •• •• •• •• •• •• •• •• •• •• ••	<u>10.2.1</u>
child's		<u>10.2.2</u>
china		<u>10.6.8</u>
Ch'ing		<u>10.4.3</u>
Chisholm		<u>10.11.7</u>
chlordane		<u>10.7.1</u> , <u>10.10.9</u>
chockfull		10.8.1
Chopin		<u>10.6.8</u>
Chou En-lai		<u>10.6.9</u>
chromosome		<u>10.7.7</u>
cinéaste	•••··•••••••••••••••••••••••••••••••••	<u>10.6.5</u>
circuity		<u>10.8.1</u>

		240
citizeness		<u>10.6.8</u> , <u>10.8.4</u> ,
		<u>10.11.7</u>
Clemenceau		<u>10.10.6</u>
coffee		<u>10.3.1</u> ,
		<u>10.6.5</u> , <u>10.10.3</u>
cofounder		10.11.5
cohere	••••··••• ···••••	<u>10.7.5</u>
cohered	••• •• •• •• •• •• •• •• •• •• •• •• •• •• •• •• •• •• •• ••	<u>10.10.7</u>
coherence		<u>10.7.5,</u> 10.10.2
colonel		10.7.6
comfort		<u>10.3.1</u>
comin'	••• •• •• •• ••• •• •• •• ••• •• •• ••	<u>10.6.1</u>
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viceregal		<u>10.4.1</u>
Vietnamese		<u>10.7.5</u>
weathered		<u>10.10.3</u>
well-known		<u>10.7.1</u>
Wenceslaus	· · · · · · · · · · · · · · · · · · ·	<u>10.8.1</u>
whaddaya	• · • • • • • • • • • • • • • • • • • •	<u>10.10.9</u>
wharf	● · · · ● ● ● · · · · · · · · · · · · ·	<u>10.4.1</u>
whereas		<u>10.10.8</u>
whereby	· · · • · • • • • • • • • • • • • • • •	<u>10.7.1</u>
where'er		<u>10.7.1,</u> <u>10.10.8</u>
wherein		10.7.1
whereof		<u>10.3.1</u>
whereupon		<u>10.7.2</u>
wherever		<u>10.7.1,</u> <u>10.10.8</u>

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whichever		<u>10.2.1</u>
which'll		<u>10.2.2</u>
which've		<u>10.2.2</u>
whiskey-still		<u>10.2.1</u>
whistle		<u>10.4.1</u>
whosesoever		<u>10.7.2</u>
will-o'-the-wisp		<u>10.1.1</u>
wiseacre		<u>10.11.1</u>
withe		<u>10.3.1</u>
wither		<u>10.10.2</u>
withered		<u>10.7.2</u>
within		<u>10.6.8</u>
without		<u>10.2.1</u> , 10.3.1
withstand		10.3.1
word-for-word		<u>10.7.1</u>
Wordsworth		<u>10.7.1</u>
workday		<u>10.7.1</u>
working		<u>10.7.1</u>
worldly		<u>10.7.1</u>
world-wide		<u>10.7.1</u>
would-be		<u>10.5.1</u>
wounded		<u>10.8.1</u>
wrench		<u>10.2.1</u>
Wunderhorn	· · · · · · · · · · · · · · · · · · ·	<u>10.7.9</u>
Xth		<u>10.4.1</u>
xxist	••••••••••	<u>10.4.1</u>
Yeats		<u>10.6.5</u>
you'd		<u>10.1.2</u>
you'll		<u>10.1.2</u>
you'm		<u>10.1.2</u>
youngest		<u>10.7.1</u>
Youngstown		<u>10.7.1</u>
Yourcenar	· · · • • • · • · • • • • • • • • • • •	<u>10.9.2</u>
	1	I

Appendix 2: Word List

you're		<u>10.1.2</u>
you's	•• ·· · • •• ·· • •• •·	<u>10.1.2</u>
you've		<u>10.1.2</u>

Appendix 3: Symbols List

This list of symbols is arranged according to braille order, i.e.

•• ••• ••• • ••• ••• ••• • ••• Line 1: •• Line 2: • • :: ••• Line 3: •• ••• • • Line 4: ••• ••• ••• · · · ... Line 5: • Line 6: ::

Print column:

A dashed circle \circ is used to indicate the position of a letter or item for symbols that are placed in relation to text.

Unicode column:

The Unicode values given are not intended to be strictly definitive but are a useful reference. To insert a symbol in many Windows applications including Word, type the Unicode number then Alt-x. This method usually requires a space before the Unicode number.

Usage and reference column:

When not otherwise indicated, symbols are assumed to take a grade 1 meaning. "Grade 2" refers to the contracted meaning of the symbol.

References are enclosed in brackets, with the type of bracket indicating the source document as follows:

This document, *The Rules of Unified English Braille*, 2013 – round brackets ()

Unified English Braille <u>Guidelines for Technical Material</u>, October 2008 – square brackets []

Both these documents are available for download from the ICEB website at <u>http://www.iceb.org/ueb.html</u>.

Some symbols are not specified in either of these documents but have been included here for completeness.

Braille	Print	Unicode	Name	Usage and reference
	(space)	0020	space (no dots)	(<u>3.23</u>)
• · · ·	а	0061	lowercase letter a	(4.1)
••	1	0031	digit 1	numeric mode (<u>6.1</u>)
• • • • • • • • • • •	about		about	grade 2 (<u>10.9</u>)
• · • · • · · · • • • • • · · • • • •	above		above	grade 2 (<u>10.9</u>)
• · • • · · · ·	according		according	grade 2 (<u>10.9</u>)
	across		across	grade 2 (<u>10.9</u>)
• · • • • · · · · · · · · · · · · · · ·	after		after	grade 2 (<u>10.9</u>)
	afternoon		afternoon	grade 2 (<u>10.9</u>)
	afterward		afterward	grade 2 (<u>10.9</u>)
• • • • • • • • • • • • • • • • • • •	again		again	grade 2 (<u>10.9</u>)
	against		against	grade 2 (<u>10.9</u>)
	also		also	grade 2 (<u>10.9</u>)
	almost		almost	grade 2 (<u>10.9</u>)
• · • · • · · · • • • • • · · • • • •	already		already	grade 2 (<u>10.9</u>)
	altogether		altogether	grade 2 (<u>10.9</u>)
	although		although	grade 2 (<u>10.9</u>)
• • • • • • • • • • • • • • • • •	always		always	grade 2 (<u>10.9</u>)
• · • ·	b	0062	lowercase letter b	(4.1)
• • • • • •	but		but	grade 2, standing alone (<u>10.1</u>)
•••	2	0032	digit 2	numeric mode (<u>6.1</u>)
• · • · • · • • · · · • • ·	blind		blind	grade 2 (<u>10.9</u>)
• · • • • • · • · • • • • • ·	braille		braille	grade 2 (<u>10.9</u>)

Braille	Print	Unicode	Name	Usage and reference
••	C	0063	lowercase letter c	(4.1)
•• · · · ·	can		can	grade 2, standing alone (<u>10.1</u>)
••	3	0033	digit 3	numeric mode (<u>6.1</u>)
••••• ••••• ••••	could		could	grade 2 (<u>10.9</u>)
•• • • • •	d	0064	lowercase letter d	(4.1)
•• •• • •	do		do	grade 2, standing alone (<u>10.1</u>)
••	4	0034	digit 4	numeric mode (<u>6.1</u>)
•••••• •••••• ••••••	declare		declare	grade 2 (<u>10.9</u>)
••••••••••••••••••••••••••••••••••••••	declaring		declaring	grade 2 (<u>10.9</u>)
	deceive		deceive	grade 2 (<u>10.9</u>)
••••••••••••••••••••••••••••••••••••••	deceiving		deceiving	grade 2 (<u>10.9</u>)
● · · ● · ·	е	0065	lowercase letter e	(4.1)
• • • • • •	every		every	grade 2, standing alone (<u>10.1</u>)
•••	5	0035	digit 5	numeric mode (<u>6.1</u>)
• · · • • • • • • • •	either		either	grade 2 (<u>10.9</u>)
• • • ·	f	0066	lowercase letter f	(4.1)
•• • · · ·	from		from	grade 2, standing alone (<u>10.1</u>)
•• • • • •	6	0036	digit 6	numeric mode (<u>6.1</u>)
•••• ••• •••	friend		friend	grade 2 (<u>10.9</u>)
••••• ••••• •••••	first		first	grade 2 (<u>10.9</u>)
•••	g	0067	lowercase letter g	(<u>4.1</u>)
••	go		go	grade 2, standing alone (<u>10.1</u>)
••	7	0037	digit 7	numeric mode (<u>6.1</u>)

Braille	Print	Unicode	Name	Usage and reference
••••••••••••••••••••••••••••••••••••••	good		good	grade 2 (<u>10.9</u>)
•••••• ••••••• •••••••	great		great	grade 2 (<u>10.9</u>)
••• ••	h	0068	lowercase letter h	(<u>4.1</u>)
•••	have		have	grade 2, standing alone (<u>10.1</u>)
•••	8	0038	digit 8	numeric mode (<u>6.1</u>)
• · • • • • • • · · · · • •	him		him	grade 2 (<u>10.9</u>)
• · • • • • • • • • • • • • • • • • • •	himself		himself	grade 2 (<u>10.9</u>)
• · • • • • • • • • • • • · · · · • • · ·	herself		herself	grade 2 (<u>10.9</u>)
· • • · · ·	i	0069	lowercase letter i	(4.1)
· ● ● · · ·	9	0039	digit 9	numeric mode (<u>6.1</u>)
· • • • • • • • • • • • • • • • • • • •	immediate		immediate	grade 2 (<u>10.9</u>)
· • • •	j	006a	lowercase letter j	(4.1)
· • • • · ·	just		just	grade 2, standing alone (10.1)
· • • • · ·	0	0030	digit 0	numeric mode (<u>6.1</u>)
· • • • · ·	e.g. ^J		corner with upward vertical	horizontal line mode (<u>16.2</u>)
• : • : • :	k	006b	lowercase letter k	(4.1)
• •	knowledge		knowledge	grade 2, standing alone (<u>10.1</u>)
• · • · • ·	I	006c	lowercase letter I	(<u>4.1</u>)
• · • · • ·	like		like	grade 2, standing alone (<u>10.1</u>)
• · • • • · • • • · • •	little		little	grade 2 (<u>10.9</u>)
• · • • · • · • • • • · • • ·	letter		letter	grade 2 (<u>10.9</u>)
•• •• ••	m	006d	lowercase letter m	(<u>4.1</u>)
• • • • • •	more		more	grade 2, standing alone (<u>10.1</u>)

Appendix 3: Symbols List

Braille	Print	Unicode	Name	Usage and reference
••••••• ••••••	myself		myself	grade 2 (<u>10.9</u>)
•• • · • • • • • • • •	much		much	grade 2 (<u>10.9</u>)
••••• ••••• •••••	must		must	grade 2 (<u>10.9</u>)
••	n	006e	lowercase letter n	(<u>4.1</u>)
• • • • • •	not		not	grade 2, standing alone (<u>10.1</u>)
••••••• •••••••• ••••••••	necessary		necessary	grade 2 (<u>10.9</u>)
••••••• ••••••• ••••••	neither		neither	grade 2 (<u>10.9</u>)
•••	0	006f	lowercase letter o	(<u>4.1</u>)
• · • • • •	e.g. →		right pointing arrow (east), arrow terminator	arrow mode (<u>11.6</u>) [13.1]
• • • ·	р	0070	lowercase letter p	(<u>4.1</u>)
• • • · • ·	people		people	grade 2, standing alone (<u>10.1</u>)
	paid		paid	grade 2 (<u>10.9</u>)
••••••••••• •••••••••••	perceive		perceive	grade 2 (<u>10.9</u>)
••••••••••••••••••••••••••••••••••••••	perceiving		perceiving	grade 2 (<u>10.9</u>)
	perhaps		perhaps	grade 2 (<u>10.9</u>)
••• ••	q	0071	lowercase letter q	(<u>4.1</u>)
•• •• • •	quite		quite	grade 2, standing alone (<u>10.1</u>)
••••• •••••	quick		quick	grade 2 (<u>10.9</u>)
• · • • • ·	r	0072	lowercase letter r	(4.1)
•	rather		rather	grade 2, standing alone (<u>10.1</u>)
••	e.g. →		regular barb, full, in line of direction	arrow mode (<u>11.6</u>) [13.3]

	a English Braille	, ppone		280
Braille	Print	Unicode	Name	Usage and reference
• • • • • • • • • • • • • • • • • • • •	receive		receive	grade 2 (<u>10.9</u>)
• · • • • • • • • • • • • • • • • • • •	receiving		receiving	grade 2 (<u>10.9</u>)
• • • • • • • • • • • • • • • • • • •	rejoice		rejoice	grade 2 (<u>10.9</u>)
• · · • • • • • • • • • • • • • • • • •	rejoicing		rejoicing	grade 2 (<u>10.9</u>)
• • • • • •	S	0073	lowercase letter s	(4.1)
• • • • • •	SO		SO	grade 2, standing alone (<u>10.1</u>)
• • • • • •	e.g. ≯		up and right pointing arrow (northeast), arrow terminator	arrow mode [13.1]
· • • • • • · • • • · · ·	said		said	grade 2 (<u>10.9</u>)
· • • · • · · · • · · •	such		such	grade 2 (<u>10.9</u>)
· • • • • ·	t	0074	lowercase letter t	(4.1)
· • • • • ·	that		that	grade 2, standing alone (<u>10.1</u>)
· • • • • • • • • • • • • • • • • • • •	today		today	grade 2 (<u>10.9</u>)
· • • • • • • •	together		together	grade 2 (<u>10.9</u>)
· • • • • • • · ·	tomorrow		tomorrow	grade 2 (<u>10.9</u>)
· • • • •	tonight		tonight	grade 2 (<u>10.9</u>)
• · · · • •	u	0075	lowercase letter u	(4.1)
• · · · • •	us		us	grade 2, standing alone (<u>10.1</u>)
• · • · • •	V	0076	lowercase letter v	(<u>4.1</u>)
• · • · • •	very		very	grade 2, standing alone (<u>10.1</u>)
••	X	0078	lowercase letter x	(4.1)
••	Х	0078	lowercase letter x as a cross	(<u>3.9</u>)
••	it		it	grade 2, standing alone (<u>10.1</u>)

2	0	1
2	в	

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Braille	Print	Unicode	Name	Usage and reference
••••• ••••	itself		itself	grade 2 (<u>10.9</u>)
•••••• ••••••	its		its	grade 2 (<u>10.9</u>)
••• ••	У	0079	lowercase letter y	(4.1)
••	you		you	grade 2, standing alone (<u>10.1</u>)
••	e.g. →		curved barb, full, in line	arrow mode [13.3]
••••• ••••• •••••	your		your	grade 2 (<u>10.9</u>)
•••••• •••••••	yourself		yourself	grade 2 (<u>10.9</u>)
••••••••••••••••••••••••••••••••••••••	yourselves		yourselves	grade 2 (<u>10.9</u>)
•••	Z	007a	lowercase letter z	(4.1)
•••	as		as	grade 2, standing alone (<u>10.1</u>)
• • • · • •			superposition indicator	between two items [14.3.2]
••	and		and	grade 2 (<u>10.3</u>)
••			curved barb, full, counter	arrow mode [13.3]
••			cursor indicator	on a line by itself [17]
::			horizontal juxtaposition indicator	between two items [14.3.4]
••	for		for	grade 2 (<u>10.3</u>)
••	0		circle	shape mode (<u>11.7</u>) [14]
••			triple horizontal line segment	horizontal line mode (<u>16.2</u>)
••			general fraction open indicator	(<u>11.3</u>) [6]
•••	of		of	grade 2 (<u>10.3</u>)
. • • · • •	ſ	222b	integral sign	[11]

Braille	Print	Unicode	Name	Usage and reference
· • • · • •	the		the	grade 2 (<u>10.3</u>)
· • • • • • · · • • • · · · • • • • • •	themselves		themselves	grade 2 (<u>10.9</u>)
 			general fraction close indicator	(<u>11.3</u>) [6]
•••	with		with	grade 2 (<u>10.3</u>)
• • • • • •				unassigned in grade 1
• · · · · •	ch		ch	grade 2 (<u>10.4</u>)
•••	child		child	grade 2, standing alone (<u>10.2</u>)
• · • • • · · • •	children		children	grade 2 (<u>10.9</u>)
• •			opening braille grouping indicator	when followed by nonspace (<u>3.4</u> , <u>11.4</u>) [7]
• • • •	gh		gh	grade 2 (<u>10.4</u>)
• •	e.g. ∖		down and right pointing arrow (southeast), arrow terminator	arrow mode [13.1]
•	e.g. —		crossing with left-leaning diagonal line	horizontal line mode (<u>16.2</u>)
• : • : • •	`		left-leaning single solid diagonal line segment	when surrounded by spaces/other diagonal line segments (<u>16.3</u>)
•• · · · •			open radical (root)	(<u>11.5</u>) [8]
••	sh		sh	grade 2 (<u>10.4</u>)
••	shall		shall	grade 2, standing alone (<u>10.2</u>)
••	e.g. ↓		down pointing arrow (south), arrow terminator	arrow mode (<u>11.6</u>) [13.1]
•• •• · · · • · • · ·	should		should	grade 2 (<u>10.9</u>)

Braille	Print	Unicode	Name	Usage and reference
••			first transcriber- defined print symbol	(<u>3.26</u>) [11]
• • · • · •	th		th	grade 2 (<u>10.4</u>)
•• • • • •	this		this	grade 2, standing alone (<u>10.2</u>)
	thyself		thyself	grade 2 (<u>10.9</u>)
• • • • • •	⊽		bar over previous item	[12]
• · · • · •	wh		wh	grade 2 (<u>10.4</u>)
• • • • • •	which		which	grade 2, standing alone (<u>10.2</u>)
• •	e.g. <		up and left pointing arrow (northwest), arrow terminator	arrow mode [13.1]
• · · • · •			shape terminator	shape mode (<u>11.7</u>) [14.1]
•• • · • •			shape indicator	(<u>3.22</u> , <u>11.7</u>) [14]
• • • • • •	ed		ed	grade 2 (<u>10.4</u>)
•••			vertical juxtaposition indicator	between two items [14.3.3]
•••	er		er	grade 2 (<u>10.4</u>)
• • • • • •			arrow indicator	(<u>3.2</u> , <u>11.6</u>) [13.1]
• • • • • •	ou		ou	grade 2 (<u>10.4</u>)
•••	out		out	grade 2, standing alone (<u>10.2</u>)
• • • • • •	e.g. ↦		straight barb, full (directionless)	arrow mode [13.3]
• •	ourselves		ourselves	grade 2 (<u>10.9</u>)
			physical enclosure indicator	between two items (<u>11.7</u>) [14.3.1]

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Braille	Print	Unicode	Name	Usage and reference
· • • · · •	OW		ow	grade 2 (<u>10.4</u>)
•	e.g. ←		left pointing arrow (west), arrow terminator	arrow mode (<u>11.6</u>) [13.1]
· • • • • •	W	0077	lowercase letter w	(<u>4.1</u>)
· • • • · •	will		will	grade 2, standing alone (<u>10.1</u>)
•••			regular barb, full, counter to line of direction	arrow mode (<u>11.6</u>) [13.3]
•	e.g. +		crossing with vertical line	horizontal line mode (<u>16.2</u>)
· • • • • • • • • • • • • • • • • • • •	would		would	grade 2 (<u>10.9</u>)
••• ••	1	002c	comma	(7)
•:	1	002c	comma, comma as decimal	numeric mode (<u>6</u>)
•:	еа		еа	grade 2, preceded and followed by a letter (<u>10.6</u>)
• • • • • •	e.g. →		short dotted line shaft	arrow mode (<u>11.6</u>) [13.2]
•:	e.g		variant horizontal line segment (e.g. dotted or dashed)	horizontal line mode (<u>16.2</u>)
• • • • • • • • • •	e.g. —>		medium dotted line shaft	arrow mode (<u>11.6</u>) [13.2]
••••••	e.g>		long dotted line shaft	arrow mode (<u>11.6</u>) [13.2]
• • • • • •	• /	003b	semicolon	(<u>7</u>)
• • • • • • •	be		be	grade 2, forming the first syllable of a word (<u>10.6</u>)
• • • • • •	bb		bb	grade 2, preceded and followed by a letter (<u>10.6</u>)

2	Q	5
Ζ	О	J

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Braille	Print	Unicode	Name	Usage and reference
• • • • • •	be		be	grade 2, standing alone (<u>10.5</u>)
· · • • • • · · · · • · · ·	because		because	grade 2 (<u>10.9</u>)
· · • • • • · • • • • · • ·	before		before	grade 2 (<u>10.9</u>)
· · • • • • · • • •	behind		behind	grade 2 (<u>10.9</u>)
· · • • · • · • • ·	below		below	grade 2 (<u>10.9</u>)
· · • • • • · • • • · • •	beneath		beneath	grade 2 (<u>10.9</u>)
· · · • •	beside		beside	grade 2 (<u>10.9</u>)
· · · • • • · • •	between		between	grade 2 (<u>10.9</u>)
· · • • • • · • •	beyond		beyond	grade 2 (<u>10.9</u>)
• • • •	:	003a	colon	(Z)
••• ••	:	2236	ratio	(<u>3.17</u>) [3]
•••	con		con	grade 2, forming the first syllable of a word (10.6)
••• ••	CC		СС	grade 2, preceded and followed by a letter (<u>10.6</u>)
••	e.g. 👌		short single straight line shaft	arrow mode (<u>11.6</u>) [13.2]
•••	_		simple (solid single) horizontal line segment	horizontal line mode (<u>16.2</u>)
••			strike through for tally marks	preceded by vertical line, followed by space [4.2]
· · • • • · • • · · • • · · · • • •	conceive		conceive	grade 2 (<u>10.9</u>)
· · · · · · · · ·	conceiving		conceiving	grade 2 (<u>10.9</u>)
•••••	::	2237	proportion	(<u>3.17</u>)
••••• •••••	e.g. →		medium single straight line shaft	arrow mode (<u>11.6</u>) [13.2]

Braille	Print	Unicode	Name	Usage and
				reference
•••••••	e.g. →		long single straight line shaft	arrow mode (<u>11.6</u>) [13.2]
••		002e	full stop (period), dot	(7)
••		002e	full stop (period), decimal point	numeric mode (<u>6</u>)
••	dis		dis	grade 2, forming the first syllable of a word (<u>10.6</u>)
••	e.g. 4		shaft with sharp turn to the right (in line of direction)	arrow mode [13.2]
••	е.g. _Т		corner with downward vertical	horizontal line mode (<u>16.2</u>)
••••••••	e.g		ellipsis	(<u>7.3</u>)
• • • • • •	e.g. H ₂ O		subscript indicator	(<u>3.24</u> , <u>11.4</u>) [7]
• • • •	en		en	grade 2 (<u>10.6</u>)
 ●. ·●	enough		enough	grade 2, standing alone (<u>10.5</u>)
••	e.g. 🖍		shaft curved or bent to the right (clockwise in line of direction)	arrow mode [13.2]
•••	!	0021	exclamation mark	(<u>7</u>)
• • • • • •	!	0021	factorial sign	[11]
• • • •	ff		ff	grade 2, preceded and followed by a letter (<u>10.6</u>)
	,	2032	prime	distinguished from apostrophe in print (<u>3.11</u> , <u>3.15</u>) [2.10, 10, 11]
••	<u>g</u> g		gg	grade 2, preceded and followed by a letter (<u>10.6</u>)

Rules of Unifie	d English Braille	Append	lix 3: Symbols List	287
Braille	Print	Unicode	Name	Usage and reference
••	were		were	grade 2, standing alone (<u>10.5</u>)
•••	e.g. ⇒		short double line shaft	arrow mode (<u>11.6</u>) [13.2]
••	=		double horizontal line segment	horizontal line mode (<u>16.2</u>)
••••	"	2033	double prime	(<u>3.11</u> , <u>3.15</u>) [2.10]
••••	e.g. ⇒		medium double line shaft	arrow mode (<u>11.6</u>) [13.2]
•••••	e.g. \Longrightarrow		long double line shaft	arrow mode (<u>11.6</u>) [13.2]
•••	?	003f	question mark	(<u>7.5</u>)
••	e.g. " or '		opening one-cell (nonspecific) quotation mark	before beginning of word (<u>7.6</u>)
••	his		his	grade 2, standing alone (<u>10.5</u>)
• • • •	e.g. x ²		superscript indicator	(<u>3.24</u> , <u>11.4</u>) [7]
••• ••	in		in	grade 2 (<u>10.5</u> , <u>10.6</u>)
 •● ••	e.g. 🥕		shaft curved or bent to the left (anticlockwise in line of direction)	arrow mode [13.2]
••	e.g. " or '		closing one-cell (nonspecific) quotation mark	(<u>7.6</u>)
· · · · •	was		was	grade 2, standing alone (<u>10.5</u>)
 ••	e.g. ⊾		shaft with sharp turn to the left (in line of direction)	arrow mode [13.2]
· • · · • ·	e.g. 1⁄2		simple numeric fraction line	numeric mode (<u>6</u> , <u>11.3</u>) [6]
· • · · • ·	st		st	grade 2 (<u>10.4</u>)
· • · · • ·	still		still	grade 2, standing alone (<u>10.2</u>)

Braille	Print	Unicode	Name	Usage and reference
· • · · • •			close radical (root)	(<u>11.5</u>) [8]
· • · ·			visible space	[3.6, 17]
· • · · • •	ing		ing	grade 2 (<u>10.4</u>)
· • • •	e.g. ↑		up pointing arrow (north), arrow terminator	arrow mode (<u>11.6</u>) [13.1]
· • • • • •			spaced numeric indicator	before space (<u>6.8</u>) [4.1]
• • • • • • • • • • • • • • • • • • •	1	0031	digit 1 and set numeric and grade 1 modes	(<u>5.6</u> , <u>6</u>)
			regular undecagon (hendecagon)	shape mode [14]
· • • · • • · · • · · • • ·			regular dodecagon	shape mode [14]
			regular decagon	shape mode [14]
	2	0032	digit 2 and set numeric and grade 1 modes	(<u>5.6</u> , <u>6</u>)
	3	0033	digit 3 and set numeric and grade 1 modes	(<u>5.6</u> , <u>6</u>)
	Δ		regular (equilateral) triangle	shape mode (<u>11.7</u>) [14]
	4	0034	digit 4 and set numeric and grade 1 modes	(<u>5.6</u> , <u>6</u>)
· • • • • • • · • • • · ·			square	shape mode (<u>11.7</u>) [3.6, 14]
· • • · · • • · •	5	0035	digit 5 and set numeric and grade 1 modes	(<u>5.6</u> , <u>6</u>)
· • • · · · • · •	\bigcirc		regular pentagon	shape mode [14]

Appendix 3: Symbols List

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Braille	Print	Unicode	Name	Usage and reference
• • • • • • • • • • • • • • • • • • •	6	0036	digit 6 and set numeric and grade 1 modes	(<u>5.6</u> , <u>6</u>)
· • • • • · • • • ·	\bigcirc		regular hexagon	shape mode [14]
• • • • •	7	0037	digit 7 and set numeric and grade 1 modes	(<u>5.6</u> , <u>6</u>)
• • • • • • • • • • •	\bigcirc		regular heptagon	shape mode [14]
· • • • •	8	0038	digit 8 and set numeric and grade 1 modes	(<u>5.6</u> , <u>6</u>)
· • • • · · · · · · · · · · · · · · · ·	\bigcirc		regular octagon	shape mode [14]
· • · · • · • • • · ·	9	0039	digit 9 and set numeric and grade 1 modes	(<u>5.6</u> , <u>6</u>)
• • • • • • • • • • •	\bigcirc		regular nonagon	shape mode [14]
· • · • • • • • • • · ·	0	0030	digit 0 and set numeric and grade 1 modes	(<u>5.6</u> , <u>6</u>)
	I	2225	parallel to	[11]
	3	021d	lowercase yogh	(<u>12</u>)
· • • • • • • • • • • • • • • • • • • •	8	221e	infinity sign	[11]
	þ	00fe	lowercase thorn	(<u>12</u>)
· • • · · · • · ·	4	266e	natural	(<u>3.18</u>)
· • • • · · • • • ·	Ь	266d	flat	(<u>3.18</u>)
· • • • • · · · · • • · · • • • • • • •	#	266f	sharp	(<u>3.18</u>)
· • • • • • • • • • • • • • • • • • • •			second transcriber- defined print symbol	(<u>3.26</u>) [11]
· • • • • · • • • ·	ð	00f0	lowercase eth	(<u>12</u>)
	р	01bf	lowercase wynn (wen)	(<u>12</u>)

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Braille	Print	Unicode	Name	Usage and reference
	1	002c	decimal comma and set numeric and grade 1 modes	(<u>6</u>)
· • • • • • • • • • • • • • • • • • • •		002e	decimal point and set numeric and grade 1 modes	(<u>6</u>)
· • · • • · •			numeric passage indicator	before space (<u>6.9</u>) [4.1]
· • · · · • · · ·			numeric passage terminator	(<u>6.9</u>) [4.1]
· • · · · • • · ·		22a5	perpendicular to (up tack)	[11]
	F	22be	measured right angle sign	[11]
· • • • • ·			closing braille grouping indicator	(<u>3.4</u> , <u>11.4</u>) [7]
· • · •	ar		ar	grade 2 (<u>10.4</u>)
•	e.g. ⊭		down and left pointing arrow (southwest), arrow terminator	arrow mode [13.1]
•	e.g		crossing with right-leaning diagonal line	horizontal line mode (<u>16.2</u>)
•	/		right-leaning single solid diagonal line segment	when surrounded by spaces/other diagonal line segments (<u>16.3</u>)
· · · · · • ·	1	0027	apostrophe	(7)
 ●·	1	0027	nondirectional single quote	(<u>7.6.6</u>)
••• •• ••	1	0027	minutes	(<u>3.11</u>)
• • • • •	I	0027	feet	(<u>3.15</u>)

Braille	Print	Unicode	Name	Usage and reference
• •			opening non-UEB passage indicator terminator	following the commence opening non-UEB passage indicator (<u>14</u>)
• • • • • •			horizontal line mode terminator	horizontal line mode (<u>16.2</u>)
· · · · · • •	-	002d	hyphen	(7.2) [3.3]
· • • · · · · · · · · · · · · · · · · ·	@	0040	commercial at sign	(<u>3.7</u>) [11]
· • • • • • • • • • • • • • • • • • • •	¢	00a2	cent sign	(<u>3.10</u>) [2.10]
· • • • • • • • • • • • • • • • • • • •	9	2202	partial derivative (curly d)	[11]
· • • · · · · · · · · · · · · · · · · ·	€	20ac	euro sign	(<u>3.10</u>) [2.10]
· • • • • · · · · · · · · · · · · · · ·	F	20a3	French franc sign	(<u>3.10</u>) [2.10]
	Ø	2205	null set (slashed zero)	[10]
· • • · · · • · · · • •	£	00a3	pound sign (pound sterling)	(<u>3.10</u>) [2.10]
	₩	20a6	Naira sign	(<u>3.10</u>) [2.10]
· • • · · · • • · · • •	e.g. →	21c0	regular barb, upper half, in line	arrow mode [13.3]
	\$	0024	dollar sign	(<u>3.10</u>) [2.10]
	¥	00a5	yen sign (yuan sign)	(<u>3.10</u>) [2.10]
· • • • • · · · • · · · · • • • • • • •	e.g. —>		curved barb, upper half, in line	arrow mode [13.3]
· • • • • · · · · · · · · · · · · · · ·	&	0026	ampersand	(<u>3.1</u>) [11]
· • • • • · · • • •			curved barb, upper half, counter	arrow mode [13.3]
· • · • · · • • · · • •	∳	222e	closed line integral (small circle halfway up)	[11]
· • • • · · · · · ·	4	0338	solidus (forward slash) overlay on following letter	(<u>4.2</u>)

Braille	Print	Unicode	Name	Usage and reference
	<	003c	opening angle bracket	(<u>7</u>) [3, 5]
· • • · · · • •	<	003c	less-than	(<u>3.17</u> , <u>11.2</u>) [3]
	-	00ac	"not" sign (line horizontal, then down at right)	[10]
• • • • • • • • •	e.g. ∲ or ↔		line through previous item (cancellation, "not")	[3, 4.1.6, 12]
· • • • • • • • • • • • • • • • • • • •	e.g. 🚫		transcriber- defined shape indicator	(<u>11.7</u>) [14.2]
· • • • • • • • • • • • • • • • • • • •			straight barb, upper half (directionless)	arrow mode [13.3]
· • · • · · • • · · • •			regular barb, upper half, counter	arrow mode [13.3]
• • • • • • • • • • • • • • • • • • •			script word indicator	(9)
			script symbol indicator	(<u>9</u>)
· · · · · · · · · · · · · · · · · · ·		0336	horizontal stroke overlay on following letter	(<u>4.2</u>)
· • · · · · • •	Λ	005e	caret (hat)	(<u>3.6</u>) [11]
· • · · · · · • • •	v	2228	or (upright v shape)	[10]
· • · · · · · • • • · · • •			script passage indicator	(9)
· • · · · · · • • · · · • •	٨	2227	and (inverted v shape)	[10]
· • · · · · · · • · · •	~	007e	tilde (swung dash)	(<u>3.25</u>) [11]
·• ·• ·· ·· ·· ••	∵	2235	"since" (three dots in inverted pyramid)	[11]

Appendix 3: Symbols List

Braille	Print	Unicode	Name	293
DI dille				Usage and reference
· • · • · · · • · · • •	ٽ	0306	breve above following letter	(<u>4.2</u>)
	e.g. 📿		parallelogram	shape mode [14]
			third transcriber- defined print symbol	(<u>3.26</u>) [11]
			first transcriber- defined typeform word indicator	(9)
			first transcriber- defined typeform symbol indicator	(9)
			first transcriber- defined typeform passage indicator	(<u>9</u>)
			first transcriber- defined typeform terminator	(<u>9</u>)
	>	003e	closing angle bracket	(<mark>7</mark>) [3, 5]
· • · • · · · • · · •	>	003e	greater-than	(<u>3.17</u> , <u>11.2</u>) [3]
• • • • • • • • • • • • • •			script terminator	(<u>9</u>)
· • · · · · · · •	5	0304	macron above following letter	(<u>4.2</u>)
	Э	220b	contains as an element (reverse variant epsilon)	[10]
	4	22b2	is a normal subgroup of (closed "less than")	[10]
	e.g. 🎔		transcriber- defined filled (solid) shape indicator	[14.2]
	-1	22a3	reverse assertion ("T" lying on right side)	[10]

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Braille	Print	Unicode	Name	Usage and
				reference
· • · • • · · · · · · · · · · · · · · ·	e.g		equilibrium arrow, trend to the left	[16]
		22b3	inverse "is normal subgroup" (closed "greater than")	[10]
	e.g. • •		quadruple dot for electrons or bond	[16]
	e.g		quadruple dashed line bond	[16]
	e.g. x x x x		quadruple cross for electrons	[16]
	e.g. • • • •		quadruple small circle for electrons	[16]
· • · • · · · · · · · · · · · · · · · ·	e.g		quadruple line bond	[16]
· • · • • · · · · · · • • ·			opening transcriber's note indicator	(<u>3.27</u>)
· • · • • • • • • • • • • • • • • • • •	e.g. 💓		transcriber- defined shaded shape indicator	[14.2]
· • · • · • · · · · · • · · · • •			closing transcriber's note indicator	(<u>3.27</u>)
· • · · · • • • • • • • • • • • • • • •	†	2020	dagger	(<u>3.3</u>)
· • · · · • • • • • • • • • • • • • • •	†	2020	dagger as a cross	(<u>3.9</u>)
· • · · · • • • • • • • • • • • • • • •	‡	2021	double dagger	(<u>3.3</u>)
	e.g.		first variant vertical line segment	when surrounded by spaces/other vertical line segments (<u>16.3</u>)
· • • · · · • · · ·	Υ	2200	"for all" (inverted A)	[11]
· • • • • • • • • • • • • • • • • • • •	©	00a9	copyright sign	(<u>3.8</u>)

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Braille	Print	Unicode	Name	Usage and reference	
	∇	2207	del, nabla (inverted capital delta)	[11]	
· • • · · · · · · · · · · · · · · · · ·	E	2208	is an element of (variant epsilon)	[10]	
· • · • · • • •	0	00b0	degree sign	(<u>3.11</u>) [2.10]	
· • • • • • • • • • • • • • • • • • • •	ŋ	014b	lowercase eng	(<u>4.4</u>)	
	¶	00b6	paragraph sign	(<u>3.20</u>)	
· • • • · · • • • •	®	00ae	registered sign	(<u>3.8</u>)	
· • · • · • • • · · • •	§	00a7	section sign	(<u>3.20</u>)	
· • · • · • • •	ТМ	2122	trademark sign	(<u>3.8</u>)	
· • • • · · • · ·	upon		upon	grade 2 (<u>10.7</u>)	
· • • • • • • · · · • •	Ŷ	2640	female sign (Venus)	(<u>3.16</u>)	
· • • • • · • • • •	3	2642	male sign (Mars)	(<u>3.16</u>)	
· • • • · · · · · · · · · · · · · · · ·	\$ 	0327	cedilla below following letter	(<u>4.2</u>)	
· • • • · · • • • •			non-UEB word indicator	(<u>14</u>)	
· • · • · • • • ·	these		these	grade 2 (<u>10.7</u>)	
· • · • · • • •			non-UEB word terminator	(<u>14</u>)	
• • • • • • • • • • • •	े 	0300	grave accent above following letter	(<u>4.2</u>)	
· • • •	C	2282	contained in, is a subset of (U open to right)	[10]	
	î	0302	circumflex above following letter	(<u>4.2</u>)	
· • • • • • • • • • • • • • • • • • • •	those		those	grade 2 (<u>10.7</u>)	

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Braille	Print	Unicode	Name	Usage and reference
· • • · · · • · •	ऺ		simple right- pointing arrow over previous item	[12]
· • • · · • • • •	whose		whose	grade 2 (<u>10.7</u>)
	°	030a	ring (circle) above following letter	(4.2)
· • • • • • • • • • • • • • • • • • • •	៍	0303	tilde above following letter	(4.2)
· • • • · · · · · · · · · · · · · · · ·			bold arrow indicator	[13.1]
· • · • · • • ·			calculator window	
· • · • · • • •	word		word	grade 2 (<u>10.7</u>)
· • • · · · · · · · · · · · · · · · · ·			boldface word indicator	(9)
· • · · · · • • · ·			boldface symbol indicator	(<u>9</u>)
· ● · · · · ● ● ● • · · · ·	ë	0308	dieresis (umlaut) above following letter	(4.2)
· • · · • • •	ċ	0307	dot over previous item	[12]
· • · · • • •	E	2203	"there exists" (reverse E)	[11]
· • · · · · • • • •	e.g. æ		ligature indicator	(<u>4.3</u> , <u>12</u>)
· • · · · · • • •			boldface passage indicator	(<u>9</u>)
· • · · · · • • • ·	e.g. "	201c	opening double quotation mark	(<u>7.6</u>)
· • • · · · · · · · · · · · · · · · · ·	~	2248	approximately equal to (tilde over tilde)	[3]
· • · · · · • · •	e.g. "	201d	closing double quotation mark	(<u>7.6</u>)

Appendix 3: Symbols List

Rules of Unlifed English Brallie Appendix 3: Symbols List 297				
Braille	Print	Unicode	Name	Usage and reference
· • · • · • • · ·	´	0301	acute accent above following letter	(<u>4.2</u>)
· • · • · • · · ·	č	030c	caron (hacek, wedge) above following letter	(4.2)
			fourth transcriber- defined print symbol	(<u>3.26</u>) [11]
			second transcriber- defined typeform word indicator	(9)
			second transcriber- defined typeform symbol indicator	(9)
			second transcriber- defined typeform passage indicator	(<u>9</u>)
			second transcriber- defined typeform terminator	(<u>9</u>)
· • • •	⊃	2283	contains, is a superset of (U open to left)	[10]
· • · · • · ·			boldface terminator	(<u>9</u>)
			first transcriber- defined modifier on following letter	(<u>4.2</u>)
			second transcriber- defined modifier on following letter	(<u>4.2</u>)

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Traics of onlined English Draine Appendix 5. Symbols Elst 298				
Braille	Print	Unicode	Name	Usage and reference
::::::::::::::::::::::::::::::::::::::	F	22a8	"is valid" sign (assertion with double stem on "T")	[10]
	⇒	21cc	equilibrium arrow (harpoons)	[16]
· • · • · · · · • · • · · ·			third transcriber- defined modifier on following letter	(<u>4.2</u>)
· • · · · • • •	≏	224f	equals sign with bump in top bar (difference between or approximately equal)	[3]
	e.g. '		primary stress sign	(<u>15.2</u>)
	e.g.1		high tone	(<u>15.3</u>)
	e.g. ≯		global rise	(<u>15.3</u>)
	e.g. `		high falling	(<u>15.3</u>)
	e.g. *		high rising	(<u>15.3</u>)
	e.g.↓		down step	(<u>15.3</u>)
	e.g. 🔨		rise-fall	(<u>15.3</u>)
	e.g.↑		up step	(<u>15.3</u>)
			secondary stress sign	(<u>15.2</u>)
	e.g.⊣		mid tone	(<u>15.3</u>)
	e.g. 🔪		low falling	(<u>15.3</u>)
	e.g. "		low rising	(<u>15.3</u>)
	e.g. 🖌		global fall	(<u>15.3</u>)
	e.g. √		fall-rise	(<u>15.3</u>)

Appendix 3: Symbols List

Braille	Print	Unicode	Name	Usage and
				reference
· • · • · · · · · · · · · · · · · · · ·	e.g		low tone	(<u>15.3</u>)
· • · · · · · · · · · · · · · · · · · ·	i	00a1	inverted	(<u>13.5</u>)
		00bf	exclamation mark inverted question	(<u>13.5</u>)
· • · · · · · · · · · · · · · · · · · ·	ć	0001	mark	(<u>13.3</u>)
			line indicator, as	unspaced before,
			in poetry	followed by space (<u>15.1</u>)
•	e.g.		vertical single	when surrounded by
			solid line	spaces/other vertical
			segment	line segments [4.1] (<u>16.3</u>)
· • • •			tally mark	[4.2]
			lowercase	
			reserved non-	
			Roman letter	
· • • · · • • · · • ·			lowercase	
			reserved non-	
· • • • • · · · · · · · · · · · · · · ·			Roman letter lowercase	
			reserved non-	
			Roman letter	
· • • • · · · · · · · · · · · · · · · ·	cannot		cannot	grade 2 (<u>10.7</u>)
			lowercase	
			reserved non-	
			Roman letter	
· • • •			lowercase	
			reserved non-	
			Roman letter	
			lowercase reserved non-	
			Roman letter	
			lowercase	
			reserved non-	
			Roman letter	
			lowercase	
			reserved non-	
			Roman letter	

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		lix 3: Syllidois List	300	
Braille	Print	Unicode	Name	Usage and reference
	had		had	grade 2 (<u>10.7</u>)
			lowercase reserved non- Roman letter	
			lowercase reserved non- Roman letter	
			lowercase reserved non- Roman letter	
			lowercase reserved non- Roman letter	
			lowercase reserved non- Roman letter	
· • • • • • • • • • • • • • • • • • • •	many		many	grade 2 (<u>10.7</u>)
· • •• • · • · • • ·			lowercase reserved non- Roman letter	
			lowercase reserved non- Roman letter	
			lowercase reserved non- Roman letter	
			lowercase reserved non- Roman letter	
· • • · • • • · • • •			lowercase reserved non- Roman letter	
· • · • · • • ·			lowercase reserved non- Roman letter	
· • · • · • • •	spirit		spirit	grade 2 (<u>10.7</u>)
::::::::::::::::::::::::::::::::::::::			lowercase reserved non- Roman letter	

Braille	Print	Unicode	Name	Usage and reference
· • • · · · · · · · · · · · · · · · · ·			lowercase reserved non- Roman letter	
			lowercase reserved non- Roman letter	
· • • • • · · · · · · · · · · · · · · ·			lowercase reserved non- Roman letter	
			lowercase reserved non- Roman letter	
			lowercase reserved non- Roman letter	
	≡	2261	equivalent to (three horizontal lines)	[3]
· • · • · • • • ·	their		their	grade 2 (<u>10.7</u>)
· • • · · · • · · ·	١	005c	reverse solidus (backslash)	(<u>7</u>) [11]
	{	007b	opening curly bracket (brace bracket)	(<u>7</u>) [5]
· • • • • · • • · · · • · •			opening Nemeth Code indicator	(<u>14.6</u>)
	#	0023	number sign (crosshatch, hash, pound sign)	(<u>3.19</u>) [11]
	ĩ	0303	tilde over previous item	[12]
· • • • • · • • • · · • • •	e.g. ■		filled (solid) shape indicator	[14]
· • • · · · • • • ·		007c	vertical line in scansion	(<u>15.1</u>)
· • • • · · • • • •		007c	vertical bar in mathematics	[5, 11]
	۷	2220	angle sign	[11]

Braille	Print	Unicode	Name	Usage and reference
· • · • • • • · • · •			lowercase reserved non- Roman letter	
	world		world	grade 2 (<u>10.7</u>)
· • · · • • • · • • ·			underlined word indicator	(9)
			underlined symbol indicator	(9)
· • · · · · • • •	F	22a6	assertion ("is a theorem" sign, "T" lying on left side)	[10]
	•	2022	bullet	(<u>3.5</u>)
	Ð	0259	lowercase schwa	(<u>4.4</u>)
· ● · · · · ● ● ● · ● ● •	±	00b1	plus-or-minus (plus over minus)	[3]
· • · · · • • • • • • •			underlined passage indicator	(9)
· • · · · • • • •	«	00ab	opening Italian quotation mark (small double angle brackets)	(<u>7.6</u>)
	~	2243	approximately equal to (tilde over horizontal straight line)	[3]
· • · · · · • • •	»	00bb	closing Italian quotation mark (small double angle brackets)	(<u>7.6</u>)
· • · • • • · · • • •	/	002f	solidus (forward slash)	(<u>7</u> , <u>15.1</u>)
			fifth transcriber- defined print symbol	(<u>3.26</u>) [11]
			third transcriber- defined typeform word indicator	(9)

Braille	Print	Unicode	Name	Usage and reference
			third transcriber- defined typeform symbol indicator	(9)
			third transcriber- defined typeform passage indicator	(9)
			third transcriber- defined typeform terminator	(9)
	}	007d	closing curly bracket (brace bracket)	(7) [5]
			underline terminator	(<u>9</u>)
· • · · • · · • • •	Ŧ	2213	minus-or-plus (minus over plus)	[3]
· • · • • • · · • · · · • •	≤	2264	less than or equal to	[3]
	≥	2265	greater than or equal to	[3]
	⊆	2286	contained in or equal to	[10]
	⊇	2287	contains or equal to	[10]
	⊴	22b4	is normal subgroup of or equal (closed "less than" with line under)	[10]
· • · • · · · · • · • • • •				unassigned/reserved
	⊵	22b5	inverse "normal subgroup or equal" (closed "greater than" with line under)	[10]
				unassigned/reserved

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Braille	Print	Unicode	Name	Usage and reference
	₩		4 tally marks with strike through (representing 5 items)	[4.2]
	e.g. • •		triple dot for electrons or bond	[16]
	e.g. :::::		triple dashed line bond	[16]
· • · · · · · · · · · · · · · · · · · ·	x	221d	is proportional to (varies as)	[3, 11]
· • · · · · · · · · · · · · · · · · · ·	eg.xx		triple cross for electrons	[16]
	e.g. • •		triple small circle for electrons	[16]
· • · · · · · · · · · · · · · · · · · ·	e.g. 🚞		triple line bond	[16]
· · · · •			line continuation indicator	at end of line (<u>6.10</u>) [1.4, 17]
· · · • · · · · · · · · · · · · · · · ·	e.g. 10 100	00a0	numeric space before digit 1	numeric mode (<u>6.6</u>)
· · · • • · · · · · · · · · · · · · · ·	e.g. 10 200	00a0	numeric space before digit 2	numeric mode (<u>6.6</u>)
··· •• • • · ·	e.g. 10 300	00a0	numeric space before digit 3	numeric mode (<u>6.6</u>)
· · • • • · • • •	day		day	grade 2 (<u>10.7</u>)
· · • • • • • • • • • • • • • • • • • •	e.g. 10 400	00a0	numeric space before digit 4	numeric mode (<u>6.6</u>)
· · • • · • • • •	ever		ever	grade 2 (<u>10.7</u>)
· · · • · · • · · • · · • · · • · · • · • · • · • · • · • · • · • · • · · • · • · • · · • · · • ·	e.g. 10 500	00a0	numeric space before digit 5	numeric mode (<u>6.6</u>)
· · • • • · • • • ·	father		father	grade 2 (<u>10.7</u>)
··· •• ·• •• ·· · ··	e.g. 10 600	00a0	numeric space before digit 6	numeric mode (<u>6.6</u>)
· · • • • • • • • • • • • • • • • • • •	e.g. 10 700	00a0	numeric space before digit 7	numeric mode (<u>6.6</u>)
· · • • · · • • • •	here		here	grade 2 (<u>10.7</u>)

Braille	Print	Unicode	Name	Usage and reference
· · • • • • • • • • • • • • • • • • • •	e.g. 10 800	00a0	numeric space before digit 8	numeric mode (<u>6.6</u>)
· · · · • · • • • · · · · ·	e.g. 10 900	00a0	numeric space before digit 9	numeric mode (<u>6.6</u>)
· · · • • • • • • • • • • • • • • • • •	e.g. 10 000	00a0	numeric space before digit 0	numeric mode (<u>6.6</u>)
· · • • · · • · ·	know		know	grade 2 (<u>10.7</u>)
	lord		lord	grade 2 (<u>10.7</u>)
	mother		mother	grade 2 (<u>10.7</u>)
	name		name	grade 2 (<u>10.7</u>)
	one		one	grade 2 (<u>10.7</u>)
· · • • • • • • • • • • • • • • • • • •	oneself		oneself	grade 2 (<u>10.9</u>)
· · • • • · • • • · · · • • ·	part		part	grade 2 (<u>10.7</u>)
· · · • • • • • • • • • • • • • • • • •	question		question	grade 2 (<u>10.7</u>)
· · • • · · • • •	right		right	grade 2 (<u>10.7</u>)
· · · • · • • · · • • •	some		some	grade 2 (<u>10.7</u>)
	time		time	grade 2 (<u>10.7</u>)
· · • • · · • • · · · • • •	under		under	grade 2 (<u>10.7</u>)
	young		young	grade 2 (<u>10.7</u>)
··· • •			commences opening non-UEB passage indicator	followed by .: (14)
$\begin{array}{ccc} \cdot & \cdot & \bullet \\ \cdot & \bullet & \bullet \\ \cdot & \cdot & \bullet \end{array}$	there		there	grade 2 (<u>10.7</u>)
	character		character	grade 2 (<u>10.7</u>)
· · · · ·	(0028	opening parenthesis (round bracket)	(7) [5]
· · • • • · • · · · • · •	\checkmark	221a	radical without vinculum	[8]
	through		through	grade 2 (<u>10.7</u>)

Appendix 5. Symbols List 30				
Braille	Print	Unicode	Name	Usage and reference
· · • • · • · •	ै		hat over previous item	[12]
· · • • · · • • •	where		where	grade 2 (<u>10.7</u>)
· · • • · · • • •	ought		ought	grade 2 (<u>10.7</u>)
· · · · • · • • •	work		work	grade 2 (<u>10.7</u>)
· · · · · · • • • ·	11	3003	ditto mark	(<u>3.12</u>)
· · · · · · · · · · · · · · · · · · ·			horizontal line mode indicator	(<u>16.2</u>) [4.1]
· · · · · · · · · · · · · · · · · · ·	•	22c5	multiplication dot	[3]
· · · · · · · · · · · · · · · · · · ·	e.g. •		single dot for electron or bond	[16]
· · · · · · • • ·	e.g		single dashed line bond	[16]
· · · · · · • • • ·	+	002b	plus	(<u>3.17</u> , <u>11.2</u>) [3]
· · · · · · · · · · · · · · · · · · ·	=	003d	equals	(<u>3.17</u> , <u>11.2</u>) [3]
· · · · · · • • · · · • •	×	00d7	times (multiplication cross)	(<u>3.17</u> , <u>11.2</u>) [3]
· · · · · • • • • · · · • • •	×	00d7	times as a cross	(<u>3.9</u>)
· · · · · • • • • · · • •	e.g. ×		single cross for electron	[16]
· · · · · · • · •	*	002a	asterisk	(<u>3.3</u>) [11]
· · · · · • ● · • • • ●	0	2218	"hollow dot"	[11]
· · · · · · • · •	e.g. •		single small circle for electron	[16]
· · · • • • · · • • •	÷	00f7	divided by	(<u>3.17</u> , <u>11.2</u>) [3]
			sixth transcriber- defined print symbol	(<u>3.26</u>) [11]
			fourth transcriber- defined typeform word indicator	(<u>9</u>)

Appendix 3: Symbols List

Braille	Print	Unicode	Name	307 Usage and reference
· · · · · · · · · · · · · · · · · · ·			fourth transcriber- defined typeform symbol indicator	(9)
			fourth transcriber- defined typeform passage indicator	(9)
· · · · · · · · · · · · · · · · · · ·			fourth transcriber- defined typeform terminator	(9)
· · · · • · • · • · · • • •)	0029	closing parenthesis (round bracket)	(7) [5]
••••	-	2212	minus (when distinguished from hyphen)	(<u>3.17</u> , <u>11.2</u>) [3]
	[005b	opening IPA bracket, opening square bracket with switch from UEB to IPA	(<u>14.4</u>)
	/	002f	opening IPA slash, opening solidus (forward slash) with switch from UEB to IPA	(<u>14.4</u>)
	e.g.		equilibrium arrow, trend to the right	[16]
	~	2245	tilde over equals sign (approximately equal)	[3]
· · · · · · · · · · · · · · · · · · ·			line continuation indicator with space	at end of line (<u>6.10</u>) [17]

Braille	Print	Unicode	Name	Usage and reference
· · · · · · · · · · · · · · · · · · ·			guide dots	with space before and after (16.5)
··· ·· • •• ·• ·• ••			dot locator for "use"	(<u>3.14</u>) [1.7]
· · · · · · · · · · · · · · · · · · ·			general opening IPA indicator	(<u>14.4</u>)
· · · · · · · · · · · · · · · · · · ·	—	2015	long dash	(<u>7.2</u>) [3.6]
· • • · · · · · · · · · · · · · · · · ·	α	03b1	lowercase Greek alpha	(<u>4.5</u>) [11.7]
· • • · · · · • • ·	β	03b2	lowercase Greek beta	(<u>4.5</u>) [11.7]
· • • • • • • • • • • • • • • • • • • •	δ	03b4	lowercase Greek delta	(<u>4.5</u>) [11.7]
· • • • • • • • • • • • • • • • • • • •	ound		ound	grade 2, following a letter (<u>10.8</u>)
· • • · · · • • · · · · • • · · · · • • ·	3	03b5	lowercase Greek epsilon	(<u>4.5</u>) [11.7]
· • • · · · · • · • · ·	ance		ance	grade 2, following a letter (<u>10.8</u>)
· • • • • · · • • • · • • •	φ	03c6	lowercase Greek phi	(<u>4.5</u>) [11.7]
· • • • • • • • • • • • • • • • • • • •	γ	03b3	lowercase Greek gamma	(<u>4.5</u>) [11.7]
· • · • · • • · · • • ·	l	03b9	lowercase Greek iota	(<u>4.5</u>) [11.7]
· • • • • · • • • • · • • •	Ð		"normal" (superscript circle crossed by horizontal line)	
· • • • · · · · · · • • ·	к	03ba	lowercase Greek kappa	(<u>4.5</u>) [11.7]
· • • · · · • • · • • •	λ	03bb	lowercase Greek lambda	(<u>4.5</u>) [11.7]
· • • • • • • • • • • • • • • • • • • •	μ	03bc	lowercase Greek mu	(<u>4.5</u>) [11.7]
· • • • • · · · • • · • • • ·	ν	03bd	lowercase Greek nu	(<u>4.5</u>) [11.7]
· • • • • · · · • • · • • •	sion		sion	grade 2, following a letter (<u>10.8</u>)

Rules of Unifie	Rules of Unified English Braille		dix 3: Symbols List	309
Braille	Print	Unicode	Name	Usage and reference
· • • • · · · · •	0	03bf	lowercase Greek omicron	(<u>4.5</u>) [11.7]
· • • • • · · • • · · • • • ·	π	03c0	lowercase Greek pi	(<u>4.5</u>) [11.7]
· • • • · · · • • • · • • •	ρ	03c1	lowercase Greek rho	(<u>4.5</u>) [11.7]
· • · • · · • • · · • • •	σ or ς	03c3 or 03c2	lowercase Greek sigma	(<u>4.5</u>) [11.7]
· • · • · · • • · · • • •	less		less	grade 2, following a letter (<u>10.8</u>)
· • · • · · • • • · • • • ·	τ	03c4	lowercase Greek tau	(4.5) [11.7]
· • · • · · • • • · • • • ·	ount		ount	grade 2, following a letter (<u>10.8</u>)
· • • • · · · · · · · • •	υ	03c5	lowercase Greek upsilon	(4.5) [11.7]
· • • • • · · · · · · • •	ڋ	03be	lowercase Greek xi	(<u>4.5</u>) [11.7]
· • • • • · · · • • · • • •	Ψ	03c8	lowercase Greek psi	(<u>4.5</u>) [11.7]
· • • · · · · · • • · • • •	ζ	03b6	lowercase Greek zeta	(<u>4.5</u>) [11.7]
· • • • • • • • • • • • • • • • • • • •	χ	03c7	lowercase Greek chi	(<u>4.5</u>) [11.7]
· • • • • • • • • • • • • • • • • • • •			dot locator for "mention"	(<u>3.13</u>)
· • • • · · · · · · · • · •	`	0060	grave accent alone	
· • • • · · · • • · · • • •]	005b	opening square bracket	(7) [5]
· • • • • · · · • · • · •	θ	03b8	lowercase Greek theta	(<u>4.5</u>) [11.7]
· • • • · • • · • •	η	03b7	lowercase Greek eta	(<u>4.5</u>) [11.7]
· • • • · • • · • •	e.g. ⊠		shaded shape indicator	[14]
· • • • · · · • • •	1	00a6	broken vertical bar	[11]
· • · • · · • •	ω	03c9	lowercase Greek omega	(<u>4.5</u>) [11.7]

Proille Dript Unicode Name Ulagra and				
Braille	Print	Unicode	Name	Usage and reference
· • · · · · • • ·			italic word indicator	(<u>9</u>)
· • · · · · · • • · · • • •			italic symbol indicator	(<u>9</u>)
· • · · · · • • ·			directly below	[7]
· • · · · · • • · • • •	U	222a	union (upright U shape)	[10]
· • · · · · · • • •			italic passage indicator	(9)
· • · · · • • •	Ω	2229	intersection (inverted U shape)	[10]
· • · · · · · · •			directly above	[7]
· • · · · · · • · • •	%	0025	percent sign	(<u>3.21</u>) [2.10]
· • · • · · · · · • • ·	e.g. $\frac{x}{4}$		general fraction line	(<u>11.3</u>) [6]
			seventh transcriber- defined print symbol	(<u>3.26</u>) [11]
			fifth transcriber- defined typeform word indicator	(<u>9</u>)
			fifth transcriber- defined typeform symbol indicator	(9)
			fifth transcriber- defined typeform passage indicator	(<u>9</u>)
			fifth transcriber- defined typeform terminator	(9)
· • · • · · • • · • • •]	005d	closing square bracket	(<u>7</u>) [5]
· • · · · · · · · • • ·			italic terminator	(9)
· • · · · · • · •	-	005f	low line (underscore)	(<u>7.2</u>) [3.6, 11]

Appendix 3: Symbols List

Braille	Print	Unicode	Name	Usage and reference
	«	226a	is much less than	[3]
· • · • · • •	>	226b	is much greater than	[3]
	Ş	228a	contained in, but not equal to (proper subset)	[10]
	⊋	228b	contains, but is not equal to (proper superset)	[10]
	4		normal subgroup but not equal (closed "less than" with cancelled line under)	[10]
	^		arc over previous item	[12]
	¥	2221	measured angle sign	[11]
	=	2ae4	reverse "is valid" sign	[10]
	D.		inverse "normal subgroup but not equal" (closed "greater than" with cancelled line under)	[10]
· • · · · · · · · · · · · · · · · · · ·	e.g. • •		double dot for electrons or bond	[16]
· • · · · · · · · · • • • · · • · · • •	e.g. =====		double dashed line bond	[16]
• • • • • • • • • • • • • • • • • • •	÷	2251	equals sign dotted above and below (approximately equal)	[3]
· • · · · · · · · · • • • · · • · · • •	e.g. x		double cross for electrons	[16]

Braille	Print	Unicode	Name	Usage and reference
· • · · · · · · · · · · · · · · · · · ·	e.g. • •		double small circle for electrons	[16]
	e.g. ===		double line bond	[16]
· · · · •			grade 1 symbol indicator	(<u>5.2</u>) [1.7]
	ence		ence	grade 2, following a letter (<u>10.8</u>)
· · • • • · • • • • · • • · ·	ong		ong	grade 2, following a letter (<u>10.8</u>)
· · • • · • • • · • • • •	ful		ful	grade 2, following a letter (<u>10.8</u>)
· · • • • • • • • • • •	tion		tion	grade 2, following a letter (<u>10.8</u>)
· · · ● · ● ● · · ● ● ·	ness		ness	grade 2, following a letter (<u>10.8</u>)
· · · · • · • • • · • • •	ment		ment	grade 2, following a letter (<u>10.8</u>)
· · • • • · • • •	ity		ity	grade 2, following a letter (<u>10.8</u>)
· · · · · • · · · • • •			grade 1 terminator	(<u>5.5</u>) [1.7]
· · · · · · ● · ● · ● · ●			grade 1 word indicator	(<u>5.3</u>) [1.7]
			grade 1 passage indicator	(<u>5.4</u>) [1.7]
· · • · · · · · · · · · · · · · · · · ·	А	0041	capital letter A	(<u>4.1</u> , <u>8</u>)
· · • • · · · • • ·	В	0042	capital letter B	(<u>4.1</u> , <u>8</u>)
· · •• · · · ·	С	0043	capital letter C	(<u>4.1</u> , <u>8</u>)
· · •• · · • •	D	0044	capital letter D	(<u>4.1</u> , <u>8</u>)
· · • • · · · • •	E	0045	capital letter E	(<u>4.1</u> , <u>8</u>)
· · • • • • • • • • • • • • • • • • • •	F	0046	capital letter F	(<u>4.1</u> , <u>8</u>)
· · • • • • • • • • • • • • • • • • • •	G	0047	capital letter G	(<u>4.1</u> , <u>8</u>)
· · • • · · · • • •	Н	0048	capital letter H	(<u>4.1</u> , <u>8</u>)

Rules of Unified English Braille Appendix 3: Symbols List 313 Braille Print Unicode Name Usage and reference Т capital letter I 0049 (<u>4.1</u>, <u>8</u>) J (<u>4.1</u>, <u>8</u>) 004a capital letter J · · • • · К 004b capital letter K (<u>4.1</u>, <u>8</u>) (4.1, 8)L 004c capital letter L · · • • • capital letter M Μ 004d (<u>4.1</u>, <u>8</u>) Ν (4.1, 8)004e capital letter N 004f capital letter O (<u>4.1</u>, <u>8</u>) 0 Ρ 0050 capital letter P (<u>4.1</u>, <u>8</u>) 0051 (<u>4.1</u>, <u>8</u>) Q capital letter Q (4.1, 8)R 0052 capital letter R arrow mode [13.3] regular barb, e.g. → lower half, in line S capital letter S (<u>4.1</u>, <u>8</u>) 0053 · · · · • Т (<u>4.1</u>, <u>8</u>) 0054 capital letter T (4.1, 8)U 0055 capital letter U · · • • · V capital letter V (<u>4.1</u>, <u>8</u>) 0056 · · • • • (<u>4.1</u>, <u>8</u>) Х 0058 capital letter X · · • •• (<u>3.9</u>) Х 0058 capital letter X as a cross Y capital letter Y (<u>4.1</u>, <u>8</u>) · · • • • 0059 arrow mode [13.3] · · • • • curved barb, e.g. 7 lower half, in line Ζ capital letter Z (<u>4.1</u>, <u>8</u>) · · • • · 005a arrow mode [13.3] · · • • • curved barb, lower half, counter "therefore" · · • • · :. 2234 [11] (three dots in upright pyramid)

Braille	Print	Unicode	Name	Usage and reference
··· • • ··· • · • •	e.g. `` _{```}		variant left- leaning diagonal line segment	when surrounded by spaces/other diagonal line segments (<u>16.3</u>)
· · • • · • • • • • • • • • • • • • • •	<u> </u>		bar under previous item	[12]
··· • •			straight barb, lower half (directionless)	arrow mode [13.3]
· · · • · · • •	W	0057	capital letter W	(<u>4.1</u> , <u>8</u>)
······ ·······························			regular barb, lower half, counter	arrow mode [13.3]
····· ·• **	n	0022	nondirectional double quotation mark	(<u>7.6.6</u>) [17]
· · · · · · · · · · · · · · · · · · ·	н	0022	seconds	(<u>3.11</u>)
· · · · · · · • • •	11	0022	inches	(<u>3.15</u>)
· · · · · · · • • ·	e.g. '	2018	opening single quotation mark	(<u>7.6</u>)
· · · · · · · · · · · · · · · · · · ·	e.g. '	2019	closing single quotation mark	(<u>7.6</u>)
· · · • • • • · · · • • • •	3	021c	capital yogh	(<u>12</u>)
· · · • • • · · · • • • •	Þ	00de	capital thorn	(<u>12</u>)
	Ð	00d0	capital eth	(<u>12</u>)
	р	01f7	capital wynn (wen)	(<u>12</u>)
····· ·····	e.g.		variant right- leaning diagonal line segment	when surrounded by spaces/other diagonal line segments (<u>16.3</u>)
· · · · · · · · · · • • •			capitals terminator	(<u>8.6</u>)
· · · · · · · · · · • •			opening music indicator	when following a space (<u>14.5</u>)
····· ·•••	_	2014	dash	when distinguished from a hyphen in the print (<u>7.2</u>)

Appendix 3: Symbols List

Braille	d English Braille		Nomo	315
	Print	Unicode	Name	Usage and reference
· · · · · · · · ·	e.g	-	single line bond	[16]
· · · • • · · · · · · · · · · · · · · ·	\$	0338	solidus (forward slash) overlay on following capital letter	(<u>4.2</u>)
···· •··· •		0336	horizontal stroke overlay on following capital letter	(<u>4.2</u>)
····•	Ŭ	0306	breve above following capital letter	(<u>4.2</u>)
····	<u></u>	0304	macron above following capital letter	(<u>4.2</u>)
· · · • • • • • • • • • • • • • • • • •	Ŋ	014a	capital eng	(<u>4.4</u>)
	ु	0327	cedilla below following capital letter	(<u>4.2</u>)
	े 	0300	grave accent above following capital letter	(<u>4.2</u>)
	<u></u>	0302	circumflex above following capital letter	(<u>4.2</u>)
· · · • • • •	_		simple right- pointing arrow under previous item	[12]
	ိ	030a	circle (ring) above following capital letter	(<u>4.2</u>) [2.10]
	õ	0303	tilde above following capital letter	(<u>4.2</u>)
· · · · · · · · · · · · · · · · · · ·	Ö	0308	dieresis/umlaut above following capital letter	(<u>4.2</u>)

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Braille	Print	Unicode	Name	Usage and reference
	•	0323	dot under previous item	[12]
			ligature indicator where only the following letter is capitalised	(<u>4.3</u> , <u>12</u>)
· · · • • • • • • • • • • • • • • • • •	ć	0301	acute accent above following capital letter	(<u>4.2</u>)
	ॅ	030c	caron (hacek, wedge) above following capital letter	(<u>4.2</u>)
			first transcriber- defined modifier on following capital letter	(<u>4.2</u>)
			second transcriber- defined modifier on following capital letter	(<u>4.2</u>)
· · · · • • • • • • • • • • • • • • • •			third transcriber- defined modifier on following capital letter	(<u>4.2</u>)
	e.g. 📗		second variant vertical line segment	when surrounded by spaces/other vertical line segments (<u>16.3</u>)
			capital reserved non-Roman letter	
· · · · • • · · · · · • • • · • · • • • · ·			capital reserved non-Roman letter	
· · · • • • • · · · • • • · ·			capital reserved non-Roman letter	
			capital reserved non-Roman letter	
· · · · • • · · · · • • • · • · • · • • · •			capital reserved non-Roman letter	

Braille	Print	Unicode	Name	Usage and reference
			capital reserved	
			non-Roman letter	
			capital reserved	
			non-Roman letter	
			capital reserved	
			non-Roman letter	
· · · • • · •			capital reserved	
			non-Roman letter	
			capital reserved	
			non-Roman letter	
			capital reserved	
			non-Roman letter	
			capital reserved	
			non-Roman letter	
			capital reserved	
			non-Roman letter	
			capital reserved	
			non-Roman letter	
			capital reserved	
			non-Roman letter	
			capital reserved	
			non-Roman letter	
			capital reserved	
			non-Roman letter	
			capital reserved	
			non-Roman letter	
			capital reserved	
			non-Roman letter	
			capital reserved	
			non-Roman letter	
			capital reserved	
			non-Roman letter	
			capital reserved	
			non-Roman letter	
			capital reserved	
			non-Roman letter	
· · · · • • •			capital reserved	
			non-Roman letter	
			capital reserved	
			non-Roman letter	

Braille	Print	Unicode	Name	Usage and
				reference
	{		multi-line opening curly bracket	(<u>7.7</u>) [5, 15]
	្ត	0330	tilde under previous item	[12]
· · · · • • • · · · · · · · · · · · · ·			multi-line vertical bar	[5, 15]
			capital reserved non-Roman letter	
	Ð	018f	capital schwa	(<u>4.4</u>)
	}		multi-line closing curly bracket	(<u>7.7</u>) [5, 15]
			closing non-UEB passage indicator	(<u>14</u>)
·····			multi-line opening round parenthesis	(<u>7.7</u> , <u>11.8</u>) [5, 15]
	`	032d	hat under previous item	[12]
· · · · · • · · • • · • · • · • • •			multi-line closing round parenthesis	(<u>7.7</u> , <u>11.8</u>) [5, 15]
	А	0391	capital Greek alpha	(<u>4.5</u> , <u>8</u>) [11.7]
· · · · • • · · · · · • • · · • · • • · ·	В	0392	capital Greek beta	(<u>4.5</u> , <u>8</u>) [11.7]
· · · · • • • • • • • • • • • • • • • •	Δ	0394	capital Greek delta	(<u>4.5</u> , <u>8</u>) [11.7]
	E	0395	capital Greek epsilon	(<u>4.5</u> , <u>8</u>) [11.7]
· · · • • • • • • • • • • • • • • • • •	Φ	03a6	capital Greek phi	(<u>4.5</u> , <u>8</u>) [11.7]
	Γ	0393	capital Greek gamma	(<u>4.5</u> , <u>8</u>) [11.7]
· · · • • • · · · • • • · • · • • •	Ι	0399	capital Greek iota	(<u>4.5</u> , <u>8</u>) [11.7]
· · · · • • · · · · · · · · · ·	K	039a	capital Greek kappa	(<u>4.5</u> , <u>8</u>) [11.7]
· · · · • • · · · · · • • · · • · • • • ·	Λ	039b	capital Greek Iambda	(<u>4.5</u> , <u>8</u>) [11.7]

Rules of Unified English Braille		Appendix 3: Symbols List			
Braille	Print	Unicode	Name	Usage and reference	
· · · • • • • · · · · · · ·	М	039c	capital Greek mu	(<u>4.5</u> , <u>8</u>) [11.7]	
· · · • • • • · · · · • • • · • · • • •	N	039d	capital Greek nu	(<u>4.5</u> , <u>8</u>) [11.7]	
· · · · • • · · · · · · · • · • · • • • ·	0	039f	capital Greek omicron	(<u>4.5</u> , <u>8</u>) [11.7]	
· · · • • • • • • • • • • • • • • • • •	П	03a0	capital Greek pi	(<u>4.5</u> , <u>8</u>) [11.7]	
	Р	03a1	capital Greek rho	(<u>4.5</u> , <u>8</u>) [11.7]	
· · · · • · • · · · · • • • · • · • • • •	Σ	03a3	capital Greek sigma	(<u>4.5</u> , <u>8</u>) [11.7]	
· · · • • • • · · · · • • •	Т	03a4	capital Greek tau	(<u>4.5</u> , <u>8</u>) [11.7]	
· · · · • • · · · · · · · · · · · · · ·	Y	03a5	capital Greek upsilon	(<u>4.5</u> , <u>8</u>) [11.7]	
· · · • • • • • • • • • • • • • • • • •	Ξ	039e	capital Greek xi	(<u>4.5</u> , <u>8</u>) [11.7]	
· · · • • • • · · · · • • • · • · • • •	Ψ	03a8	capital Greek psi	(<u>4.5</u> , <u>8</u>) [11.7]	
· · · · • • · · · · · · · · · · · · · ·	Ζ	0396	capital Greek zeta	(<u>4.5</u> , <u>8</u>) [11.7]	
· · · • • • • • • • • • • • • • • • • •	Х	03a7	capital Greek chi	(<u>4.5</u> , <u>8</u>) [11.7]	
			multi-line opening square bracket	(<u>7.7</u>) [5, 15]	
· · · · • • • • • • • • • • • • • • • •	Θ	0398	capital Greek theta	(<u>4.5</u> , <u>8</u>) [11.7]	
	Н	0397	capital Greek eta	(<u>4.5</u> , <u>8</u>) [11.7]	
· · · • • • • • • • • • • • • • • • • •	Ω	03a9	capital Greek omega	(<u>4.5</u> , <u>8</u>) [11.7]	
			multi-line closing square bracket	(<u>7.7</u>) [5, 15]	
· · · · · · · · ·			capitalised word indicator	(<u>8.4</u>)	
· · · · · · · · · · · · · · · · · · ·			capitalised passage indicator	(<u>8.5</u>)	