# **UEB to EBAE Comparison**

This manual was prepared for and is dedicated to Teachers of the Blind/Visually Impaired everywhere who provide quality braille instruction for their students every day. Barb Lhotka, Teacher of Blind/Visually Impaired Students, Cokato, MN.

# **Purpose**

The purpose of this document is to assist Teachers of the Blind/Visually Impaired in efficiently transitioning their knowledge and skills and those of their students from English Braille American Edition (EBAE) to the Unified English Braille Code (UEB) to be implemented in January 2016. Users of this information can look up changes in the braille code and rules rapidly and efficiently when teaching students. It is important to understand that the general rules of braille are not included in this document, it is only a comparison of UEB with EBAE.

# **Suggested Transition Plan for Student Instruction**

**Early Childhood Learners:** Begin with UEB and introduce EBAE as encountered in text.

**K-grade 2 Learners:** Begin with UEB and introduce EBAE as encountered in text.

**Grades 3-12:** Introduce UEB as encountered in text. These changes should be addressed in the student's IEP.

**Functional Readers:** Use what is familiar at this time; introduce UEB as appropriate. These changes should be addressed in the student's IEP.

#### How to Use This Manual

The document is designed to highlight UEB as the preferred braille code in comparison with EBAE. The user will find the UEB code divided by categories, with the EBAE equivalent listed with the UEB to show changes.

# Formatting in UEB

# **Page Formatting**

There are 25 lines on a braille page.

Number each braille page beginning with number one (:::).

The braille page number should be placed at the lower far right corner of the page of line 25 (preceded by 3 blank spaces).

# **Paragraphs**

Indented paragraphs start in braille cell 3. All lines that follow in the paragraph start in braille cell 1 (at the left margin).

There are no blank lines left between indented paragraphs unless indicated as necessary in print.

If the print paragraph starts at the margin and the following lines are indented, the braille should start in cell 1 and the following lines each start in cell 3.

#### **Paragraph Headings**

Paragraph headings are words at the beginning of a paragraph—printed in full capitals or in a typeface different from the continuing text—that serve to highlight the important issue of the paragraph. Follow print for capitalization and punctuation. If all of the paragraph headings are in the same font, emphasize them by using the appropriate typeform indicator. If the headings are in full capitals, follow print and do not add typeform indicators. Do not confuse paragraph headings with purely stylistic letters at the beginning of a chapter or unit, which are not emphasized in braille.

Source: NLS UEB 17-2, Formats Section

#### **Punctuation**

The use of braille punctuation generally follows what is used in print (with specific exceptions).

"As in print, only one space (cell) is left empty following commas and semicolons. However, unlike print that often leaves two blank spaces following a colon and between sentences, only one empty cell is left in braille."

Source: NLS UEB 2-4, Formats Section

# **Correspondence/Letters**

Follow print copy for location of parts of the letter.

Follow print for paragraph styles/indentation. If the letter is in block style (no indentations), leave a blank space between paragraphs.

Spacing for the parts of the letter should follow the print format.

When blocking a heading, closing, or signature: count the number of cells used in the longest line of the item (start at the right hand margin and backspace). Start all lines of that section in the cell where the longest line will start. Note: the heading, closing and signature should all start in the same cell for that document.

Avoid runover lines in the heading and inside address. Items may start in the middle of the page.

If there isn't room for the last line of the body of the letter and closing information, carry the last line of the body of the letter to the next page.

# **Quoted or Displayed Material**

"When quoted matter, i.e., passages taken verbatim from another source, or other displayed material such as a facsimile of a handwritten note or a sign, is *set off in print by blank lines, special typefaces, or indented margins*, the following guidelines should be observed:

- Leave one blank line before and after the quoted or displayed material. When material that is to be followed by a blank line ends on either line 24 or 25, leave a blank line at the top of the next page following the running head.
- Use cell 3 as the left margin for displayed material. Use 5-3 margins for indented paragraphs. Braille paragraphs that are printed in block form in 3-3, leaving a blank line between paragraphs.
- Retain font attributes when only certain words or phrases are emphasized within displayed material. Ignore font attributes if the entire body of displayed material is italicized or otherwise emphasized.
- If quoted material appears in both quotation marks and a distinctive typeface, such as italics, in braille the quotation marks are retained but the font attributes are omitted unless they are needed for emphasis or distinction."

Source: NLS UEB 15-11 & 15-12, Formats Section

#### **Typeform Indicators**

Use typeform indicators when print emphasizes a word or phrase through the use of italics, boldface, underline, etc.

Use special typeface when indicated for:

- Foreign words or phrases
- Names of ships, books, pictures, etc. (proper nouns)
- Hyperlinks when the text itself does not indicate the presence of a link (when in black print not blue underline)
- Subject headings at the beginning of paragraphs
- Silent thoughts (shown as conversation that is not heard)
- Passages not enclosed in quotes but printed in a different type (might be separated by blank lines or indented)

Do Not Use the Typeform indicators when in print the style is strictly for visual appeal

- · Where chapter titles or other centered headings are printed entirely in italics or boldface
- Where a vertical list of words or terms, which is always brailled with a blank line before and after it, is printed entirely in italics or boldface
- In an electronic address, the presence of which is sufficient to indicate a hyperlink

Source: NLS UEB 15-7, UEB Rulebook 2013 Section 9

# **Quick List of Rules in UEB**

# **Alphabetic Wordsigns**

Alphabetic wordsigns are used when the word is standing alone.

The capitalized word indicator is repeated after the hyphen in fully capitalized expression involving alphabetic wordsigns.

Source: UEB Rulebook 2013 Rule 2.6

#### Capitalization

A capital letter indicator means that only the next letter is capitalized.

A capitalized word indicator means that the next word or string of letters is fully capitalized. In other words, it sets capitals mode for one word. Its effect is ended by:

- a space
- a capitals terminator or capital letter indicator
- any non-alphabetic symbol (such as a number, a period, a slash, an apostrophe, or a hyphen).

A passage is three or more symbols-sequences—that is, three or more strings of unspaced characters.

If three or more symbols-sequences in a row are fully capitalized, a capitalized passage indicator is used. This indicator sets capitals mode for the entire passage. Its effect is stopped only by a capitalized passage terminator.

# **Contraction Usage**

A wordsign is a contraction that represents an entire word.

A groupsign represents two or more letters that are part of a word.

Some contractions have both a wordsign and a groupsign meaning just as in EBAE.

Wordsigns may be used only if they are standing alone—i.e., both preceded and followed by a space, hyphen, dash, or punctuation (restrictions on punctuation will be studied later).

Alphabetic and strong wordsigns may also be used if they are followed by 'd, 'll, 're, 's, 't or 've.

Groupsigns may not be used if their letters overlap the components of a solid compound.

If there is a choice of contractions, the strong groupsigns and, for, of, the, and with should be chosen unless another choice would result in fewer cells used.

The strong groupsigns ch, gh, sh, th, and wh should not be used if the h is aspirated (pronounced separately).

Groupsigns may not be used if their letters are part of an ordinal number (no contractions are used in numeric mode).

The strong groupsign *ing* may not be used at the beginning of a word just as in EBAE.

Source: NLS UEB 6-8, UEB Rulebook 2013 Section 10

#### **Grade 1 Indicators**

Grade 1 indicator alerts the reader that the next symbol is read as a letter name or symbol with its uncontracted meaning.

Grade 1 word indicator alerts the reader that the next word or symbol sequence does not contain any contractions (its grade 1 meaning).

A grade 1 word indicator effect is ended by a space or by use of the grade 1 terminator.

A grade 1 word indicator is used if the letter combination could be misunderstood as a shortform.

Grade 1 passage indicator is used when no contractions are used in the next 3 or more symbol sequences.

The grade 1 passage indicator is terminated by the grade 1 terminator.

The grade 1 terminator is placed directly after the letter or punctuation following the last grade 1 mode word.

Source: NLS UEB 12-12, UEB Rulebook 2013 Section 12

# **Lower Sign Rule**

Any number of lower groupsigns and lower punctuation may follow one another without a space, provided that one of them is in contact with a character containing dot 1 or dot 4. Capital indicators are disregarded for purposes of this rule.

When a series of lower signs is not in contact with a dot 1 or 4, the last possible contraction is spelled out.

Source: NLS UEB 8-10, UEB Rulebook 2013 Section 10.6.10 & Section 10.10.10

# **Lower Wordsigns**

#### be, his, was, were

- Cannot be part of a longer word.
- Cannot be used in contact with lower punctuation.

Source: NLS UEB 8-10, UEB Rulebook 2013 Section 10.5.1

#### in, enough

- Cannot be part of a longer word (except that enough can be used in the word enough's).
- Can be used in contact with lower punctuation if the sequence contains upper dots.

The wordsign for in can be used next to a slash

Source: NLS UEB 8-10, UEB Rulebook 2013 Section 10.5.2 & Section 10.5.3

# **Lower Groupsigns**

#### be, con dis

- Are only used when they constitute the first syllable of a word.
- Are used following the hyphen in a hyphenated compound word.
- Are not used next to a slash.
- con and dis cannot be used as whole words.
- Can be used in abbreviations if they do not constitute the entire abbreviation.

Source: NLS UEB 8-10, UEB Rulebook Section 10.6.1-4

# bb, cc, ff, gg, ea

- · Are used only in the middle of words.
- Strong groupsigns have preference over them.
- · Are never used when in contact with punctuation.
- ea is not used when its letters overlap a prefix and the remainder of the word.

Source: NLS UEB 8-10, UEB Rulebook Section 10.6.5

#### en, in

- · Can be used wherever the letters occur.
- Strong groupsigns have preference over them; however, ing cannot be used at the beginning of a word.
- Must follow the lower sign rule.

Source: NLS UEB 8-10, UEB Rulebook 2013 Section 10.6.8

#### **Numeric Indicator**

A digit (that is, a number 1 through 0) sets numeric mode.

Numeric mode continues over:

- Numbers
- · Period or decimal point
- Comma
- Simple fraction line
- Continuation indicator
- Numeric space

Numeric mode is terminated by a space, hyphen, dash or anything not listed above including the grade 1 terminator.

Source: NLS UEB 3-9, UEB Rulebook 2013 Section 6

# References

- Bogart, D., & Landon, P. (2012). *Update to UEB: A self-directed course to update from English Braille American Edition to Unified English Braille*. Toronto, Ontario, Canada: Canadian National Institute for the Blind.
- Braille Authority of North America. (2013). *Overview of changes from current literary braille to UEB.* Baltimore, MD: BANA.
- Dunnam, J. (2013). *Instruction manual for braille transcribing, 6<sup>th</sup> edition*. Baltimore, MD: The National Federation of the Blind.
- Dunnam, J. (2015). *Instruction manual for braille transcribing—UEB edition*. Baltimore, MD: The National Federation of the Blind.
- Howse, J., Riessen, K., & Holloway, L. (2014). *Unified English Braille: Australian training manual*. Lindisfarne, Tasmania, Australia: Round Table on Information Access for People with Print Disabilities Inc.
- International Council on English Braille (2013). *The rules of Unified English Braille, 2<sup>nd</sup> Edition 2013.* Round Table on Information Access for People with Print Disabilities and International Council on English Braille.

- Stevens, M., Chairperson. (2011). *Unified English Braille manual: New Zealand edition.* Auckland, New Zealand: The Royal New Zealand Foundation of the Blind.
- Sumwalt, J. (2015). *Unified English Braille: An introduction—parts 1-6.* Janesville, WI: Wisconsin Center for the Blind and Visually Impaired.

Alphabet	Configuration	n Dot Names	Code	Rule Change
а	•: ::	1	Both	No change from EBAE to UEB
b	<b>:</b> :	1,2	Both	No change from EBAE to UEB
С	<b>::</b>	1,4	Both	No change from EBAE to UEB
d	<b>:</b>	1,4,5	Both	No change from EBAE to UEB
е	<b>:</b>	1,5	Both	No change from EBAE to UEB
f	<b>:</b>	1,2,4	Both	No change from EBAE to UEB
g	<b>:</b>	1,2,4,5	Both	No change from EBAE to UEB
h	<b>:</b> :	1,2,5	Both	No change from EBAE to UEB
i	<b>:</b>	2,4	Both	No change from EBAE to UEB
j	<b>:</b>	2,4,5	Both	No change from EBAE to UEB
k	<b>:</b> :	1,3	Both	No change from EBAE to UEB
1	<b>:</b> :	1,2,3	Both	No change from EBAE to UEB
m	::	1,3,4	Both	No change from EBAE to UEB
n	::	1,3,4,5	Both	No change from EBAE to UEB
0	<b>:</b>	1,3,5	Both	No change from EBAE to UEB
p	••	1,2,3,4	Both	No change from EBAE to UEB

Alphabet	Configuration	<b>Dot Names</b>	Code	Rule Change
q	<b>:</b>	1,2,3,4,5	Both	No change from EBAE to UEB
r	•:	1,2,3,5	Both	No change from EBAE to UEB
S	:• •:	2,3,4	Both	No change from EBAE to UEB
t	<b>:</b>	2,3,4,5	Both	No change from EBAE to UEB
u	<b>:</b>	1,3,6	Both	No change from EBAE to UEB
V	<b>:</b> :	1,2,3,6	Both	No change from EBAE to UEB
w	<b>:</b>	2,4,5,6	Both	No change from EBAE to UEB
x	••	1,3,4,6	Both	No change from EBAE to UEB
у	<b>:</b>	1,3,4,5,6	Both	No change from EBAE to UEB
z	••	1,3,5,6	Both	No change from EBAE to UEB

Alphabetic Wordsigns	Configuration	Dot Names	Code	Rule Change
but	<b>:</b> :	1,2	Both	No change from EBAE to UEB
can	::	1,4	Both	No change from EBAE to UEB
do	:	1,4,5	Both	No change from EBAE to UEB
every	<b>:</b>	1,5	Both	No change from EBAE to UEB
from	<b>:</b> :	1,2,4	Both	No change from EBAE to UEB
go	<b>::</b>	1,2,4,5	Both	No change from EBAE to UEB
have	<b>:</b>	1,2,5	Both	No change from EBAE to UEB
just	<b>::</b>	2,4,5	Both	No change from EBAE to UEB
knowledge	<b>:</b>	1,3	Both	No change from EBAE to UEB
like	<b>:</b>	1,2,3	Both	No change from EBAE to UEB
more	::	1,3,4	Both	No change from EBAE to UEB
not	:	1,3,4,5	Both	No change from EBAE to UEB
people	<b>:</b> :	1,2,3,4	Both	No change from EBAE to UEB
quite	<b>:</b>	1,2,3,4,5	Both	No change from EBAE to UEB
rather	<b>!</b>	1,2,3,5	Both	No change from EBAE to UEB

Alphabetic Wordsigns	Configurat	ion Dot Name	s Code	Rule Change
so	<b>:</b> :	2,3,4	Both	No change from EBAE to UEB
that	<b>#</b>	2,3,5,6	Both	No change from EBAE to UEB
us	:	1,3,6	Both	No change from EBAE to UEB
very	<b>:</b>	1,2,3,6	Both	No change from EBAE to UEB
x = it	•	2,4,5,6	Both	No change from EBAE to UEB
you	:	1,3,4,5,6	Both	No change from EBAE to UEB
z = as	•:	1,3,5,6	Both	No change from EBAE to UEB

Final Letter Groupsigns	Configuration	<b>Dot Names</b>	Code	Rule Change
ally			UEB	Eliminated from the braille code
	··· •• ··· •• ·• ••	6-1,3,4,5,6	EBAE	
ance	: • • • • • • • • • • • • • • • • • • •	4,6-1,5	UEB	
	::::	4,6-1,5	EBAE	
ation			UEB	Eliminated from the braille code
	:: #	6-1,3,4,5	EBAE	
ence	:: :::	5,6-e	UEB	
	:: to	5,6-e	EBAE	
ful	:: ::	5,6-1,2,3	UEB	
	:: <b>:</b> :	5,6-1,2,3	EBAE	
ty	: • • • • • • • • • • • • • • • • • • •	5,6-1,3,4,5,6	UEB	
	:: 00 :0 :0 :0 00	5,6-1,3,4,5,6	EBAE	
ess	:::::	4,6-2,3,4	UEB	Cannot be used as a whole word
	::::	4,6-2,3,4	EBAE	
ment	:: :::	5,6-2,3,4,5	UEB	
	:: : : : : : : : : : : : : : : : : : :	5,6-2,3,4,5	EBAE	

Final Letter Groupsigns	Configuration	Dot Names	Code	Rule Change
ness	H #	5,6-2,3,4	UEB	
	:::	5,6-2,3,4	EBAE	
ong	: • • • • • • • • • • • • • • • • • • •	5,6-1,2,4,5	UEB	
	<b>:: !!</b>	5,6-1,2,4,5	EBAE	
ound	: • • • : • • •	4,6-1,4,5	UEB	
	: <b>: ::</b>	4,6-1,4,5	EBAE	
ount	:::::::::::::::::::::::::::::::::::::::	4,6-2,3,4,5	UEB	
	<b>:::</b>	4,6-2,3,4,5	EBAE	
sion	: • • • • • • • • • • • • • • • • • • •	4,6-1,3,4,5	UEB	Cannot be used as a whole word
	::::	4-6,1,3,4,5	EBAE	
tion	:: ** :* **	5,6-1,3,4,5	UEB	
	:: •• :• ••	5,6-1,3,4,5	EBAE	

Indicators	Configuration	<b>Dot Names</b>	Code	Rule Change
Capital Letter Indicator	: <b>.</b>	6	UEB	Placed immediately before letter to be capitalized
	ii.	6	EBAE	Placed immediately before letter to be capitalized
Capitalized Word	:•:•	6,6	UEB	Used when 2 or more successive letters capitalized
	<b>::::</b>	6,6	EBAE	Used when 2 or more successive letters capitalized
Capitalized Passage	###	6,6,6	UEB	Used when 3 or more consecutive words capitalized
			EBAE	Each consecutive word in all caps preceded by double caps
Capital Terminator	::::::::::::::::::::::::::::::::::::::	6,3	UEB	** Used when capitalization stops in middle of word;  ** Used when number occurs after series of capitals;  ** If terminator would separate letters that form a complete word, use capital indicator to show the last letter that is capitalized;  ** If punctuation ends capitalized passage, terminator is placed after punctuation mark
			EBAE	Not used in EBAE

Indicators	Configuration	<b>Dot Names</b>	Code	Rule Change
Grade 1 Indicator	::	5,6	UEB	** Place immediately before single letter that stands alone; ** If letter is capitalized grade 1 indicator placed before the capital indicator;  ** Don't use grade 1 indicator before single letters a, i, o;  ** To show the end of the number and beginning of letters, use a grade 1 indicator before the lowercase letters a-j if they immediately follow a number (if capitalized letters don't use letter indicator);  ** Numeric mode terminated by hyphen and slash so no grade 1 indicator needed after number and hyphen or slash (period does not terminate numeric mode)
	<b>∷</b>	5,6	EBAE	** Called a Letter Indicator;  ** Used before single letters that mean named letters;  ** Use letter indicator before a, i, o when they name letters;  ** Use letter indicator when a letter/letter grouping immediately follows number or a number and hypen or slash
Grade 1 Word Indicator	::::::::::::::::::::::::::::::::::::::	5,6-5,6	UEB	** Indicates no contractions used in the next word or symbol sequence;  ** A space ends the effect of the indicator or a grade 1 terminator is used;  ** Used if letter combination could be misunderstood as a short form
			EBAE	Not used in EBAE
Grade 1 Passage Indicator	####	5,6-5,6-5,6	UEB	** Indicates no contractions used in the next 3 or more symbo sequences;  ** Terminated by the grade 1 terminator
			EBAE	Not used in EBAE

Indicators	Configuration	<b>Dot Names</b>	Code	Rule Change
Grade 1 Terminator	: <u>:</u> :::	5,6-3	UEB	Place immediately after last letter or punctuation of material that does not include contractions
	:: :: • •:	6-3	EBAE	Used when there are upper and lower case letters in a word
Numeric Indicator	<b>:</b>	3,4,5,6	UEB	** Terminated by all punctuation except comma & decimal;  ** Repeat indicator after colons, hyphens, dashes, spaces
	:	3,4,5,6	EBAE	** Number sign not terminated by comma, colon, hyphen, slash or decimal;  ** Repeat indicator after space or other terminating punctuation
Shape Indicator	::	1,2,4,6	UEB	Used with a basic shape (circle, triangle) indicator
			EBAE	Not used in EBAE until 2010
Shape Indicator for Emoticons	# <b>#</b>	4-1,2,4,6	UEB	Picture/shape symbols used in text are indicated with transcriber-defined symbol through use of the shape indicator followed without a space by the initial letter(s) of the object or symbol or a grade 1 word
			EBAE	Not used in EBAE until 2010

Configuration	Dot Names	Code	Rule Change
:• <b>::</b>	5-1,4,5	UEB	
: <b>: ::</b>	5-1,4,5	EBAE	
##	5-1,5	UEB	** Used only when stress is on the first e, when its letters not preceded by i or e;  ** Use only when all letters fall in same syllable
##	5-1,5	EBAE	Original pronunciation must be maintained
	5-1,2,4	UEB	
:: ::	5-1,2,4	EBAE	
:• <b>!</b> •	5-1,2,5	UEB	
<b>∺ </b>	5-1,2,5	EBAE	
	5-1,3	UEB	
# <b>.</b>	5-1,3	EBAE	
:: <b>!</b> :	5-1,2,3	UEB	
# <b>#</b>	5-1,2,3	EBAE	
:: ::	5-1,3,4	UEB	
# <b>#</b>	5-1,3,4	EBAE	
		5-1,4,5  5-1,4,5  5-1,5  5-1,5  5-1,2,4  5-1,2,4  5-1,2,5  5-1,2,5  5-1,2,5  5-1,3  5-1,3  5-1,3  5-1,2,3  5-1,2,3  5-1,2,3	5-1,4,5 EBAE  5-1,5 UEB  5-1,5 EBAE  5-1,2,4 UEB  5-1,2,4 EBAE  5-1,2,5 UEB  5-1,2,5 UEB  5-1,2,5 EBAE  5-1,2,5 EBAE  5-1,2,5 EBAE  5-1,2,5 EBAE  5-1,2,5 EBAE  5-1,2,5 EBAE  5-1,3 UEB  5-1,3 UEB  5-1,3 EBAE  5-1,2,3 UEB  5-1,2,3 UEB  5-1,2,3 UEB

same syllable
intained
he same syllable; ' preceded by the letter o; nd derivatives
intained, with exceptions
refix/suffix
a prefix/suffix
me syllable of basic word
intained
nced as the word "time"
intained
1

Initial-Letter Contractions	Configuration	Dot Names	Code	Rule Change
under	<b>∺ 1</b>	5-1,3,6	UEB	<ul><li>** Cannot use when letters are preceded by the letters a or o;</li><li>** Cannot use when any of its letters fall into a prefix</li></ul>
	:: :: ::	5-1,3,6	EBAE	Original pronunciation must be maintained
work	: :	5-2,4,5,6	UEB	
	: <b>: ::</b>	5-2,4,5,6	EBAE	
young	:: ::	5-1,3,4,5,6	UEB	
	:: <b>::</b>	5-1,3,4,5,6	EBAE	
character	:• : <u>•</u>	5-1,6	UEB	
	:: :: ::	5-1,6	EBAE	
through	::::	5-1,4,5,6	UEB	
	: <b>:</b> ::	5-1,4,5,6	EBAE	
where	::::::::::::::::::::::::::::::::::::::	5-1,5,6	UEB	
	##	5-1,5,6	EBAE	
ought	:: <b>::</b>	5-1,2,5,6	UEB	
	:: <b>::</b>	5-1,2,5,6	EBAE	

Configuration	<b>Dot Names</b>	Code	Rule Change
<b>∷ ::</b>	5-2,3,4,6	UEB	Only used when original meaning is retained
:: :: :: ::	5-2,3,4,6	EBAE	Original pronunciation must be maintained
: <b>:</b>	4,5-2,3,4,6	UEB	Only used when original meaning is retained
: <b>: ::</b>	4,5-2,3,4,6	EBAE	Original pronunciation must be maintained
: <b>!</b> ! <b>!</b>	4,5-1,4,5,6	UEB	Only used when original meaning is retained
<b>::::</b>	4,5-1,4,5,6	EBAE	Original pronunciation must be maintained
: <b>•</b> •:	4,5-1,3,6	UEB	Only used when original meaning is retained
: ::	4,5-1,3,6	EBAE	Original meaning must be maintained
: <b>! !!</b>	4,5-2,4,5,6	UEB	
: <b>: ::</b>	4,5-2,4,5,6	EBAE	
:• •	4,5-1,5,6	UEB	Only used when original meaning is retained
##	4,5-1,5,6	EBAE	Original meaning must be maintained
: <b>:</b> ::	4,5,6-1,4	UEB	
::::	4,5,6-1,4	EBAE	
		5-2,3,4,6  5-2,3,4,6  4,5-2,3,4,6  4,5-2,3,4,6  4,5-1,4,5,6  4,5-1,4,5,6  4,5-1,3,6  4,5-2,4,5,6  4,5-2,4,5,6  4,5-1,5,6  4,5-1,5,6  4,5-1,5,6	5-2,3,4,6 EBAE  4,5-2,3,4,6 UEB  4,5-2,3,4,6 EBAE  4,5-1,4,5,6 UEB  4,5-1,4,5,6 EBAE  4,5-1,3,6 UEB  4,5-1,3,6 UEB  4,5-2,4,5,6 UEB  4,5-2,4,5,6 UEB  4,5-2,4,5,6 UEB  4,5-1,5,6 EBAE  4,5-1,5,6 UEB  4,5-1,5,6 UEB

Initial-Letter Contractions	Configuration	Dot Names	Code	Rule Change
had	: <b>: ::</b>	4,5,6-1,2,5	UEB	Use only when the a is short
	<b>##</b>	1,5,6-1,2,5	EBAE	
many	<b>:::</b> :::::::::::::::::::::::::::::::::	4,5,6-1,3,4	UEB	
	<b>::</b> ::	4,5,6-1,3,4	EBAE	
spirit	::::	4,5,6-2,3,4	UEB	
	::::	4,5,6-2,3,4	EBAE	
their	:• ••	4,5,6-2,3,4,6	UEB	
	<b>:::</b> :	4,5,6-2,3,4,6	EBAE	
world	: 0 : 0 : 0 : 0 : 0 : 0	4,5,6-2,4,5,6	UEB	
		4,5,6-2,4,5,6	EBAE	

Lower Group	osigns Configuratio	n Dot Names	Code	Rule Change
in	÷	3,5	UEB	Can be used when overlaps in prefix
	#	3,5	EBAE	Cannot be used when overlaps in prefix
en	**	2,6	UEB	Can be used when overlaps in prefix
	#	2,6	EBAE	Cannot be used when overlaps in prefix
be	<b>:</b>	2,3	UEB	
	<b>:</b>	2,3	EBAE	
con	#	2,5	UEB	
	<b>:</b>	2,5	EBAE	
dis	#	2,5,6	UEB	
	<b>:</b>	2,5,6	EBAE	
com			UEB	Eliminated from the braille code
	<b>::</b>	3,6	EBAE	
bb	<b>:</b> ii	2,3	UEB	
	<b>i</b> i	2,3	EBAE	
СС	<del>!!</del>	2,5	UEB	
	<b>::</b>	2,5	EBAE	

Lower Grou	ıpsigns Configur	ation Dot Nam	es Code	Rule Change
dd			UEB	Eliminated from the braille code
	<b>::</b>	2,5,6	EBAE	
f	**	2,3,5	UEB	
	<b>:</b>	2,3,5	EBAE	
99	::	2,3,5,6	UEB	
	<b>::</b>	2,3,5,6	EBAE	
ea	÷:	2	UEB	** Cannot bridge a prefix;  ** Must be preceded and followed by by a letter or contraction;  ** Do not use when preceded or followed by a capital indicator
	•::	2	EBAE	Cannot bridge a prefix

<b>Lower Wordsigns</b>	Configuration	<b>Dot Names</b>	Code	Rule Change
in	i <del>i</del>	3,5	UEB	Can be used next to a slash
	<b>:</b>	3,5	EBAE	Cannot be used next to a slash
enough	•	2,6	UEB	Can be in contact with lower punctuation signs if the sequence contains upper dots
	<del>1</del> ;	2,6	EBAE	Cannot be in contact with any other letter, contraction, word, or punctuation sign
be	<b>:</b>	2,3	UEB	
	<b>:</b>	2,3	EBAE	
his	<b>:</b>	2,3,6	UEB	
	<b>:</b>	2,3,6	EBAE	
was	<b>:</b>	3,5,6	UEB	
	<b>::</b>	3,5,6	EBAE	
were	#	2,3,5,6	UEB	
	ä	2,3,5,6	EBAE	
to			UEB	Eliminated from the braille code
	<b>::</b>	2,3,5	EBAE	

<b>Lower Wordsigns</b>	Configuration	Dot Names	Code	Rule Change
into			UEB	Eliminated from the braille code; Use in in into
	<b>∷</b> #	3,5-2,3,5	EBAE	
by			UEB	Eliminated from the braille code
	  ••	3,5,6	EBAE	

Numbers	Configuration	n Dot Names	Code	Rule Change
1	<b>:</b> ::	#-1	Both	No change from EBAE to UEB
2	· • • · · · · · · · · · · · · · · · · ·	#-1,2	Both	No change from EBAE to UEB
3	· • • • • • • • • • • • • • • • • • • •	#-1,4	Both	No change from EBAE to UEB
4	· • • • • • • • • • • • • • • • • • • •	#-1,4,5	Both	No change from EBAE to UEB
5	: • • · · · · · · · · · · · · · · · · ·	#-1,5	Both	No change from EBAE to UEB
6		#-1,2,4	Both	No change from EBAE to UEB
7	· • • • • • • • • • • • • • • • • • • •	#-1,2,4,5	Both	No change from EBAE to UEB
8	: : : :	#-1,2,5	Both	No change from EBAE to UEB
9	· • · • · • • · · • • · ·	#-2,4	Both	No change from EBAE to UEB
0	<b>::</b> ::	#-2,4,5	Both	No change from EBAE to UEB
Numeric Indicator	:	3,4,5,6	UEB	** Terminated by all punctuation except comma & decimal;  ** Repeat indicator after colons, hyphens, dashes, spaces
	<b>:</b>	3,4,5,6	EBAE	** Number sign not terminated by comma, colon, hyphen, slash or decimal;  ** Repeat indicator after space or other terminating punctuation
Numeric Space	ii .	5	UEB	Placed before any digit means that the digit is preceded by a numeric space (used in telephone numbers without hyphens credit card numbers, etc.)
			EBAE	Not used in EBAE

<b>Punctuation</b>	Configuration	<b>Dot Names</b>	Code	Rule Change
Period	#	2,5,6	UEB	Follows print
	<b>::</b>	2,5,6	EBAE	Follows print
Decimal	::	2.5.6	UEB	Follows print
	: <b>:</b>	4,6	EBAE	Follows print
Question Mark	::	2,3,6	UEB	Follows print
	<b>:</b>	2,3,6	EBAE	Follows print
Exclamation Mark	<b>;</b> :	2,3,5	UEB	Follows print
	<b>:</b> :	2,3,5	EBAE	Follows print
Comma	<b>:</b> :	2	UEB	Follows print
	ŧ	2	EBAE	Follows print
Semicolon	<b>;</b> ;	2,3	UEB	Follows print
	<b>:</b> :	2,3	EBAE	Follows print
Colon	<b>:</b>	2,5	UEB	Follows print
	<b>#</b>	2,5	EBAE	Follows print

Punctuation	Configuration	Dot Names	Code	Rule Change
Hyphen	<b>ii</b>	3,6	UEB	** If capitalized word is hyphenated, repeat capitalized word indicator after the hyphen (before second word);  ** Capitalized word indicator is repeated after the hyphen in fully capitalized expression involving alphabetic whole word signs
	<b>::</b>	3,6	EBAE	** One double capital sign used before whole unit in the completely capitalized and hyphenated compound word (do not repeat the double cap sign);  ** Double capital sign is not repeated after a hyphen in fully capitalized expression involving whole word alphabetic contractions
Dash	:::::	6-3,6	UEB	** Follows print spacing in all situations;  ** Terminates capital word indicator but not the capital passage indicator
	<b>:: ::</b>	3,6-3,6	EBAE	** No space between words and dash mid-sentence; ** Braille dash terminates effect of capital indicator
Apostrophe	<b>.</b> :	3	UEB	** Order of symbols: Braille apostrophe, capital indicator, letter;  ** Apostrophe terminates capital word indicator;  ** When a number is preceded by apostrophe, braille the apostrophe first then the numeric indicator
	<b>:</b> :	3	EBAE	** Order of symbols: Braille apostrophe, capital indicator, letter;  ** Apostrophe does not terminate all caps sign;  ** When a number is preceded by apostrophe, braille number sign first

Punctuation	Configuration	<b>Dot Names</b>	Code	Rule Change
Opening Quotation Mark	#	2,3,6	UEB	"
	<b>::</b>	2,3,6	EBAE	"
Closing Quotation Mark	: <b>:</b>	3,5,6	UEB	п
	<b>::</b>	3,5,6	EBAE	н
Opening Single Quote	:: ::	6-2,3,6	UEB	
	:: •: :• ••	6-2,3,6	EBAE	
Closing Single Quote	:: :: :• ••	6-3,5,6	UEB	Reversed cell order change from EBAE
	:: ::	3,5,6-3	EBAE	
Opening Parenthesis	# <b>:</b>	5-1,2,6	UEB	(
	<b>:</b>	2,3,5,6	EBAE	(
Closing Parenthesis	: <b>:</b> :	5-3,4,5	UEB	)
	<b>:</b>	2,3,5,6	EBAE	)
Opening Square Bracket	:::::::::::::::::::::::::::::::::::::::	4,6-1,2,6	UEB	
	:: <b>::</b>	6-2,3,5,6	EBAE	]

Punctuation	Configuration	<b>Dot Names</b>	Code	Rule Change
Closing Square Bracket	::::	4,6-3,4,5	UEB	[
	•• ••	2,3,5,6-3	EBAE	[
Underscore (omission)	::::	4,6-3,6	UEB	** Lower line showing omission;  ** Use only once regardless of length of line of omission;  ** Spacing follows print;  ** If it doesn't fit on a line bring the last unit and the connected underscore to the next line
	······································	3,6-3,6-3,6-3,6	EBAE	Double dash; Spaced and punctuated as a word
Slash		4,5,6-3,4	UEB	** Spacing follows print;  ** Slash terminates capital word indicator and numeric indicator so each must be repeated after the slash;  ** Slash does not terminate passage indicator
	**	4,5,6-3,4	EBAE	** Spacing follows print;  ** Slash terminates composition signs except the number sign (don't repeat number sign but repeat other composition signs/indicators)
Ellipsis	***	2,5,6-2,5,6-2,5,6	UEB	Follow print; If spacing is unclear space as a word
	:: :: •: •:	3-3-3	EBAE	Follow print; If spacing is unclear space as a word

Shortforms	Configurat	ion Dot Name	s Code	Rule Change
about	•:: •:: •::	ab	UEB	
	##:	ab	EBAE	
above	*: <b>*</b> : <b>*</b> :	abv	UEB	
	:: <b>:: ::</b>	abv	EBAE	
according	•: •• :: ::	ac	UEB	
	## ##	ac	EBAE	
across	•••••	acr	UEB	
	:: :: <b>:</b> :	acr	EBAE	
after	:: <b>:</b> :	af	UEB	
	±:#:	af	EBAE	** Must maintain original meaning;  ** Cannot be used if followed by a vowel because then takes on the appearance of another word
afternoon	*: •: •: :: •: •:	afn	UEB	
	:: <b>:: ::</b>	afn	EBAE	
afterward	*: •: • :: •: •	afw	UEB	
	:: <b>::</b> ::	afw	EBAE	

Shortforms	Configuration	<b>Dot Names</b>	Code	Rule Change
again	:: <b>::</b>	ag	UEB	
	:: <b>!!</b>	ag	EBAE	
against	ii <b>ii ii</b>	ag(st)	UEB	
	‡: <b>#: ;</b> !	ag(st)	EBAE	
almost	:: <b>:: ::</b>	alm	UEB	
	:: <b>:</b> : ::	alm	EBAE	
already	:: <b>:: ::</b>	alr	UEB	
	:: <b>:</b> : <b>:</b> :	alr	EBAE	
also	:: <b>:</b> :	al	UEB	
	<b>:</b> : <b>:</b> :	al	EBAE	
although	:: <b>:</b> : ::	al(th)	UEB	
	:: <b>:</b> : ::	al(th)	EBAE	
altogether	:: <b>::</b> ::	alt	UEB	
	<b>∷ ∷</b> ∷	alt	EBAE	
always	:: <b>:</b> : ::	alw	UEB	
	*: *: ··	alw	EBAE	

Shortforms	Configuration	n Dot Names	Code	Rule Change
because	:: :: :: ::	(be)c	UEB	
	<b>:</b> : <b>::</b>	(be)c	EBAE	
before	<b>:</b> ::::	(be)f	UEB	
	<b>:: ::</b>	(be)f	EBAE	
behind	• •	(be)h	UEB	
	<b>::                                   </b>	(be)h	EBAE	
below	:: •: •: •:	(be)l	UEB	
	<b>:: :</b> :	(be)l	EBAE	
beneath	:::	(be)n	UEB	
	##	(be)n	EBAE	
beside	<b>:</b> : <b>:</b> :	(be)s	UEB	
	<b>:: :</b> :	(be)s	EBAE	
between	<b>:</b> : <b>:</b> :	(be)t	UEB	
	##	(be)t	EBAE	
beyond	<b>:</b> ::	(be)y	UEB	
	# <b>#</b>	(be)y	EBAE	

Shortforms	Configuration	Dot Names	Code	Rule Change
blind	#: <b>#</b> :	bl	UEB	Can be used within longer words but only at beginning of such words and only if shortform isn't followed by a vowel or y
	<b>:</b> ::::	bl	EBAE	Cannot be used if followed by a vowel because they then take on the appearance of another word
braille	*: *: *: *: ** *:	brl	UEB	Can be used within longer words that stand alone
	<b>:</b> : <b>:</b> :	brl	EBAE	
children	##	(ch)n	UEB	Can be used within longer words that stand alone and if shortform isn't followed by a vowel or y
	:	(ch)n	EBAE	
conceive	·· •• •· •• ·· ••	(con)cv	UEB	
	<b>:: :: ::</b>	(con)cv	EBAE	
conceiving	·· •• •· •• •• ·· •• ••	(con)cvg	UEB	
	# # # #	(con)cvg	EBAE	
could	:: : <b>:</b>	cd	UEB	
	<b>:: ::</b>	cd	EBAE	
deceive	** ** **	dcv	UEB	
	## <b>#</b>	dcv	EBAE	

<b>Shortforms</b>	Configuration	<b>Dot Names</b>	Code	Rule Change
deceiving	## <b>#</b> #	dcvg	UEB	
	:: :: <b>:</b> : ::	dcvg	EBAE	
declare	:• :: •: :• :: •:	dcl	UEB	
	<b>!! !! !</b> !	dcl	EBAE	
declaring	: :: ::	dclg	UEB	
	<b>:::::::</b>	dclg	EBAE	
either	:: ::	ei	UEB	
	:• •:	ei	EBAE	
first	# #	f(st)	UEB	Can be used within longer words but only at beginning of such words and only if shortform isn't followed by a vowel or y
	** :*	f(st)	EBAE	
friend	#: #:	fr	UEB	Can be used within longer words but only at beginning of such words and only if shortform isn't followed by a vowel or y
	# #·	fr	EBAE	Cannot be used if followed by a vowel because they then take on the appearance of another word

Shortforms	Configuration	<b>Dot Names</b>	Code	Rule Change
good	##	gd	UEB	Can be used within longer words but only at the beginning of such words and only if shortform isn't followed by a vowel or y
	##	gd	EBAE	Cannot be used if followed by a vowel because they then take on the appearance of another word
great	** ** **	grt	UEB	Can be used within longer words that stands alone
	** ** **	grt	EBAE	
herself	** ** **	h(er)f	UEB	
	<b>:: ::</b>	h(er)f	EBAE	
him	*::	hm	UEB	
	<b>::</b> ::	hm	EBAE	
himself	** **	hmf	UEB	
	####	hmf	EBAE	
its	** :• :: •:	XS	UEB	
	<b>::</b> :::	XS	EBAE	
itself	** **	xf	UEB	
	<b>:: ::</b>	xf	EBAE	

Shortforms	Configuration	<b>Dot Names</b>	Code	Rule Change
mmediate	<b>:: ::</b> ::	imm	UEB	
	 •: :: :: ·: •: •:	imm	EBAE	
etter	<b>.</b> : <b>.:</b> :	lr	UEB	Can be used within longer words but only at the beginning of such words and only if shortform isn't followed by a vowel or y
	<b>: :</b>	Ir	EBAE	
little :: ::	<b>:</b> : <b>:</b> :	II	UEB	Can be used within longer words but only at the beginning of such words and only if shortform isn't followed by a vowel or y
	<b>: :</b>	II	EBAE	
much ::::	m(ch)	UEB		
	** *: :: : *	m(ch)	EBAE	
must	** :*	m(st)	UEB	
	** :*	m(st)	EBAE	
myself	00 00 00 11 10 01 01 00 11	myf	UEB	
	** ** **	myf	EBAE	
necessary	00 0: 00 :0 :0 :: 0: :: ::	nec	UEB	
	<b>:</b> :: ::	nec	EBAE	

Shortforms	Configuration	<b>Dot Names</b>	Code	Rule Change
neither	<b>:</b> :: ::	nei	UEB	
	###	nei	EBAE	
o'clock			UEB	Eliminated from the braille code
	###	o'c	EBAE	
oneself	:• •• ••	(one)f	UEB	
	# <b># #</b>	(one)f	EBAE	
ourselves	** ** ** ** ** ** * * * * * * * * * * *	(ou)rvs	UEB	
	***	(ou)rvs	EBAE	
paid	<b>:</b> : : <del>:</del>	pd	UEB	
	<b>:</b> :::	pd	EBAE	
perceive	*: ** ·: **	p(er)cv	UEB	
	<b>:: :: ::</b>	p(er)cv	EBAE	
perceiving	** ** ** **	p(er)cvg	UEB	
	#####	p(er)cvg	EBAE	

Shortforms	Configuration	<b>Dot Names</b>	Code	Rule Change
perhaps	<b>:: ::</b>	p(er)h	UEB	
	<b>:: :: ::</b>	p(er)h	EBAE	
quick	##:	qk	UEB	Can be used within longer words but only at the beginning of such words and only if shortform isn't followed by a vowel or y
	#1:	qk	EBAE	
receive	<b>:</b> :: <b>:</b> :	rcv	UEB	
	<b>:</b> :: <b>:</b> :	rcv	EBAE	
receiving	•	rcvg	UEB	
	#####	rcvg	EBAE	
rejoice	•• •• ···	rjc	UEB	
	<b>:</b> :: ::	rjc	EBAE	
rejoicing	<b>:</b> :: ::	rjcg	UEB	
	<b>##</b> ###	rjcg	EBAE	
said	<b>:</b> ::	sd	UEB	
	<b>:</b> ::	sd	EBAE	

Shortforms	Configuration	<b>Dot Names</b>	Code	Rule Change
should	: <b>:</b> ::	(sh)d	UEB	
	::::	(sh)d	EBAE	
such	** ** *· · ·	s(ch)	UEB	
	** **	s(ch)	EBAE	
themselves	• • • •	(the)mvs	UEB	
	: • • • • · · • • • · · · • • • · · · • • • · · · · • • • · · · · • • • · · · · · • • • ·	(the)mvs	EBAE	
thyself	:::::::::::::::::::::::::::::::::::::::	(th)yf	UEB	
	** ** **	(th)yf	EBAE	
today	<b>:</b> ::	td	UEB	
	<b>:</b>	td	EBAE	
tomorrow	<b>::</b> :::	tm	UEB	
	** **	tm	EBAE	
tonight	<b>::</b> ::	tn	UEB	
	##	tn	EBAE	

Shortforms	Configura	tion Dot Nar	nes Code	Rule Change
together	<b>:: :: ::</b>	tgr	UEB	
	** ** **	tgr	EBAE	
would	:::	wd	UEB	
	<b>::</b> ::	wd	EBAE	
your	** • • • • • • • • • • • • • • • • • •	yr	UEB	
	::::	yr	EBAE	
yourself	** *: **	yrf	UEB	
	<b>:::</b> ::::	yrf	EBAE	
yourselves	** *: *: *: :** *: *:	yrvs	UEB	
	** ** ** **	yrvs	EBAE	

Configuration	<b>Dot Names</b>	Code	Rule Change
ii ii	4-1	UEB	
<b>!</b>	4-1	EBAE	
	4-1,4	UEB	
:• ••	4-1,4	EBAE	
:: <b>::</b>	4-1,5	UEB	
: <b>* :</b> :	4-1,5	EBAE	
:: <b>:</b> :	4-1,2,4	UEB	
: <b>: :</b> :	4-1,2,4	EBAE	
:: <b>:</b> :	4-1,2,3	UEB	
<b>:</b> :	1,2,3	EBAE	
:: ::	4-2,3,4	UEB	
<b>::</b>	2,5,6	EBAE	
:: ••	4-1,3,4,5,6	UEB	
: • • • • • • • • • • • • • • • • • • •	4-1,3,4,5,6	EBAE	
		4-1  4-1  4-1,4  4-1,4  4-1,5  4-1,5  4-1,5  4-1,2,4  4-1,2,4  4-1,2,3  1,2,3  1,2,3  1,2,3  4-2,3,4  2,5,6  4-1,3,4,5,6	4-1,4 UEB  4-1,4 EBAE  4-1,5 UEB  4-1,5 EBAE  4-1,5 EBAE  4-1,2,4 UEB  4-1,2,4 EBAE  11:1: 4-1,2,4 EBAE  11:1: 4-1,2,4 EBAE  11:1: 4-1,2,4 EBAE  11:1: 4-1,2,3 UEB  11:1: 4-2,3,4 UEB  12:1: 4-2,3,4 UEB  13:1: 4-2,3,4 UEB  14:1: 4-2,3,4 UEB  15:1: 4-2,3,4 UEB  16:1: 4-2,3,4 UEB

Special Symbols: Other	Configuration	Dot Names	Code	Rule Change
ampersand &	:: <b>::</b>	4-1,2,3,4,6	UEB	
	:: ::	4-1,2,3,4,6	EBAE	
bullet	:::::::::::::::::::::::::::::::::::::::	4,5,6-2,5,6	UEB	
	<b>::</b> ::	4,5,6-2,5,6	EBAE	Added 2011
copyright ©	:• :: :• ::	4,5-1,4	UEB	
	: <b>:</b> ::	4,5-1,4	EBAE	
degrees °	:::::	4,5-2,4,5	UEB	
	<b>:: ::</b>	1,4,5-1,2,4,5	EBAE	
ditto	: • • · ·	5-2	UEB	
	<b>!• •</b> !	5-2	EBAE	
number sign (crosshatch/pound sign) #	33	4,5-1,4,5,6	UEB	
	<b>::::</b>	1,2,3-1,4,5,6	EBAE	
paragraph sign ¶	:: ::	4,5-1,2,3,4	UEB	
	<b>:</b> ::	1,2,3,4-3,4,5	EBAE	

Special Symbols	Configuration	n Dot Names	Code	Rule Change
percent sign %	:• ::	4,6-3,5,6	UEB	
	:: <b>:: :</b> :	4-2,5-1,2,3,4	EBAE	
prime (foot, feet, minutes) [angular and time] '	<b>::</b>	2,3,4,5	UEB	
		ft m(in)	EBAE	
double prime (inch/inches, seond(s) [angular and time] "	<b>::::</b>	2,3,4,5-2,3,4,5	5 UEB	
		sec	EBAE	
registered sign ®	:• •	4,5-1,2,3,5	UEB	
	<b>:: :</b> :	4,5-1,2,3,5	EBAE	
section sign §	:• •: :• •:	4,5-2,3,4	UEB	
	<b>:</b> ::	2,3,4-3	EBAE	
tilde ~	·• ·· ·· •	4-3,5	UEB	
	:: ::	4-1,5,6	EBAE	
trademark sign ™	:• :•	4,5-2,3,4,5	UEB	
	:• :• :• ••	4,5-2,3,4,5	EBAE	

Strong Contractions as Groupsigns	Configuratio	on Dot Name	s Code	Rule Change
and	•••	1,2,3,4,6	UEB	
	••	1,2,3,4,6	EBAE	
for	<b>#</b>	1,2,3,4,5,6	UEB	Used in all words where combination of letters appear except when they overlap components of a solid compound word (unhyphenated)
	••	1,2,3,4,5,6	EBAE	Can't be used when syllable splits contraction word letters
of	ii.	1,2,3,5,6	UEB	Used in all words where combination of letters appear except when they overlap components of a solid compound word (unhyphenated)
	• •	1,2,3,5,6	EBAE	Can't be used when syllable splits contraction word letters
the	::	2,3,4,6	UEB	
	<b>:</b>	2,3,4,6	EBAE	
with	:	2,3,4,5,6	UEB	
	<b>:</b>	2,3,4,5,6	EBAE	

Strong Contractions as Wordsigns	Configuratio	n Dot Names	Code	Rule Change
and	<b>:</b>	1,2,3,4,6	UEB	Space as in print
	<b>:</b> :	1,2,3,4,6	EBAE	Can be joined without a space to a/for/of/the/with
for	:	1,2,3,4,5,6	UEB	Space as in print
	<b>:</b>	1,2,3,4,5,6	EBAE	Can be joined without a space to a/and/of/the/with
of	<b>:</b>	1,2,3,5,6	UEB	Space as in print
	<b>:</b>	1,2,3,5,6	EBAE	Can be joined without a space to a/and/for/the/with
the	::	2,3,4,6	UEB	Space as in print
	<b>:</b>	2,3,4,6	EBAE	Can be joined without a space to a/and/for/of/with
with	#	2,3,4,5,6	UEB	Space as in print
	:	2,3,4,5,6	EBAE	Can be joined without a space to a/and/for/of/the

Strong Groupsigns	Configuration	<b>Dot Names</b>	Code	Rule Change
ch	::	1,6	UEB	
	<b>!</b>	1,6	EBAE	
sh	::	1,4,6	UEB	
	<b>::</b>	1,4,6	EBAE	
th	::	1,4,5,6	UEB	Cannot be used with ordinal numbers
	:	1,4,5,6	EBAE	Can be used with ordinal numbers
wh	<b>:</b>	1,5,6	UEB	
	<b>:</b>	1,5,6	EBAE	
ou	•••	1,2,5,6	UEB	
	<b>:</b>	1,2,5,6	EBAE	
st	:• •:	3,4	UEB	Cannot be used with ordinal numbers
	<b>:</b>	3,4	EBAE	Can be used with ordinal numbers
ar	<b>:</b>	3,4,5	UEB	Used wherever occurs unless overlaps each compound word part
	<b>:</b>	3,4,5	EBAE	Cannot be used when split with prefix/suffix

Strong Groupsigns	Configuration	Dot Names	Code	Rule Change
ed	<b>:</b> :	1,2,4,6	UEB	Used wherever occurs unless overlaps each compound word part
	<b>:</b>	1,2,4,6	EBAE	Cannot be used when split with prefix/suffix
er	ij	1,2,4,5,6	UEB	Used wherever occurs unless overlaps each compound word part
	#	1,2,4,5,6	EBAE	Cannot be used when split with prefix/suffix
gh	<b>!</b> ;	1,2,6	UEB	Used wherever occurs unless overlaps each compound word part
	•	1,2,6	EBAE	Cannot be used when split with prefix/suffix
ble			UEB	Eliminated from the braille code
	<b>:</b>	3,4,5,6	EBAE	
ow	<u>.</u>	2,4,6	UEB	Used wherever occurs unless overlaps each compound word part
	•	2,4,6	EBAE	Cannot be used when split with prefix/suffix
ing	<b>:</b>	3,4,6	UEB	Used wherever occurs unless overlaps each compound word part; Cannot use at the beginning of a word
	ii	3,4,6	EBAE	** Cannot be used when split with prefix/suffix; ** Cannot be used at the beginning of a word

<b>Strong Wordsigns</b>	Configuration	<b>Dot Names</b>	Code	Rule Change
child	•:	1,6	UEB	
	::	1,6	EBAE	
shall	**	1,4,6	UEB	
	::	1,4,6	EBAE	
this	::	1,4,5,6	UEB	Can use with an apostrophe
	:	1,4,5,6	EBAE	Can't use with apostrophe such as in which'll
which	::	1,5,6	UEB	Can use with an apostrophe
	<b>:</b>	1,5,6	EBAE	Can't use with apostrophe such as in this'll
out	•	1,2,5,6	UEB	
	<b>:</b>	1,2,5,6	EBAE	
still	<b>:</b>	3,4	UEB	
	<b>:</b>	3,4	EBAE	

Abbreviations	Configuration	<b>Dot Names</b>	Code	Rule Change
Abbreviations	NA	None	UEB	** Use grade 1 indicator before each single-letter abbreviation;  ** Can use contraction for "in" as an abbreviation for inches (ins.);  ** Can use alphabetic wordsign for an abbreviation as long as the letters in the abbreviation are pronounced as a word (otherwise not)
	NA	None	EBAE	** Do not use letter indicator before single-letter abbreviation unless it would be confused with a contraction;  ** Cannot use contraction for "in" as an abbreviation for inches (ins.);  ** Cannot use whole-word contractions or shortform words for abbreviations

Foreign Language	Configuration	<b>Dot Names</b>	Code	Rule Change
Acute accent above following letter é	::::::::::::::::::::::::::::::::::::::	4,5-3,4	UEB	Modifier placed immediately before letter to which it applies; example: é :::::
	<b>:</b>	2,3,4,6	EBAE	é
Breve above following letter ü	:: ::	4-3,4,6	UEB	Modifier placed immediately before letter to which it applies; example: ü ::::::
	<b>:</b>	1,2,5,6	EBAE	ü
Cedila below following letter ç	::::::::::::::::::::::::::::::::::::::	4,5-1,2,3,4,6	UEB	Modifier placed immediately before leter to which it applies: example: ç :::::
	<b>::</b>	1.2.3.4.6	EBAE	Ç
Circumflex above following letter ô	## <b>:</b>	4,5-1,4,6	UEB	Modifier placed immediately before letter to which it applies; example: ô ::::
	::	1,4,5,6	EBAE	ô
Grave accent above following letter à	::::::::::::::::::::::::::::::::::::::	4,5-1,6	UEB	Modifier placed immediately before letter to which it applies; example: à :::::
	<b>:</b>	1,2,3,5,6	EBAE	à
Ligature indicator æ	:: #:	4,5-2,3,5	UEB	Place the ligature indicator between two letters which are shown joined together in print; example: æ ::::::::::::::::::::::::::::::::::
	:	3,4,5	EBAE	æ

Foreign Language	Configuration	<b>Dot Names</b>	Code	Rule Change
Macron above following letter ū	ii ii	4-3,6	UEB	Modifier placed immediately before letter to which it applies; example: ū ::::::
	:	4,5,6	EBAE	ū
Tilde ñ	: <b>!!</b>	4,5-1,2,4,5,6	UEB	Modifier placed immediately before letter to which it applies example: ñ ::::
	<b>:</b>	1,2,4,5,6	EBAE	ñ
Umlaut or diaresis above following letter ü	: <del>! ::</del>	4,5-2,5	UEB	Modifier placed immediately before letter to which it applies example: ü ::::::::::::::::::::::::::::::::::
	• • • • • • • • • • • • • • • • • • • •		EBAE	ü

Mathematical	Configuration	<b>Dot Names</b>	Code	Rule Change
Decimal	**	2,5,6	UEB	
	:	4,6	EBAE	
Fraction Line	ii.	3,4	UEB	Used when numbers of fraction on different levels of type on same line
	<b>:</b>	3,4	EBAE	Used when numbers of fraction on different levels of type on same line
Mixed Number Unspaced	NA	NONE	UEB	When print shows no space between whole number and fraction: Numeric indicator is placed before whole number and followed by numeric indicator before the fraction
	NA	NONE	EBAE	When print shows no space between whole number and fraction: Number sign placed before whole number and whole number followed by hyphen (do not repeat the number sign) before the fraction
Mixed Number Spaced	NA	NONE	UEB	When print shows a space between whole number and fraction: Place numeric indicator in before the whole number and before the fraction with a space between the two parts
	NA	NONE	EBAE	When print shows a space between whole number and fraction: Place number sign before the whole number , followed by a hyphen, followed by the fraction (no repeat of the number sign)

Mathematical	Configuration	<b>Dot Names</b>	Code	Rule Change
Hyphens and Dashes	NA	NONE	UEB	Hyphens and dashes terminate the numeric code, so repeat the numeric indicator after each
	NA	NONE	EBAE	<ul><li>** Do not repeat number sign before single whole number after hyphen or dash;</li><li>** Repeat number sign before fraction following hyphen or dash</li></ul>
Slash		4,5,6-3,4	UEB	Used when numbers of fraction are on the same level on the same line
	<b>:::</b> :	4,5,6-3,4	EBAE	Used when numbers of fractin are on the same level on the same line
Sign of Operation: +	: • • • • • • • • • • • • • • • • • • •	5-2,3,5	UEB	Follow print format
	** *: *: ** *: *: *: *:	plus	EBAE	Use words for symbols and space as sentence
Sign of Operation: -	:• :: •• ••	5-3,6	UEB	Follow print format
	****	m(in)us	EBAE	Use words for symbols and space as sentence
Sign of Operation: x	:• •:	5-2,3,5	UEB	Follow print format
	:: <b>:: :</b> :	(time)s	EBAE	Use words for symbols and space as sentence
Sign of Operation: ÷	:: ·• :• ·:	5-3,4	UEB	Follow print format
		divid(ed) by	EBAE	Use words for symbols and space as sentence

Mathematical	Configuration	n Dot Names	Code	Rule Change
Sign of Comparison: =	:• <b>::</b>	5-2,3,5,6	UEB	Follow print format
	:: :: :: :: ::	equals	EBAE	Use words for symbols and space as sentence
Sign of Operation: (opening angle bracket or is less than) <	##	5-1,2,6	UEB	Follow print format
		less (th)an	EBAE	Use words for symbols and space as sentence
Sign of Operation: (closing angle bracket or greater than) >	9.3	5-3,4,5	UEB	Follow print format
		(great)(er) (th)an	EBAE	Use words for symbols and space as sentence
Sign of Operation: Ratio:	:•	5,6	UEB	Follow print format
	<b>::</b>	to	EBAE	Use words for symbols and space as sentence
Subscript	••	2,6	UEB	Transcriber's Note
	<b>::</b> ::	parenthesis	EBAE	Enclose in parenthesisno specific sign
Superscript	<b>.</b>	3,5	UEB	Show specifically using a superscript
	:: ::	parenthesis	EBAE	Transcriber's Note

<b>Roman Numerals</b>	Configuration	<b>Dot Names</b>	Code	Rule Change
Upper Case Numerals	NA	NONE	UEB	** Use grade 1 indicator if single capital letter used as numeral;
	NA	NONE	EBAE	** Do not use letter sign if single capital letter used as numeral;  ** Do not use letter sign before capitalized numeral with multiple letters
Lower Case Numerals	NA	NONE	UEB	** Use grade 1 indicator if single lower case letter used as numeral;  ** Do not use grade 1 indicator before numeral with multiple letters
	NA	NONE	EBAE	** Use letter sign if single lower case letter used as numeral;  ** Use letter sign if multiple lower case letters used as numeral
With hyphen, dash, colon	NA	NONE	UEB	Repeat grade 1 indicator after hyphen, dash but not colon
	NA	NONE	EBAE	Repeat letter sign only after punctuation in lower case Roman Numerals

Speech Mannerisms	Configuration	Dot Names	Code	Rule Change
Speech Hesitations, Elongation, Sound Imitations, Lisped Words, Dialect	NA	None	UEB	Follow contraction rules
	NA	None	EBAE	Cannot divide between lines
Stammering	NA	None	UEB	** Cannot use contractions in stammered words;  ** Use grade 1 indicator if stammer could be confused with contraction;  ** Minimize number of switches between grades of braille: if 4 or more grade 1 indicators would be required in a sequence, use the grade 1 word indicator and grade 1 terminator;  ** If the stammered word does not contain any contractions, don't use a grade 1 terminator for the full word
	NA	None	EBAE	** Can use contractions in stammered words; ** Don't use letter indicator in stammered word(s)
Syllabicated Words	NA	None	UEB	** Follow basic contraction rules;
	NA	None	EBAE	** Cannot divide between lines;  ** Cannot use contraction to, into, by;  ** Contraction usage is limited to avoid confusion (short list)

<b>Transcriber Note</b>	Configuration	<b>Dot Names</b>	Code	Rule Change
Opening Embedded Note	:: : <b>: ::</b>	4-4,6-1,2,6	UEB	
	:::	6-3	EBAE	Starts in cell 7 with runovers in cell 5
Closing Embedded Note	· • · • · • · • · · • · · · · · · · · ·	4-4,6-3,4,5	UEB	
	:: :: :• •:	6-3	EBAE	

Typeform Indicators	Configuration	Dot Names	Code	Rule Change
Italic Word Indicator	<b>:</b> ‡+:	4,6-2	UEB	** Placed before word;  ** Effect continues until space or terminator
	:	4,6	EBAE	Generic indicator of emphasis (doesn't specify typeform)
Italic Symbol Indicator	:::::	4,6-2,3	UEB	Used for a single letter, digit, or symbol that is italicized
	::	4,6	EBAE	Generic indicator of emphasis (doesn't specify typeform)
Italic Passage Indicator	:::::	4,6-2,3,5,6	UEB	When 3 or more words are printed in italics in the general text
	::::	4,6-4,6	EBAE	Generic indicator of emphasis (doesn't specify typeform)
Italic Terminator	:::::::::::::::::::::::::::::::::::::::	4,6-3	UEB	Used to terminate effect of typeform indicator (italics) within a word or at the end of a passage
	#	4,6	EBAE	Used to terminate effect of the italics by placing before last word of passage that is italicized
Boldface Word Indicator	: <b>! :</b> :	4,5-2	UEB	** Placed before word;  ** Effect continues until space or terminator
	:	4,6	EBAE	Generic indicator of emphasis (doesn't specify typeform)
Boldface Symbol Indicator	: <b>! ;</b> :	4,5-2,3	UEB	Used for a single letter, digit, or symbol that is in boldface type
	ii.	4,6	EBAE	Generic indicator of emphasis (doesn't specify typeform)

Typeform Indicators	Configuration	Dot Names	Code	Rule Change
Boldface Passage Indicator	<b>:: ::</b>	4,5-2,3,5,6	UEB	When 3 or more words are printed in a boldface typeform from general text
	::::	4,6-4,6	EBAE	Generic indicator of emphasis (doesn't specify typeform)
Boldface Terminator	:::::::::::::::::::::::::::::::::::::::	4,5-3	UEB	Used to terminate effect of typeform indicator (boldface) within a word or at the end of a passage
	<b>:</b>	4,6	EBAE	Used to terminate effect of the emphasis by placing before last word of passage
Underline Word Indicator	<b>::</b> :::	4,5,6-2	UEB	** Placed before word;  ** Effect continues until space or terminator
	:	4,6	EBAE	Generic indicator of emphasis (doesn't specify typeform)
Jnderline Symbol Indicator	::::	4,5,6-2,3	UEB	Used for a single letter, digit, or symbol that is underlined
	:	4,6	EBAE	Generic indicator of emphasis (doesn't specify typeform)
Underline Passage Indicator	:::::	4,5,6-2,3,5,6	UEB	When 3 or more words are underlined in the general text
	##	4,6-4,6	EBAE	Used to terminate effect of the emphasis by placing before last word of passage

Typeform Indicators	Configuration	<b>Dot Names</b>	Code	Rule Change
Underline Terminator	<b>#</b> #	4,5,6-3	UEB	Used to terminate effect of typeform indicator for underlining within a word or at the end of a passage
	<b>:</b>	4,6	EBAE	Used to terminate effect of the italics by placing before last word of passage
Script Word Indicator	:: *:	4-2	UEB	** Placed before word;  ** Effect continues until space or terminator
	:	4,6	EBAE	Generic indicator of emphasis (doesn't specify typeform)
Script Symbol Indicator	: <b>:</b> ::	4-2,3	UEB	Used for a single letter, digit, or symbol that is written in script
	<b>:</b>	4,6	EBAE	Generic indicator of emphasis (doesn't specify typeform)
Script Passage Indicator	:: <b>::</b>	4-2,3,5,6	UEB	When 3 or more words are printed in a script typeform in the general text
	:::	4,6-4,6	EBAE	Generic indicator of emphasis (doesn't specify typeform)
Script Terminator	##	4-3	UEB	Used to terminate effect of typeform indicator for script within a word or at the end of a passage
	#	4,6	EBAE	Used to terminate effect of the emphasis by placing before last word of passage
Typeform and Punctuation	NA	NONE	UEB	Follow print for placement of indicator
			EBAE	Not used in EBAE

Typeform Indicators	Configuration	Dot Names	Code	Rule Change
Multiple Paragraphs	NA	NONE	UEB	** Placed at beginning of each new paragraph;  ** Terminator after last word of typeform change
	NA	NONE	EBAE	Use rules for italics
Transcriber-Defined Typeform Indicators	NA	NONE	UEB	** Used for color, crossed out type, double underlining, change in font size, etc. that have no braille equivalent;  ** List in transcriber's notes
			EBAE	Not used in EBAE
1st Transcriber-Defined Word Indicator	###	4-#-2	UEB	Describe in Transcriber Note
			EBAE	Not used in EBAE
1st Transcriber-Defined Symbol Indicator	###	4-#-2,3	UEB	Describe in Transcriber Note
			EBAE	Not used in EBAE
1st Transscriber-Defined Passage Indicator	:: :: ::::::::::::::::::::::::::::::::	4-#-2,3,5,6	UEB	Describe in Transcriber Note
			EBAE	Not used in EBAE
1st Transcriber-Defined Terminator	###	4-#-3	UEB	Describe in Transcriber Note
			EBAE	Not used in EBAE

Typeform Indicators	Configuration	Dot Names	Code	Rule Change
2nd Transcriber-Defined Word Indicator	: <b>!</b> : <b>!</b> ::	4,5-#-2	UEB	Describe in Transcriber Note
			EBAE	Not used in EBAE
2nd Transcriber-Defined Symbol Indicator	:	4,5-#-2,3	UEB	Describe in Transcriber Note
			EBAE	Not used in EBAE
2nd Transcriber-Defined Passage Indicator	###	4,5-#-2,3,5,6	UEB	Describe in Transcriber Note
			EBAE	Not used in EBAE
2nd Transcriber-Defined Terminator	###	4,5-#-3	UEB	Describe in Transcriber Note
			EBAE	Not used in EBAE
3rd Transcriber-Defined Word Indicator	###	4,5,6-#-2	UEB	Describe in Transcriber Note
			EBAE	Not used in EBAE
3rd Transcriber-Defined Symbol Indicator	:::::::	4,5,6-#-2,3	UEB	Describe in Transcriber Note
			EBAE	Not used in EBAE

Typeform Indicators	Configuration	Dot Names Code		Rule Change	
3rd Transcriber-Defined Passage Indicator	###	4,5,6-#-2,3,5	,6 UEB	Describe in Transcriber Note	
			EBAE	Not used in EBAE	
3rd Transcriber-Defined Terminator	<b>::::</b> ::::::::::::::::::::::::::::::::	4,5,6-#-3	UEB	Describe in Transcriber Note	
			EBAE	Not used in EBAE	
4th Transcriber-Defined Word Indicator	# <b>#</b> #	5-#-2	UEB	Describe in Transcriber Note	
			EBAE	Not used in EBAE	
4th Transcriber-Defined Symbol Indicator	:: <b>:: :</b> :	5-#-2,3	UEB	Describe in Transcriber Note	
			EBAE	Not used in EBAE	
4th Transcriber-Defined Passage Indicator	# <b># #</b>	5-#-2,3,5,6	UEB	Describe in Transcriber Note	
			EBAE	Not used in EBAE	
4th Transcriber-Defined Terminator	::::::::::::::::::::::::::::::::::::::	5-#-3	UEB	Describe in Transcriber Note	
			EBAE	Not used in EBAE	

Typeform Indicators	Configuration	Dot Names	Code	Rule Change
5th Transcriber-Defined Word Indicator	11.11.41	4,6-#-2	UEB	Describe in Transcriber Note
			EBAE	Not used in EBAE
5th Transcriber-Defined Symbol Indicator	1111	4,6-#-2,3	UEB	Describe in Transcriber Note
			EBAE	Not used in EBAE
5th Transcriber-Defined Passage Indicator	1111	4,6-#-2,3,5,6	UEB	Describe in Transcriber Note
			EBAE	Not used in EBAE
5th Transcriber-Defined Terminator	1111	4,6-#-3	UEB	Describe in Transcriber Note
			EBAE	Not used in EBAE

Web Related	Configura	tion Dot Names	Code	Rule Change
Begin Computer Code			UEB	Not used in UEB, just braille as in print (no need to switch codes)
	<b>:::</b>	4,5,6-3,4,6	EBAE	Placed at beginning of email address and website address
End Computer Code			UEB	Not used in UEB, just braille as in print
	::::	4,5,6-1,5,6	EBAE	Placed at the end of email address and website address
Sign for @	:• •:	4-1	UEB	
	::	4	EBAE	
Colon	••	2,5	UEB	
	::	1,5,6	EBAE	
Dot or Decimal	•••	2,5,6	UEB	
	: <b>:</b>	4,6	EBAE	
Forward Slash	: : : :	4,5,6-3,4	UEB	
	<b>:</b> :	3,4	EBAE	