Grade 1 Braille Readings, by Cheri Montgomery
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Acknowledgment
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Preface

Grade 1 Braille Readings is designed for adult readers who wish to learn braille. It is available in digital and hard copy formats. The hard copy version is offered in two parts (textbook and workbook). The textbook contains warm-up exercises. The workbook contains reading assignments and a brief study of Montgomery's braille phonetic system: IPA Braille for Lyric Diction. The unit numbers correspond with page numbers in the hard copy version of this text. The digital version combines textbook and workbook in one document. It is intended for those with access to a refreshable braille display.

Active links facilitate easy navigation throughout the book. Use the computer's "text to audio" feature to hear instructions and access unit titles and subtitles. The letter *x* functions as a place marker. A line with four *x* cells indicates the point where students begin or end use of the refreshable braille display.

The resources needed to create the exercises in this book originated from research developed for the publication of the *Lyric Diction Workbook Series* by Cheri Montgomery. Her database of lyric words, organized by spelling, was ideal for creating a graded method of learning braille. Resources for singers with blindness are available on the "Braille resources" page at www.stmpublishers.com.

Each unit is cumulative in nature and organized in the following order: first, new braille symbols are introduced; second, warm-up exercises are provided; third, a group exercise is offered to be completed alone or with the instructor; fourth, homework assignments for up to 12 students are provided.

This text was designed to follow the Moore teaching model. The Moore Method is an interactive approach to instruction designed by Robert Lee Moore, a famous topologist who first used the method at the University of Pennsylvania in 1911. His methodology engages students in the learning process by giving each class member the opportunity to present portions of the course content. The first class meeting is led by the instructor. The remaining meetings follow a daily routine. First, class begins with students reading their individually assigned braille phrase. Second, the instructor introduces new material in a brief lecture. Third, the instructor leads the group in warm-up exercises and a braille reading assignment. Fourth, each student is given a unique braille reading assignment to present in the following class meeting. Organization of this text adheres to the procedure outlined above.

The order of letters covered in each unit provides a unique approach to learning braille. Symbols with similar dot configurations are introduced together, facilitating a memorable and concise study. The units are cumulative in nature. Letters introduced in previous units are reviewed in the warm-up exercises. Two supplemental units (units 1A and 1B) are provided for those who wish to study letters a through j in alphabetical order.

Grade 1 Braille Readings is designed to advance braille literacy, create an interesting and engaging braille study, and introduce students to Montgomery's braille phonetic system: IPA Braille for Lyric Diction. The hard copy version of this text was first adopted by the National Federation of the Blind of Tennessee's Live the life You Want: Educate to Empower Seminar series.

Cheri Montgomery

Introduction

Braille is a tactile writing system created in 1824 by Frenchman Louis Braille. Each braille character consists of a cell with raised or lowered dots. Characters are distinguished by the number and arrangement of raised dots within each cell. The six dots are organized in two columns. There are three dots in the left column and three dots in the right column (imagine a 2 by 3 Lego brick).

Each braille cell is assigned a number name according to the dot configuration within the cell. The dots are numbered counting from top to bottom starting with the left column. The braille symbol for *c* is named dots 14 (dots 1 and 4 are raised for the braille representation of c). Uppercase letters are indicated by placing a braille dots 6 before the letter. The braille representation for uppercase C is a dots 6 cell followed by a dots 14 cell.

Braille consumes a lot of space. Certain characters require more than one cell. The 6-dot cell system is used for reading, math, and music. The 8-dot cell system provides an extension. A third row of dots reduces the line by including additional information, like capitalization, beneath the cell (imagine a 2 by 4 Lego brick).

There are three levels of encoding for English braille: Grade 1 provides a letter-by-letter representation of any given spelling, grade 2 includes abbreviations and contractions, and grade 3 contains various symbols that can be customized to suit the individual needs of the user. This text provides a study of grade 1 braille. Those reading with the assistance of a refreshable braille display will need to activate the grade 1 braille setting.

Patterns in braille

Braille is an intuitive system designed for easy memorization of symbols. Braille letters of the alphabet correspond with numbers: *a* is 1, *b* is 2, *c* is 3, *d* is 4, *e* is 5, *f* is 6, *g* is 7, *h* is 8, *i* is 9, and *j* is 0. A numeric indicator precedes a braille number to distinguish it from a letter of the alphabet. The numeric indicator is a dots 3456 cell.

The braille alphabet follows a pattern. The raised dots for letters *a* through *j* are similar to letters *k* through *t* (an added dots 3 distinguishes *k* through *t*). The raised dots for letters *u, v, x, y,* and *z* are similar to letters *a, b, c, d, e* (an added dots 36 distinguishes *u, v, x, y,* and *z*). Notice that the letter *w* was not included. It was omitted by Braille since *w* is not a spelling of the French language. The letter *w* is a dots 2456 cell.

The pedagogical approach of this text is based on recognizing dot patterns. Letters with similar dot configurations are paired in most units. Letters *a, b, c, d, e* are introduced in the first unit since those letters produce a reasonable vocabulary list. Letters *k, l, m, n, o* are introduced in following units since the dot configurations are similar to *a* through *e*. The remaining letters with similar dot configurations, are paired and introduced together. Two supplemental units (units 1A and 1B) are provided for those who wish to study letters a through j in alphabetical order.

Memory aids help students memorize braille cells with similar dot configurations. You may make up your own memory aids or use one of the following: *a k u* is **a k**ind **u**niverse, *b l v* is **b**lind **l**ow **v**ision, *c m x* is **C**hex **M**i**x**, *d n y* is **D**an**ny**, *e o z* is **ezo** (a breed of fox), *f p* is **f**ingerti**p**, *g q* is the **GQ** magazine, *h r* is the **HR** department, *i s* is **is**, *j t* is **jet**, and dots 2456 for *w* is similar to the numeric indicator which is dots 3456.

Legos make great learning aids. Purchase a 32x16 base plate, 30 2x4 bricks, and 100 1x1 round dots. Recreate the braille cells of each letter using the 1x1 bricks for dots and 2x4 bricks for cells (the bottom row should remain blank). Place the cells in alphabetical order on the base plate (a through j on row 1, k through t on row 2, and u v x y z w on row 3). After the letters are memorized in alphabetical order, remove the cells from the base plate, place them in a sandwich bag, and select randomly to test your memory. Click here for a link to the Lego brick store.

Special symbols

There are two symbols needed to navigate the braille portions of this book: the numeric indicator and the letter *x.* The numeric indicator helps the reader identify numbered lists. The letter *x* acts as a place marker for discovering new symbols. The dot configuration of an *x* cell marks the outer boundaries of a cell. Imagine the sighted version of an uppercase *X* with dots at the ends of each diagonal line. A braille *x* is dots 1346. This arrangement of dots provides an ideal tactile reference point for other braille symbols.

A line with three or four *x* braille cells is used to indicate the beginnings and ends of exercises. A number between two groups of x's indicates a new line of an exercise.

Each student will need to memorize the braille number associated with their individually assigned homework. Students may locate exercises by searching the lines that contain a group of x cells (dots 1346) followed by the numeric indicator (dots 3456), the exercise number, then another group of x cells. Note the braille symbol for each number: 1 is dots 1, 2 is dots 12, 3 is dots 14, 4 is dots 145, 5 is dots 15, 6 is dots 124, 7 is dots 1245, 8 is dots 125, 9 is dots 24, 10 is dots 1 and dots 245, 11 is dots 1 and dots 1, 12 is dots 1 and dots 12.

Introductory exercise

The following exercise trains the reader to identify the two important navigational symbols in this book: the *x* and the numeric indicator. It also demonstrates the format for all braille exercises in this book. Listen for the four *x*'s, turn off your audio, transition to your braille display, and practice the following exercise. Observe the differences between *x* and and the spaces, and *x* and the numeric indicator. The numeric indicator is dots 3456.
xxxx # x # x # xxxx

Did you notice the blank cells? Did you notice a difference between the *x* cells and the numeric indicators? The following exercise will help you identify capital letters. A capital letter sign is a dots 6 cell. A dots 6 cell precedes a letter that is capitalized. Listen for the four *x*'s, turn off your audio, transition to your braille display, and practice the following line which alternates between lowercase *x* and uppercase X.
xxxx x X x X x X xxxx

Did you identify two blank cells and three dots 6 cells? Excellent! You are ready to begin!

Unit 8: *h r*

Unit 8: *h r*, Warm-up (begin reading)

xxxx 1 xxxx

xhxhxH xuxuxU xmxmxM hum

xxxx 2 xxxx

xrxrxR xoxoxO xfxfxF roof

xxxx 3 xxxx

xfxfxF xrxrxR xexexE xnxnxN xcxcxC xhxhxH French

xxxx 4 xxxx

xhxhxH xaxaxA xrxrxR xmxmxM xoxoxO xnxnxN xyxyxY harmony

xxxx 5 xxxx

xqxqxQ xuxuxU xexexE xnxnxN xcxcxC xhxhxH xdxdxD quenched

xxxx 6 xxxx

xhxhxH xaxaxA xrxrxR xbxbxB xoxoxO harbor

xxxx 7 xxxx

xexexE xhxhxH xaxaxA xlxlxL xexexE exhale

xxxx 8 xxxx

xhxhxH xuxuxU xnxnxN xgxgxG xrxrxR xyxyxY hungry

xxxx 9 xxxx

xhxhxH xexexE xaxaxA xrxrxR xkxkxK xnxnxN hearken

xxxx 10 xxxx

xpxpxP xrxrxR xoxoxO xvxvxV xexexE xrxrxR xbxbxB proverb

xxxx

Unit 8: *h r*, Group assignment (begin reading)

xxxx

Hannah laughed for half an hour.

xxxx

Unit 8: *h r*, Homework assignments (begin reading)

xxxx 1 xxxx

He heard a heavenly harmony.

xxxx 2 xxxx

Humor and horror are ever near.

xxxx 3 xxxx

Henry marched cheerfully home.

xxxx 4 xxxx

Remember our humble harbor.

xxxx 5 xxxx

A French monarch overheard her cry.

xxxx 6 xxxx

A hundred happy humans hovered near.

xxxx 7 xxxx

He hung a charm around her forehead.

xxxx 8 xxxx

Never hurl a hungry hedgehog!

xxxx 9 xxxx

He overheard a horn and a harp.

xxxx 10 xxxx

Hank crouched under a cherry orchard.

xxxx 11 xxxx

Helen hummed a hymn in a churchyard.

xxxx 12 xxxx

A haggard archer held a heavy anchor.

xxxx

Unit 11: *z w* question mark

Unit 11: *z w* question mark, Warm-up (begin reading)

xxxx 1 xxxx

xzxzxZ xbxbxB xuxuxU x?x?x? buzz?

xxxx 2 xxxx

xwxwxW xixixI xlxlxL x?x?x? will?

xxxx 3 xxxx

xjxjxJ xexexE xwxwxW xlxlxL xsxsxS jewels

xxxx 4 xxxx

xdxdxD xaxaxA xzxzxZ xlxlxL xixixI xnxnxN xgxgxG dazzling

xxxx 5 xxxx

xkxkxK xnxnxN xoxoxO xwxwxW xnxnxN known

xxxx 6 xxxx

xqxqxQ xuxuxU xaxaxA xrxrxR xtxtxT xzxzxZ quartz

xxxx 7 xxxx

xhxhxH xoxoxO xrxrxR xixixI xzxzxZ xnxnxN horizon

xxxx 8 xxxx

xcxcxC xuxuxU xfxfxF xexexE xwxwxW curfew

xxxx 9 xxxx

xmxmxM xaxaxA xixixI xmxmxM xzxzxZ xexexE maximize

xxxx 10 xxxx

xwxwxW xixixI xsxsxS xpxp xyxyxY x?x?x? wispy?

xxxx

Unit 11: *z w* question mark, Group assignment (begin reading)

xxxx

Why do zealous zoo keepers wonder where to waltz?

xxxx

Unit 11: *z w* question mark, Homework assignments (begin reading)

xxxx 1 xxxx

What warm welcome do the buzzing zephyrs bring?

xxxx 2 xxxx

Which wealthy woman was amazed by brazen words?

xxxx 3 xxxx

Why would wandering wizards wheeze in the breeze?

xxxx 4 xxxx

When will frenzied citizens realize which way to gaze?

xxxx 5 xxxx

Wine will not freeze in meadows of drizzling snow.

xxxx 6 xxxx

We were puzzled when quartz and topaz whistled in the breeze.

xxxx 7 xxxx

Witch Hazel blows sweetly in the crazy lazy town.

xxxx 8 xxxx

A dozen prizes were awarded to women with frizzy wigs.

xxxx 9 xxxx

What wizard would want to wed a witch with an oozing nose?

xxxx 10 xxxx

We wound around in the haze of a winding wax maze.

xxxx 11 xxxx

Whispering wives were zipping and buzzing within the twilight zone!

xxxx 12 xxxx

Why woo a woman with words when a dozen stanzas will do?

xxxx

Unit 12: Phonetic symbols

Phonetic symbols with sound links

Resources with braille phonetics

Unit 12: Braille phonetic symbols, Phonetic symbols with sound links

Singers study the International Phonetic Alphabet (IPA) to discover accurate pronunciation of foreign language repertoire. Defining the sounds represented by phonetic symbols also helps singers explore the function of the voice.

The keystrokes needed to create documents with IPA are awkward for both the sighted and the blind. A new system: IPA Braille for Lyric Diction by Montgomery, provides characters that are mutually accessible by by both the sighted and the blind. Uppercase and lowercase letters along with a few punctuation marks are used to indicate the sung pronunciation of English, Italian, Latin, German, and French.

The following exercises are designed to help the reader identify brackets, parentheses, and the plus and minus signs. These characters are needed to read IPA Braille for Lyric Diction.

xxxx 1 xxxx x[x[x[x]x]x] [brackets]

xxxx 2 xxxx x(x(x(x)x)x) (parentheses)

xxxx 3 xxxx x-x-x- x+x+x+ 5 + 2 is 7. 7 - 2 is 5. xxxx

Chart: IPA Braille for Lyric Diction
The IPA symbols on the following chart are listed in alphabetical order. Symbols are enclosed in brackets to distinguish them from other content within the text. Sound links are included.

Uppercase [A]: father bit.ly/2WuU5q2
Lowercase [a]: voila https://bit.ly/3gYXg2X
Lowercase [ae]: glad bit.ly/3fpGZmA
Lowercase [b]: baby bit.ly/3c9R5WG
Lowercase [c]: There is no *c* in IPA.
Lowercase [d]: deed bit.ly/35APdUe
Lowercase *d* uppercase Z [dZ]: judge bit.ly/3djkUnS
Lowercase [e]: chaos bit.ly/2WupTex
Uppercase [E]: bell bit.ly/3b1FWWA
Lowercase [f]: faith bit.ly/2L30LX3
Lowercase [g]: good bit.ly/2SHAcuJ
Lowercase [h]: heart bit.ly/3cbRckG
Lowercase [i]: key bit.ly/2YCmFs8
Lowercase [I]: sit bit.ly/3b8PiQ8
Lowercase [j]: yet bit.ly/2yzX2O7
Lowercase [k]: kiss bit.ly/35B6FrO
Lowercase [l]: little bit.ly/35BOHWe
Uppercase [L]: Italian figlio https://bit.ly/3agoSiQ
Lowercase [m]: mist bit.ly/3beJdlD
Lowercase [n]: nine bit.ly/2YHrrVh
Uppercase [N]: wing bit.ly/2SE2gPN
Dash [-] + lowercase [j]: Italian signore
Lowercase [o]: obey bit.ly/3bb6q7Y
Uppercase [O]: ought bit.ly/3diCQ1U
Lowercase [oe]: German schön https://bit.ly/3h2GuAc
Uppercase [OE]: German können https://bit.ly/37oGZBa
Lowercase [p]: pure bit.ly/3dlWDh4
Lowercase [q]: song
Uppercase [R]: rose bit.ly/2SFsQrP
Lowercase [r]: thread bit.ly/2xDxsHz

Double lowercase [rr] is a rolled r: Italian rosa https://bit.ly/2Kb9mdi
Lowercase [s]: sing bit.ly/2YD76QR
Uppercase [S]: sheep bit.ly/3dmEXSs
Lowercase [t]: tone bit.ly/2SI9MZX
Lowercase *t* uppercase S [tS]: child bit.ly/35ChxG8
Lowercase [th]: thin bit.ly/2L5gDsg
Uppercase T lowercase *h* [Th]: them bit.ly/2L5gDsg
Lowercase [u]: moon bit.ly/2SHwcdF
Uppercase [U]: book bit.ly/2SJ3V6G
Lowercase [v]: voice bit.ly/2L62Sti
Uppercase [V]: the uh sound of up bit.ly/2Wtvv93
Lowercase [w]: wish bit.ly/2YHtbhh
Uppercase [W]: wheat bit.ly/35zvbJW
Lowercase [x]: hue https://bit.ly/3gYY1sP
Uppercase [X]: Nacht https://bit.ly/2KvtaIg
Lowercase [y]: German Blüte https://bit.ly/3nttPbJ
Uppercase [Y]: German Küsse https://bit.ly/2IVCepm
Lowercase [z]: zeal bit.ly/2SFvgqg
Uppercase [Z]: measure bit.ly/3b8OOd9

The schwa is indicated with a period. The schwa represents an undefined sound in an unstressed syllable. Pronunciation must be assigned. For example, the word remarkable contains two pronunciations of the schwa. If the schwas were defined with specific IPA symbols, the third syllable would be transcribed with an uppercase [V], while the fourth syllable would be transcribed with an uppercase [U].

The glottal stop is indicated with a question mark. The glottal stop is a speech sound in English and German. It is a manner of articulating a word or element that begins with a vowel. Notice the attack in the throat that occurs while enunciating the words *I, ever,* and *it.* These words could be transcribed with a glottal stop at the beginning of the word. Articulation of the glottal stop should be executed with care. It is reserved for initial vowel words or elements that are stressed within the phrase.

A stressed syllable is indicated with a comma. The comma is placed before the stressed syllable. For example, *believe* is transcribed with a comma preceding the second syllable. Stress indications are not necessary for French. The final syllable of a French word or phrase is stressed, except when that syllable contains a schwa. The penultimate syllable is stressed for final schwa words. Stress is executed in French by lengthening the vowel sound (not with a weighted accentuation).

A long mark is indicated with a semicolon. A semicolon is placed after the vowel that is lengthened. In English, the first vowel of a diphthong or triphthong is lengthened while singing. Vowel length is not typically indicated. However, the long mark is necessary for the transcription of other languages. For example, the *i* of the Italian word *mio* is long in both the spoken and sung forms of the word.

A dash is used to indicate nasality. The French language has four nasal vowels. A nasal mark precedes the nasalized vowel. For instance, the word *l'ombre* is transcribed with a dash preceding a lowercase [o] symbol. There is one consonant in this system that has a nasal mark. The *gn* spelling of *signore* has a lowercase [j] formation with nasal air flow. The dash plus lowercase [j] symbol describes formation as well as air flow. Words with *ng* spelling, as in *sing* and *finger*, are transcribed with an uppercase [N].

Unit 12: Braille phonetic symbols, Resources with braille phonetics

This unit introduced a new phonetic system that is mutually accessible by both the sighted and the blind. It is well supported with a database of more than 2,000 English, Italian, Latin, German, and French lyrics transcribed according to the system; three Kindle books; and an IPA chart with tactile and visual symbols. The "Braille resources" page at www.stmpublishers.com directs instructors to resources that use IPA Braille for Lyric Diction. Students may access the resources more easily by clicking on one of the following links:

The Singer's Practice Journal for Braille Readers https://amzn.to/2TjSkLz
Phonetic Readings, Braille Version https://amzn.to/2WHxhod
Singer's Diction for Braille Readers https://amzn.to/3cKlJGh
Phonetic Transcription for Lyric Diction, Braille Version: contact info@studenttextmfg.com for a digital copy

Students may request phonetic transcriptions of repertoire assignments by email: info@studenttextmfg.com

About the author

Cheri Montgomery is an author of workbooks for voice and diction. She teaches English, Italian, German, and French diction at the Blair School of Music at Vanderbilt University. Her series of workbooks are available at www.stmpublishers.com.

Click here for a link to Montgomery's Vanderbilt University bio.