VISUAL VERSION

GRADE 1
BRAILLE READINGS

An introductory study for adult readers who wish to learn braille

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PREFACE

Grade 1 Braille Readings is designed for adult readers who wish to learn braille. Hard copy tactile, hard copy visual, and digital versions are available. The hard copy tactile version comes 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 digital version combines textbook and workbook in one document and is intended for those with access to a refreshable braille display.

The active links in the digital version facilitate easy navigation throughout the book. Use the computer's "text to voice" feature to hear instructions and gain quick access to points throughout the document. The letter *x* functions as a place marker (see the *Introduction to Braille* on page vi). A line with four *x* cells indicates the point where students begin or end use of the refreshable braille display.

Resources needed to create the exercises in this text originated from research developed for the publication of the *Lyric Diction Workbook Series* and the *IPA Scramble* game app by Montgomery. Computer search functions and her database of more than 87,000 English words were used to organize a graded approach to learning braille. Additional resources for singers with blindness are available on the "Braille Resources" page at www.stmpublishers.com.

Organization of this text provides a unique approach to learning braille:

1. Symbols with a similar dot configuration are introduced together. This facilitates a concise study of braille and makes memorization easier.
2. Each unit is cumulative in nature. Symbols introduced in previous units are included in the exercises of subsequent units.
3. Two supplemental units (units 1A and 1B) are designed for those who wish to learn letters *a* through *j* in alphabetical order.
4. Four sections in each unit facilitate an efficient study of braille. They include: an introduction to new braille symbols, warm-up exercises, a group exercise, and individual homework assignments for up to 12 students.

This text follows 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 homework assignments. 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 (workbook) . Second, the instructor introduces new material in a brief lecture (textbook). Third, the instructor leads the group in warm-up exercises and a braille reading assignment (textbook). Fourth, each student is given a unique braille reading assignment to present in the following class meeting (workbook).

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 tactile 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 and has been in use since January 2021.

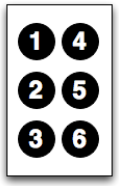
Cheri Montgomery

ACKNOWLEDGMENT

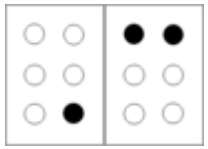
I am grateful for braille instruction from Steve Norman, braille/technology instructor at the Tennessee Rehabilitation Center. He assisted with research that culminated in articles published by the National Association of Teachers of Singing, *Journal of Singing*; *MultiBriefs*; and *Vanderbilt University News*. He was instrumental in testing the Kindle version of three diction workbooks written for singers with blindness. His willingness to share his expertise and extensive experience with the braille system and associated technology is much appreciated.

INTRODUCTION TO BRAILLE

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 2x3 Lego brick). The dots are numbered counting from top to bottom starting with the left column.



Each braille cell is assigned a number name according to the dot configuration within the cell. For example, 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.

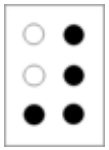


Braille consumes a lot of space. Certain characters require more than one cell. The 6-dot cell system is used for reading, math, and music. The 8-dot cell system provides an extension. A third row of dots reduces the line by including additional information, like capitalization, beneath the cell (imagine a 2x4 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

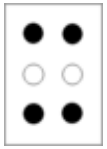
in following units since the dot configurations are similar to *a* through *e*. The remaining letters with similar dot configurations are paired and introduced together. Two supplemental units (units 1A and 1B) are provided for those who wish to study letters *a* through *j* in alphabetical order.

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 kind universe, *b l v* is blind low vision, *c m x* is Chex Mix, *d n y* is Danny, *e o z* is ezo (a breed of fox), *f p* is fingertip, *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.

Use a 2x3 egg carton and ping pong balls to recreate braille symbols. Lego bricks are also good learning aids. Purchase a 32x16 base plate, 30 2x4 bricks, and 100 1x1 round dots. Recreate the braille cells 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.

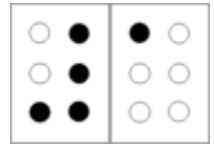
SPECIAL SYMBOLS

There are two symbols needed to navigate the braille portions of this text: 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 typed 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 a group of *x* cells is used to create a tracking line. It indicates the beginnings and ends of exercises. A number between two groups of *x* cells indicates a new line of an exercise.

Students in a group learning environment should memorize the braille number associated with their individually assigned homework. Students may locate their assignment 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.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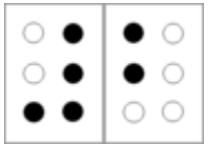
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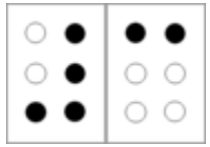
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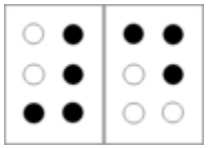
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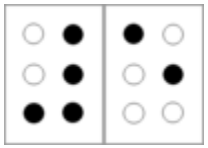
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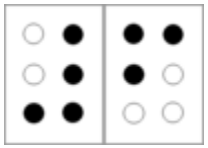
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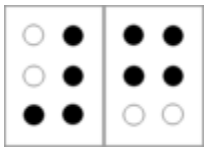
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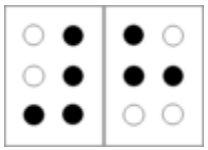
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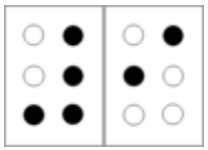
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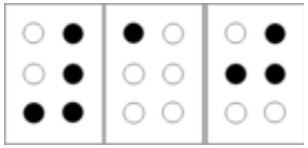
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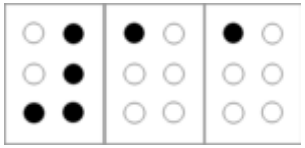
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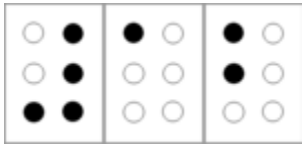
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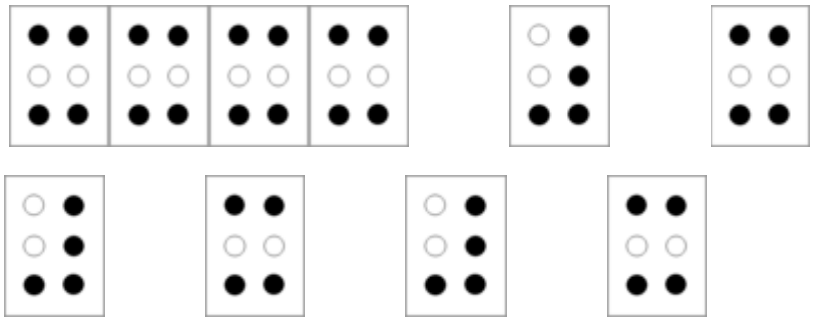
INTRODUCTORY EXERCISE

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* cells, turn off your audio, transition to your braille display, and practice the following exercise. Observe the differences between *x* and the spaces, and *x* and the numeric indicator. The numeric indicator is dots 3456.

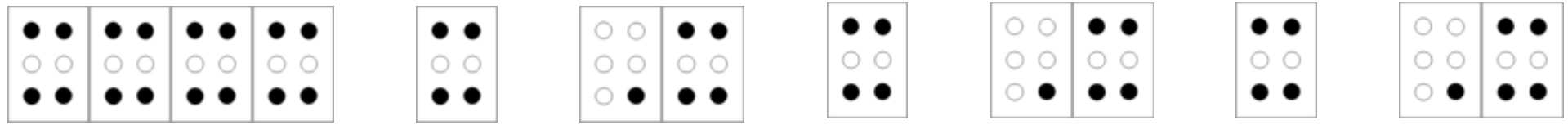
xxxx # x # x # x



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 indicator is a dots 6 cell. A dots 6 cell precedes a letter that is capitalized. Listen for the four *x* cells, 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



Were you able to distinguish between the blank cells and uppercase letter indicator (dots 6 cell)? If so, then excellent, you are ready to begin! If you struggled to feel the difference between the cells, try the exercise again and lighten your touch. Pressed contact interferes with sensory awareness.

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About the author

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

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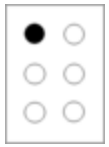
UNIT 1:

Dot configuration for *a b c d e*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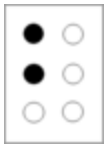
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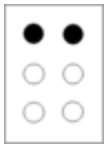
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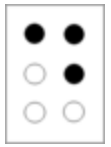
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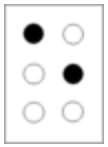
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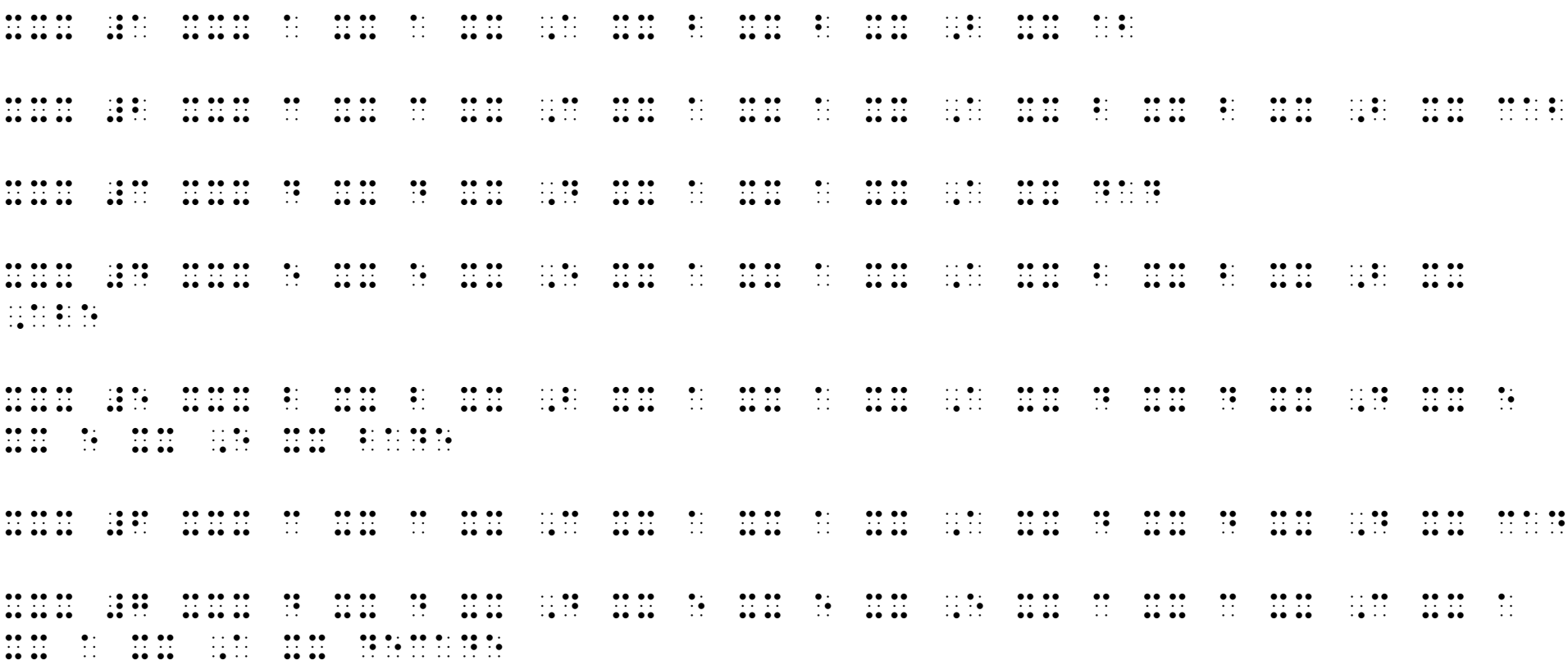
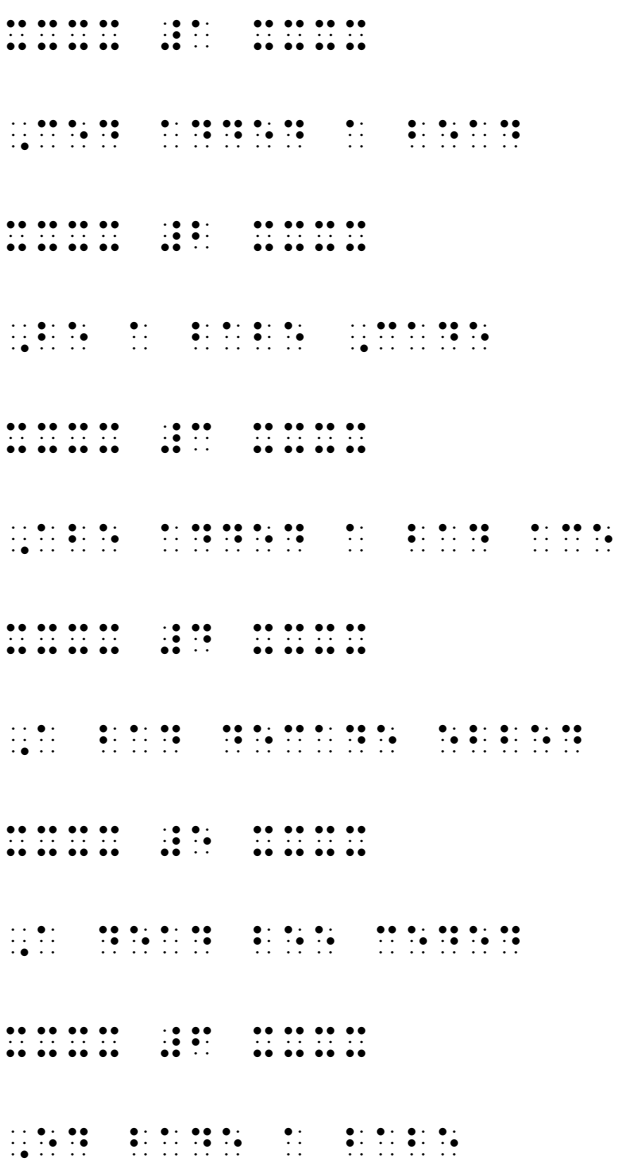
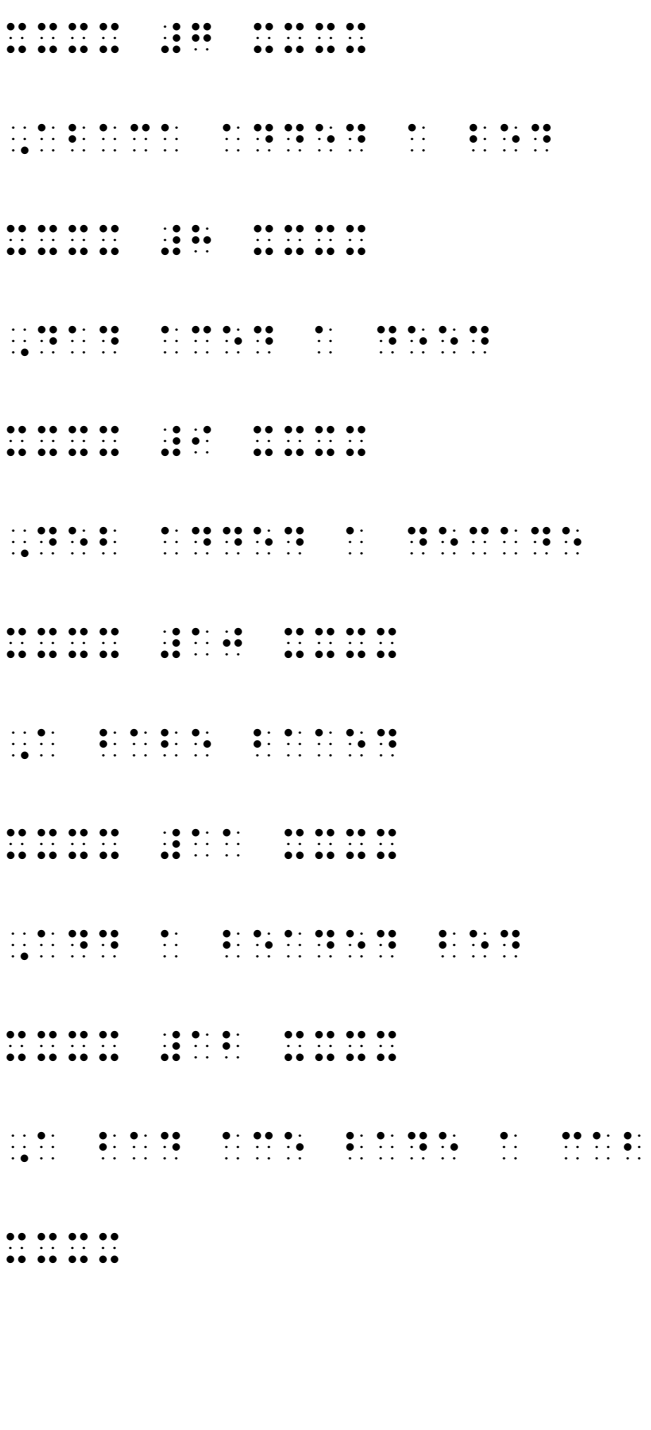
Unit 1: a *b c d e*, Warm-up (page 1 in textbook)



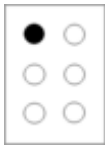
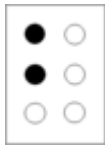
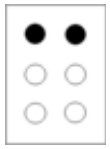
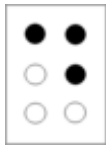
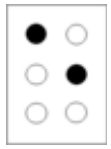
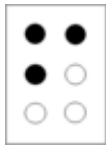
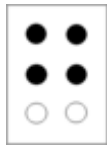
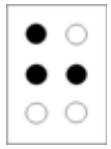
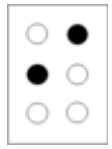
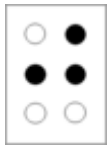
Unit 1: a *b c d e*, Group assignment

Unit 1: a *b c d e*, Homework assignments (page 1 in workbook)





REVIEW OF BRAILLE SYMBOLS

a	b	c	d	e	f	g	h	i	j
1	2	3	4	5	6	7	8	9	10
									
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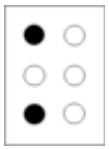	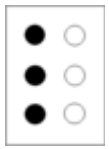	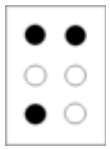	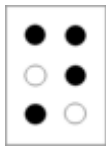	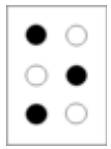	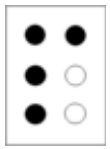	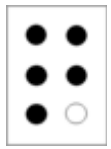	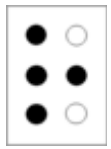	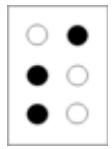	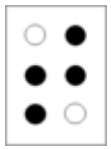
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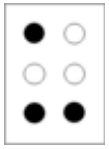	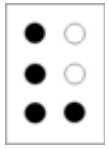	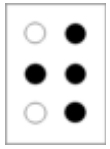	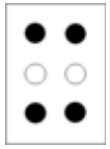	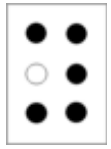	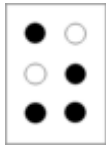	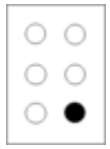	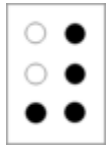	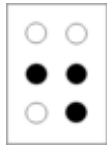	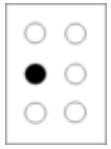
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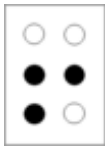	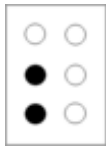	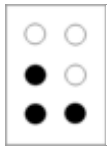	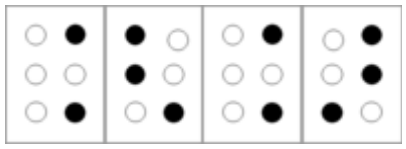		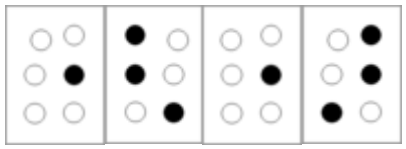		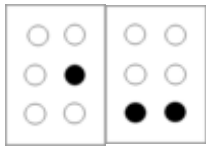		

ANSWER KEY

Unit 1: a *b c d e*, Warm-up (page 1 in textbook)

xxx #1 xxx a xx a xx A xx b xx b xx B xx ab
xxx #2 xxx c xx c xx C xx a xx a xx A xx b xx b xx B xx cab
xxx #3 xxx d xx d xx D xx a xx a xx A xx dad
xxx #4 xxx e xx e xx E xx a xx a xx A xx b xx b xx B xx Abe
xxx #5 xxx b xx b xx B xx a xx a xx A xx d xx d xx D xx e xx e xx E xx bade
xxx #6 xxx c xx c xx C xx a xx a xx A xx d xx d xx D xx cad
xxx #7 xxx d xx d xx D xx e xx e xx E xx c xx c xx C xx a xx a xx A xx decade

Unit 1: a *b c d e*, Group assignment

xxx Dad dabbed a dace xxx

Unit 1: a *b c d e*, Homework assignments (page 1 in workbook)

xxxx #1 xxxx
Ced added a bead
xxxx #2 xxxx
Be a babe Cade
xxxx #3 xxxx
Abe added a bad ace
xxxx #4 xxxx
A bad decade ebbed
xxxx #5 xxxx
A dead bee ceded
xxxx #6 xxxx
Ed bade a babe
xxxx #7 xxxx
Abaca added a bed
xxxx #8 xxxx
Dad aced a deed
xxxx #9 xxxx
Deb added a decade
xxxx #10 xxxx
A babe baaed
xxxx #11 xxxx
Add a beaded bed
xxxx #12 xxxx
A bad ace bade a cab xxxx

Unit 2: *k l m*, Warm-up (page 2 in textbook)

xxx #1 xxx k xx k xx K xx e xx e xx E xx eek
xxx #2 xxx l xx l xx L xx e xx e xx E xx k xx k xx K xx elk
xxx #3 xxx m xx m xx M xx a xx a xx A xx maam
xxx #4 xxx m xx m xx M xx a xx a xx A xx k xx k xx K xx e xx e xx E xx make
xxx #5 xxx c xx c xx C xx a xx a xx A xx l xx l xx L xx m xx m xx M xx calm
xxx #6 xxx d xx d xx D xx a xx a xx A xx l xx l xx L xx e xx e xx E xx dale
xxx #7 xxx m xx m xx M xx e xx e xx E xx l xx l xx L xx b xx b xx B xx a xx a xx A xx Melba xxxx