## Lesson 1

# The Braille Alphabet and Numbers

## 1.1 In General

Braille is a system for tactile reading and writing. It uses characters formed by combinations of six embossed dots that are arranged within the *braille cell* in two vertical columns of three dots each. A simple braille character is formed by one or more of these dots, and it occupies a full cell or space.

For convenience, the dots of the braille cell are referred to by number and correspond to the keys on a braillewriter.

Braille Cell				Braillewriter			
1	•	•	4	UUU	[[[[]]]]	UUU	
2	•	•	5	3 2 1		4 5 6	
3	•	•	6				

# 1.2 Methods of Braille Transcription

There are three basic methods of braille transcription: 1) braille transcription software on a computer; 2) manual braille typewriter (braillewriter); and 3) slate and stylus.

For easier duplication and distribution of materials, transcribers generally use computers for their work, either by typing the material using six keys corresponding to the braille cell as shown above, or (after being thoroughly trained in the reading and writing of braille) with assistance from software that translates from print to braille. Material transcribed using a computer may be either embossed onto paper or provided in electronic format so that it can be read using an electronic refreshable braille display.

The braillewriter uses six keys corresponding to the braille cell as shown above.

The use of the slate and stylus is equivalent to writing with a pen or pencil. Although it was once a primary method of transcribing braille, the slate and stylus cannot allow for the speed and ease of distribution

necessary in modern braille production and is therefore not generally a practical tool for this purpose unless no other means are available.

# 1.3 The First Ten Letters of the Alphabet

The first ten letters of the alphabet are formed by using the upper and middle dots of the cell, and they are the foundation of the braille system.

Memorize the following letters by their dot numbers and configurations.



#### Drill 1

Thoroughly familiarize yourself with the first ten letters of the alphabet by brailling the following words. Reading across, start each line in the first cell. Leave one blank cell (space) between words. Your work on this and all subsequent drills should not be submitted to the instructor for correction. Instead, check the accuracy of your work by comparing it with the correct braille form in the accompanying supplement, *Drills Reproduced in Braille*.

acid acacia badge beige babe cicada cage deface dice ebb fad fief egg gag gage haq hajji hide hie id if idea jag iade

# 1.4 The Second Ten Letters of the Alphabet

The second ten letters of the alphabet are formed by adding dot 3 to each of the first ten. Thus, k is formed by adding dot 3 to a, l by adding dot 3 to b, and so on.

•:	:	••	• •	• •	• •	• •	•	• • • :	••
k	1	m	n	0	p	q	r	s	t
•:	• :	•• ::	: <b>:</b>	• : • : •	• • • • • • • • • • • • • • • • • • • •	•••	•••	•:	•••
a	b	c	d	e	f	g	h	i	j

#### Drill 2

Practice the letters learned by brailling the words in the following drill.

kick kneel lair llama manor melon mammal orange orphan noise notice popcorn pope possessor qoph rapport rascal sassafras tattletale tragic ticket tide trio tort

## 1.5 The Last Six Letters of the Alphabet

The letters u, v, x, y, and z are formed by adding dots 3 and 6 to the first five letters. Thus, u is formed by adding dots 3 and 6 to a, and so on. The letter w, dots 2456 (::), does not fit into this pattern because Louis Braille devised the braille system in France in the mid-19th century, and the French alphabet did not then contain the letter w.

::: :	j
ii	•••
ii	
u v w x y z	t
	::

## Drill 3

When you have learned the final six letters of the alphabet, braille the following words for practice.

quiz ukulele ultimatum vacillate vaguely wigwag wield weird xylem xebec yolk yew zebra zombie zoological zygoma ooze maze

# **1.6 Numbers** [UEB §6]

There are no special braille symbols for cardinal numbers. Instead, the numbers 1 through 0 are expressed by the letters a through j preceded by the numeric indicator, dots 3456 ( $\vdots$ ).

			• • •					
10	14	59		87	103	965		
•••		••••	· • • • • • • • • • • • • • • • • • • •	:::	· • • • · · · · · · · · · · · · · · · ·	· • • • • • • • • • • • • • • • • • • •		
1	2	3	4	5	6	7	8	9

### **Drill 4**

Practice numbers by brailling the following drill. Braille the numbers across the page as they appear in print. Leave one blank cell between each set of numbers.

23	104	9	58	77
01	64	956	8	323
11	549	476	400	80

### **READING PRACTICE**

Read the following phrases and write them out in longhand. Do not submit this work to your instructor. Compare your work with the print version in Appendix A.

	** ** ** ** ** ** ** ** ** ** ** ** **
••••	
	• • • • • • • • • • • • • • • • • • •
** · · · · · · · · · · · · · · · · · ·	
** * · * · * · * · * · * · * · · * ·	0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0

### **EXERCISE**

Prepare the following exercise and submit it to the instructor for correction. *Read down the columns.* Starting on line 1, begin each phrase in the first cell of a new braille line. Do not skip lines; you should have 25

phrases on each page. If you are using a braillewriter, be sure that you position every page correctly by pushing down on the line-space key (farthest key to the left) one time before you start to braille. Add your name in braille at the end of the exercise or as your teacher directs. (Correspondence students: If you are sending your lessons via email, include your name in the subject line of your email along with the lesson number. For the convenience of our braille-reading instructors and non-braille-reading clerical staff, if you are submitting your lessons on paper, add your name in braille and print at the end of each exercise.)

jazz tunes	olives or onions	xiphoid process
he prays daily	vivid pictures	quizzes puzzle me
feigns surprise	icicles drip	3 labor battalions
a frisky poodle	dull adjectives	unbelievably calm
fidgety filly	bridle a pony	home sweet home
59 raw recruits	wise philosophy	fireflies flit
quixotic exploits	126 wet pets	brass knuckles
electric elevator	six textbooks	mimic a madman
queue up	lovely velvet	angry gangs
64 zany zebras	yuletide joy	12 pretty rosebuds
build a wigwam	pretty anemone	prompt appraisal
9 gigantic piranhas	true blue	bacon smells salty
attractive tie	blood circulates	10 nocturnal birds
company vehicles	mutual respect	extra axe
wry wit	80 hot dogs	big felt yurt
jubilant hallelujahs	a brook murmurs	78 brass bassoons
gooseneck lamp	weird spectacle	