# Beginning Braille for Wisconsinites 

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## Braille is ...

- Braille is read left to right, top to bottom, just like print.
- Braille is literacy-reading and writing.
- Braille is not a foreign language.


## Braille is Systematic

- Dots are arranged into clusters.
- Each cluster has six dots. Some dots are raised, some are not.
- Each cluster of six dots is called a braille cell.
- The dots are arranged into two columns of three dots each.
- The dots are numbered 1-2-3 down the left side and 4-5-6 down the right.
- Dot numbers are used when referring to the dot positions.
- All letters, numbers, and punctuation marks use the same system of braille cells.


## The Braille Cell



## The First Ten Letters

- The first ten letters use only the dots in the upper part of the cell. (1245)
- These are the most important dot arrangements, as all the other dot arrangements are based on these.
- They must be memorized; there is no easy pattern to them, as we will see for the rest of braille.


## The First Ten Letters

$$
\begin{array}{llllllllll}
: & \vdots & \because & : & \vdots & : & : & : & \vdots & : \\
\mathrm{a} & \mathrm{~b} & \mathrm{c} & \mathrm{~d} & \mathrm{e} & \mathrm{f} & \mathrm{~g} & \mathrm{~h} & \mathrm{i} & \mathrm{j}
\end{array}
$$

## The Braille Cell



## The Next Ten Letters

- The next ten letters add a dot 3 (in the lower left) to each of the original ten letters.
- Take away the dot 3 of each letter k-t and you are back to the original ten letters.


## The Next Ten Letters



## The Braille Cell



## The Last Six Letters

- The last letters add dots 3 and 6, the bottom two dots in the cell.
- Missing is " $w$ ". Louis Braille, who invented the braille code in France in the 1800s, spoke French. French does not natively include our English letter " $w$ ".
- The letter " w " was added later, following a different pattern. It adds a dot 6 , in the lower right of the cell.
- Take away dots 3 and 6, or dot 6 for " $w$ ", and you are back to the original ten letters, $\mathrm{a}-\mathrm{j}$.


## The Last Six Letters

$$
\begin{aligned}
& \text { : : :: :: : : : :: :. : : : } \\
& \text { a b c d e f g h i j } \\
& \text { :: } \vdots: \quad \text { : } \quad \vdots \quad \text { : : } \\
& \text { u v x y z } \\
& \text { W }
\end{aligned}
$$

## The Braille Cell



## Numbers

- Numbers use the same dots as the first ten letters, $\mathrm{a}-\mathrm{j}$.
- Dots 3456 are used in the cell before a number so the dots are not read as letters.
- The cell of dots 3456 is called the numeric indicator.
- Only one numeric indicator is needed for each number.


## Numbers

$$
\begin{aligned}
& \text { : : ." : : : : : : : } \\
& \text { a b c d e f g h i j } \\
& \text { :! : : : : : : : : : : : } \\
& 12345 \\
& \text { :! : : : : : : : : : : : : : ! : : } \\
& \begin{array}{llllll}
6 & 7 & 8 & 9 & 0 & 10
\end{array}
\end{aligned}
$$

## The Braille Cell



## Capital Letters

- There are no separate capital letters.
- Dot 6 from the cell before the letter is used to mean the next letter is capitalized.


## Capital Letters

$$
\begin{aligned}
& \text { A B C D } \quad \text { B } \quad \text { F } \quad \text { G } \quad H \quad I \quad \text { J } \\
& \begin{array}{cccccccccc}
\therefore & \vdots & : & \vdots & \vdots & 0: & : & \vdots & \vdots & \vdots \\
\mathrm{K} & \mathrm{~L} & \mathrm{M} & \mathrm{~N} & \mathrm{O} & \mathrm{P} & \mathrm{Q} & \mathrm{R} & \mathrm{~S} & \mathrm{~T}
\end{array} \\
& \begin{array}{cccccc}
\therefore: & \vdots: & \because: & \vdots: & \vdots: & : \vdots \\
U & V & W & X & Y & Z
\end{array}
\end{aligned}
$$

## The Braille Cell



## Punctuation

- Punctuation is used the same way as it is in print.
- Punctuation marks use dots from the lower part of the cell. (2356)


## Punctuation

Period ..... ::
Comma
Question mark : :
Exclamation mark ..... :
Quotation marks
Opening : :
Closing ..... ::
Apostrophe
Hyphen:

## Reading Practice

$$
\begin{aligned}
& \text { : } \\
& \text { o: } \\
& \text { : } \\
& \text { ب: }
\end{aligned}
$$

## Reading Practice Answers



Now you can read braille!
: ©: : : : : : : : : : : : : : : : : : :

Isn't this fun?

This is room 914.

But wait, there's more!

## Contracted Braille

- You now know uncontracted braille.
- Uncontracted braille is written letter for letter.
- It takes a lot of space to write uncontracted braille.
- The next step to learning braille is called contracted braille.
- Most people use contracted braille.


## Contracted Braille

## Contractions ...

- are used for common letter combinations and words.
- are different than English grammar contractions (I'm, don't, etc.).
- save space and time.
- have a systematic formation, just like the alphabet.
- may use one or more cells.
- are grouped by what they have in common.


## Other Braille Codes

There are other codes that also use six dots.

- Nemeth Code (for math and science)
- Chemistry Code
- World languages
- Music Code
- International Phonetic Alphabet (linguistics)


## Want to Know More?

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