# Learning Braille

## How Does It Work?

**Braille is a code that presents written information.** It is equivalent to print. The alphabet, numbers, music notation, and any other symbol that appears in print can be replicated in Braille by arranging combinations of the six dots of the Braille cell. Braille is read by touch, usually using the first finger on one or both hands.

Braille is not that hard to learn, especially when the student is young. Children who learn Braille early usually become extremely fast and competent readers. Children have the advantage over adults – they learn more quickly and expect to make mistakes as they go along.

Braille is a system of transcribing print so it can be read by touch. Braille is now mainly used by blind people but the original idea was for soldiers to be able to read at night without putting themselves in danger by using any light. You can learn about Braille by reading this page and following the links.

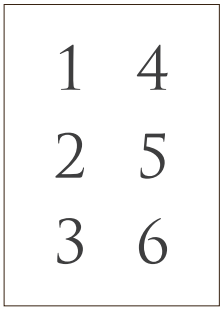



*Fig1.* Cells

### Cells

The basis of the Braille system is known as the Braille cell. The cell is comprised of six dots numbered in a specific order. Each dot or combination of dots represents a letter of the alphabet and there are 63 different cells not counting the space. The positions are normally numbered starting at the top of the left-hand column as shown opposite.

The two main forms of tactile Braille are embossed paper Braille and refreshable Braille displays (RBDs) in which an electronic signal results in pins moving up and down to make a row of cells. Braille readers use RBDs as computer monitors.

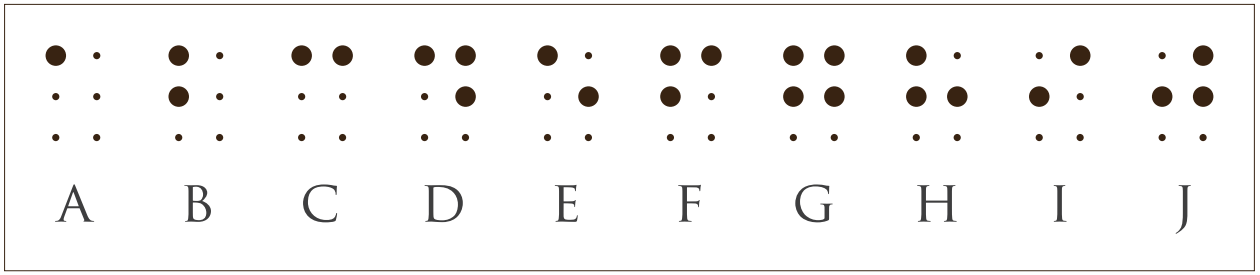
### Codes

A natural question is what the Braille cells mean. However, the cells have no intrinsic meanings; since there is only one standard Braille alphabet, the cells mean different things depending on which Braille Code is in use: math, music, Japanese, etc.

## Memorizing the dots

One way to learn the alphabet in literary Braille is to memorise the dot patterns for the first ten letters, a-j, shown by the simulated or inkprint Braille cells below.

*Fig2*. SIMULATED BRAILLE CELLS

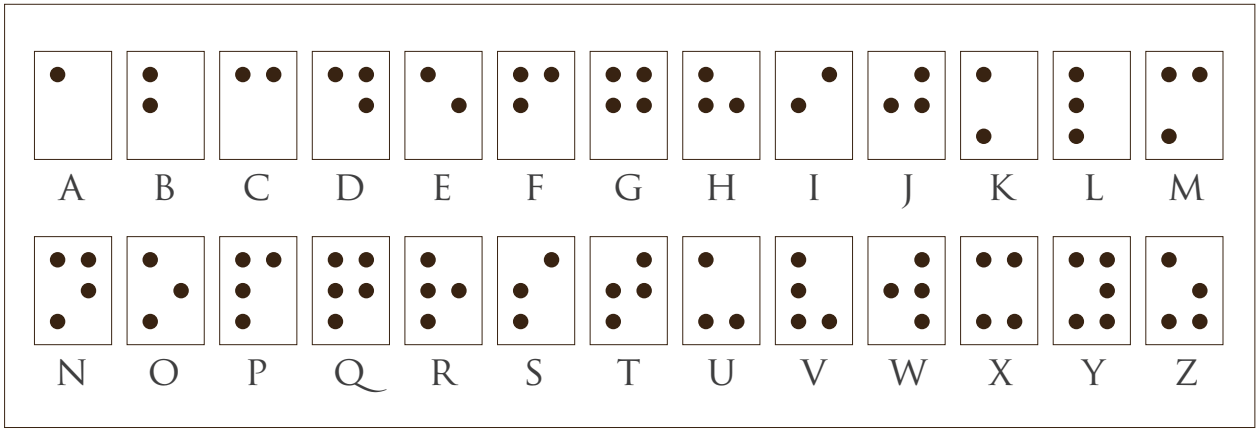



*(The shadow dots in empty positions are for sighted persons and are not used in embossed Braille.)*

The dot patterns for the next ten letters, k-t, are the same as the first ten but with an additional dot in position 3. The dot patterns for the letters u,v,x,y, and z are the same as the letters a-e with additional dots in positions 3 and 6. The letter "w", dot pattern 2-4-5-6, is out of alphabetical order because the French alphabet did not have that letter when Louis Braille invented the Braille alphabet in 1829.

The picture below shows you how the dots are arranged in the Braille cell for each letter of the alphabet.

*Fig3*. COMPLETE ALPHABET

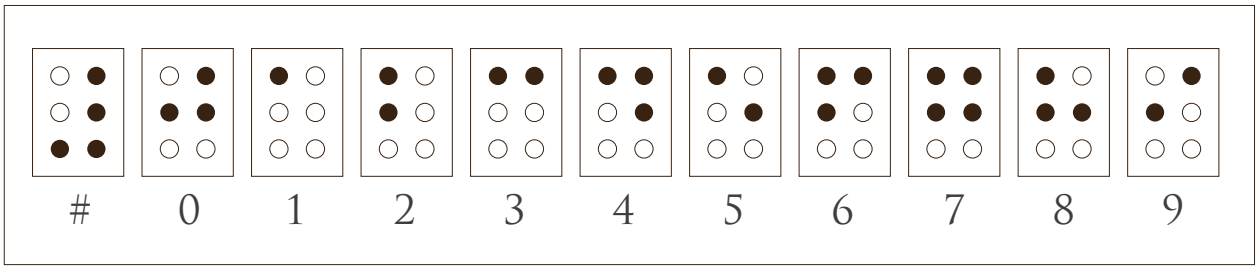


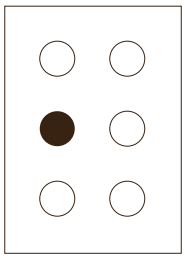
Braille does not have a separate alphabet of capital letters as there is in print. Capital letters are indicated by placing a dot 6 in front of the letter to be capitalised. Two capital signs mean the whole word is capitalized

*Fig4*. CASE


Braille numbers are made using the first ten letters of the alphabet, "a" through "j", and a special number sign, dots 3, 4, 5, and 6.

*Fig5*. NUMBERS



Larger numbers only need one number sign.
The comma in braille is dot 2.

*Fig6*. COMMA

*Information courtesy of:*

**American Federation for the Blind**
**Perkins**
**World Blind Union**