

LÍNGUA ESTRANGEIRA: Inglês

How Braille Works

by Tracy V. Wilson

In 1828, Charles Barbier, a visitor to Royal Institution for Blind Youth, introduced Louis Braille to a tactile dot code known as **night writing**. Barbier had invented the code to allow soldiers to communicate with one another in the dark, but his idea hadn't caught on. It used dots to represent 36 phonetic sounds rather than the letters of the alphabet. Some of its characters were six dots tall.

Louis Braille realized that the same basic idea could give blind people an efficient method for reading and writing. Through trial and error, he figured out that a six-dot cell was small enough to fit under a fingertip but had enough possible dot combinations to represent a wide range of letters and symbols. He used this cell to create an alphabet using tactile dots and dashes.

The **Braille cells** used today are two dots wide and three dots tall, and they no longer use dashes. You can represent each dot's position within the cell with a number.

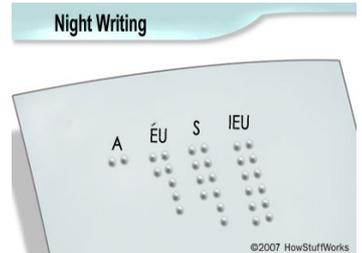
Dots one, two and three are on the left side of the cell, and dots four, five and six are on the right side. A cell with one dot in position six indicates that the next cell represents a capital letter, and a cell marked with dots three through six signifies that the next cell represents a number. The Braille characters for the numbers zero through nine are the same as for the letters "a" through "j."

A typical line of Braille is about 40 characters long, and a typical page of Braille is about 25 lines long. In other words, Braille takes up significantly more room than standard-sized print. Braille pages are also thicker and heavier than ordinary paper, and they have to be bound in a loose format so that pages can lie flat and people can reach the cells near the book's binding. This leads to relatively bulky books. For example, the Braille version of "Harry Potter and the Half Blood Prince" is eight volumes long. Its longer predecessor, "Harry Potter and the Order of the Phoenix," is fourteen volumes long.

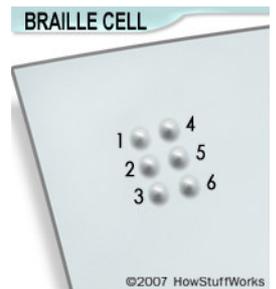
To conserve space and make the reading process a little faster, many people learn to read contracted Braille, previously known as Grade 2 Braille. Uncontracted Braille, or Grade 1 Braille, uses characters to represent single letters, numbers and symbols. **Contracted Braille** uses characters to represent letter combinations or whole words. There are close to 200 contractions in the American version of English Braille. These include commonly-used words like "and," "you" and "for" as well as letter combinations like "ing" and "ed."

There are opposing theories about whether it is better for a person to learn contracted or uncontracted Braille. Some educators argue that uncontracted Braille is an important foundation for learning contracted Braille. In addition, learning characters for individual letters and symbols may be easier for young children who are beginning to learn to read.

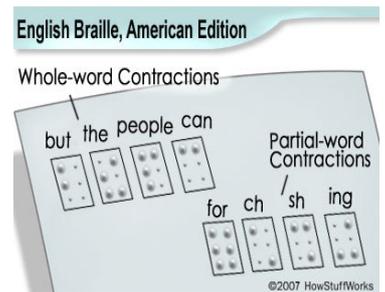
Opponents argue that uncontracted Braille is more time- and space-consuming than contracted Braille and that teaching the contracted version first requires people to learn two codes.



An example of the cells used in night writing



A Braille cell has six dots



Examples of whole- and part-word contractions in English Braille, American Edition

<http://people.howstuffworks.com/braille.htm>

QUESTÃO 31

A que, especificamente, se refere o título do texto?

- A) À autora, Tracy Wilson.
- B) À estrutura e ao funcionamento do Braille.
- C) Às variedades do Braille.
- D) À origem do Braille.

QUESTÃO 32

Segundo o texto, os fundamentos que levaram à criação do código Braille foram propostos

- A) pelo Instituto Real para jovens cegos.
- B) por Louis Braille.
- C) por Charles Barbier.
- D) pelo governo britânico.

QUESTÃO 33

The fragment “Through trial and error, he figured out that a six-dot cell was small enough [...]” (linhas 7-8) could express similar meaning if rewritten as:

- A) he tried several times before concluding that a six-dot cell was ideal.
- B) he had an instant insight and concluded that a six-dot cell was small enough.
- C) because the original code had characters six-dot tall, he made no error.
- D) he discovered a very easy and intelligent solution effortlessly.

QUESTÃO 34

Braille's original code used

- A) dots to represent 36 phonetic sounds.
- B) cells composed of dots and dashes.
- C) different dots to represent letters and numbers.
- D) an almost unlimited combination of dots.

QUESTÃO 35

Com base no texto, é correto afirmar que a palavra **woman** em um texto Braille, quando precedida por uma célula Braille contendo um ponto em relevo na posição de número 6, encontra-se grafada da seguinte maneira:

- A) Woman.
- B) woman.
- C) WOMAN.
- D) *woman*.

QUESTÃO 36

Sobre o código tátil conhecido como “escrita noturna”, mencionado no texto, é correto afirmar que

- A) ele ainda é amplamente utilizado por soldados do exército norte-americano.
- B) nele os pontos em relevo não representavam nem letras nem palavras.
- C) ele fez muito sucesso entre os soldados no início do século, mas caiu em desuso.
- D) nele todos os caracteres eram compostos de conjuntos de 6 pontos em relevo.

QUESTÃO 37

Contracted Braille was originally known as

- A) the American version of Braille.
- B) English Braille.
- C) Grade 2 Braille.
- D) Advanced Braille.

QUESTÃO 38

De acordo com o texto, considere as alternativas a seguir.

- I - The Braille code has changed over the years.
- II - There's no need to use especial paper when writing in Braille.
- III - Books in Braille come in relatively voluminous editions.
- IV - Harry Potter is the longest Braille book ever.

Assinale a alternativa que contém **somente** afirmativas corretas.

- A) III e IV
- B) II e III
- C) I e III
- D) I e IV

QUESTÃO 39

Segundo o texto, uma célula Braille é, atualmente, composta de:

- A) 3 pontos na coluna esquerda e 3 à direita.
- B) 6 pontos em relevo e traços complementares.
- C) pelo menos 6 posições distribuídas em colunas.
- D) pontos distribuídos entre, pelo menos, 3 posições.

QUESTÃO 40

De acordo com o texto, quais alternativas completam corretamente o enunciado?

About Contracted and Uncontracted Braille, it is safe to say that

- I - there's no agreement as to which form is better for the learner.
- II - contracted Braille seems better for children beginning to read.
- III - they are identical and would be easily taught to children and adult readers alike.
- IV - some argue it is more time-consuming to use the uncontracted version.

Assinale a alternativa que contém **somente** afirmativas corretas.

- A) II e IV
- B) I, II e III
- C) III e IV
- D) I e IV