

Scrabble [en]

A board of Scrabble,
with words or not.

Scrabble™, from Hasbro™ and Mattel™.

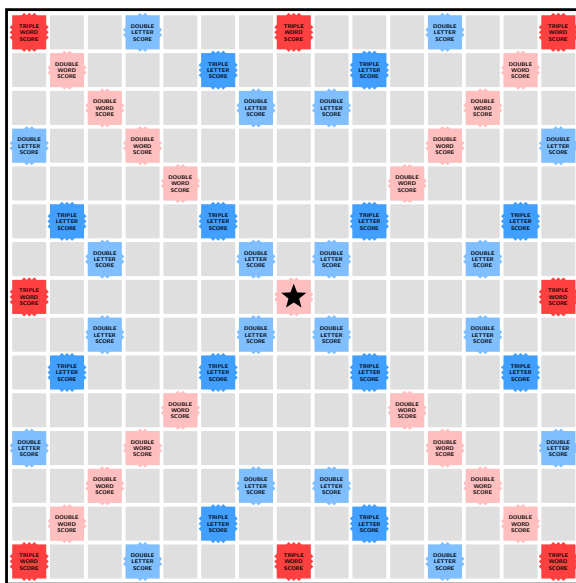
Version 0.1.7 - 19/03/2025

Cédric Pierquet

c.pierquet - at - outlook . fr

<https://forge.apps.education.fr/pierquetcedric/packages-latex>

- ▶ Some commands to display a Scrabble board, with or without words.
- ▶ English, French, German or Spanish version for points and labels.
- ▶ Ideas from <https://tex.stackexchange.com/questions/194780/tikz-drawing-a-rectangle-with-spikes-on-borders>



Thanks to Denis Bitouzé, Patrick Bideault, quark67 and jmbeckers for help and ideas !

L^AT_EX

pdfL^AT_EX

LuaL^AT_EX

TikZ

T_EXLive

MiK_TE_X

Introduction

1 The Scrabble package

1.1 Source

Some ideas are from <https://tex.stackexchange.com/questions/194780/tikz-drawing-a-rectangle-with-spikes-on-borders>, with proposition from Mark Wibrow.

This package is *build* within styles and ideas from Mark Wibrow.

1.2 Loading of the package, used packages

The package Scrabble loads within the preamble:

```
\usepackage{Scrabble}
```

Code \LaTeX

It's mostly compatible with latex, pdflatex, lualatex or xelatex compilation!

It loads the following packages and libraries:

- tikz with `\calc` with the tikzlibraries `\calc` and `\shapes.geometric`;
- pgf and pgffor;
- xstring, xparse, simplekv and listofitems.

1.3 The package itself

The idea is to, thanks to TikZ, propose commands or environments to display a Scrabble™ board:

- *independent*;
- in an *environment* with words.

```
%independent command for the empty board
\ScrabbleBoard<language>[keys]

%environment with word(s)
\begin{EnvScrabble}<language>[keys]
  \ScrabblePutWord[orientation]{word}{coordinates of the beginning cell}
\end{EnvScrabble}
```

Code \LaTeX

1.4 Languages

The commands, environments et keys are in english, but cells can be displayed in:

- english (code ISO 639-1 EN);
- french (code ISO 639-1 FR);
- german (code ISO 639-1 DE);
- spanish (code ISO 639-1 ES).

2 Commands, keys and options

2.1 The board, standalone

The first argument, *optional*, between `<...>` is the **<language>** of the display, form the list:

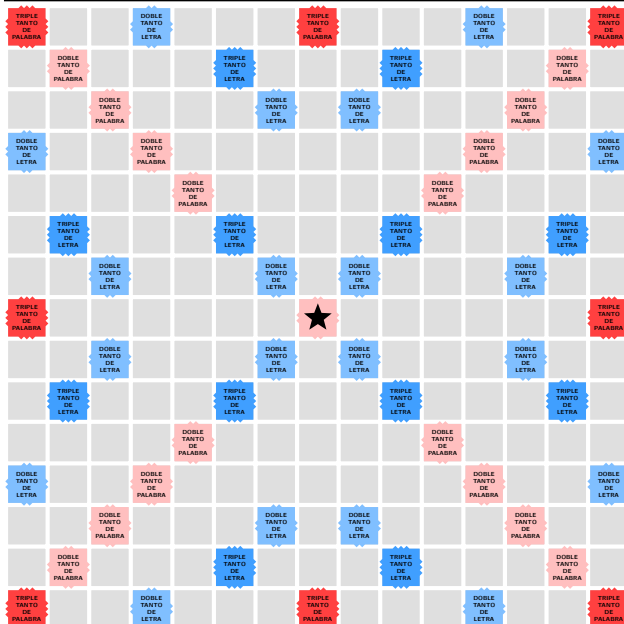
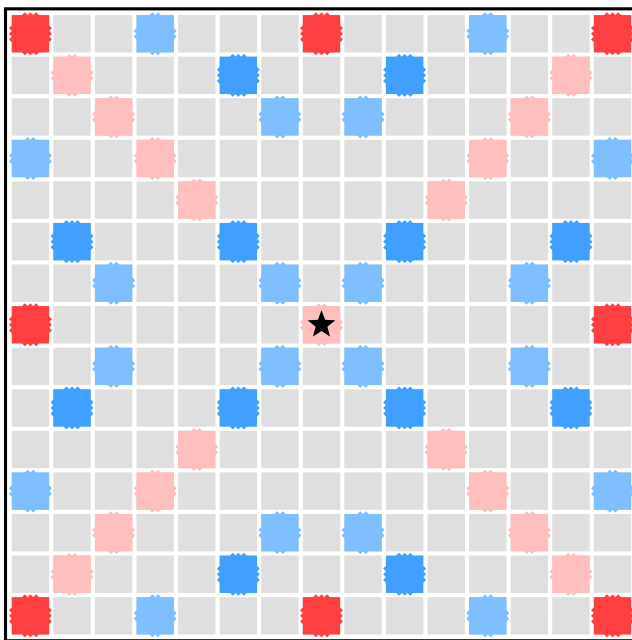
<EN> (english, default), **<FR>** (french), **<DE>** (german) et **<ES>** (spanish).

The second argument, *optional*, between `[...]` give the **<keys>**:

- **<Scale>** for the display (the initial unit is 1 cm); default: **<1>**
- **<ScaleLabels>** for the cell's names; défaut: **<1>**
- the boolean **<Border>** pour print a border outside the board; default: **<true>**
- the boolean **<Labels>** to print *names* of the special cells; default: **<true>**
- the boolean **<Help>** pour print numbers to reperate th cells; default: **<false>**

```
\ScrabbleBoard[Labels=false,Scale=0.55]\\ %board without cell's names  
\ScrabbleBoard<ES>[Scale=0.55,Border=false] %board in spanish, without border
```

Code \LaTeX



2.2 The board with words

Here we can use the environment with the specific command in order to print words on the board.

For the *environment*, the options are the same as for the independent command!

For putting word on the board:

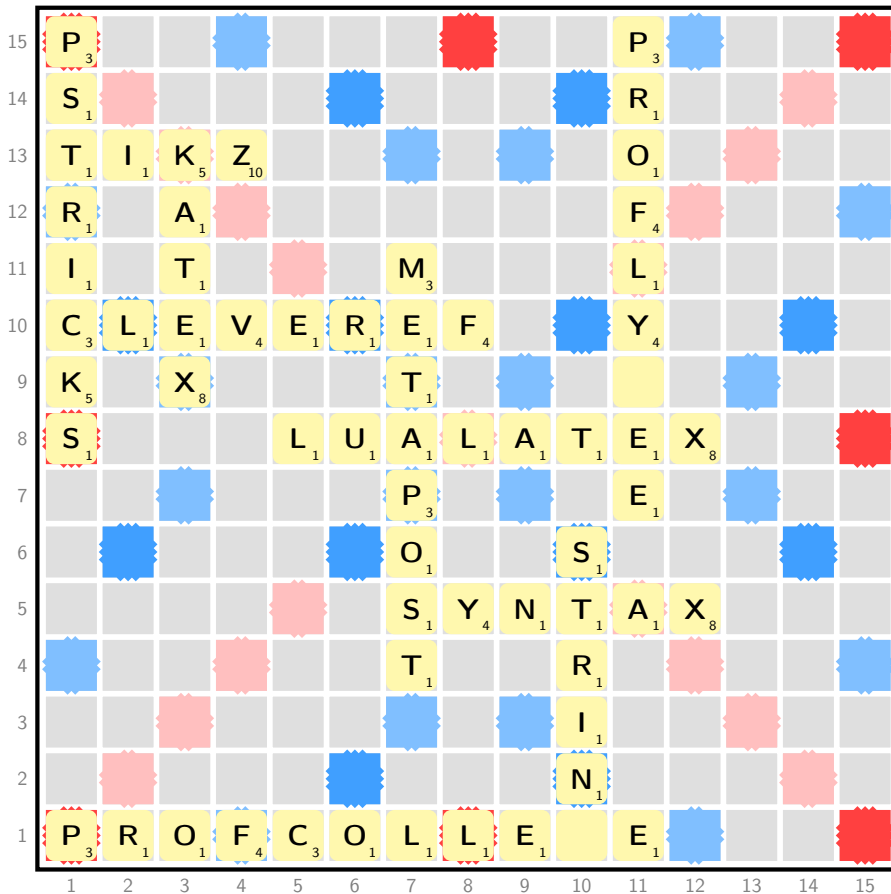
- the first argument, *optional*, between [...] is the orientation of the word, **(H)** (by default) or **(V)**;
- the second argument, *mandatory*, between {...}, is the word, with uppercase or lowercase letters;
- the last argument, *mandatory*, between {...}, is the coordinates of the first cell for first letter (the cell (1,1) is south-west corner).

Observation 1: the chosen language will display the right points in the tile!

Observation 2: the *white* (or *joker*) is coded by the character *.

```
\begin{EnvScrabble}[Scale=0.75,Labels=false,Help]
  \ScrabblePutWord{TIKZ}{1,13}
  \ScrabblePutWord[V]{pstricks}{1,15}
  \ScrabblePutWord[V]{KaTeX}{3,13}
  \ScrabblePutWord{cleveref}{1,10}
  \ScrabblePutWord[V]{METAPOST}{7,11}
  \ScrabblePutWord{LUALATEX}{5,8}
  \ScrabblePutWord[V]{ProfLy*ee}{11,15}
  \ScrabblePutWord{PROFCOLLE*E}{1,1}
  \ScrabblePutWord{SYNTAX}{7,5}
  \ScrabblePutWord[V]{STRIN*}{10,6}
\end{EnvScrabble}
```

Code \LaTeX

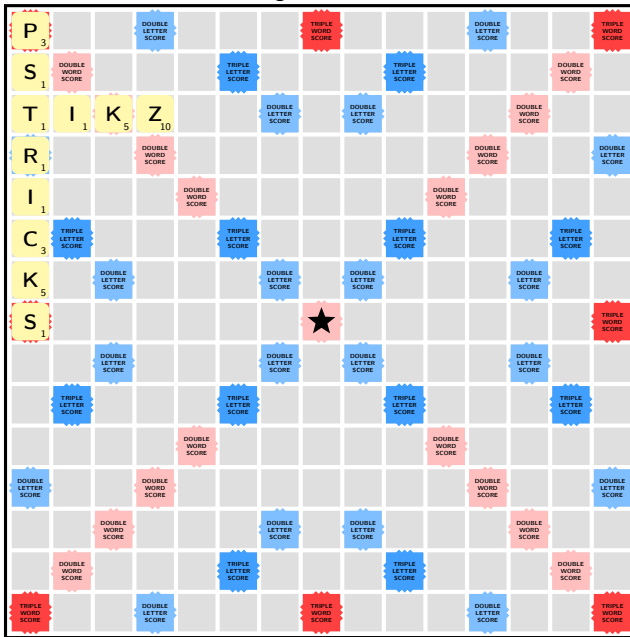


```

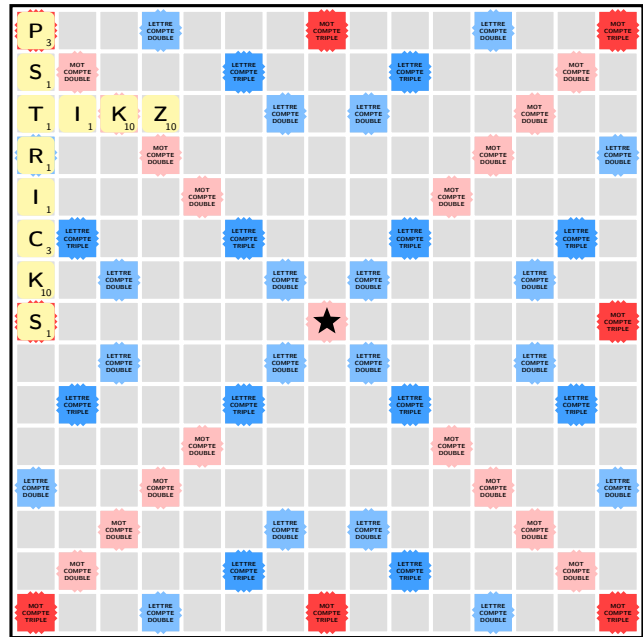
\begin{EnvScrabble}[Scale=0.55]
  \ScrabblePutWord{tikz}{1,13} \ScrabblePutWord[V]{PSTRiCKS}{1,15}
  \draw (7,15) node[font=\LARGE\sffamily] {English version} ;
\end{EnvScrabble}~~~
\begin{EnvScrabble}<FR>[Scale=0.55]
  \ScrabblePutWord{tikz}{1,13} \ScrabblePutWord[V]{PSTRiCKS}{1,15}
  \draw (7,15) node[font=\LARGE\sffamily] {French version} ;
\end{EnvScrabble}~~~
\begin{EnvScrabble}<DE>[Scale=0.55]
  \ScrabblePutWord{tikz}{1,13} \ScrabblePutWord[V]{PSTRiCKS}{1,15}
  \draw (7,15) node[font=\LARGE\sffamily] {German version} ;
\end{EnvScrabble}~~~
\begin{EnvScrabble}<ES>[Scale=0.55]
  \ScrabblePutWord{LaTeX}{1,14} \ScrabblePutWord[V]{Madrid}{2,15}
  \draw (7,15) node[font=\LARGE\sffamily] {Spanish version} ;
\end{EnvScrabble}

```

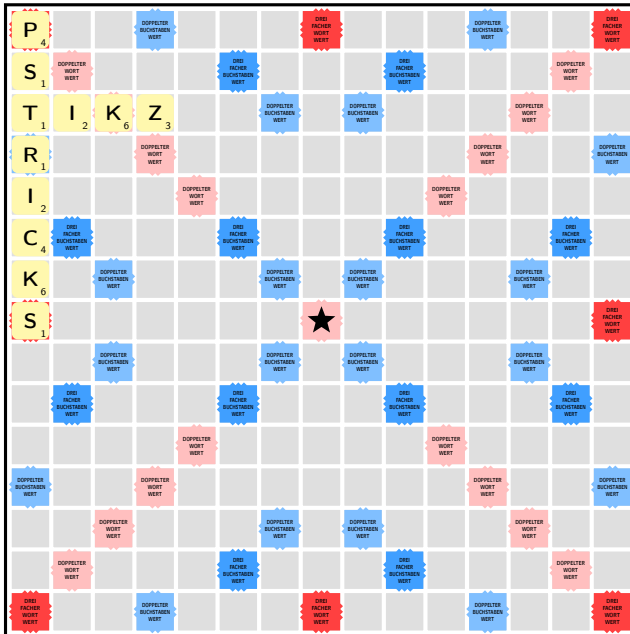
English version



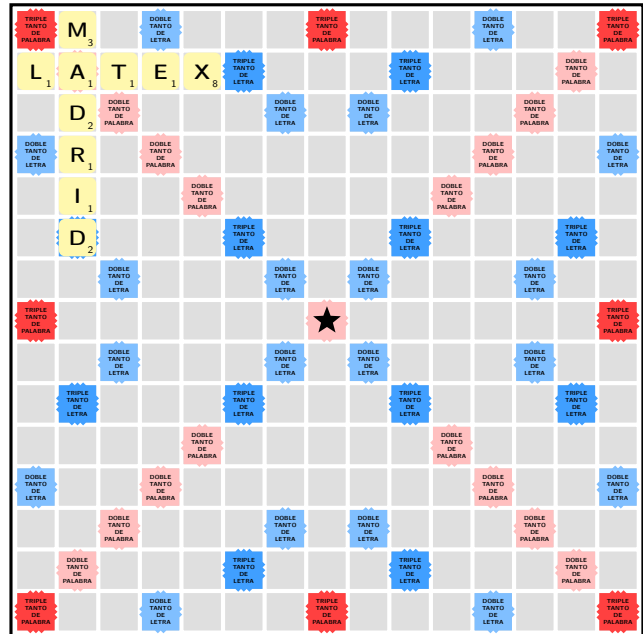
French version



German version



Spanish version



2.3 *Inline word*

The idea is to propose a command to insert a word in *inline* mode, with automatic adjustment of size and position.

```
%command to put inline word  
\ScrabbleWord[keys]{word}
```

Code \LaTeX

The first argument, *optional*, between [...] allows you to configure the **<keys>**:

- **<Colback>** for the color of the pieces default: **<yellow!40>**
- **** for the font; default: **<\bfseries\sffamily>**
- **<Colfonte>** for the color of the characters; default: **<black>**
- **<Lang>** to choose the language (for the number of points); default: **<EN>**
- **<Offset>** to specify horizontal spacing between pieces; default: **<0.1pt>**
- **<Scale>** to specify a base scale for texts; default: **<0.6>**
- **<Shuffle>** (boolean) to mix letters; default: **<>false>**
- **<Score>** which is a boolean to display the score of each piece. default: **<>true>**

Note 1: the code is responsible for positioning the pieces for *satisfactory* alignment and scaling based on the active font.

Note 2: the *blank* (or *wildcard*) is obtained by the character `*`.

```
Online Scrabble word test positioning \ScrabbleWord{TE*ST} to see!
```

Code \LaTeX

Online Scrabble word test positioning **T₄ E₄ S₄ T₄** to see!

```
{\Huge\sffamily Test positioning \ScrabbleWord[Colback=teal!5,Colfonte=orange]{PYTHAG*RE} to see!}
```

Code \LaTeX

Test positioning **P₃ Y₄ T₁ H₄ A₁ G₂ R₁ E₁** to see!

```
\scalebox{3}[3]{Positioning \ScrabbleWord[Lang=DE,Font=\ttfamily,Scale=0.75,Shuffle]{PYTHAG*RE} to see!}
```

Code \LaTeX

Positioning **P₄ E₁ R₁ A₁ Y₁₀ G₂ T₁ H₂** to see!

```
{\LARGE Test positioning \ScrabbleWord[Score=false,Offset=1pt,Colback=orange!50]{PSTRICKS} to see!}
```

Code \LaTeX

Test positioning **P₃ S₃ T₁ R₁ I₁ C₃ K₅ S₁** to see!

2.4 Special letters

It is possible to use special characters, for the languages <DE> and <ES>, but for compatibility reasons, special characters are *coded* by numbers:

- 0 code the letter $\boxed{\ddot{O}}$ with 8 points;
- 1 code the letter $\boxed{\ddot{A}}$ with 6 points;
- 4 code the letter $\boxed{\ddot{U}}$ with 6 points;
- 6 code the *letter* \boxed{CH} with 5 points;
- 7 code the letter $\boxed{\tilde{N}}$ with 8 points;
- 8 code the *letter* \boxed{RR} with 8 points;
- 9 code the *letter* \boxed{LL} with 8 points.

Code \LaTeX

```
{\Huge \ScrabbleWord[Lang=DE,Font=\ttfamily,Scale=0.75]{104AAA}}  
{\Huge \ScrabbleWord[Lang=ES,Font=\sffamily,Scale=0.75]{R070S0689}}
```

\ddot{A}_6 \ddot{O}_8 \ddot{U}_6 A_1 A_1 A_1
 R_1 O_1 \tilde{N}_8 O_1 S_1 O_1 CH_5 RR_8 LL_8

History

- v0.1.7 : Key [Shuffle] for inline words
- v0.1.6 : Bugfix with *joker* ; enhancements for <DE> board
- v0.1.5 : Special letters for <DE> and <ES>
- v0.1.4 : Command to insert *inline* words
- v0.1.3 : Words in uppercase or lowercase, adjusted codes for language (ISO 639-1)
- v0.1.2 : Key <ScaleLabels> to modify scale of the cell's names
- v0.1 : Initial version