

Scrabble [en]

A board of Scrabble,
with words or not.

Scrabble™, from Hasbro™ and Mattel™.

Version 0.20a - 16/12/2025

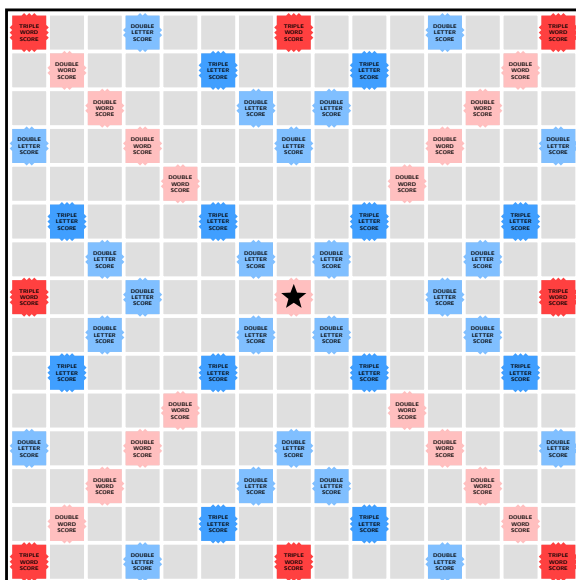
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<https://github.com/cpierquet/latex-packages/tree/main/scrabble>

<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, Patrick Jenty 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).

2.2 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:

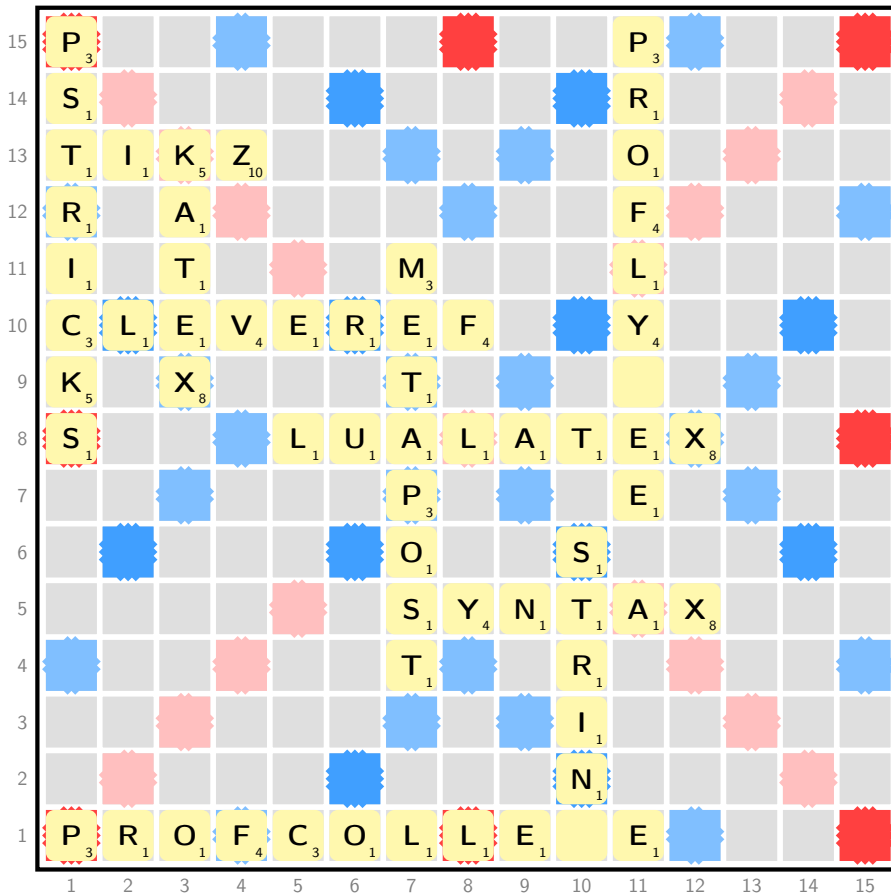
- the first argument, *optional*, between [...] is the orientation of the word, **(H)** (by default) or **(V)**;
- the second argument, *mandatory*, between {...}, is the word, with uppercase or lowercase letters;
- the last argument, *mandatory*, between {...}, is the coordinates of the first cell for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

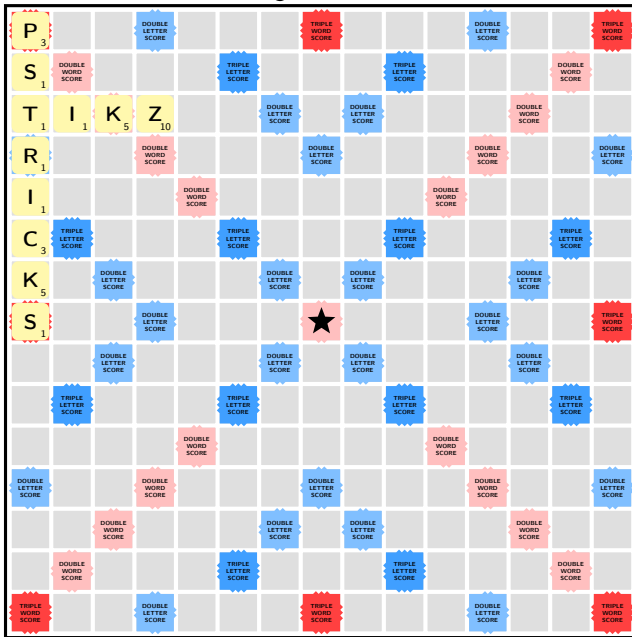


```

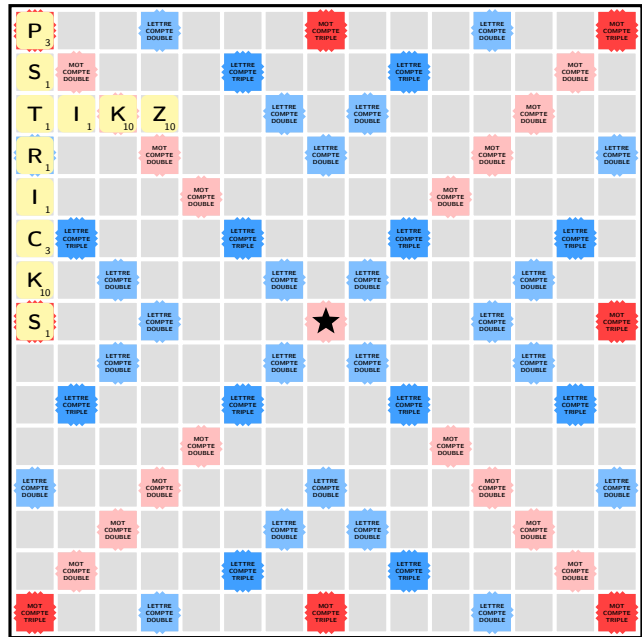
\begin{EnvScrabble}[Scale=0.55]
  \ScrabblePutWord{tikz}{1,13} \ScrabblePutWord[V]{PSTRiCKS}{1,15}
  \draw (7,15) node[font=\LARGE\sffamily] {English version};
\end{EnvScrabble}~~~
\begin{EnvScrabble}<FR>[Scale=0.55]
  \ScrabblePutWord{tikz}{1,13} \ScrabblePutWord[V]{PSTRiCKS}{1,15}
  \draw (7,15) node[font=\LARGE\sffamily] {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}

```

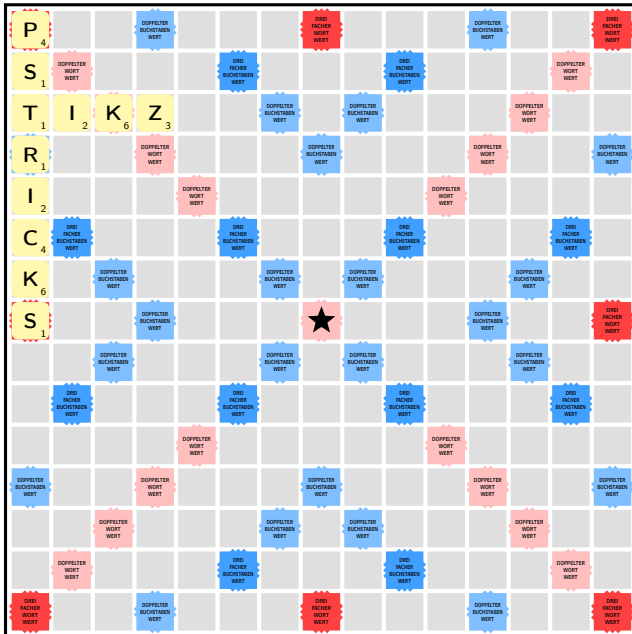
English version



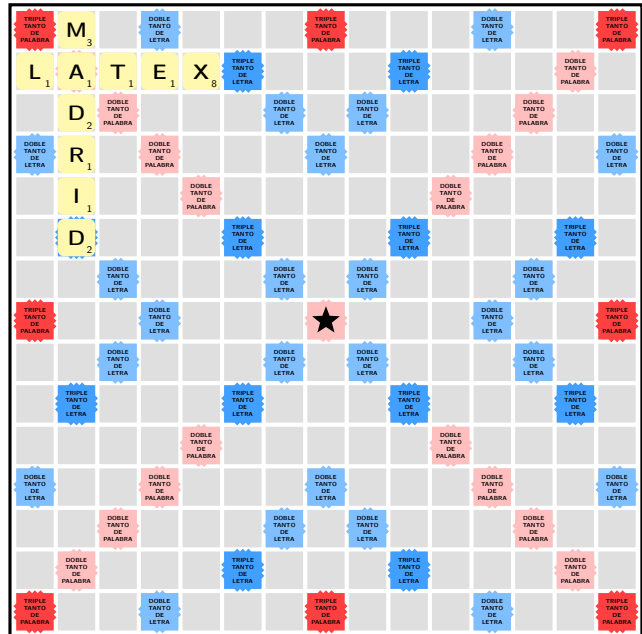
French version



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 `*`.

```
Inline Scrabble letter test positioning \ScrabbleWord{K} to see!
```

Code \LaTeX

Inline Scrabble letter test positioning **K** to see!

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

Code \LaTeX

Inline Scrabble word test positioning **T E * S T** 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 **H₂ G₂ * A₁ Y₁₀ R₁ T₁ E₁ P₄** to see!

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

Code \LaTeX

Test positioning **P₃ S₁ T₁ R₁ I₁ C₁ 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=\sfamily,Scale=0.75]{R070S0689}
```

Ä₆ Ö₈ Ü₆ A₁ A₁ A₁
R₁ O₁ Ñ₈ O₁ S₁ O₁ CH₅ RR₈ LL₈

2.5 Colors

The colors used can be redefined using the aliases given below.

Code \LaTeX

```
\colorlet{triplewordscore}{red!75}  
\colorlet{doublewordscore}{red!25}  
\colorlet{tripleletterscore}{blue!50!cyan!75}  
\colorlet{doubleletterscore}{blue!50!cyan!50}  
\colorlet{scrabblebgtile}{yellow!40}  
\colorlet{scrabbleboard}{gray!25}
```

History

- v0.20a: Bugfix with single letters
- v0.1.9: Bugfix (forgotten 'cells') + colors
- v0.1.8: Bugfix
- 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