

# Package ‘ScrabbleScore’

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**Type** Package

**Title** Calculates Scrabble score for strings

**Version** 1.0

**Date** 2013-10-01

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**Description** Given a word will produce that word's scrabble score. Unlike many naive implementations this package takes into consideration the distribution of letter in scrabble. So a word like 'zzz' will be scored '10' rather than '30'.

**License** MIT License

**Suggests** testthat (>= 0.7)

**Note** The name ``Scrabble" is a trademark of Hasbro, Inc. in the United States and Canada; elsewhere, it is a trademark of Mattel.

**Depends** R (>= 2.10)

**NeedsCompilation** no

**Repository** CRAN

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ScrabbleScore-package *Calculates Scrabble score for strings*

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### Description

Given a word will produce that word's scrabble score. Unlike many naive implementations this package takes into consideration the distribution of letters in scrabble. So a word like 'zzz' will be scored '10' rather than '30'.

### Details

Package: ScrabbleScore  
Type: Package  
Version: 1.0  
Date: 2013-09-30  
License: MIT License

The most useful function is 'sws' which computes the Scrabble word score for a given string. It takes into account the letter distribution so not to count impossible letter combinations, such as 'zzz' (worth 10 rather than 30 due to necessity of blanks)

### Note

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### Author(s)

Will Kurt

Maintainer: Will Kurt <wckurt@gmail.com>

Project at: [https://github.com/willkurt/scrabble\\_score](https://github.com/willkurt/scrabble_score)

### References

[https://github.com/willkurt/scrabble\\_score](https://github.com/willkurt/scrabble_score)

### Examples

```
data(tw106)
sws(head(tw106))
```

---

impossible.points      *Calculates total of impossible points*

---

**Description**

Calculates the number of point in excess of the maximum possible amount due to the limitations of the the letter distribution.

**Usage**

```
impossible.points(c1)
```

**Arguments**

c1                      Word broken down into a list of characters (or a vector of words broken down this way)

**Value**

Returns a vector of values for the total number of impossible points in each list of characters

**Author(s)**

Will Kurt <wckurt@gmail.com>

**Examples**

```
impossible.points(strsplit("zzzz",""))
```

---

is.twl06.word              *Verifies that word belong to the twl06 list.*

---

**Description**

Only certain words are officially approved for Scrabble tournament play. They are collected in a dataset revered to as twl06

**Usage**

```
is.twl06.word(w)
```

**Arguments**

w                      Word or vector of words to check for inclusion in the twl06 list

**Note**

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**Author(s)**

Will Kurt <wckurt@gmail.com>

**References**

[https://en.wikipedia.org/wiki/Official\\_Tournament\\_and\\_Club\\_Word\\_List](https://en.wikipedia.org/wiki/Official_Tournament_and_Club_Word_List)

**Examples**

```
is.twl06.word("zzz")
is.twl06.word(c("zzz", "zzzz"))
```

---

letter.dists	<i>Scrabble letter distribution table</i>
--------------	---

---

**Description**

A table specifying the exact distribution of letters in a normal game of Scrabble. Used to calculate impossible.points

**Usage**

```
data(letter.dists)
```

**Format**

The format is: 'table' int [1:26(1d)] 9 2 2 4 12 2 3 2 9 1 ... - attr(\*, "dimnames")=List of 1 ..\$ : chr [1:26] "a" "b" "c" "d" ...

**Note**

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**Source**

table compiled from data found here: [http://en.wikipedia.org/wiki/Scrabble\\_letter\\_distributions](http://en.wikipedia.org/wiki/Scrabble_letter_distributions)

**Examples**

```
data(letter.dists)
```

---

sIs	<i>Scrabble Letter Score</i>
-----	------------------------------

---

**Description**

A simple function giving the standard letter value of each letter in Scrabble.

**Usage**

```
sIs(1)
```

**Arguments**

1                    A letter or vectors of letters to get the Scrabble letter score for.

**Value**

Returns a vector of values for the letter score of each letter passed in.

**Note**

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**Author(s)**

Will Kurt <wckurt@gmail.com>

**See Also**

[SWS](#)

**Examples**

```
sIs("z")  
sIs(c("z", "z", "z"))
```

---

SWS

*Scrabble Word Score*

---

### Description

Gives the base word score for a string in scrabble.

### Usage

```
sws(w,only.possible=TRUE,check.valid=FALSE)
```

### Arguments

<code>w</code>	Word or vector of words
<code>only.possible</code>	Default=TRUE Only consider scores that are possible based on the distribution of scrabble letters. For example "zzz" would score 30 if it weren't for the fact that there is only 1 'z' necessitating the use of 2 blanks, for a real score of 10.
<code>check.valid</code>	Default=FALSE When TRUE returns a score of 0 for words not in the TWL06 dictionary.

### Value

Returns a vector of values for the word score of each word passed in.

### Note

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### Author(s)

Will Kurt <wckurt@gmail.com>

### See Also

[s1s](#)

### Examples

```
sws("zzz")
sws(c("dog", "zzz"))
sws(c("dog", "zzz"),only.possible=FALSE)
sws(c("dog", "zzzzzz"),only.possible=FALSE,check.valid=TRUE)
```

---

`twl06`*TWL06 word list*

---

**Description**

The Official Tournament and Club Word List

**Usage**

```
data(twl06)
```

**Format**

A list of official Scrabble Words

**Note**

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**Source**

<http://norvig.com/ngrams/TWL06.txt>

**References**

[http://en.wikipedia.org/wiki/Official\\_Tournament\\_and\\_Club\\_Word\\_List](http://en.wikipedia.org/wiki/Official_Tournament_and_Club_Word_List)

**Examples**

```
data(twl06)
sws(head(twl06))
```

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