

# Package ‘geocacheR’

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**Type** Package

**Imports** dplyr, stringr, magrittr, tibble, threewords

**Title** Tools for Geocaching

**Version** 0.1.0

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**Description** Tools for solving common geocaching puzzle types, and other Geocaching-related tasks.

**License** GPL-3

**Encoding** UTF-8

**LazyData** true

**Suggests** testthat

**RoxygenNote** 7.0.2

**NeedsCompilation** no

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base64	<i>A helper table for base64 conversion and lookup</i>
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**Description**

A helper table for base64 conversion and lookup

**Usage**

base64

**Format**

An object of class `tbl_df` (inherits from `tbl`, `data.frame`) with 64 rows and 3 columns.

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expressCoordinates	<i>Express Decimal Coordinates in Other (text) Formats</i>
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**Description**

Designed to convert into Geocaching-style coordinates, but future styles may be accommodated.

**Usage**

```
expressCoordinates(x, style = "GC")
```

**Arguments**

x	A numeric vector of length 2
style	placeholder for future development if requirements emerge

**Value**

A character of length 1 with an alternative expression of the coordinates

**Examples**

```
expressCoordinates(c(55.9327, -3.25103))
```

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parseCoordinates	<i>Parse Coordinates into Numeric Format</i>
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**Description**

parseCoordinates takes a variety of string inputs for coordinates in the following formats: - N00 00.000 W000 00.000 - N00 00 00 W000 00 00 - N00.0000 W00.0000 and converts them into a numeric vector of length 2

**Usage**

```
parseCoordinates(x)
```

**Arguments**

x	A string for the coordinates to be converted
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**Value**

A numeric vector holding the n(orth) and e(ast) coordinates

**Examples**

```
parseCoordinates("N55 55.555 W003 14.159")
parseCoordinates("N 55 55.555 E003 14.159")
parseCoordinates("N55.92592 W3.23598")
```

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qqmiaiii	<i>Encrypt a string using the Vigenere cipher</i>
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**Description**

This is a wrapper for vigenere where decrypt is set to FALSE

**Usage**

```
qqmiaiii(x, key, alphabet = standard_alphabet)
```

**Arguments**

x	A string to encrypt or decrypt
key	The encryption or decryption key
alphabet	A list of letters in lower and upper case

**See Also**

[vigenere](#)

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rot	<i>Caesar-shift a string by a given number of letters.</i>
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**Description**

Caesar-shift a string by a given number of letters.

**Usage**

```
rot(x, n = 13, alphabet = standard_alphabet, showWarn = TRUE)
```

**Arguments**

x	A string.
n	A number of letters to shift the string by.
alphabet	A list containing lower and upper case alphabets.
showWarn	boolean. Do you want to see warnings about alphabets?

**Value**

A string

**Examples**

```
rot("abc")
rot("abc", n=2)
rot("abc", n=5, list(lw=letters[1:7], up=LETTERS[1:7]))
```

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rot_all	<i>Caesar-shift a string over all possible number n</i>
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**Description**

Caesar-shift a string over all possible number n

**Usage**

```
rot_all(x, alphabet = standard_alphabet)
```

**Arguments**

x	A string.
alphabet	A list containing lower and upper case alphabets.

**Value**

a vector of strings

**Examples**

```
rot_all("abc")
rot_all("abc", list(lw=letters[1:7], up=LETTERS[1:7]))
```

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Scrabble	<i>Value and frequency of Scrabble letters</i>
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**Description**

Value and frequency of Scrabble letters

**Usage**

Scrabble

**Format**

An object of class `tbl_df` (inherits from `tbl`, `data.frame`) with 27 rows and 3 columns.

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Scrabble_score	<i>Find the Scrabble value of words</i>
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**Description**

Find the Scrabble value of words

**Usage**

```
Scrabble_score(x, language = "en")
```

**Arguments**

<code>x</code>	A vector of character strings
<code>language</code>	A character string for the linguistic Scrabble edition, conforming to ISO 639-1 Current supported languages: en

**Value**

An integer vector

**Examples**

```
Scrabble_score(c("kwyjibo", "jozxyqk"))
```

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standard_alphabet	<i>The standard alphabet for the locale, for use in Caesar-based encryption etc.</i>
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**Description**

The standard alphabet for the locale, for use in Caesar-based encryption etc.

**Usage**

standard\_alphabet

**Format**

An object of class list of length 2.

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vigenere	<i>Encrypt or decrypt a string using a key</i>
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**Description**

Encrypt or decrypt a string using a key

**Usage**

```
vigenere(x, key, decrypt = TRUE, alphabet = standard_alphabet)
```

**Arguments**

x	A string to encrypt or decrypt
key	The encryption or decryption key
decrypt	Are you decrypting an encrypted string?
alphabet	A list of letters in lower and upper case

**Value**

A string

**Examples**

```
vigenere("MN vdopf wq brcep zwtcd.", "midway")
vigenere("My treasure is buried he... find it who may.", "La Bouche", decrypt = FALSE)
```

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w3w

*What 3 Words wrapper*


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**Description**

This function requires you to have a valid what3words API key called W3WAPIKey stored as an environment variable

**Usage**

```
w3w(x)
```

**Arguments**

**x** A vector, or list, of words. Strings with dots in them will be split. After splitting, there must be a multiple of three words. Either a vector of words, for a single latitude/longitude pair, or a list of vectors for vectorised operations. This wrapper also accepts a single string of three words separated by full stops.

**Value**

a numeric vector of length 2, consisting of lat(itude) and lon(gitude)

**Examples**

```
## Not run:
w3w("president.always.lying")
w3w("unseen.academicals.football") ## returns NAs
w3w(list("special.tools.required", "cliffs.falling.rocks",
        "available.during.winter", "ultraviolet.light.required"))
w3w(c("protests", "memo", "consoles"))

## End(Not run)
```

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word\_score

*Find the value of words*


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**Description**

Find the value of words

**Usage**

```
word_score(x)
```

**Arguments**

x                    A vector of character strings

**Value**

An integer vector

**Examples**

```
word_score(c("infinite", "monkey", "cage"))
```



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