# A Regular Expressions Summary

## Creating:

Standard regex literal	/ / <options></options>
Extended regex literal	%r{ } <options></options>
Formal constructor	Regex.new(' ', 'options')

#### Regex Options:

i	Case insensitive pattern matching. Default is case sensitive.
0	Substitute once only. ???
m	Multi-line mode: The special key "." now also matches newlines.
Х	Extended mode: Spaces/newlines allowed to increase readability.
	Character encoding: One of None, EUC, UTF-8, SJIS. The default encoding is the same as the source encoding.

# Special Keys:

	Any character except a newline (unless in mode m).
^	The beginning of the line or string
\$	The ending of the line or string
\\ \/ \. \^ \\$	A "\", "/", ".", "^", or "\$" character
\A	The beginning of the string.
\b	A word boundary (outside of [] only)
\B	Not a word boundary
\d	A digit (0 through 9)
\D	Not a digit
\h	A hex digit
\H	Not a hex digit
\s	A white space character (including tabs, newlines, carriage returns, and form feeds).
\S	Not a white space character.
\w	A word ("C" identifier) character.
\W	Not a word character.
\xHH	An encoded hexadecimal character value
\ Z	The end of the string.
\Z	The end of the string or line.

#### **Grouping:**

(a z)	Sequence: The contents (expressions a through z) in sequence.
a   b	Alternation: One and only one of a or b or etc
(? <name> )</name>	Define a named sub-group. Typically tagged with {0}, see below.
\g <name></name>	Invoke an named sub-group.
[ ]	Any character from the set of characters in the brackets.
[^ ]	Any character not in the set of characters in the brackets.

#### Set Special Keys:

\] \\ \/ \-	A "]", "\", "/", or "-" character.
a-z	A character range.
\b	A backspace (0x08) character (inside a [] only).

## Repetition:

r*	Matches r zero or more times.
r*?	Matches r zero or more times (non-greedy).
r+	Matches r one or more times.
r+?	Matches r one or more times (non-greedy).
r?	Matches r zero or one times.
r{M,N}	Matches r M through N times.
r{M,N}?	Matches r M through N times (non-greedy).
r{M,}	Matches r M or more times.
r{,N}	Matches r zero through N times.
r { N }	Matches r exactly N times.

## Peeking Outward:

(?= )	A positive look ahead, not part of the match.
(?! )	A negative look ahead, not part of the match.
(?<= )	A positive look behind, not part of the match.
(? )</th <th>A negative look behind, not part of the match.</th>	A negative look behind, not part of the match.

## Usage:

pos = regex =~ string #\$PREMATCH \$MATCH \$POSTMATCH md = regex.match(string) #md.pre\_match md.to\_s md.post\_match #md[name] fetches the values of any named sub-groups.

Always require 'English' and never forget: <a href="http://rubular.com/">http://rubular.com/</a>