

Meta Characters:

() [] { } ^ \$. \ ? * + |

Escape Character: \

Within square brackets, you only have to escape (1) an initial ^, (2) a non-initial or non-final -, (3) a non-initial], and (4) a \.

- **Validate** that a piece of text (or a portion of that text) matches some pattern
- **Find** fragments of some text that match some pattern
- **Extract** fragments of some text
- **Replace** fragments of text with other text

hello	contains {hello}
gray grey	contains {gray, grey}
gr(a e)y	contains {gray, grey}
gr[ae]y	contains {gray, grey}
b[aeiou]bble	contains {babble, bebble, bibble, bobble, bubble}
[b-chm-pP]at ot	contains {bat, cat, hat, mat, nat, oat, pat, Pat, ot}
[a-zA-Z]	a through z or A through Z, inclusive (range)
colou?r	contains {color, colour}
rege(x(es)? xps?)	contains {regex, regexes, regexp, regexps}
go*gle	contains {ggle, gogle, google, gooogle, goooogle, ...}

go+gle	contains {gogle, google, gooogle, goooogle, ...}
g(oog)+le	contains {google, googoogle, googoogoogle, googooogoogoogle, ...}
z{3}	contains {zzz}
z{3,6}	contains {zzz, zzzz, zzzzz, zzzzzz}
z{3,}	contains {zzz, zzzz, zzzzz, ...}
[Gg]o**le	contains {Go**le, go**le }
\d	contains {0,1,2,3,4,5,6,7,8,9}
1\d{10}	contains an 11-digit string starting with a 1
Hello\nworld	contains Hello followed by a newline followed by world
mi.....ft	contains a nine-character (sub)string beginning with mi and ending with ft (Note: depending on context, the dot stands either for “any character at all” or “any character except a newline”.) Each dot is allowed to match a different character, so both microsoft and minecraft will match.
^dog	begins with "dog"
dog\$	ends with "dog"
^dog\$	is exactly "dog"

[^ i * & 2 @]	contains any character other than an i, asterisk, ampersand, 2, or at-sign.
-----------------	---

([A-Z])\w+ Finds all words starting with uppercase letter

<https://regexr.com/>

regex101.com