# JavaScript Cheat Sheet

### JavaScript reference guide.

### Operators

|  |  |
| --- | --- |
| Operator | Description |
| + | Plus |
| - | Minus |
| \* | multiplication |
| / | division |
| + | addition |
| - | subtraction |

### Logical operators

|  |  |
| --- | --- |
| = | assignment |
| && | and |
| || | or |
| ! | not |
| ^ | xor |
| ~ | not |
| << | Left shift |
| >> | Right shift |
| >>> | Zero-fill right shift |

### Comparisons

Given that x = 5, the table below explains the comparison operators:

|  |  |  |  |
| --- | --- | --- | --- |
| Operator | Description | Comparing | Returns |
| == | equal to | x == 8  x == 5  x == "5" | false  true  true |
| === | equal value and equal type | x === 5 | true |
|  |  | x === "5" | false |
| != | not equal | x != 8 | true |
| !== | not equal value or not equal type | x !== 5  x !== "5"  x !== 8 | false  true  true |
| > | greater than | x > 8 | false |
| < | less than | x < 8 | false |
| >= | greater than or equal to | x >= 8 | false |
| <= | less than or equal to | x <= 8 | true |

### Data types

|  |  |
| --- | --- |
| var i = 123; | integer |
| var f = 0.2 | real number |
| var t = "text" | string |
| var a = [1, "deux", 'trois'] | array |
| var m = {1:"un", "deux":2} | map, associative array |
| function x() {} | object |

### Event handlers

|  |  |
| --- | --- |
| onAbort | loading stopped |
| onBlur | focus lost |
| onChange | content modified |
| onClick | clicked |
| onDblClick | clicked twice |
| onDragDrop | moved |
| onError | not loaded |
| onFocus | focus entered |
| onKeyDown | key depressed |
| onKeyPress | key pressed |
| onKeyUp | key released |
| onLoad | just after loading |
| onMouseDown | mouse button depressed |
| onMouseMove | mouse moved |
| onMouseOut | mouse exited |
| onMouseOver | mouse on the element |
| onMouseUp | mouse button released |
| onReset | reset form button clicked |
| onResize | size of page changed |
| onSelect | element selected |
| onSubmit | submit form button clicked |
| onUnload | page exited |

### Methods of object (inherited by all objects)

|  |  |
| --- | --- |
| toString() | convert to a string |
| toLocaleString() | convert to a localized string |
| valueOf() | get the value |

### Date methods

|  |  |
| --- | --- |
| new Date() | constructor, arguments: milliseconds, string, list |
| getDate() | day of the month |
| getDay() | day of the week |
| getTime() | number of milliseconds since 1/1/1970 |
| getYear() | and getMonth/Hour/Minutes/Seconds |

### String methods

|  |  |
| --- | --- |
| charAt() | character at the given position |
| charCodeAt() | code of a character |
| concat() | concatenate with the argument |
| indexOf() | position of a character |
| lastIndexOf() | position from the end |
| localeCompare() | localized comparison |
| match | apply a regular expression |
| replace() | replace a substring |
| search() | search a substring |
| slice() | extract a part |
| split() | cut to build an array with parts |
| substring() | extract a part |
| toLowerCase() | convert to lowercase |
| toUpperCase() | convert to uppercase |
| toLocaleLowerCase() | localized lowercase |
| toLocaleUpperCase | localized uppercase |

### Array, index and methods

|  |  |
| --- | --- |
| a["one"]=1 | assignment by indice |
| a.one=1 | assignment by attribute |
| delete a["one"] | deletion by indice |
| delete a.one | deletion by attribute |
| for(var k in a) {} | iteration on the content |
| concat() | add a second array |
| join() | concatenate the elements into a string |
| push() | add an element |
| pop() | get and remove the last element |
| reverse() | invert the order of elements |
| shift() | insert an element at start |
| slice() | extract a sub-array |
| splice | insert an array |
| sort() | sort the elements |
| toString() | return the array as a string |
| unshift() | get and remove the first element |

### Number methods

|  |  |
| --- | --- |
| new Number() | constructor with a decimal/hexa/string argument |
| toString() | convert to a string |
| toExponential() | exponential form |
| toPrecision() | convert to a given number of decimals |

### Function (is also an object)

|  |  |
| --- | --- |
| function x(a, b) { return y; } | declaration |
| y = x(1, "two") | call |
| var y = new x(1, "two") | declaring a instance |
| x.prototype.methodx =  function() { } | adding a method |

### Built-in functions

|  |  |
| --- | --- |
| eval() | evaluate an expression |
| parseInt() | convert a string to an integer |
| parseFloat() | convert a string to a floating number |
| isNaN() | check if the content of a variable is valid |
| ifFinite() | check for overflow |
| decodeURI() | convert to a string |
| decodeURIComponent() | decode a component of the URL |
| encodeURI() | convert to file name |
| encodeURIComponent() | encode a component to URL |
| escape() | convert to URL parameters |
| unescape() | convert parameters to normal string |

### Regular expressions, suffixes

|  |  |
| --- | --- |
| g | global |
| i | case-insensitive |
| s | single line |
| m | multi-lines |

### Regular expressions, masks

|  |  |
| --- | --- |
| ^ | start of string |
| $ | end of string |
| (...) | grouping |
| !() | but this group |
| . | any character |
| (x|y) | either x or y |
| [xyz] | among x y or z |
| [^xyz] | any but x y or z |
| a? | may holds a once |
| a+ | at least a once |
| a\* | zero or several times a |
| a{5} | five times a |
| a{5,} | at least five times a |
| a{1, 4} | a between 1 and 4 times |