

# JavaScript Reference

## Primitive Data Types

Data Types	Description
<b>Integer numbers</b>	Positive or negative numbers, with no decimal places
<b>Floating-point numbers</b>	Positive or negative numbers with decimal places or numbers written within exponential notation
<b>Boolean</b>	Logical value of true or false
<b>String</b>	Text string
<b>Undefined</b>	A variable that has never had a value assigned to it, has not been declared, or does not exist
<b>Null</b>	An empty value

## Built-in JavaScript functions

Functions	Description
<b>Eval()</b>	Evaluates expression contained within string
<b>isFinite()</b>	Determine whether a number is finite
<b>isNaN()</b>	Determines whether a value is the special value NaN (Not a Number)
<b>parseInt()</b>	Converts string literals to integers
<b>parseFloat()</b>	Converts string literals to floating-point numbers
<b>encodeURIComponent()</b>	Encodes a text string so that it becomes a valid URL
<b>decodeURIComponent()</b>	Decodes text strings encoded with encodeURIComponent()

Array Class	Description
<b>Array()</b>	Array object constructor
<b>concat()</b>	Combines two arrays into a single array
<b>join()</b>	Combines all elements of an array into a string
<b>pop()</b>	Removes and returns a new array element
<b>push()</b>	Adds and returns a new array element
<b>reverse()</b>	Transposes elements of an array
<b>shift()</b>	Removes and returns the first element from an array
<b>slice()</b>	Creates a new array from a section of an existing array
<b>splice()</b>	Adds or removes array elements
<b>sort()</b>	Sorts elements of an array
<b>unshift()</b>	Adds new elements to the start of an array and returns the new array length
<b>Properties</b>	Description
<b>length</b>	Returns the number of elements in an array



Date Class	Description
<b>Date()</b>	Data object constructor
<b>getDate()</b>	Returns the date of a Date object
<b>getDay()</b>	Returns the day of a Date object
<b>getFullYear()</b>	Returns the year of a Date object in four-digit format
<b>getHours()</b>	Returns the hour of a Date object
<b>getMilliseconds()</b>	Returns the milliseconds of a Date object
<b>getMinutes()</b>	Returns the minutes of a Date object
<b>getMonth()</b>	Returns the month of a Date object
<b>getSeconds()</b>	Returns the seconds a Date object
<b>getTime()</b>	Returns the time of a Date object
<b>getTimezoneOffset()</b>	Returns the time difference between the user's computer and Greenwich Mean Time (GMT)
<b>getUTCDate()</b>	Returns the date of a Date object in Coordinated Universal Time (UTC)
<b>getUTXDay()</b>	Returns the day of a Date object in Coordinated Universal Time (UTC)
<b>getUTCFullYear()</b>	Returns the four-digit year of a Date object in Coordinated Universal Time (UTC)
<b>getYear()</b>	Returns the year of a Date object
<b>parse()</b>	Returns a string containing the number of milliseconds since January 1, 1970
<b>setDate()</b>	Sets the date of a Date object
<b>setFullYear()</b>	Sets the year of a Date object in four-digit format
<b>setHours()</b>	Sets the hour of a Date object
<b>setMilliseconds()</b>	Sets the milliseconds of a Date object
<b>setMinutes()</b>	Sets the minutes of a Date object
<b>setMonth()</b>	Sets the month of a Date object
<b>setSeconds()</b>	Sets the seconds a Date object
<b>toString()</b>	Convert a Date object to a string

Math Class	Description
<b>abs(x)</b>	Returns the absolute value of x
<b>ceil(x)</b>	Returns the value of x rounded to the next highest integer
<b>floor(x)</b>	Returns the value of x rounded to the next lowest integer
<b>max(x, y)</b>	Returns the larger of two numbers
<b>min(x, y)</b>	Returns the smaller of two numbers
<b>pow(x, y)</b>	Returns the value of x raised to the y power
<b>random()</b>	Returns a random number
<b>round(x)</b>	Returns the value of x rounded to the nearest integer
<b>sqrt()</b>	Returns the square of x



Properties	Description
<b>PI</b>	A constant representing the ration of the circumference of a circle to its diameter, which is approximately 3.1415265
<b>SQRT2</b>	The square root of 2, which is approximately 1.4142135

Number Class	Description
<b>Number()</b>	Number object constructor
<b>toExponential()</b>	Converts a number to a string in exponential notation using a specified number of decimal places
<b>toFixed()</b>	Converts a number to a string with a specified number of decimal places
<b>toLocaleString()</b>	Converts a number to a string that is formatted with local numeric formatting conventions
<b>toPrecision()</b>	Converts a number to a string with a specific number of decimal places, either in exponential notation on in fixed notation
<b>toString()</b>	Convert a number object to a string
Properties	Description
<b>MAX_VALUE</b>	The largest positive number that can be used in JavaScript
<b>MIN_VALUE</b>	The smallest positive number that can be used in JavaScript
<b>NaN</b>	The value NaN
<b>NEGATIVE_INFINITY</b>	The value of negative infinity
<b>POSITIVE_INFINITY</b>	The value of positive infinity



