

# JS DOM Traversal Cheat Sheet

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## Element vs Node

### Types

### Element

Only HTML Elements  
<span>, <div>, <body>, <a>, etc.

### Node

Anything within an HTML document including comments, text, HTML elements and much more  
"text", <!-- comment -->, <span>

### Methods/Properties

A special type of node with all the methods/properties of a node plus additional methods/properties

The most basic HTML piece with only the most basic methods/properties

### Which To Use

Almost always use elements

Can contain non-HTML elements so nodes are generally harder to work with

## HTMLCollection vs NodeList

### HTMLCollection

### NodeList

### Element Types

Only HTML Elements  
<span>, <div>, <body>, <a>, etc.

Anything within an HTML document including comments, text, HTML elements and much more  
"text", <!-- comment -->, <span>

### Available Array Methods

map, forEach, reduce, filter, etc.

None

Only forEach

### Live Updates

When a new element is added to the page and it would match the elements in the list it is automatically added to the list

Always

Sometimes

### Which To Use

Generally don't use as live updates can lead to hard to fix bugs

Use static NodeLists or convert to an array since arrays have many additional methods such as map and reduce

## Parent

Name	Return Type	Description	Results
<b>parentElement</b> a.parentElement	Element	Select the parent element of the current element Select the div parent of the a	<pre> graph TD     div[div] --- text["text"]     div --- a[a]     div --- span[span]             </pre>
<b>parentNode</b> a.parentNode	Node	Select the parent node of the current element Select the div parent of the a	<pre> graph TD     div[div] --- text["text"]     div --- a[a]     div --- span[span]             </pre>
<b>closest</b> a.closest(".c")	Element	Select the closest ancestor element that matches the CSS selector Select the first ancestor of the a tag with the class c	<pre> graph TD     c[.c] --- div[div]     div --- a[a]     div --- b[b]             </pre>

# Descendants

Name	Return Type	Description	Results
<b>getElementById</b> <code>document.getElementById("b")</code>	Element	Select the first element that matches the id Select the element with the id b <i>Only works on the document</i>	<div>#a</div> <div>#b</div> <div>#c</div> <div>#d</div>
<b>getElementsByClassName</b> <code>div.getElementsByClassName("a")</code>	HTMLCollection Elements Only Live	Select all elements that match the class name that are descendants of the current element Select all elements with the class a that are descendants of the div	<div>div</div> <div>.a</div> <div>.a</div> <div>.b</div> <div>span</div> <div>.b</div> <div>.b</div> <div>.a</div>
<b>getElementsByTagName</b> <code>div.getElementsByTagName("b")</code>	HTMLCollection Elements Only Live	Select all elements of a specific type that are descendants of the current element Select all b elements that are descendants of the div	<div>div</div> <div>a</div> <div>a</div> <div>b</div> <div>span</div> <div>b</div> <div>b</div> <div>a</div>
<b>querySelectorAll</b> <code>div.querySelectorAll(".a")</code>	NodeList Elements Only Static	Select all elements that match the CSS selector that are descendants of the current element Select all element with the class a that are descendants of the div	<div>div</div> <div>.a</div> <div>.a</div> <div>.b</div> <div>span</div> <div>.b</div> <div>.b</div> <div>.a</div>
<b>querySelector</b> <code>div.querySelector(".a")</code>	Element	Select the first element that matches the CSS selector that is a descendant of the current element Select the first element with the class a that is a descendant of the div	<div>div</div> <div>.a</div> <div>.a</div> <div>.b</div> <div>span</div> <div>.b</div> <div>.b</div> <div>.a</div>
<b>children</b> <code>div.children</code>	HTMLCollection Elements Only Live	Select all child elements of the current element Select the child elements of the div	<div>div</div> <div>"text"</div> <div>a</div> <div>span</div>
<b>childNodes</b> <code>div.childNodes</code>	NodeList All Nodes Live	Select all child nodes of the current element Select the child nodes of the div	<div>div</div> <div>"text"</div> <div>a</div> <div>span</div>

# Siblings

Name	Return Type	Description	Results
<b>nextElementSibling</b> <code>div.nextElementSibling</code>	Element	Select the first element that comes after the current element Select the a element directly after the div	<div>b</div> <div>div</div> <div>"text"</div> <div>a</div>
<b>nextSibling</b> <code>div.nextSibling</code>	Node	Select the first node that comes after the current element Select the text node directly after the div	<div>b</div> <div>div</div> <div>"text"</div> <div>a</div>
<b>previousElementSibling</b> <code>div.previousElementSibling</code>	Element	Select the first element that comes before the current element Select the b element directly before the div	<div>b</div> <div>div</div> <div>"text"</div> <div>a</div>
<b>previousSibling</b> <code>div.previousSibling</code>	Node	Select the first node that comes before the current element Select the b element directly before the div	<div>b</div> <div>div</div> <div>"text"</div> <div>a</div>