Challenge Questions: Even More JavaScript!

**Done:**View **To do:**Make forum posts: 1

Choose**between 1-3** of the following Challenge Questions to research on your own and answer. You can research all of the questions, but only submit answers to a max of three.

The answers are *not* in your lessons. These questions are intended to have you conduct additional research on your own to gain experience in finding answers for yourself. Don't look for answers in the lessons!

If some of your classmates have already submitted answers, try to choose a question/questions that have not already been answered. If they have all been answered, try to find additional information that has not yet been presented by your classmates.

Challenge Questions

**Question #1:**

* You've learned that a typical **for** loop statement begins with three parts, which can be called the **initialization**, the **condition**, and the**final expression**, such as:

for (let i = 0; i < 10; i++)

Are any of these three parts optional, or are they all required? Explain.

All three of these parts are optional; however, including them in the for loop is the most efficient. If they are not included in the for loop they still need to be referenced outside the loop which just creates more (or longer code) aka less efficient.

**Question #2:**

* Name another array method that has not been covered and briefly explain what it does. Provide sample code.

toString() is another array method. It converts an array to a string of comma separated array values. However; the join() method also does this but has the additional flexibility of changing the comma to other specified separators such as a dash or period.

**const toys = ["truck", "doll", "blocks"];**

**const mytoys = toys.toString();**

**Question #3**

* Name another string method that has not been covered and briefly explain what it does. Provide sample code.

Trim() method removed whitespace from both sides of a string

**let text = “ Hi Bob! “;**

**let text2 = text.trim();**

**Question #4**

* You've learned about an escape sequence **\n** that creates a newline in a string. Provide another example of an escape sequence, or escape characters, and explain what it does.

**Question #5**

* You've learned that you can access the attributes of HTML elements using syntax such as: *node***.style.background** and n*ode***.hidden**. List at least two other HTML element attributes that you can access as JavaScript element node properties, and include sample code to demonstrate how you would use them in JavaScript. See [this reference on W3Schools](https://www.w3schools.com/jsref/dom_obj_all.asp) and [this reference on MDN](https://developer.mozilla.org/en-US/docs/Web/API/HTMLElement#Properties). (Note: **methods**end with**()** and **properties**do not.)

**Question #6**

* What is the return value from a call to *node****.*removeChild()**? What can you do with it? Show sample code to demonstrate how you might store the return value in a variable then use it.

**Question #7**

* What happens if you try to use the*node****.*insertBefore()**method to insert a node that already exists in the document, i.e. is already attached to the DOM?

**Question #8**

* Research JavaScript events such as onclick/click, onmouseover/mouseover and find one that has not been discussed during this course. Give a brief explanation of what it does.

**Question #9**

You've seen how the array method **sort()** can be used to sort an array of strings alphabetically. What is its behavior when used to sort an array of numbers? For example, what would this array look like once sorted?: **[1, 13, 1000, 29, 255]**