



## Lesson 1.1: The Script Tag

<https://codehs.com/course/20715/lesson/1.1>

<b>Description</b>	In this lesson, students learn how to incorporate JavaScript into their HTML pages using the <code>script</code> tag.
<b>Objective</b>	Students will be able to: <ul style="list-style-type: none"><li>• Incorporate JavaScript into their HTML pages</li><li>• Use the console to debug scripts</li></ul>
<b>Activities</b>	<a href="#">1.1.1 Video: The Script Tag</a> <a href="#">1.1.2 Check for Understanding: The Script Tag Quiz</a> <a href="#">1.1.3 Example: Debugging Functions</a> <a href="#">1.1.4 Free Response: Using the Console</a> <a href="#">1.1.5 Exercise: Writing in the Console</a> <a href="#">1.1.6 Exercise: Alert Introduction</a> <a href="#">1.1.7 Exercise: Debugging with the Console</a> <a href="#">1.1.8 Challenge: Quick Trivia</a>
<b>Prior Knowledge</b>	<ul style="list-style-type: none"><li>• Students should be familiar with basic JavaScript and HTML. It is recommended that students have taken an Intro Web Design and Intro to CS in JavaScript course before starting this one. Students can take the diagnostic exams at the beginning of this unit to determine their proficiency, and if this course should be started right away before reviewing basic concepts.</li><li>• Students using browsers other than Chrome may struggle to access the console easily. Safari, for example, requires students to enter developer mode. Make sure to check student browsers before getting started.</li></ul>
<b>Planning Notes</b>	<ul style="list-style-type: none"><li>• Students should be familiar with basic JavaScript and HTML. It is recommended that students have taken an Intro Web Design and Intro to CS in JavaScript course before starting this one. Students can take the diagnostic exams at the beginning of this unit to determine their proficiency, and if this course should be started right away before reviewing basic concepts.</li></ul>

- Students will make a list of things they would like to learn more about. Consider writing that list down on poster paper to document their progress over the course of the year.

## Standards Addressed

## Teaching and Learning Strategies

### Lesson Opener:

- Explain to the class that this course is going to combine two languages that they've been learning. Have them answer the beginning of class discussion questions with this fact in mind. (5 -7 mins)
- Ask the class to share their answers. Consider keeping a chart with student answers so as to document the different things students would like to learn. Over the course of the year, if those things are taught, they can be crossed off the list! (5 mins)

### Activities:

- Have students watch *The Script Tag* video and take notes. Students should also complete the corresponding quiz. (7-10 mins)
- Explore *Debugging Functions*. Note that the prompt and alerts occur before the web page is fully loaded. This is something students should take into consideration as they are building their sites. (5 mins).
- Complete *Using the Console, Writing in the Console, Alert Introduction* and *Debugging with the Console*. (15 mins).
  - For good practice, have students open the console before beginning any of the exercises so they get familiar with using it.

### Lesson Closer:

- Have students complete the end of class discussion questions as a class, or as an exit ticket. (5 - 10 mins)

## Discussion Questions

### Beginning of Class:

- Even with all of your knowledge of programming in HTML and JavaScript, what are some things that you feel you still aren't able to do?
  - *Answers will vary*
- What specific things would you like to learn more about in regards to developing web sites?
  - *Answers will vary*

### End of Class:

- How can we include JavaScript into our websites?
  - *We can do so by using the script tag. Putting JavaScript code in a script tag will allow the program to run JavaScript.*

- How can incorporating JavaScript in our programs help create more complex problems in the future?
  - *Answers will vary*
- Why is the console an important tool to use when we program?
  - *Outside of CodeHS, messages and errors are printed in the console, not in the program itself. This tool allows us to see errors that come up in our programs, and print messages to understand the value of variables at different points in our program.*

**Resources/Handouts**

**Vocabulary**

Term		Definition
Modification: Advanced	Modification: Special Education	Modification: English Language Learners
<ul style="list-style-type: none"> <li>• Encourage students to continue adding JavaScript code to their script functions. Ask them: Does math work the same way? What about storing variables?</li> </ul>	<ul style="list-style-type: none"> <li>• Consider providing a more extensive tutorial on how to use the console, and what each component of the console is for.</li> </ul>	<ul style="list-style-type: none"> <li>• Consider providing a more extensive tutorial on how to use the console, and what each component of the console is for.</li> </ul>