

## 1. JavaScript concepts

This would be a good time to re-read the first half of JavaScript resources, through "How to Loop over Lists."

*JavaScript and JQuery: Interactive Front-End Web Development* by Jon Duckett

- Chapters 3 'Functions, Methods & Objects' and Chapter 4 'Decisions & Loops'
  - Revisit in depth the sections on decisions and looping, and the use of the Math object for things like rounding.
- Chapter 10 'Error Handling & Debugging'
  - Pay particular attention to the discussion about the execution stack.

## 2. Debugging

When code becomes complicated, a very useful tool is the ability to set breakpoints in your code so that you can inspect variables and step through the code one instruction at a time.

- [Advanced Debugging with JavaScript](#)
- [Using the Chrome Debugger Tools...](#)
  - Details on the Chrome debugger for advanced users.

Before browser debuggers became as common and powerful as they are, a common approach was to add instructions to JavaScript code to print information to the console log. This can still a useful tool sometimes, especially to capture data to submit for help.

- page 471 of *JavaScript and JQuery: Interactive Front-End Web Development* by Jon Duckett has examples of using of `console.log()`
- [JavaScript Output](#) -- interactive examples of various JavaScript output types.
  - Scroll down to see `console.log()` being used

# Optional resources

## 1. JSON, including Looping

[A JSON Tutorial: Getting Started with JSON using JavaScript and jQuery](#)

- Work through or review this tutorial for a solid introduction to:
  - creating JSON data
  - inserting JSON data into an HTML page
  - pulling JSON data from an external file

- inserting JSON data into an HTML page using jQuery
- looping over JSON data to construct strings containing both data and embedded HTML markup, and then inserting the result into an HTML page
  - You can loop over JSON data to perform calculations on it as well.

[More on Looping Through a JSON Array](#)