Import Settings:

Base Settings: Brownstone Default

Information Field: Complexity

Information Field: Ahead

Information Field: Subject

Information Field: Title

Highest Answer Letter: D

Multiple Keywords in Same Paragraph: No

NAS ISBN13: 9781284093674, add to Ahead, Title tags

**Chapter: Final**

**Multiple Choice**

1. To handle browsers that support different audio file formats, you can provide multiple options between your audio start and end tags. Which of the following could serve as a valid option?

A) <source src="../audio/hippoRoar.wav" type="audio/wav">

B) <audio source="../audio/ hippoRoar.wav" type="audio/wav">

C) <source src="../audio/hippoRoar.xmp" type="audio/xmp">

D) <audio source="../audio/ hippoRoar.xmp" type="audio/xmp">

Ans: A

Complexity: Moderate

Ahead: Audio

Subject: Chapter 7

Title: Image Manipulations, Audio, and Video

2. Which of the following is a valid CSS rule that generates a color gradient background?

A) body {background-image: linear-gradient(to right, blue, red);}

B) body {background-image: color-spectrum(horizontal, blue, red);}

C) body {background-color: spectrum(blue, red);}

Ans: A

Complexity: Moderate

Ahead: Centering Content Within the Viewport, Color Gradients

Subject: Chapter 7

Title: Image Manipulations, Audio, and Video

3. An advantage of client-side processing over server-side processing is that client-side processing:

A) tends to be more efficient when the calculations require a lot of programming code.

B) tends to be more efficient when the calculations require large amounts of data.

C) is better for proprietary code.

D) tends to be faster.

Ans: D

Complexity: Moderate

Ahead: Forms and How They’re Processed: Client-Side Versus Server-Side

Subject: Chapter 8

Title: Introduction to JavaScript: Functions, DOM, Forms, and Event Handlers

4. Which of the following is the best way to prompt for number of children and store the input as a number?

A) numOfKids = parseInt(prompt("Number of children:", ""));

B) numOfKids = parseFloat(prompt("Number of children:", ""));

C) numOfKids = confirm("Number of children:"));

D) prompt(numOfKids, "Number of children:"));

Ans: A

Complexity: Moderate

Ahead: Parsing Numbers: parseInt, parseFloat

Subject: Chapter 9

Title: Additional JavaScript Basics: window Object, if Statement, Strings, Numbers, and Input Validation

5. A text control is an example of a “one line plain text edit control.” Which of the following attribute-value pairs could be added to an input element to create another type of one line plain text edit control?

A) type="edit"

B) type="tel"

C) type="textarea"

Ans: B

Complexity: Moderate

Ahead: Water Balloons Web Page

Subject: Chapter 9

Title: Additional JavaScript Basics: window Object, if Statement, Strings, Numbers, and Input Validation

6. Which of the following displays a numOfPurchases variable’s value in the browser’s debugging frame?

A) console.log("numOfPurchases = " + numOfPurchases);

B) debug.display("numOfPurchases = " + numOfPurchases);

C) <debug>numOfPurchases = %numOfPurchases</debug>

Ans: A

Complexity: Moderate

Ahead: Compound Interest Web Page

Subject: Chapter 10

Title: Loops, Additional Controls, Manipulating CSS with JavaScript

7. Suppose you have a class named Student with a class variable named numOfStudents. How should you access the numOfStudents property?

A) Use numOfStudents by itself.

B) this.numOfStudents

C) Student.numOfStudents

Ans: C

Complexity: Moderate

Ahead: Point Tracker Web Page

Subject: Chapter 11

Title: Object-Oriented Programming and Arrays

8. Suppose you have a class named Employee with a name property and a standard setName method. What is the situation after the following code executes?

var emp1 = new Employee("Emme");

var emp2 = emp1;

emp2.setName("Jessie");

A) For their name properties, emp1 stores “Emme” and emp2 stores “Jessie”.

B) For their name properties, both emp1 and emp2 store “Emme”.

C) For their name properties, both emp1 and emp2 store “Jessie”.

D) Both emp1 and emp2 store null.

Ans: C

Complexity: Moderate

Ahead: Primitive Values Versus Objects

Subject: Chapter 11

Title: Object-Oriented Programming and Arrays

9. When you call the addEventListener method, you pass two arguments to it. The first argument is for the name of a predefined event built into the DOM. What is the second argument for?

A) The name of a function that serves as a listener for the first argument’s event firing

B) The name of the class where the first argument’s event is defined

C) The control whose event is being listened to

Ans: A

Complexity: Difficult

Ahead: Using addEventListener to Add Event Listeners

Subject: Chapter 11

Title: Object-Oriented Programming and Arrays

10. What do canvas’s transformation operations allow you to do with graphics objects?

A) Move in a straight line, rotate, and scale

B) Duplicate, delete, and move in a straight line

C) Duplicate and create

Ans: A

Complexity: Easy

Ahead: Using Canvas for Transformations

Subject: Chapter 12

Title: Canvas

11. In JavaScript, which of the following creates an empty array?

A) var [] arr1;

B) var arr1 = new Array();

C) var arr1();

D) var arr1;

Ans: B

Complexity: Moderate

Ahead: Arrays

Subject: Chapter 11

Title: Object-Oriented Programming and Arrays

12. In JavaScript, to find the number of elements in an array, use:

A) the length property.

B) the size property.

C) the elements method.

D) It is impossible to find the number of elements in an array.

Ans: A

Ahead: Arrays

Complexity: Moderate

Subject: Chapter 11

Title: Object-Oriented Programming and Arrays

13. Suppose you have an array named carMakes with two elements in it. When the following JavaScript code executes, what happens?

carMakes[2] = "GM";

A) The “GM” value overlays the array’s second element's value.

B) The array dynamically expands and adds a third element with a "GM" value to the array at index position 2.

C) There is an “out of range” error because there is no element at index position 2.

Ans: B

Complexity: Moderate

Ahead: Arrays

Subject: Chapter 11

Title: Object-Oriented Programming and Arrays

14. What is the difference between a method heading and a function heading?

A) A method heading uses the word method at the left.

B) A function heading uses the word function at the left.

C) A method heading includes parameters and a function heading provides arguments.

D) A function heading includes parameters and a method heading provides arguments.

Ans: B

Complexity: Moderate

Ahead: Classes, Constructors, Properties, new Operator, Methods

Subject: Chapter 11

Title: Object-Oriented Programming and Arrays

15. What does the following CSS rule do?

input:valid:focus {color: green;}

A) If an input element contains valid input and focus is on the element, the element’s foreground color turns green.

B) If a form is submitted and focus is on the form, the form turns green.

C) If a user enters valid input into a prompt dialog, the dialog turns green.

Ans: A

Complexity: Moderate

Ahead: Constraint Validation using CSS Pseudo-Classes

Subject: Chapter 9

Title: Additional JavaScript Basics: window Object, if Statement, Strings, Numbers, and Input Validation

16. An if statement is an example of a:

A) A declaration statment

B) A branching statement

C) A looping statement

Ans: B

Complexity: moderate

Ahead: if Statement: if by itself

Subject: Chapter 9

Title: Additional JavaScript Basics: window Object, if Statement, Strings, Numbers, and Input Validation

**True/False**

1. True or False? With a CSS web font at-rule, the src attribute is assigned a list of font files. The browser downloads the files first, then decides which one to use.

Ans: False

Complexity: Difficult

Ahead: Web Fonts

Subject: Chapter 7

Title: Image Manipulations, Audio, and Video

2. True or False? The following JavaScript variable name exhibits proper coding conventions:

dog\_name

Ans: False

Complexity: Moderate

Ahead: Identifiers

Subject: Chapter 8

Title: Introduction to JavaScript: Functions, DOM, Forms, and Event Handlers

3. True or False? An object is defined by its set of properties and its set of behaviors.

Ans: True

Complexity: Moderate

Ahead: Assignment Statement and Objects

Subject: Chapter 8

Title: Introduction to JavaScript: Functions, DOM, Forms, and Event Handlers

4. True or False? All element objects have an outerHTML property, which stores the element's code, including the element's start and end tags.

Ans: True

Complexity: Moderate

Ahead: Assignment Statement and Objects

Subject: Chapter 8

Title: Introduction to JavaScript: Functions, DOM, Forms, and Event Handlers

5. True or False? The Document Object Model models all of the parts of a web page (elements, attributes, and plain text) as nodes in a node tree.

Ans: True

Complexity: Moderate

Ahead: Document Object Model

Subject: Chapter 8

Title: Introduction to JavaScript: Functions, DOM, Forms, and Event Handlers

6. True or False? A local variable is a variable that can be used only within the function in which it is declared.

Ans: True

Complexity: Moderate

Ahead: Comments and Coding Conventions

Subject: Chapter 8

Title: Introduction to JavaScript: Functions, DOM, Forms, and Event Handlers

7. True or False? For the “if, else” form of the if statement, you may include only one if clause, but as many else clauses as you like.

Ans: False

Complexity: Moderate

Ahead: if Statement: else and else if Clauses

Subject: Chapter 9

8. True or False? Coding conventions suggest that you declare a named constant at the point where the named constant is used.

Ans: False

Complexity: Moderate

Ahead: Water Balloons Web Page

Subject: Chapter 9

Title: Additional JavaScript Basics: window Object, if Statement, Strings, Numbers, and Input Validation

9. True or False? If you call the checkValidity method from an input control object and the method call returns false, that means the input control’s value is invalid.

Ans: True

Complexity: Moderate

Ahead: JavaScript for the Improved Water Balloons Web Page

Subject: Chapter 9

Title: Additional JavaScript Basics: window Object, if Statement, Strings, Numbers, and Input Validation

10. True or False? Typically, an infinite loop is indicative of a bug.

Ans: True

Complexity: Moderate

Ahead: while Loop

Subject: Chapter 10

Title: Loops, Additional Controls, Manipulating CSS with JavaScript

11. True or False? With a do loop, the loop is guaranteed to execute at least one time.

Ans: True

Ahead: do Loop

Complexity: Easy

Subject: Chapter 10

Title: Loops, Additional Controls, Manipulating CSS with JavaScript

12. True or False? To group radio buttons together, each of the radio button controls should have a name attribute with the same value.

Ans: True

Complexity: Easy

Ahead: Radio Buttons

Subject: Chapter 10

Title: Loops, Additional Controls, Manipulating CSS with JavaScript

13. True or False? A radio button’s checked property is associated with the radio button element’s checked attribute, which means the checked property returns true if the radio button’s element has a checked attribute, and the checked property returns false if the radio button’s element has no checked attribute.

Ans: False

Complexity: Moderate

Ahead: Radio Buttons

Subject: Chapter 10

Title: Loops, Additional Controls, Manipulating CSS with JavaScript

14. True or False? Normally, within a class definition, you should include a constructor as the class’s first member.

Ans: True

Complexity: Moderate

Ahead: Point Tracker Web Page

Subject: Chapter 11

Title: Object-Oriented Programming and Arrays

15. True or False? To specify font size (e.g., 2em) and font family (e.g., times new roman) values for canvas text, you should use the context object’s font-weight and font-family properties, respectively.

Ans: False

Complexity: Moderate

Ahead: Formatting Text

Subject: Chapter 12

Title: Canvas

16. True or False? The context object’s closePath method connects the most recently created line’s end point to the most recently created subpath’s starting point.

Ans: True

Complexity: Easy

Ahead: Drawing Lines and Paths

Subject: Chapter 12

Title: Canvas

17. True or False? If you call the scale method to expand a shape that is positioned down and to the right of the origin, that will cause the shape’s position to be closer to the origin.

Ans: False

Complexity: Moderate

Ahead: Using Canvas for Transformations

Subject: Chapter 12

Title: Canvas

**Short Answer**

1. DOM stands for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

Ans: Document Object Model

Complexity: Moderate

Ahead: Document Object Model

Subject: Chapter 8

Title: Introduction to JavaScript: Functions, DOM, Forms, and Event Handlers

2. The JavaScript exponentiation operator is \_\_\_\_\_\_.

Ans: \*\*

Complexity: Moderate

Ahead: Arithmetic Operators

Subject: Chapter 9

Title: Additional JavaScript Basics: window Object, if Statement, Strings, Numbers, and Input Validation

3. By default, a number control allows integer input. To enable a number control to allow decimal input, you should add a(n) \_\_\_\_\_\_ attribute with a decimal value.

Ans: step

Complexity: Difficult

Ahead: Constraint Validation Using the Number Control’s Attributes

Subject: Chapter 9

Title: Additional JavaScript Basics: window Object, if Statement, Strings, Numbers, and Input Validation

4. The \_\_\_\_\_\_\_\_\_\_ operator uses the symbols ? and :.

Ans: conditional

Complexity: Moderate

Ahead: static Methods

Subject: Chapter 11

Title: Object-Oriented Programming and Arrays

5. A(n) \_\_\_\_\_\_\_\_\_\_ is a pictorial representation of the logic flow of a computer program.

Ans: flowchart

Complexity: Difficult

Ahead: if Statement: if by itself

Subject: Chapter 9

Title: Additional JavaScript Basics: window Object, if Statement, Strings, Numbers, and Input Validation

**Essay**

1. Web fonts rely on CSS at-rules. Why are at-rules called at-rules?

Ans: At-rules are called at-rules because they use the @ symbol.

Complexity: Moderate

Ahead: Web Fonts

Subject: Chapter 7

Title: Image Manipulations, Audio, and Video

2. Given the following at-rule that creates a web font, provide a CSS rule for p elements that uses the created web font. Use monospace for the generic font family.

@font-face {

font-family: Austere;

src: url(../fonts/metalic.woff2) format("woff2"),

url(../fonts/metalic.woff) format("woff");

}

Ans: p {font-family: Austere, monospace;}

Complexity: Difficult

Ahead: Web Fonts

Subject: Chapter 7

Title: Image Manipulations, Audio, and Video

3. Suppose you have a button within a form, and you want to pass the form object to a function that processes the form. What argument should you use to pass the form object to the function?

Ans: this.form

Complexity: Difficult

Ahead: Email Generator Web Page

Subject: Chapter 8

Title: Introduction to JavaScript: Functions, DOM, Forms, and Event Handlers

4. After the following code executes, what does x hold?

var location = "Taos, NM";

var x = location.indexOf("NM");

Ans: 6

Complexity: Moderate

Ahead: More String Details

Subject: Chapter 9

Title: Additional JavaScript Basics: window Object, if Statement, Strings, Numbers, and Input Validation

5. After the following code executes, what does x hold?

var animal = "porcupine";

var x = animal.replace(animal.substring(4, 6), "");

Ans: porcine

Complexity: Difficult

Ahead: More String Details

Subject: Chapter 9

Title: Additional JavaScript Basics: window Object, if Statement, Strings, Numbers, and Input Validation

6. How is the strict equality operator (===) more restrictive than the standard equality operator (==) in its comparison test?

Ans: The === operator evaluates to true only if its two operands are the same value and the same type, whereas with the == operator, if the values are of different types, the JavaScript engine attempts to convert them to the same type before performing the comparison.

Complexity: Difficult

Ahead: Comparison Operators and Logical Operators

Subject: Chapter 9

Title: Additional JavaScript Basics: window Object, if Statement, Strings, Numbers, and Input Validation

7. When executed, what does the following code fragment display?

var x = 19.5, y = 3;

alert(22 - x % y \*\* 2);

Ans: 20.5

Complexity: Difficult

Ahead: Comparison Operators and Logical Operators

Subject: Chapter 9

Title: Additional JavaScript Basics: window Object, if Statement, Strings, Numbers, and Input Validation

8. When executed, what does the following code fragment display?

var x = 10, y = 4;

alert(false || x != y + 5 && 2 <= y – 2);

Ans: True

Complexity: Difficult

Ahead: Comparison Operators and Logical Operators

Subject: Chapter 9

Title: Additional JavaScript Basics: window Object, if Statement, Strings, Numbers, and Input Validation

9. When executed, what does the following code fragment display?

var x = 22;

x++;

x -= 3;

alert(!(x \* 2 == 40));

Ans: False

Complexity: Moderate

Ahead: Comparison Operators and Logical Operators

Subject: Chapter 9

Title: Additional JavaScript Basics: window Object, if Statement, Strings, Numbers, and Input Validation

10. The following code looks pretty weird. Why is it appropriate to split the line of code at the place where it is split?

<textarea id="accommodations" rows="8" cols="50" maxlength="300"

></textarea>

Ans: If the start tag’s “>” was on the prior line, the newline character would be stored in the textarea control.

Complexity: Difficult

Ahead: textarea Controls

Subject: Chapter 10

Title: Loops, Additional Controls, Manipulating CSS with JavaScript

11. What is a disadvantage of a list box as compared to a pull-down menu?

Ans: A list box takes up more space.

Complexity: Moderate

Ahead: List Boxes

Subject: Chapter 10

Title: Loops, Additional Controls, Manipulating CSS with JavaScript

12. Why is code redundancy bad?

Ans: With code redundancy, if you later decide to make a change, you have to remember to make the change in all of the places where the code appears.

Complexity: Moderate

Ahead: Moving Face Web Page

Subject: Chapter 12

Title: Canvas