Name: _____   Date: _____

Stunning Synthesized Sites: Seven Scripts and Styles for 7th Grade

Analyze ten complex scenarios involving the Document Object Model, CSS specificity hierarchies, and asynchronous logic to troubleshoot and optimize modern web architecture.

1. A developer applies 'color: red !important' to a paragraph in an external stylesheet, but an inline style on the HTML element sets 'color: blue'. Later, a CSS ID selector sets 'color: green'. What color is the text?
- A. Blue, because inline styles always override external CSS.
- B. Green, because ID selectors have higher specificity than tags.
- C. Red, because the !important flag overrides the standard cascade hierarchy.
- D. Black, because the conflicting rules cause a syntax error.

2. In the Box Model, if an element has a width of 200px, a padding of 20px on all sides, and a border of 5px, the total calculated horizontal space it occupies is ____.
- A. 225px
- B. 250px
- C. 240px
- D. 210px

3. Which JavaScript method would you use to change the text content of an HTML element after identifying it by its unique identifier in the DOM?
- A. document.write()
- B. console.log()
- C. getElementById().textContent
- D. setAttribute('type', 'text')

4. The HTML <iframe> element is primarily used to create a semantic break between different thematic sections of a single document.
- A. True
- B. False

5. You are building a site for a high-contrast mode. Which CSS property allows you to change the background color of an element only when a user hovers over it?
- A. element:active
- B. element:hover
- C. element::after
- D. element:visited

6. To ensure an image is accessible to screen readers for visually impaired users, the developer must include the ____ attribute within the <img> tag.
- A. src

    B.   href

    C.   alt

    D.   id

7. In JavaScript, the 'const' keyword is used to declare a variable that can be reassigned a new value later in the code execution.

    A.   True

    B.   False

8. Which of the following is the most efficient way to apply a shared font-style to all level-one headings, level-two headings, and paragraphs simultaneously?

    A.   h1 h2 p { font-family: sans-serif; }

    B.   h1, h2, p { font-family: sans-serif; }

    C.   h1 + h2 + p { font-family: sans-serif; }

    D.   * { font-family: sans-serif; }

9. If you want to trigger a JavaScript function when a user submits a form, you should attach an event listener for the ___ event.

    A.   onclick

    B.   onscroll

    C.   onsubmit

    D.   onhover

10. The <div> element is considered a semantic tag because it clearly describes the meaning and type of content contained within it to the browser.

    A.   True

    B.   False