

Name: _____ Date: _____

Launch Web Apps 8th Grade Programming Challenge

Students debug DOM events, calculate CSS specificity, and construct asynchronous logic to solve complex architectural problems in modern front-end development.

1. An 8th-grade developer wants to select every odd-numbered element within a to give them a striped background. Which CSS selector is most efficient for this task?

- A. li:nth-child(2n)
- B. li:nth-child(odd)
- C. li .odd-item
- D. ul > li:first-child

2. In the Document Object Model (DOM), the standard method used to update the text content of an HTML element via JavaScript is _____.

- A. textContent
- B. setVariable
- C. changeText
- D. style.content

3. A CSS rule with an ID selector (#header) will override a rule with a class selector (.main-title) applied to the same element due to higher specificity.

- A. True
- B. False

4. When creating a responsive grid for a portfolio, which CSS property allows an element to automatically wrap to the next line when there isn't enough horizontal space?

- A. display: block;
- B. position: relative;
- C. flex-wrap: wrap;
- D. overflow: hidden;

5. To ensure an image remains accessible to screen readers even if the file fails to load, developers must include the _____ attribute.

- A. title
- B. src
- C. alt
- D. caption

6. JavaScript is a compiled language that must be turned into an .exe file before it can run inside a Google Chrome or Firefox browser window.

- A. True

Name: _____ **Date:** _____

B. False

7. Which of these represents a JavaScript 'Event Listener' that triggers a function specifically when a user finishes typing in a text field?

- A. `element.addEventListener('click', ...)`
- B. `element.addEventListener('keyup', ...)`
- C. `element.addEventListener('hover', ...)`
- D. `element.addEventListener('load', ...)`

8. In the CSS Box Model, the space between the element's actual content and its border is known as _____.

- A. Margin
- B. Padding
- C. Outline
- D. Gutter

9. Which HTML element is the most semantically correct for grouping the primary navigation links of a website?

- A. `<section>`
- B. `<div>`
- C. `<nav>`
- D. `<header>`

10. Using 'const' to declare a variable in JavaScript means the value stored in that variable can never be changed or reassigned later in the code.

- A. True
- B. False