HTML Cheat Sheet (Modern & Advanced Guide)

Basic Structure

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Page Title</title>
  <link rel="stylesheet" href="style.css">
  <script src="script.js" defer></script>
</head>
<body>
  <h1>Hello, World!</h1>
  <p>This is a paragraph.</p>
</body>
</html>
```

Global Attributes (Modern)

All HTML elements can use these (unless noted otherwise):

id="unique-id" — identifies an element uniquely
class="classname" — groups elements for CSS/JS
style="color:red;" — inline CSS styling
title="tooltip text" — adds a hover tooltip
data-*="value" — custom data attributes for JS
hidden — hides element
tabindex="0" — sets keyboard tab order
draggable="true" — makes element draggable
contenteditable="true" — allows live text editing
translate="no" — prevents automatic translation
spellcheck="false" — disables spell checking
aria-label="Description" — accessibility label

Text Formatting

<b>, <strong>, <i>, <em>, <u>, <mark>, <small>, <del>, <ins>, <sub>, <sup>, <code>, <pre>

Semantic Layout

<header> — top section or navigation
<nav> — site navigation
<main> — main content
<section> — general block of related content
<article> — self-contained content

<aside> — sidebar or related info
<footer> — bottom section
<div> — generic block-level container
<span> — generic inline container

Media & Links

Link
<img src="image.jpg" alt="Description">
<video controls width="400"><source src="video.mp4" type="video/mp4"></video>
<audio controls><source src="audio.mp3" type="audio/mpeg"></audio>

Forms (Modern HTML5 Inputs)

```
<form action="/submit" method="post">
  <input type="text" placeholder="Your Name" required>
  <input type="email" placeholder="Email" required>
  <input type="password" minlength="8" required>
  <input type="number" min="1" max="10">
  <input type="date">
  <input type="color">
  <input type="range" min="0" max="100">
  <textarea rows="4" cols="40"></textarea>
  <select><option>Option 1</option><option>Option 2</option></select>
  <button type="submit">Send</button>
</form>
```

Interactive Elements

```
<details>
  <summary>Click to expand</summary>
  <p>Hidden content here.</p>
</details>
```

<dialog open>Modal content</dialog>
<progress value="70" max="100"></progress>
<meter value="0.6">60%</meter>

Graphics & Scripting

```
<canvas id="myCanvas"></canvas>
<svg width="100" height="100">
  <circle cx="50" cy="50" r="40" stroke="black" fill="red" />
</svg>
<script>console.log("Hello, HTML5!");</script>
```

Meta, SEO, and Social

```
<meta name="description" content="Website description">
<meta name="keywords" content="HTML, CSS, JavaScript">
<link rel="icon" href="favicon.ico" type="image/x-icon">
<meta property="og:title" content="Open Graph Title">
<meta property="og:image" content="thumbnail.jpg">
<meta name="robots" content="index, follow">
<meta name="theme-color" content="#ffffff">
```

Modern Practices

✔ Use semantic HTML for accessibility
✔ Prefer <section>, <article>, <nav>, and <main> for structure
✔ Add ARIA attributes for screen readers
✔ Use <link rel="preload"> for performance
✔ Always include <meta viewport> for mobile
✔ Validate code at https://validator.w3.org/
✔ Use lazy loading: <img loading="lazy">