HTML & CSS - Exercises

[1. Type Selector 1](#_Toc169593774)

[2. Class Selector 3](#_Toc169593775)

[3. Percentage Width 4](#_Toc169593776)

[4. Nested Divs 5](#_Toc169593777)

[5. Pixel Width 5](#_Toc169593778)

[6. Pixel vs Percentage Width 6](#_Toc169593779)

[7. EM Units 6](#_Toc169593780)

[8. REM Units 7](#_Toc169593781)

[9. Specificity 8](#_Toc169593782)

[10. ID Selector 9](#_Toc169593783)

[11. Attribute Selector 9](#_Toc169593784)

[12. Universal Selector 10](#_Toc169593785)

[13. Descendant Combinator 11](#_Toc169593786)

[14. Combinator Comparison 12](#_Toc169593787)

[15. Selector List 12](#_Toc169593788)

[16. Child Combinator 13](#_Toc169593789)

[17. Box Model 14](#_Toc169593790)

[18. Display Property 15](#_Toc169593791)

[19. Width Properties 16](#_Toc169593792)

[20. Height Properties 16](#_Toc169593793)

[21. Margin, Border, Padding 16](#_Toc169593794)

# Type Selector

**Define a CSS rule to style all paragraph elements to have blue text and bold font weight.**

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>Type Selector Exercise</title>  <link rel="stylesheet" href="styles.css">  </head>  <body>  <p>This is a paragraph.</p>  <p>Style me with CSS!</p>  </body>  </html> |
| p {  color: blue:  font-weight: bold;  } |
|  |

**Define a type selector to style all heading elements to have green text.**

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>Type Selector Exercise</title>  <link rel="stylesheet" href="styles.css">  </head>  <body>  <h1>This is a heading.</h1>  <h2>This is a subheading.</h2>  </body>  </html> |
| h1, h2 {  color: green;  } |

**Style different HTML elements (h1, p, div) using type selectors.**

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>Type Selector Exercise</title>  <link rel="stylesheet" href="styles.css">  </head>  <body>  <h1>Heading 1</h1>  <p>Paragraph text.</p>  <div>Div content.</div>  </body>  </html> |
| h1 {  color: red;  }  p {  color; green;  }  div {  color: purple;  } |
|  |

# Class Selector

**Use a class selector to change the color of text inside elements with a specific class to red.**

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>Class Selector Exercise</title>  <link rel="stylesheet" href="styles.css">  </head>  <body>  <div class="highlight">This text should be red.</div>  <p class="highlight">This text should also be red.</p>  <p class="not-highlight">This should not be red.</p>  <p>This text should not be red.</p>  </body>  </html> |
| .highlight {  Color: red;  } |

**Write an example CSS rule using a class selector to change the background color of elements with a specific class.**

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>Class Selector Exercise</title>  <link rel="stylesheet" href="styles.css">  </head>  <body>  <div class="highlight">This should have a background color.</div>  <p class="highlight">This too!</p>  <p class="red">This is just a text!</p>  </body>  </html>  .highlight {  background-color: orange; } |

**Apply a common style to multiple elements using a class selector.**

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>Class Selector Exercise</title>  <link rel="stylesheet" href="styles.css">  </head>  <body>  <div class="common-style">Element 1</div>  <p class="common-style">Element 2</p>  <p>Element 3</p>  </body>  </html> |
| .common-style {  Border: 3px solid green;  } |

**Change the background color of elements with a specific class.**

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>Class Selector Exercise</title>  <link rel="stylesheet" href="styles.css">  </head>  <body>  <div class="highlight">This should have a different background color.</div>  <p class="highlight">So should this!</p>  <p>Hello World!</p>  </body>  </html> |
| .highlight {  Background-color: green;  } |

# Percentage Width

**Set the width of a div to 50% and observe how it changes with the browser window size.**

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>Percentage Width Exercise</title>  <link rel="stylesheet" href="styles.css">  </head>  <body>  <div class="percentage-width">Resize the window to see me change!</div>  </body>  </html> |
| .percentage-width {  width: 50%;  } |

# Nested Divs

**Create a parent div with 60% width and a child div with 50% width of its parent. Apply some colors to better see the difference.**

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>Nested Divs Exercise</title>  <link rel="stylesheet" href="styles.css">  </head>  <body>  <div class="parent">  <div class="child">I'm 50% of my parent.</div>  </div>  </body>  </html>  div.parent {      width: 100px;  }  div.child {      color:blueviolet;      width: 50%;  } |

# Pixel Width

**Set the width of a div to 300px and observe its behavior when resizing the browser.**

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>Pixel Width Exercise</title>  <link rel="stylesheet" href="styles.css">  </head>  <body>  <div class="fixed-width">I have a fixed width of 300px.</div>  </body>  </html> |
| .fixed-width {  Width: 300px  } |

# Pixel vs Percentage Width

**Create two divs, one with a width set in pixels and the other in percentages.**

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>Pixel vs Percentage Width Exercise</title>  <link rel="stylesheet" href="styles.css">  </head>  <body>  <div class="pixel-width">I have a fixed width of 300px.</div>  <div class="percentage-width">I have a width of 50%.</div>  </body>  </html> |
| .pixel-width {  Width: 300px;  }  .percentage-width {  Width: 50%;  } |

# EM Units

**Set the font-size of a parent div to 20px and a child div to 1.5em.**

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>EM Units Exercise</title>  <link rel="stylesheet" href="styles.css">  </head>  <body>  <div class="parent">  <div class="child">I am 1.5em of my parent.</div>  </div>  </body>  </html> |
| .parent {  font-size: 20px;  }  .child {  font-size: 1.5em  } |

**Change the parent div's font-size to 10px and observe the change in the child div's font-size.**

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <title>EM Units Exercise</title>  <link rel="stylesheet" href="styles.css">  </head>  <body>  <div class="parent">  <div class="child">I am 1.5em of my parent.</div>  </div>  </body>  </html> |
| .parent {  font-size: 10px;  }  .child {  font-size: 1.5em;  } |

# REM Units

**Set the root element's font-size to 16px and a div element's font-size to 2rem.**

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>REM Units Exercise</title>  <link rel="stylesheet" href="styles.css">  </head>  <body>  <div class="rem-size">I am 2rem.</div>  </body>  </html> |
| html {  font-size: 16px;  }  .rem-size {  font-size: 2rem;  } |

**Change the root element's font-size to 20px and observe the change in the div element's font-size.**

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title> REM Units Exercise</title>  <link rel="stylesheet" href="styles.css">  </head>  <body>  <div class="rem-size">I am 2rem.</div>  </body>  </html>  html {  font-size: 2rem; } |

# Specificity

**Use a class and a type selector on the same element and see which style is applied.**

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>Specificity Exercise</title>  <link rel="stylesheet" href="styles.css">  </head>  <body>  <p class="highlight">This is a paragraph.</p>  </body>  </html> |
| p {  background-color: green;  }  .highlight {  Background-color: red;  } |

**Apply both a class and an ID selector to the same element and see which style takes precedence.**

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>Specificity Exercise</title>  <link rel="stylesheet" href="styles.css">  </head>  <body>  <p id="unique" class="highlight">This is a paragraph.</p>  </body>  </html> |
| #unique {  color: green;  }  .highlight {  color: red;  } |

# ID Selector

**Style elements with unique IDs.**

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>ID Selector Exercise</title>  <link rel="stylesheet" href="styles.css">  </head>  <body>  <div id="unique-element">Unique Element</div>  <div>Element</div>  </body>  </html>  #unique-element {  font-weight: bold;  } |

# Attribute Selector

**Style input elements based on their type attribute.**

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>Attribute Selector Exercise</title>  <link rel="stylesheet" href="styles.css">  </head>  <body>  <input type="text" placeholder="Text input">  <input type="submit" value="Submit">  </body>  </html> |
| input[type="text"] {  font-size: 16px;  }  input[type="submit"] {  font-size: 18px;  } |

**Change the text color of links with a specific href attribute.**

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>Attribute Selector Exercise</title>  <link rel="stylesheet" href="styles.css">  </head>  <body>  <a href="https://example.com">Example Link</a>  <a href="https://another.com">Another Link</a>  </body>  </html> |
| a[href="https://example.com"] {  color: red;  } |

# Universal Selector

**Use the universal selector to set a default margin and padding for all elements.**

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>Universal Selector Exercise</title>  <link rel="stylesheet" href="styles.css">  </head>  <body>  <div>Content with default margin and padding.</div>  </body>  </html> |
| \* {  margin: 100px  padding: 100px  } |

**Use the universal selector to set a default font-family and color for all elements.**

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <title>Universal Selector Exercise</title>  <link rel="stylesheet" href="styles.css">  </head>  <body>  <div>Content with default font and color.</div>  </body>  </html> |
| \* {  font-family: ariel; color: red;  } |

# Descendant Combinator

**Style nested elements using a descendant combinator.**

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>Descendant Combinator Exercise</title>  <link rel="stylesheet" href="styles.css">  </head>  <body>  <div>  <p>Descendant of div</p>  </div>  </body>  </html> |
| div p {  color: red;  border: 3px solid green;  display: inline-block;  } |

# Combinator Comparison

**Compare descendant combinator and child combinator.**

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>Combinator Comparison Exercise</title>  <link rel="stylesheet" href="styles.css">  </head>  <body>  <div>  <p>Descendant</p>  <div>  <p>Child</p>  </div>  </div>  </body>  </html> |
| div p {  color: yellow;  }  div > p {  color: green;  } |

# Selector List

**Use a selector list to apply the same style to multiple elements.**

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>Selector List Exercise</title>  <link rel="stylesheet" href="styles.css">  </head>  <body>  <h1>Heading</h1>  <p>Paragraph</p>  <div>Div content</div>  </body>  </html> |
| h1, p, div {  color: green;  background-color: yellow;  border: 5px dotted red;  } |

**Style both paragraph and heading elements using a selector list.**

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>Selector List Exercise</title>  <link rel="stylesheet" href="styles.css">  </head>  <body>  <h1>Heading</h1>  <p>Paragraph</p>  </body>  </html> |
| h1, p {  color: red;  background-color: green;  font-size: 14px;  border: 5px dashed black;  font-weight: bold:  font-family: fantasy; } |
|  |

# Child Combinator

**Use a child combinator to style direct children of a div element.**

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>Child Combinator Exercise</title>  <link rel="stylesheet" href="styles.css">  </head>  <body>  <div>  <p>Direct child of div</p>  <div>  <p>Nested child</p>  </div>  </div>  </body>  </html> |
| div > p {  color: chocolate;  font-family: fantasy;  font-weight: bold;  font-size: 14px;  border: 5px solid red;  } |

**Use a child combinator to style direct children of a specific class.**

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>Child Combinator Exercise</title>  <link rel="stylesheet" href="styles.css">  </head>  <body>  <div class="parent">  <p>Direct child of .parent</p>  <div>  <p>Nested child of .parent</p>  </div>  </div>  </body>  </html> |
| .parent > p {  Font-family: fatansy;  font-size: 14px;  color: yellow;  } |

# Box Model

**Use CSS to demonstrate the box model by setting margin, border, padding, and content area values.**

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>Box Model Exercise</title>  <link rel="stylesheet" href="styles.css">  </head>  <body>  <div class="box">Box Model Example</div>  </body>  </html> |
| .box {  margin: 100px;   border: 100px;  padding: 100px  content: normal;  } |

**Calculate the total width of an element with specific width, padding, border, and margin values.**

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>Box Model Exercise</title>  <link rel="stylesheet" href="styles.css">  </head>  <body>  <div class="box">Calculate my total width</div>  </body>  </html> |
| .box {  width: 200px;  padding: 20px;  border: 5px solid black;  margin: 10px;  } The total width of the content of the element is 35px; |

# Display Property

**Set different display properties (block, inline, inline-block) for elements.**

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>Display Property Exercise</title>  <link rel="stylesheet" href="styles.css">  </head>  <body>  <div class="block">Block element</div>  <span class="inline">Inline element</span>  <div class="inline-block">Inline-block element</div>  </body>  </html> |
| .block {  display: block;  }  .inline {  display: inline  }  .inline-block {  Display: inline-block;  } |

# Width Properties

**Set the width, min-width, and max-width of a div element.**

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>Width Properties Exercise</title>  <link rel="stylesheet" href="styles.css">  </head>  <body>  <div class="width-example">Resize the window to see me change!</div>  </body>  </html> |
| .width-example {  width: 150px;  min-width: 100px;  max-width: 200px;  } |

# Height Properties

**Set the height, min-height, and max-height of a div element.**

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>Height Properties Exercise</title>  <link rel="stylesheet" href="styles.css">  </head>  <body>  <div class="height-example">Resize the window to see me change!</div>  </body>  </html> |
| .height-example {  Height: 100px  min-height: 50xp;  max-height: 150px;  } |

# Margin, Border, Padding

**Set different margin, border, and padding values for a div element.**

|  |
| --- |
| <!DOCTYPE html>  <html>  <head>  <meta charset="UTF-8">  <meta name="viewport" content="width=device-width, initial-scale=1.0">  <title>Margin, Border, Padding Exercise</title>  <link rel="stylesheet" href="styles.css">  </head>  <body>  <div class="box-model">Box Model Example</div>  </body>  </html> |
| .box-model {  border: 5px solid rgba(50, 100, 255, .2);  padding: 50px;  margin: 20px;  } |