

# HTML & CSS - Exercises

1.	Type Selector	1
2.	Class Selector	3
3.	Percentage Width	4
4.	Nested Divs	5
5.	Pixel Width	5
6.	Pixel vs Percentage Width	6
7.	EM Units	6
8.	REM Units	7
9.	Specificity	8
10.	ID Selector	9
11.	Attribute Selector	9
12.	Universal Selector	10
13.	Descendant Combinator	11
14.	Combinator Comparison	12
15.	Selector List	12
16.	Child Combinator	13
17.	Box Model	14
18.	Display Property	15
19.	Width Properties	16
20.	Height Properties	16
21.	Margin, Border, Padding	16

## 1. 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 {
  /* Write your rule here */
}
```

**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 {
```

  

```
}
```

**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 {  
  
}  
  
p {  
  
}  
  
div {  
  
}
```

## 2. 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 {  
  
}
```

**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>
```

### 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 {  
  
}
```

### 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 {  
  
}
```



### 3. 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 {
```

```
}
```

### 4. 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>
```

### 5. 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 {
  /* Set width to 300px */
}
```

## 6. 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 {
  /* Set width to 300px */
}

.percentage-width {
  /* Set width to 50% */
}
```

## 7. 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 have a fixed width of 300px.
    </div>
  </div>
</body>
</html>
```



```
</head>
<body>
  <div class="parent">
    <div class="child">I am 1.5em of my parent.</div>
  </div>
</body>
</html>
```

```
.parent {
  /* Set font-size to 20px */
}

.child {
  /* Set font-size to 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 {
  /* Set font-size to 10px */
}

.child {
  /* Set font-size to 1.5em */
}
```

## 8. 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 {
  /* Set font-size to 16px */
}

.rem-size {
  /* Set font-size to 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>
```

## 9. 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 {  
    /* Style for type selector */  
}  
  
.highlight {  
    /* Style for class selector */  
}
```

**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 {  
    /* Style for ID selector */  
}  
  
.highlight {  
    /* Style for class selector */  
}
```

## 10. 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>
```



## 11. 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"] {
  /* Style for text input */
}

input[type="submit"] {
  /* Style for submit input */
}
```

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"] {
```

```
}
```

## 12. 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>
```

```
* {
```

  

```
}
```

**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>
```

## 13. 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 {

}
```

## 14. 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 {
  /* Style for descendant combinator */
}

div > p {
  /* Style for child combinator */
}
```

## 15. 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 {

}
```

**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>
```

## 16. 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 {  
  
}
```

**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 {  
  
}
```

## 17. 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, border, padding, and content area */  
}
```

**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;  
}
```

## 18. 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 {  
  
}
```



```
.inline {  
  
}  
  
.inline-block {  
  
}
```

## 19. 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 {  
  /* Set width, min-width, and max-width */  
}
```

## 20. 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 {  
  
}
```





## 21. 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 {
```

  

```
}
```

