**Does Padding/Margin Increase the Width/Height of an Element?**

Yes, **padding** and **margin** can increase the width and height of an element.

* **Padding**: Adds space inside the element, between the element's content and its border. Padding affects the element's total size (width and height).
* **Margin**: Adds space outside the element, creating space between the element's border and surrounding elements. Margins do **not** affect the element's internal dimensions, but they do affect the overall layout by providing external space.

**Changing the Behavior**

By default, **padding** and **border** increase the total width and height of an element. However, this behavior can be altered by using the CSS property box-sizing.

* **box-sizing: content-box;** (default): The width and height only include the content, but **padding** and **border** are added outside of the box, increasing the total size of the element.
* **box-sizing: border-box;**: The width and height include padding and border, so the element's total size will not increase due to padding and border.

**Code Example: Demonstrating Padding and Margin Behavior**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Padding and Margin Example</title>

<style>

/\* Default box-sizing behavior \*/

.box-content-box {

width: 200px;

height: 100px;

padding: 20px;

margin: 10px;

border: 5px solid black;

box-sizing: content-box; /\* Default behavior \*/

background-color: lightblue;

}

/\* Box-sizing behavior where padding and border are included in the width/height \*/

.box-border-box {

width: 200px;

height: 100px;

padding: 20px;

margin: 10px;

border: 5px solid black;

box-sizing: border-box; /\* Changes the behavior \*/

background-color: lightgreen;

}

</style>

</head>

<body>

<div class="box-content-box">Content Box: Padding and Border add to size</div>

<div class="box-border-box">Border Box: Padding and Border are included in size</div>

</body>

</html>

**Explanation of the Code:**

1. **Box with content-box (default)**:
   * The box's width is set to 200px, but because the box-sizing is set to content-box, the padding (20px on all sides) and border (5px on all sides) will increase the actual size of the box. This makes the box **larger** than the specified width of 200px.
   * So, the total width is: 200px + 2 \* 20px (padding left and right) + 2 \* 5px (border left and right) = 250px.
2. **Box with border-box**:
   * The width and height are set to 200px, and with box-sizing: border-box, padding and border are **included** in the 200px width and height. So the box will stay 200px wide, including the padding and border, and the content area will shrink to accommodate the padding and border.

**Output Demonstration:**

* The first box (box-content-box) will appear **larger** than the specified width and height due to padding and border being added outside.
* The second box (box-border-box) will remain **exactly 200px** wide and high, as padding and border are considered part of the element's dimensions.

**How to Adjust the Behavior:**

If you don't want padding and border to affect the size of the element, use box-sizing: border-box;. This is especially useful when you want a consistent box size regardless of padding or borders.

**Conclusion:**

The box-sizing property is key in determining whether padding and borders will affect the total size of an element. By default, padding and borders increase the element’s dimensions, but with box-sizing: border-box, you can make sure the padding and border are included in the specified size.