



**Fundamentals
of
WEB
DESIGN**

Padding/Borders/Margins

Cascading Style Sheets

About Padding, Borders, and Margins

- Padding, borders, and margins surround content within your Web pages. The padding, whose color can be controlled, is the space between the content and the border.
- The border, whose color, thickness, and type can be controlled, is the outside edge of the padding.
- The margin, which is always invisible, defines the space buffer on the outside of the border. The margin allows you to control the space between Web elements.



Content Padding

- The CSS "padding" property is used to control the amount of padding around content. This supposedly replaces the "cellpadding" attribute for tables. As you will see from the screen captures below, the results vary greatly between browsers. It would appear that the HTML "cellpadding" attribute will still be a valuable control for current browsers.

```
<table border="1" style="background-color:#ffcccc; padding:10px">
```

How is it Applied?

- The value(s) of an attribute is always applied in the same clockwise order:
 - Top
 - Right
 - Bottom
 - Left

```
<tag style="attribute : top right bottom left;">
```

The <tr> Tag

- Although the CSS1 definition would suggest that the CSS "padding" property can be applied to all table tags, it seems to have no valuable effect to the <tr> tag. Notice how the "padding" property applied to the first <tr> tag does not adjust the cell padding of the row as you might expect.

```
<table border="1" style="background-color : #ffcccc">  
<tr style="padding : 10px">  
<td>Row1Data1</td>
```

The <td> Tag

- The CSS "padding" property can be applied to the <td> tag with some predictable results. Notice how the "padding" property applied to the first cell of the table effects the height of the first row and the width of the first column.

```
<table border="1" style="background-color : #ffcccc">
<tr>
<td style="padding : 10px">Row1Data1</td>
<td>Row1Data2</td>
```

Padding Property

- The CSS "padding" property can also be used within most other HTML tags that accept style. In this example, "padding" is applied to the <p>, <h1>, <pre>, and tags. Standard HTML does not provide a method for setting the padding of these tags. This control is not limited to these tags, but browser results may vary with other tags.

```
<body style="background-color : #ffffff">  
<br />  
<p style="padding:10px; background-color:#ffcccc">  
Paragraph Tag</p>  
<br />  
<h1 style="padding:10px; background-color:#ffcccc">  
H1 Tag</h1>  
<br />  
<pre style="padding:10px; background-color:#ffcccc">  
Pre Tag</pre>  
<br />  
<font style="padding:10px; background-color:#ffcccc">  
Font Tag</font>
```

The padding-left Property

- The CSS "padding-left" property can be applied to the <td>, <p>, <h1>, <pre>, and tags with very consistent results across browsers. This control is not limited to these tags, but browser results may vary with other tags.

```
<table border="1" style="background-color : #ffcccc">
<tr>
<td style="padding-left : 20px">Row1Data1</td>
<td style="padding-left : 20px">Row1Data2</td>
<td style="padding-left : 20px">Row1Data3</td>
</tr>
</table>
<br />
<p style="padding-left : 30px;
background-color : #ffcccc">Paragraph Tag</p>
<br />
<h1 style="padding-left : 30px;
background-color : #ffcccc">H1 Tag</h1>
<br />
<pre style="padding-left : 30px;
background-color : #ffcccc">Pre Tag</pre>
<br />
<font style="padding-left : 30px;
background-color : #ffcccc">Font Tag</font>
```

The padding-right Property

- The CSS "padding-right" property can be applied to the <td>, <p>, <h1>, <pre>, and tags with very consistent results across browsers, but may only be really noticeable when used within tables. This control is not limited to these tags, but browser results may vary with other tags.

```
<td style="padding-right : 20px">Row1Data1</td>
<td style="padding-right : 20px">Row1Data2</td>
<td style="padding-right : 20px">Row1Data3</td>
</tr>
</table>
<br />
<p style="padding-right : 30px;
        background-color : #ffcccc">Paragraph Tag</p>
<br />
<h1 style="padding-right : 30px;
        background-color : #ffcccc">H1 Tag</h1>
<br />
<pre style="padding-right : 30px;
        background-color : #ffcccc">Pre Tag</pre>
<br />
<font style="padding-right : 30px;
        background-color : #ffcccc">Font Tag</font>
```

The padding-top Property

- The CSS "padding-top" property can be applied to the <td>, <p>, <h1>, <pre>, and tags with very consistent results across browsers. This control is not limited to these tags, but browser results may vary with other tags.

```
<td style="padding-top : 20px">Row1Data1</td>
<td style="padding-top : 20px">Row1Data2</td>
<td style="padding-top : 20px">Row1Data3</td>
</tr>
</table>
<br />
<p style="padding-top : 30px;
background-color : #ffcccc">Paragraph Tag</p>
<br />
<h1 style="padding-top : 30px;
background-color : #ffcccc">H1 Tag</h1>
<br />
<pre style="padding-top : 30px;
background-color : #ffcccc">Pre Tag</pre>
<br />
<font style="padding-top : 30px;
background-color : #ffcccc">Font Tag</font>
```

The padding-bottom Property

- The CSS "padding-bottom" property can be applied to the <td>, <p>, <h1>, <pre>, and tags with very consistent results across browsers. This control is not limited to these tags, but browser results may vary with other tags.

```
<td style="padding-bottom : 20px">Row1Data1</td>
<td style="padding-bottom : 20px">Row1Data2</td>
<td style="padding-bottom : 20px">Row1Data3</td>
</tr>
</table>
<br />
<p style="padding-bottom : 30px;
background-color : #ffcccc">Paragraph Tag</p>
<br />
<h1 style="padding-bottom : 30px;
background-color : #ffcccc">H1 Tag</h1>
<br />
<pre style="padding-bottom : 30px;
background-color : #ffcccc">Pre Tag</pre>
<br />
<font style="padding-bottom : 30px;
background-color : #ffcccc">Font Tag</font>
```

The border-style Property

- The CSS "border-style" property is used to display a border around content. It can be applied to the <td>, <p>, <h1>, <pre>, and tags with very consistent results across browsers. This control is not limited to these tags, but browser results may vary with other tags.

```
<table style="border-style : solid">
<tr>
<td>Row1Data1</td>
<td>Row1Data2</td>
<td>Row1Data3</td>
</tr>
</table>
<p style="border-style : solid">Paragraph Tag</p>
<br />
<h1 style="border-style : solid">H1 Tag</h1>
<br />
<pre style="border-style : solid">Pre Tag</pre>
<br />
<font style="border-style : solid">Font Tag</font>
```

border-style Types

- The CSS "border-style" can generate dotted, dashed, solid, double, groove, ridge, outset, and inset borders.

```
<p style="border-style : dotted">  
A dotted border</p>
```

```
<p style="border-style : dashed">  
A dashed border</p>
```

```
<p style="border-style : solid">  
A solid border</p>
```

```
<p style="border-style : double">  
A double border</p>
```

```
<p style="border-style : groove">  
A groove border</p>
```

```
<p style="border-style : ridge">  
A ridge border</p>
```

```
<p style="border-style : inset">  
An inset border</p>
```

```
<p style="border-style : outset">  
An outset border</p>
```

border-style Types

- The CSS "border-style" property has four variations for controlling each side of the border separately. They are "border-left-style", "border-right-style", "border-top-style", and "border-bottom-style."

```
<p style="border-bottom-style : double">  
A double border on the bottom only</p>  
<br />  
<p style="border-top-style : solid;  
border-bottom-style : solid">  
A solid border on the top and bottom</p>  
<br />  
<p style="border-left-style : dotted;  
border-right-style : dotted;  
border-bottom-style : dotted">  
A dotted border on three sides</p>  
<br />  
<p style="border-left-style : solid;  
border-right-style : double;  
border-top-style : dotted;  
border-bottom-style : dashed">  
Four different border styles used at once</p>  
<br />  
<p style="border-left-style : solid;  
border-right-style : solid">  
A solid border on the left and right sides</p>
```

border-color Property

- The CSS "border-color" property can be applied to the <td>, <p>, <h1>, <pre>, and tags with very consistent results across browsers. This control is not limited to these tags, but browser results may vary with other tags.
- Like in HTML, the color value can be in either hex format "#ffffff" or the name of the color such as white. In CSS the "#" symbol is required when using the hex format for it to work in all browsers.

```
<table style="border-color : black;  
border-style : solid">
```

border-color Property

- The CSS "border-style" and "border-color" properties can generate colored dotted, dashed, solid, double, groove, ridge, and inset borders.

```
<p style="border-color : red; border-style : dotted">  
A dotted border</p>
```

```
<p style="border-color : purple; border-style : dashed">  
A dashed border</p>
```

```
<p style="border-color : blue; border-style : solid">  
A solid border</p>
```

```
<p style="border-color : green; border-style : double">  
A double border</p>
```

```
<p style="border-color : yellow; border-style : groove">  
A groove border</p>
```

```
<p style="border-color : orange; border-style : ridge">  
A ridge border</p>
```

```
<p style="border-color : pink; border-style : inset">  
An inset border</p>
```

```
<p style="border-color : red; border-style : outset">  
An outset border</p>
```

border-color Property

- The CSS "border-color" property has four variations for controlling each side of the border separately. They are "border-left-color", "border-right-color", "border-top-color", and "border-bottom-color"

```
<p style="border-bottom-color : blue;  
border-bottom-style : dotted">
```

A dotted border</p>

```
<p style="border-left-color : yellow;  
border-right-color : green;  
border-top-color : blue;  
border-bottom-color : red;  
border-style : dashed">
```

A dashed border</p>

```
<p style="border-left-color : yellow;  
border-right-color : green;  
border-top-color : blue;  
border-bottom-color : red;  
border-style : solid">
```

A solid border</p>

```
<p style="border-left-color : yellow;  
border-right-color : green;  
border-top-color : blue;  
border-bottom-color : red;  
border-style : double">
```

A double border</p>

border-width Property

- The CSS "border-width" property can be applied to the <td>, <p>, <h1>, <pre>, and tags but requires "px" for pixels added to the width value to ensure browser compatibility.

```
<table style="border-width : 10px;  
        border-color : blue;  
        border-style : solid">  
<tr>  
<td>Row1Data1</td>  
<td>Row1Data2</td>  
<td>Row1Data3</td>  
</tr>  
</table>  
<p style="border-width:10px;  
        border-color:blue; border-style:solid">  
Paragraph Tag</p>  
<h1 style="border-width:20px;  
        border-color:blue; border-style:solid;">  
H1 Tag</h1>  
<pre style="border-width:30px;  
        border-color:blue; border-style:solid">  
Pre Tag</pre>  
<br />  
<br />  
<font style="border-width:40px;  
        border-color:blue; border-style:solid">  
Font Tag</font>
```

border-width Property

- The CSS "border" properties can be used at the same time to yield unlimited combinations of border color, width, and style.

```
<p style="border-width:10px;  
border-color:blue; border-style:dotted">  
A dotted border</p>  
  
<p style="border-width:15px;  
border-color:blue; border-style:dashed">  
A dashed border</p>  
  
<p style="border-width:20px;  
border-color:blue; border-style:solid">  
A solid border</p>  
  
<p style="border-width:25px;  
border-color:blue; border-style:double">  
A double border</p>  
  
<p style="border-width:30px;  
border-color:blue; border-style:groove">  
A groove border</p>  
  
<p style="border-width:35px;  
border-color:blue; border-style:ridge">  
A ridge border</p>  
  
<p style="border-width:40px;  
border-color:blue; border-style:inset">  
An inset border</p>  
  
<p style="border-width:45px;  
border-color:blue; border-style:outset">  
An outset border</p>
```

border-width Property

- The CSS "border-width" property has four variations for controlling each side of the border separately. They are "border-left-width", "border-right-width", "border-top-width", and "border-bottom-width"

```
<body style="background-color : #ffffff">
<br />
<p style="border-bottom-width : 20px;
border-bottom-color : blue;
border-bottom-style : double">
A thick double border on the bottom</p>
<br />
<p style="border-left-width : 0px;
border-right-width : 20px;
border-top-width : 0px;
border-bottom-width : 20px;
border-color : blue; border-style : solid">
A thick solid border on the bottom and right</p>
<br />
<p style="border-left-width : 20px;
border-right-width : 0px;
border-top-width : 0px;
border-bottom-width : 20px;
border-color : blue; border-style : solid">
A thick solid border on the bottom and left</p>
```

Insure Browser Compatibility

- Even though the border width, color, and style properties can be used separately, you are strongly encouraged to use all three when using borders to ensure your results are consistent across all browsers.

```
<p style="border-width : 10px;  
        border-color : red;  
        border-style : solid;">
```

Line Spacing

- The CSS line-height property allows you to control the line height for Web content. A line height of 15 pixels is about the default in most browsers. A line height smaller than 15 will produce less space between lines, and a line height greater than 15 will produce more space between lines.

```
<p style = "line-height : 1px">
```

The CSS line-height Property is set to 1 which will reduce the spacing between lines of this paragraph.

```
</p>
```

```
<p style = "line-height : 5px">
```

The CSS line-height Property is set to 5 which will reduce the spacing between lines of this paragraph.

```
</p>
```

```
<p style = "line-height : 10px">
```

The CSS line-height Property is set to 10 which will reduce the spacing between lines of this paragraph.

```
</p>
```

```
<p style = "line-height : 20px">
```

The CSS line-height Property is set to 20 which will increase the spacing between lines of this paragraph.

```
</p>
```

margin Property

- The CSS "margin" property works similarly to padding except it controls the space outside an element instead of the white space inside an element.
- The four values within the margin property run clockwise, top, right, bottom, left.

```
<p style="background-color: yellow; margin: 10px 20px 30px 40px">  
This is a paragraph with margins.<br />  
Notice how the indention is not just<br />  
for the first line of the paragraph.  
</p>
```

margin Property

- The CSS "margin" property has four variations for controlling each margin separately. They are "margin-left", "margin-right", "margin-top", and "margin-bottom."

```
<p style="background-color: yellow;  
        margin-top      : 10px;  
        margin-right    : 20px;  
        margin-bottom   : 30px;  
        margin-left     : 40px">
```

```
This is a paragraph with margins.<br />  
Notice how the indentation is not just<br />  
for the first line of the paragraph.  
</p>
```

margin Property

- The CSS "margin" property can be set to "auto".
- When applied to a <div> tag and width attribute will center the tag on the page.

```
<div style="margin : auto;  
          width  : 800px;">
```