

Margins and Paddings

In this lesson, we say hello to margins and paddings.
Let's begin!

WE'LL COVER THE FOLLOWING



- [Listing 10-5](#): Specify spacing with the margin and padding
- [Listing 10-6](#): Spacing with percentages

There are several ways to specify spacing within the margin and padding properties. You can use any size type units to set these values. To demonstrate how you can set them, let's start with the page defined in Listing 10-5.

Listing 10-5: Specify spacing with the margin and padding

```
<!DOCTYPE html>
<html>
<head>
  <title>Margins and paddings</title>
  <style>
    .box {
      border: 4px solid blue;
      background-color: #a0a0a0;
    }

    .spacing {
      margin: 12px;
      padding: 24px;
    }

    .content {
      width: 100px;
      height: 80px;
      background-color: red;
    }

    table {
      border-collapse: collapse;
    }

    td {
```

```
border: 1px dashed black;
}
</style>
</head>
<body>
  <table>
    <tr>
      <td>
        <div class="box spacing">
          <div class="content" />
        </div>
      </td>
    </tr>
  </table>
</body>
</html>
```

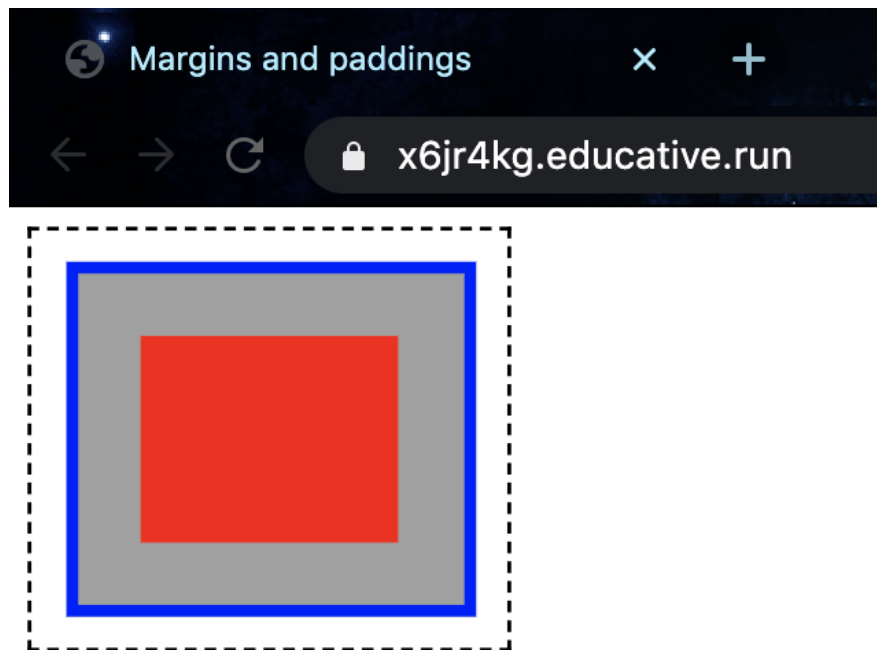
The `<body>` of this page contains a single-cell table that marks the table cell borders with a dashed line to designate the outer edge of the box. There are two nested `<div>` tags in the table cell. The first is the internal one representing the content with a red rectangle that is *100pixels* wide and *80pixels* tall (set by the `.content` rule).

The outer `<div>` tag represents the box. It uses two classes, `box` and `spacing`, where the `box` class, through the `.box` rule, styles the border and background color of the tag, the `.spacing` rule sets up margins and paddings:

```
.spacing {
  margin: 12px;
  padding: 24px;
}
```



This specification sets all margins to 12 pixels and paddings to 24 pixels, as you can see below:



Paddings and margins (1)

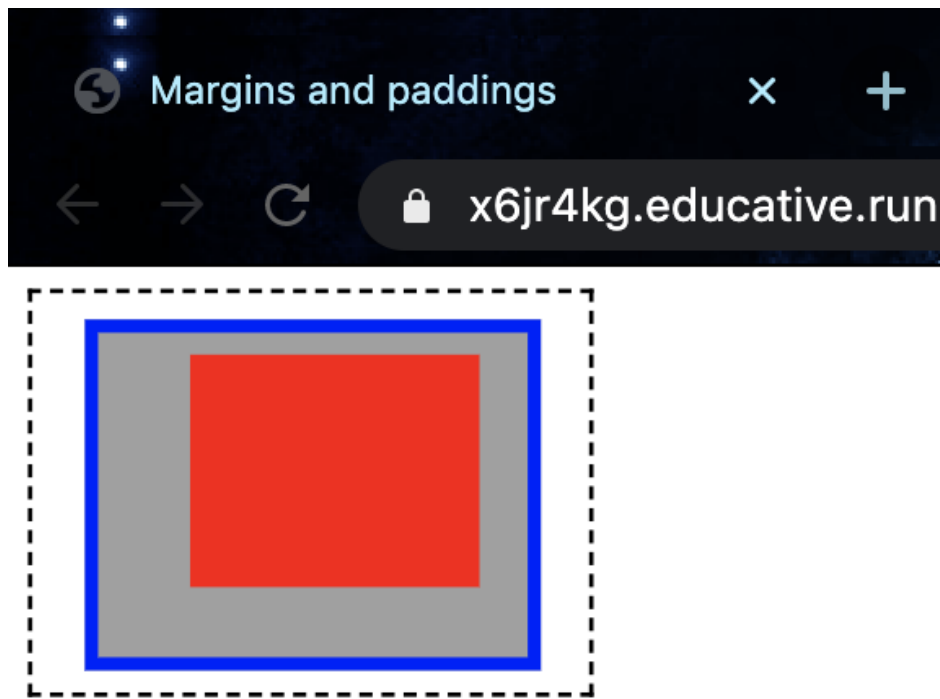
The red rectangle in the middle is the actual content, the dark blue border is the border of the box. The space between the dashed line and the border is the margin, the light grey area between the border and the content is the padding.

Change the `.spacing` rule to this:

```
.spacing {  
  margin: 8px 16px;  
  padding: 8px 16px 24px 32px;  
}
```



Now, the page is displayed as you can see below:



Paddings and margins (2)

In the margin property, you have used the two values that represent the vertical and the horizontal margins. The four values in padding specify the top, right, bottom, and left padding values, respectively. Now, change the `.spacing` rule to this:

```
.spacing {  
  margin: 16px;  
  margin-bottom: 32px;  
  padding: 8px;  
  padding-left: 32px;  
}
```



The margin property sets all margins to *16pixels*. The margin-bottom property changes the bottom margin to *32px*. Both properties set the bottom margin, but according to the cascade order, as you learned in Chapter 9, the last declaration wins, thus the bottom margin is set to *32pixels*. Should you exchange these two lines, all margins would be set to *16pixels*. With similar logic, all paddings are set to *8pixels*, except the left one which uses *32pixels*. The image below shows the result:



Paddings and margins (3)

Listing 10-5 uses a trick, it sets the width and height of the `<div>` element that represents the content and utilizes the default behavior of the `<td>` tag that accommodates its size to the size of the content.

Generally, when rendering content, the width of a block element is set according to the width of the containing element. When using percentages for any of the margin or padding properties, the base of the calculation is the width of the containing element, as shown in Listing 10-6. This listing is similar to Listing 10-5, except, that it does not use a table cell, and spacing is declared with percentage values.

Listing 10-6: Spacing with percentages

```
<!DOCTYPE html>
<html>
<head>
  <title>Spacing with percentages</title>
<style>
  .box {
    border: 4px solid blue;
    background-color: #a0a0a0;
  }
  spacing {
```

```

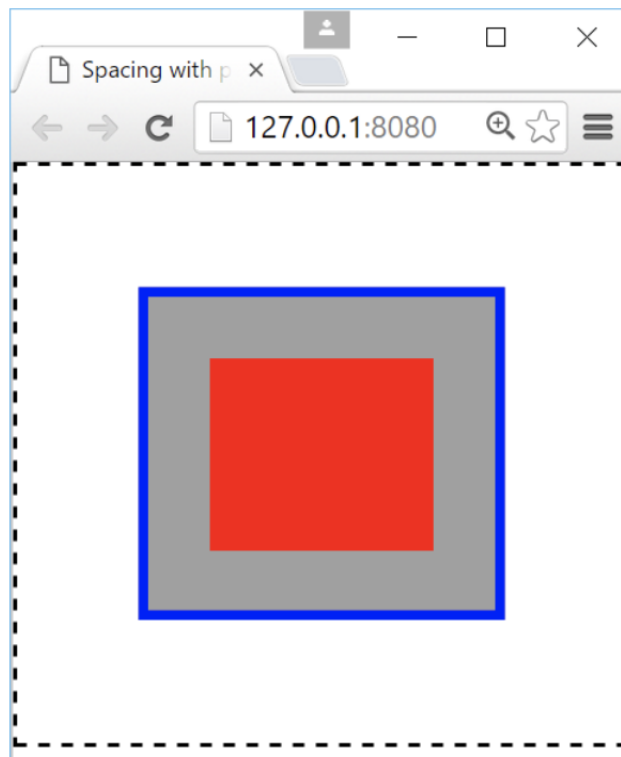
.spacing {
  margin: 20%;
  padding: 10%;
}

.content {
  height: 80px;
  background-color: red;
}

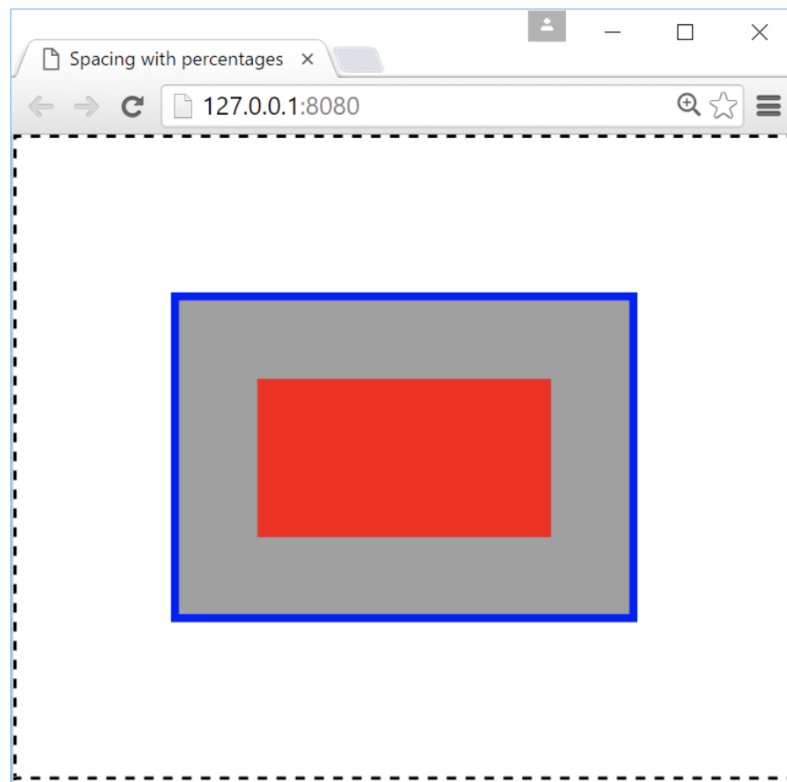
body {
  margin: 0;
  border: 2px dashed black;
}
</style>
</head>
<body>
  <div class="box spacing">
    <div class="content" />
  </div>
</body>
</html>

```

As you resize the browser window, the width of the containing element (`<body>`) changes, so the margins and paddings change together with the browser window's width, as shown in the images below:



Spacing with percentages (1)



Spacing with percentages (2)

Listing 10-6 sets all margins to 20% and all paddings to 10%. So, provided the browser window's width is 400 pixels, margins are set to 80 pixels, and paddings to 40 pixels.

NOTE: Even if you specify vertical margins and paddings with percentage values, the base of their calculation is the width of the containing element, and not the height of it, as you likely expect.

In the *next lesson*, we will note some special behavior exhibited by margins.

Stay tuned! :)