

## Tables

Everything you read has structure to it, from that boring shopping list in your pocket, to the latest magazine on your desk. Just like these items, HTML pages should have a structure. I'm sure you could manage to construct a shopping list without too much trouble, but how about a magazine? If we use HTML in the way its original creators intended, the amazing, graphics-intensive sites we see today wouldn't be possible - all we'd be able to produce would be plain, dull pages.

Tables make up the basic layout of almost every Web page in existence today.

To create a table, you will need to use the `<table>` tag, along with its corresponding `</table>` tag. There are a number of optional attributes you can specify in the `<table>` tag but these are not necessary (yet!).

Once you have the `<table>` tag in place, the next tag you need is the `<tr>` tag. The `<tr>` tag creates a table row, which can contain one or more cells (or columns) of information. To create these individual cells, which can contain almost any other HTML element, you can use the `<td>` tag. You can make as many cells as you want, but each row of the table should have the same number of cells as all the others. So let's take a look at a basic table:

```
<table>
  <tr>
    <td>
      <b>Name</b>
    </td>
    <td>
      <b>E-Mail Address</b>
    </td>
    <td>
      <b>Phone Number</b>
    </td>
  </tr>
  <tr>
    <td>
```

```

        Joe Jones
    </td>
    <td>
        <a
href="mailto:joe.jones@hotmail.com">joe.jones@hotmail.com</
a>
    </td>
    <td>
        555 1234
    </td>
</tr>
<tr>
    <td>
        John Smith
    </td>
    <td>
        <a
href="mailto:john.smith@yahoo.com">john.smith@yahoo.com</a>
    </td>
    <td>
        555 4321
    </td>
</tr>
</table>

```

Now, I know that looks confusing, so let's go through it section by section. First, we have the <table> tag, which is followed by 3 separate table rows. Let's take a closer look at one of these rows:

```

<tr>
    <td>
        <b>Name</b>
    </td>
    <td>
        <b>E-Mail Address</b>
    </td>
    <td>
        <b>Phone Number</b>

```

```
</td>
</tr>
```

First we have the `<tr>` tag, which starts the new row. We then have a `<td>` tag, which starts a new cell within that row. In this cell can be anything at all, but in this case it contains a bolded title, "Name". This is followed by the closing `</td>` tag, which ends the table cell, ready for another one. Then there are two more cells, followed by the end of the row.

That example will produce a table like this:

<b>Name</b>	<b>E-Mail Address</b>	<b>Phone Number</b>
Joe Jones	<a href="mailto:joe.jones@hotmail.com">joe.jones@hotmail.com</a>	555 1234
John Smith	<a href="mailto:john.smith@yahoo.com">john.smith@yahoo.com</a>	555 4321

As you can see, it has 3 rows and 3 columns (or cells) in each row.

## Table Size

By default, a table will be just large enough for the elements it contains to fit within it, but no bigger or smaller. You can change this default using various 'height' and 'width' attributes. You can specify a height or width either in pixels, or in percentage of the browser window. For example:

- `<table height="500" width="247">` will create a table of height 500 and width 247
- `<table width="100%">` will create a table that's as wide as the screen, but only as high as it needs to be to contain the elements it holds

Now here's a challenge for you. Add another row to the example table we looked at above, listing another made-up person's contact details. The answer is on the next page.

## Tables Challenge Solution

Your new table (with one more row) should look something like this:

```
<table>
  <tr>
    <td>
      <b>Name</b>
    </td>
    <td>
      <b>E-Mail Address</b>
    </td>
    <td>
      <b>Phone Number</b>
    </td>
  </tr>
  <tr>
    <td>
      Joe Jones
    </td>
    <td>
      <a
href="mailto:joe.jones@hotmail.com">joe.jones@hotmail.com</
a>
    </td>
    <td>
      555 1234
    </td>
  </tr>
  <tr>
    <td>
      John Smith
    </td>
    <td>
      <a
href="mailto:john.smith@yahoo.com">john.smith@yahoo.com</a>
    </td>
```

```
 555 4321 || James Bond | jamesbond@yahoo.com |
| 857 4630 |

```

If it doesn't look like that, then scroll back to the previous page and look at the example of a single row again, then try to add another row. If you got it right, then well done!

Tables can include practically any other HTML tag or element, for example, images or links. Let's take a look at another example - a price list of a shop that sells chairs.

```

<html>
<head>
    <title>Chairs</title>
</head>
<body>
    <table width="50%" align="center">
        <tr>
            <td>
                <b>Title</b>
            </td>
            <td>
                <b>Picture</b>
            </td>
            <td>

```

```

        <b>Price</b>
    </td>
</tr>
<tr>
    <td>
        Small Chair
    </td>
    <td>
        
    </td>
    <td>
        $39.99
    </td>
</tr>
<tr>
    <td>
        Large Chair
    </td>
    <td>
        
    </td>
    <td>
        $99.99
    </td>
</tr>
</table>
</body>
</html>

```

For some practice, take a look at that code and see if you can work out how many rows it has, and how many cells there are within each row. Once you've done that, read on...

Again, there are 3 rows (the header row, then one for the small chair and one for the large chair), and 3 cells (name, picture and price) in each. For one last practice, try to add an extra cell in each row into that table for the size of the chair. Remember, you need to add the right tags in each row, otherwise it won't work.

The completed table should look something like this:

```
<html>
  <head>
    <title>Chairs</title>
  </head>
  <body>
    <table width="50%" align="center">
      <tr>
        <td>
          <b>Title</b>
        </td>
        <td>
          <b>Picture</b>
        </td>
        <td>
          <b>Price</b>
        </td>
        <td>
          <b>Size</b>
        </td>
      </tr>
      <tr>
        <td>
          Small Chair
        </td>
        <td>
          
        </td>
        <td>
          $39.99
        </td>
        <td>
          2 feet
        </td>
      </tr>
      <tr>
        <td>
```

```
        Large Chair
    </td>
    <td>
        
    </td>
    <td>
        $99.99
    </td>
    <td>
        4 feet
    </td>
</tr>
</table>
</body>
</html>
```

If you have managed to understand tables, you have done well. Tables are usually the hardest HTML concept to grasp.

Let's go on to the next section and take a look at some other tags that we have not yet covered in this tutorial.