

Tables

Tables are a great way to organize data into rows and columns. HTML tables are used to display a variety of content on a webpage, from presenting numerical data, to financial reports, or to other content where you want to organize content into columns and rows of content within the table.

Tables should *never* be used to structure the layout of a webpage.

Table Structure and Syntax

Tables are created using the `<table>` element. Inside the table tags, table rows are created using the `<tr>` element. Table content are created using the `<td>` (table data) element. The `<th>` element is used instead of `<td>` to indicate a header row. By default, table headings are rendered in a different typeface (typically bold and centered) for visual distinction.

The following table lists the essential html elements used to define the structure of a table.

HTML Table Tags

HTML Tag	Tag Description
<code><table></table></code>	The table tag (<code><table></table></code>) is the main container tag that defines a table.
<code><caption></caption></code>	The caption tag (<code><caption></caption></code>) defines the table caption, or the name of the table. The proper syntax is to add the caption tag directly after the table tag.
<code><thead></thead></code>	The header tag (<code><thead></thead></code>) defines the header content in a table.
<code><tbody></tbody></code>	The body tag (<code><tbody></tbody></code>) defines the content that makes up the body of the table. It is used if a table's structure includes header and footer tags.
<code><tr></tr></code>	The table row tag (<code><tr></tr></code>) defines a table row within the table's structure. A table row (<code><tr></tr></code>) to be valid.
<code><th></th></code>	The <code><th></th></code> tag that defines a header cell for a column or row in a table. Header cells are bold and centered.
<code><td></td></code>	The <code><td></td></code> defines a cell within a table. Each table needs at least one cell. **Columns in a table are determined by the number of <code><td></code> tags in a row. **Cells can be merged with the "colspan" tag, e.g., <code><td colspan="2"></code>
<code><tfooter></tfooter></code>	The footer tag (<code><tfooter></tfooter></code>) defines the footer content in a table.

Now that we've had a chance to review the basic HTML tags that make up the structure of a table, let's see how these html elements work together to render a table.

```
</tfoot>
</table>
</body>
</html>
```

Notice how the table renders in the browser window. By default, tables do not have borders. These can be added using CSS, which is covered in a later course.

Exercise: Creating a Table

Let's create a simple table using the following information.

Instructions:

Build a table with five columns and three rows that lists horse type categories across the top of each column. In each column header, list the breeds of horses that belong in that horse type category.

The five categories of horses are as follows:

- Draft Horses
- Gaited Horses
- Light Horses
- Ponies
- Warmbloods

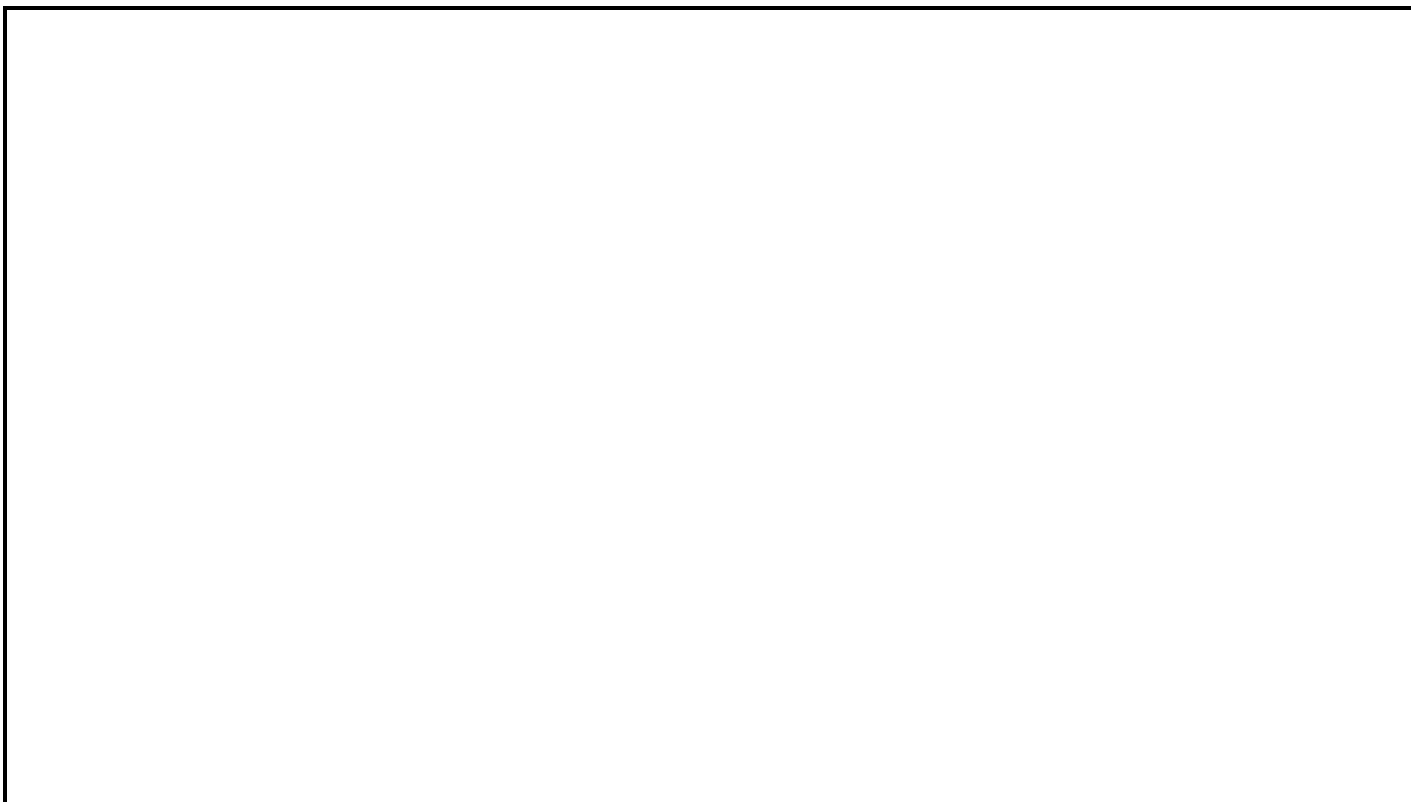
The breeds associated with each type of horse are as follows:

- Draft Horses: Belgian, Clydesdales, Percheron
- Gaited Horses: American Saddlebred, Paso Fino, Tennessee Walking Horse
- Light Horses: American Quarter Horse, Appaloosas, Morgans
- Ponies: Connemara Pony, Hackney Pony, Shetland Pony
- Warmbloods: Dutch Warmblood, Hanoverian, Trakehner

Run Code Save Export Reset

index.html

```
1 <!doctype html>
2 <html>
3 <head>
4 <meta charset="utf-8">
5 </head>
6 <body>
7
8 </body>
```



Theme Select:

rubyblue

Click the following tab to check your answer.

▸ Check Your Answer

The correct code for this lab is below.

```
<!doctype html>
<html>
<head>
<meta charset="utf-8">
</head>
<body>
<table>
  <tr>
    <th>Draft Horses</th>
    <th>Gaited Horses</th>
    <th>Light Horses</th>
    <th>Ponies</th>
    <th>Warmbloods</th>
  </tr>
  <tr>
```

```

</table>
</body>
</html>

```

The following illustrates the correct code in the lab tool.

Run Code block

[index.html](#)

```

7 <table>
8   <tr>
9     <th>Draft Horses</th>
10    <th>Gaited Horses</th>
11    <th>Light Horses</th>
12    <th>Ponies</th>
13    <th>Warmbloods</th>
14  </tr>
15  <tr>
16    <td>Belgian</td>
17    <td>American Saddlebred</td>
18    <td>American Quarter Horse</td>
19    <td>Connemara Pony</td>
20    <td>Dutch Warmblood</td>
21  </tr>
22  <tr>
23    <td>Clydesdales</td>

```

Draft Horses	Gaited Horses	Light Horses	
Belgian	American Saddlebred	American Quarter Horse	C
Clydesdales	Paso Fino	Appaloosas	H
Percheron	Tennessee Walking Horse	Morgans	SH
			P

Row and Column Span (<rowspan> & <colspan>) Attributes

Cells within a table can be formatted to span multiple columns or multiple rows using the attributes `colspan` and `rowspan`. We will look at an example of how each attribute works. First, we will look at `colspan`.

colspan

Notice in the table in the example below that the `colspan` attribute in the second `<th>` (`<th colspan="2">`) header cell that spans two columns—the second and third column—in the table that is rendered in the example below. This attribute has been added to help illustrate how `colspan` changes the table's layout. Again, by default, HTML tables are rendered with a border.

```

<!DOCTYPE html>
<html>
  <head>
    <title>Creating Tables</title>
  </head>
  <body>
    <table border="1">

```

The table caption is placed here.

Column 1	Column 2 & Column 3	
Row 1, Column 1	Row 1, Column 2	Row 1, Column 3
Row 2, Column 1	Row 2, Column 2	Row 2, Column 3

```

<!DOCTYPE html>
<html>
  <head>
    <title>Creating Tables</title>
  </head>
  <body>
    <table border="1">
      <caption>The table caption is placed here.</caption>
      <thead><!--the header tag defines the table's header row -->
        <tr>
          <th>Column 1</th>
          <th>Column 2</th>
          <th>Column 3</th>
        </tr>
      </thead>
      <tbody><!--the body tag defines the body of table's content -->
        <tr>
          <td rowspan="2">spanned row</td>
          <td>Row 1, Column 2</td>
          <td>Row 1, Column 3</td>
        </tr>
        <tr>
          <td>Row 2, Column 2</td>
          <td>Row 2, Column 3</td>
        </tr>
      </tbody>
    </table>
  </body>
</html>

```

The table caption is placed here.

Column 1	Column 2	Column 3
spanned row	Row 1, Column 2	Row 1, Column 3
	Row 2, Column 2	Row 2, Column 3

Exercise:

Let's practice building a table using colspan and rowspan.

Instructions:

Build a two column table with the following specifications:

- The table header row should read "The Five Categories of Horses" and span two columns.
- The second table row should contain two header cells: "Category" and "Examples"
- The first cell in each row under the first column should list the horse category and should span two rows. The categories: Draft Horse, Gaited Horse, Light Horse, Ponies, and Warmbloods
- The cells underneath the second column should list example breeds for each category of horse. The example breeds for each category are listed below
 - Draft: Belgian, Clydesdales, Percheron
 - Gaited Horses: American Saddlebred, Paso Fino, Tennessee Walking Horse
 - Light Horse: American Quarter Horse, Appaloosas, Morgans
 - Ponies: Connemara Pony, Hackney Pony, Shetland Pony
 - Warmbloods: Dutch Warmblood, Hanoverian, Trakehner

To assist with viewing the colspans and rowspans, we are going to add a little bit of CSS to add border. For the purpose of this exercise, use the following syntax for your opening table tag:

Warmbloods	Dutch Warmblood
	Hanoverian
	Trakehner

Enter your code into the code tool below. When you are finished, click on the 'run code block' button to in a browser window.

Run Code

Save

Export

Reset

index.html

```
1 <!doctype html>
2 <html>
3 <head>
4 <meta charset="utf-8">
5 </head>
6 <body>
7
8
9 </body>
10 </html>
11
12
13
```

```

    <th>Category</th>
    <th>Examples</th>
</tr>
<tr>
    <th rowspan="3">Draft Horses</th>
    <td>Belgian</td>
</tr>
<tr>
    <td>Clydesdales</td>
</tr>
<tr>
    <td>Percheron</td>
</tr>
<tr>
    <th rowspan="3">Gaited Horses</th>
    <td>American Saddlebred</td>
</tr>
<tr>
    <td>Paso Fino</td>
</tr>
<tr>
    <td>Tennessee Walking Horse</td>
</tr>
<tr>
    <th rowspan="3">Light Horses</th>
    <td>American Quarter Horse</td>
</tr>
<tr>
    <td>*gt;Appaloosas</td>
</tr>
<tr>
    <td>Morgans</td>
</tr>
<tr>
    <th rowspan="3">Ponies</th>
    <td>Connemara Pony</td>
</tr>
<tr>
    <td>Hackney Pony</td>
</tr>
<tr>
    <td>Shetland Pony</td>
</tr>
<tr>

```

```

5 </head>
6   <body>
7   <table border="1">
8   <tr>
9   <th colspan="2">The Five
    Categories of
    Horses</th>
10 </tr>
11
12 <tr>
13 <th>Category</th>
14 <th>Examples</th>
15 </tr>

```

	Percheron
Gaited Horses	American S
	Paso Fino
	Tennessee W
Light Horses	American Q
	Appaloosas
	Morgans
Ponies	Connemara
	Hackney Po
	Shetland Po
Warmbloods	Dutch Warm
	Hanoverian

Table Tip

Do not use tables to structure the layout of a webpage. Tables should be used for tabular data only.

Review Checkpoint

To test your understanding of the content presented in this assignment, please click on the Questions icon. When answering any of the questions presented here, you are always free to return to this or any assignment.



1. What is the default formatting of the `<th>` tag?

a. **bolded.**

Incorrect. Try again.

b. *italicized.*

Incorrect. Try again.

c. **bolded** and centered.

Correct. By default, browsers bold and center `<th>` tags .

d. *italicized* and centered.

Incorrect. Try again.

2. True or False?

Tables can be used to display tabular data or to format webpage layouts.

a. True

Incorrect. Try again.

b. False

Correct. This is a false statement. Tables should be used for tabular data only.