



Tables



Tables

- Provides a clearer picture of the information by visually organizing it
 - Can categorize, make comparisons, and see results
- Made up of a grid-like system of cells

Cells

Boxes that hold data

Columns

- Vertical lines of cells

Rows

- Horizontal lines of cells

Column Header

- First cell in a column
- Indicates type of data in column

Row Header

- First cell in a row
- Indicates type of data in row

Table Example:

	 Phone A	 Phone B	 Phone C
Fingerprint			✓
Waterproof	✓		
2-year Warranty		✓	✓

Basic Table Tags

- `<table>` - container/tag for the entire table
 - Everything for the table is nested inside this tag
- `<tr>` - “table row” - container/tag for each row
 - Everything in that row is nested inside this tag
- `<td>` - “table data” - used for data in each cell
- border attribute - `border="1"` - adds 1 pixel border

Example:

One row, two columns:

```
<table border="1">  
  <tr>  
    <td>Row 1, Column 1</td>  
    <td>Row 1, Column 2</td>  
  </tr>  
</table>
```

Row 1, Column 1	Row 1, Column 2
-----------------	-----------------

Example:

Add another row to the previous table:

```
<table border="1">  
  <tr>  
    <td>Row 1, Column 1</td>  
    <td>Row 1, Column 2</td>  
  </tr>  
  <tr>  
    <td>Row 2, Column 1</td>  
    <td>Row 2, Column 2</td>  
  </tr>  
</table>
```

Row 1, Column 1	Row 1, Column 2
Row 2, Column 1	Row 2, Column 2

Example:

Add two more columns to the previous table:

```
<table border="1">
  <tr>
    <td>Row 1, Column 1</td>
    <td>Row 1, Column 2</td>
    <td>Row 1, Column 3</td>
    <td>Row 1, Column 4</td>
  </tr>
  <tr>
    <td>Row 2, Column 1</td>
    <td>Row 2, Column 2</td>
    <td>Row 2, Column 3</td>
    <td>Row 2, Column 4</td>
  </tr>
</table>
```

Row 1, Column 1	Row 1, Column 2	Row 1, Column 3	Row 1, Column 4
Row 2, Column 1	Row 2, Column 2	Row 2, Column 3	Row 2, Column 4

Which table will this code produce?

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

- A. 2 rows, 3 columns
- B. 2 rows, 2 columns
- C. 3 rows, 2 columns
- D. 3 rows, 3 columns

Which table will this code produce?

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

A. 2 rows, 3 columns

B. 2 rows, 2 columns

C. 3 rows, 2 columns

D. 3 rows, 3 columns

Which table will this code produce?

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

- A. 2 rows, 3 columns
- B. 3 rows, 2 columns
- C. 2 rows, 4 columns
- D. 4 rows, 2 columns

Which table will this code produce?

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

- A. 2 rows, 3 columns
- B. 3 rows, 2 columns
- C. 2 rows, 4 columns
- D. 4 rows, 2 columns

Which table will this code produce?

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

- A. 1 rows, 5 columns
- B. 5 rows, 1 columns
- C. 1 rows, 6 columns
- D. 6 rows, 1 columns

Which table will this code produce?

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

- A. 1 rows, 5 columns
- B. 5 rows, 1 columns
- C. 1 rows, 6 columns
- D. 6 rows, 1 columns

Which table will this code produce?

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

A.

B.

C.

--	--

D.

Which table will this code produce?

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

A.

B.

C.

--	--

D.

Which table will this code produce?

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

A.

--	--	--	--

B.

C.

D.

Which table will this code produce?

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

A.

--	--	--	--

B.

C.

D.

Which table will this code produce?

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

A.

--	--	--	--

B.

C.

D.

Which table will this code produce?

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

A.

--	--	--	--

B.

C.

D.

Table Captions

- <caption> tag
- Placed after the <table> tag
- Placed before the first <tr> tag

Table with a caption.

```
<table border="1">
  <caption>This is the table's caption.</caption>
  <tr>
    <td>Row 1, Column 1</td>
    <td>Row 1, Column 2</td>
  </tr>
</table>
```

This is the table's caption.

Row 1, Column 1	Row 1, Column 2
-----------------	-----------------

Table Headers

- <th> tag
- Functions the same as <td>
- Bolds and Centers the content within the cell

The previous table with column headers added.

```
<table border="1">
  <caption>This is the table's caption.</caption>
  <tr>
    <th>Column Header 1</th>
    <th>Column Header 2</th>
  </tr>
  <tr>
    <td>Row 1, Column 1</td>
    <td>Row 1, Column 2</td>
  </tr>
</table>
```

This is the table's caption.

Column Header 1	Column Header 2
Row 1, Column 1	Row 1, Column 2

No Headers or Captions

- Look at this table. What do you know about the information you see?
- Can assume the first column is related to political parties.
- What do the numbers mean?
- What do they measure?
- We need to label these columns for this table to be of any use.

```
<table border="1">
  <tr>
    <td>Republican</td>
    <td>42</td>
    <td>47</td>
    <td>37</td>
  </tr>
  <tr>
    <td>Independent</td>
    <td>13</td>
    <td>13</td>
    <td>13</td>
  </tr>
  <tr>
    <td>Democratic</td>
    <td>42</td>
    <td>37</td>
    <td>46</td>
  </tr>
</table>
```

Republican	42	47	37
Independent	13	13	13
Democratic	42	37	46

Spanning Columns

- colspan attribute
- Used to modify the <td>

The first table cell spanning all three columns:

```
<table border="1">
  <tr>
    <td colspan="3">Row 1, Columns 1-3</td>
  </tr>
  <tr>
    <td>Row 2, Column 1</td>
    <td>Row 2, Column 2</td>
    <td>Row 2, Column 3</td>
  </tr>
</table>
```

Row 1, Columns 1-3		
Row 2, Column 1	Row 2, Column 2	Row 2, Column 3

Spanning Columns - continued

- colspan attribute
- Used to modify the <td>

The second table cell in the first row spanning two columns:

```
<table border="1">
  <tr>
    <td>Row 1, Column 1</td>
    <td colspan="2">Row 1, Columns 2-3</td>
  </tr>
  <tr>
    <td>Row 2, Column 1</td>
    <td>Row 2, Column 2</td>
    <td>Row 2, Column 3</td>
  </tr>
</table>
```

Row 1, Column 1	Row 1, Columns 2-3	
Row 2, Column 1	Row 2, Column 2	Row 2, Column 3

Spanning Rows

- rowspan attribute
- Used to modify the <td>

The first table cell spanning all three rows:

```
<table border="1">
  <tr>
    <td rowspan="3">Rows 1-3, Column 1</td>
    <td>Row 1, Column 2</td>
  </tr>
  <tr>
    <td>Row 2, Column 2</td>
  </tr>
  <tr>
    <td>Row 3, Column 2</td>
  </tr>
</table>
```

Rows 1-3, Column 1	Row 1, Column 2
	Row 2, Column 2
	Row 3, Column 2

Spanning Rows - continued

- rowspan attribute
- Used to modify the <td>

The first table cell spanning two rows:

```
<table border="1">
  <tr>
    <td rowspan="2">Rows 1-3, Column 1</td>
    <td>Row 1, Column 2</td>
  </tr>
  <tr>
    <td>Row 2, Column 2</td>
  </tr>
  <tr>
    <td>Row 3, Column 1</td>
    <td>Row 3, Column 2</td>
  </tr>
</table>
```

Rows 1-2, Column 1	Row 1, Column 2
	Row 2, Column 2
Row 3, Column 1	Row 3, Column 2

Spanning Both

A table with the first cell spanning two rows *and* two columns, and the cell in the fourth row spanning all four columns:

```
<table border="1">
  <tr>
    <td rowspan="2" colspan="2">Rows 1-2,
      Columns 1-2</td>
    <td>Row 1, Column 3</td>
    <td>Row 1, Column 4</td>
  </tr>
  <tr>
    <td>Row 2, Column 3</td>
    <td>Row 2, Column 4</td>
  </tr>
  <tr>
    <td>Row 3, Column 1</td>
    <td>Row 3, Column 2</td>
    <td>Row 3, Column 3</td>
    <td>Row 3, Column 4</td>
  </tr>
  <tr>
    <td colspan="4">Row 4, Columns 1-4</td>
  </tr>
</table>
```

Rows 1-2, Columns 1-2		Row 1, Column 3	Row 1, Column 4
		Row 2, Column 3	Row 2, Column 4
Row 3, Column 1	Row 3, Column 2	Row 3, Column 3	Row 3, Column 4
Row 4, Columns 1-4			

Dividing Tables into Three Parts

- Used especially when tallying numerical data
- Part 1 - Table Header - `<thead>`
 - At the head/top of the table
 - Usually contains the `<th>` tags
- Part 3 - Table Footer - `<tfoot>`
 - At the foot/bottom of the table
 - Used for totals or summary info
- Part 2 - Table Body - `<tbody>`
 - Everything between the header and footer
 - Includes General Table Information/Data
- These tags will help with styling when we learn CSS.
- They are not mandatory
- You can use the table header/table footer on their own
- If used, table header must come after the `<table>` and/or `<caption>`
- Can put table footer before the table body so that it will load faster / I don't recommend because it is harder to read/understand the code

Dividing Tables into Three Parts

A table with the table header, body and footer designated:

```
<table border="1">
  <caption>Table Caption</caption>
  <thead>
    <tr>
      <th>Table Header (1,1)</th>
      <th>Table Header (1,2)</th>
    </tr>
  </thead>
  <tfoot>
    <tr>
      <td>Table Footer (3,1)</td>
      <td>Table Footer (3,2)</td>
    </tr>
  </tfoot>
  <tbody>
    <tr>
      <td>Table Body (2,1)</td>
      <td>Table Body (2,2)</td>
    </tr>
  </tbody>
</table>
```

Table Caption

Table Header (1,1)	Table Header (1,2)
Table Body (2,1)	Table Body (2,2)
Table Footer (3,1)	Table Footer (3,2)