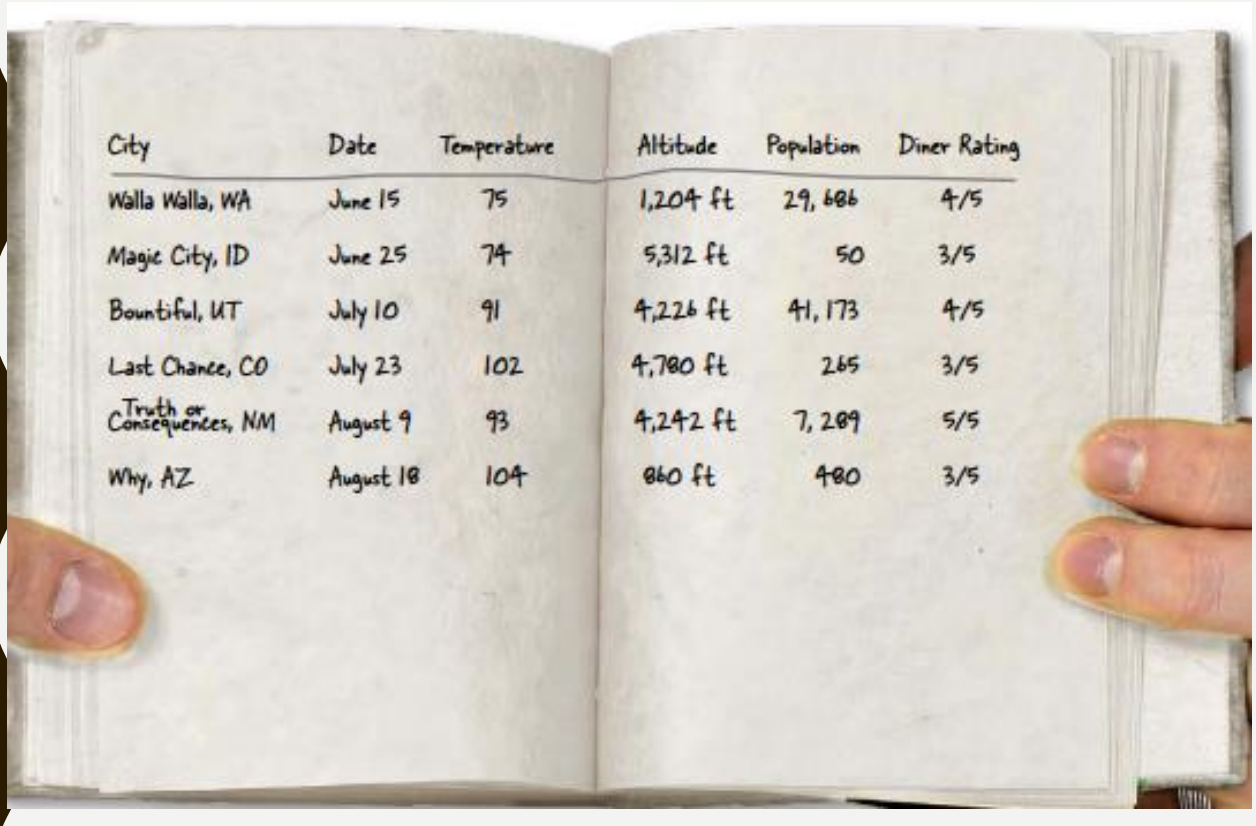
TABLES

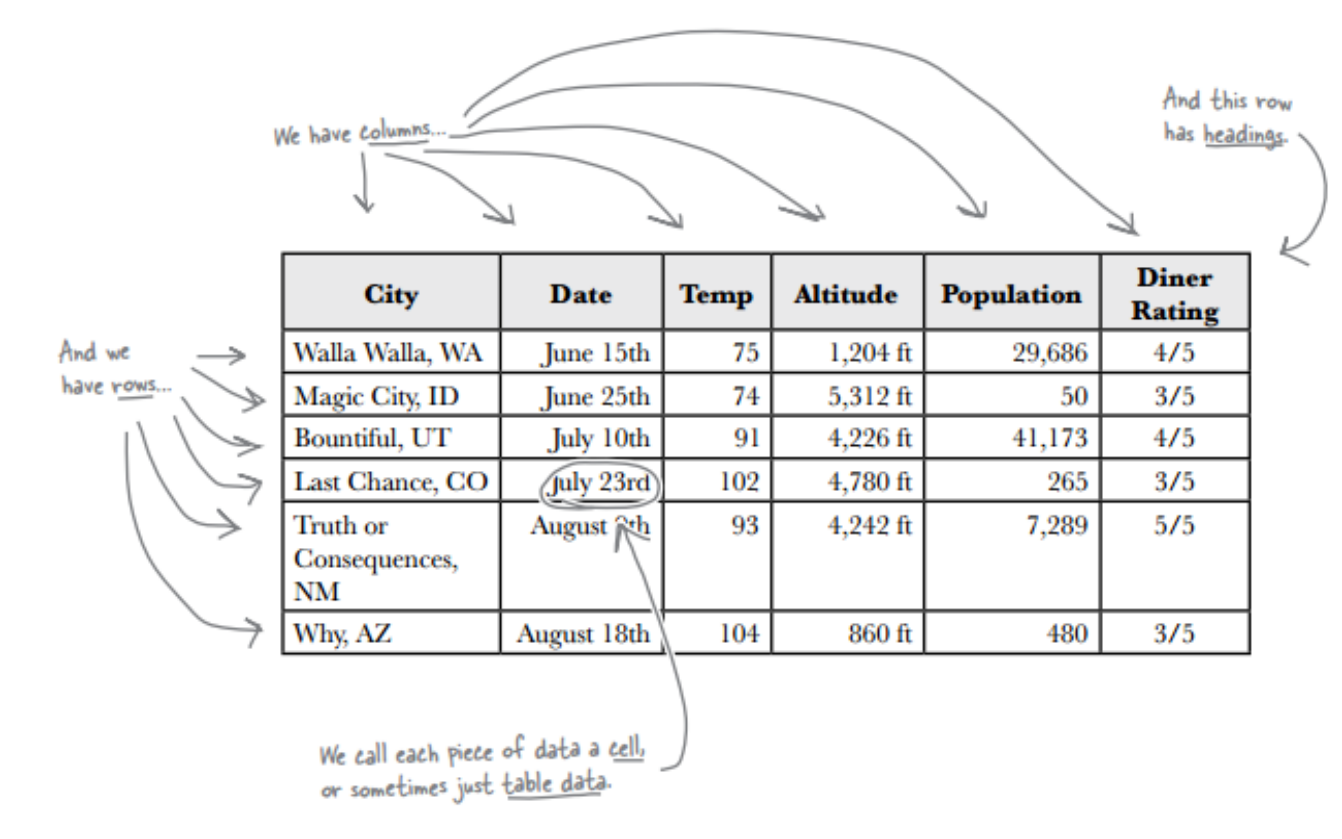
HTML TABLES

Sometimes you need to present tabular data, perhaps for inventory of products or a catalog of albums.



City	Date	Temperature	Altitude	Population	Diner Rating
Walla Walla, WA	June 15	75	1,204 ft	29, 686	4/5
Magic City, ID	June 25	74	5,312 ft	50	3/5
Bountiful, UT	July 10	91	4,226 ft	41, 173	4/5
Last Chance, CO	July 23	102	4,780 ft	265	3/5
Truth or Consequences, NM	August 9	93	4,242 ft	7, 289	5/5
Why, AZ	August 18	104	860 ft	480	3/5

HTML TABLES



City	Date	Temp	Altitude	Population	Diner Rating
Walla Walla, WA	June 15th	75	1,204 ft	29,686	4/5
Magic City, ID	June 25th	74	5,312 ft	50	3/5
Bountiful, UT	July 10th	91	4,226 ft	41,173	4/5
Last Chance, CO	July 23rd	102	4,780 ft	265	3/5
Truth or Consequences, NM	August 8th	93	4,242 ft	7,289	5/5
Why, AZ	August 18th	104	860 ft	480	3/5

- HTML has a <table> element to take care of marking up tabular data.

HTML Tables

Rows
Columns
Headers

```
<!DOCTYPE html>
<html>
<head>
   <meta charset="utf-8">
   <style type="text/css">
        td, th {border: 1px solid black;}
   </style>
   <title>Testing Tony's Travels</title>
</head>
<body>
   <table>
      <tr>
         <th>City</th>
         <th>Date</th>
         <th>Temperature</th>
         <th>Altitude</th>
         <th>Population</th>
         <th>Diner Rating</th>
      </tr>
      <tr>
         <td>Walla Walla, WA</td>
         <td>June 15th</td>
         <td>75</td>
         <td>1,204 ft</td>
         <td>29,686</td>
         <td>4/5</td>
      </tr>
      <tr>
         <td>Magic City, ID</td>
         <td>June 25th</td>
         <td>74</td>
         <td>5,312 ft</td>
         <td>50</td>
         <td>3/5</td>
      </tr>
   </table>
</body>
</html>
```

This is just a small bit of CSS so we can see the structure of the table in the browser. Don't worry about this for now.

We use a <table> tag to start the table.

Here's the first row, which we start with a <tr>.

Each <th> element is a table heading for a column.

Notice that the table headings are listed one after each other. While these look like they might make up a column in the HTML, we are actually defining the entire table headings row. Look back at Tony's list to see how his headings map to these.

Each <tr> element forms a table row.

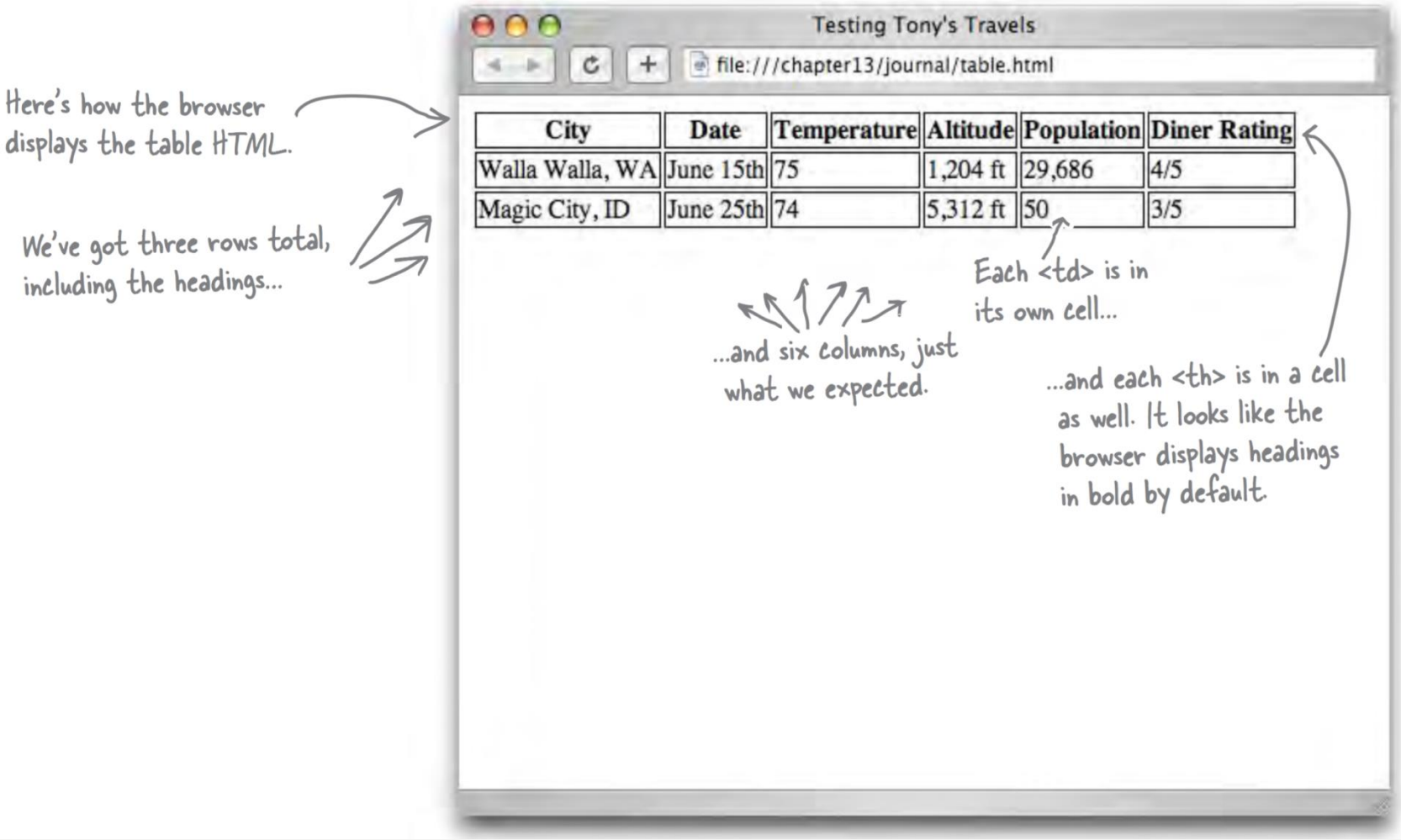
Here's the start of the second row, which is for the city Walla Walla.

Each <td> element holds one cell of the table, and each cell makes a separate column.

All these <td>s make up one row.

And here's the third row. Again, the <td> elements each hold one piece of table data.

HTML Tables


Here's how the browser displays the table HTML.
We've got three rows total, including the headings...
Testing Tony's Travels
file:///chapter13/journal/table.html
City | Date | Temperature | Altitude | Population | Diner Rating
Walla Walla, WA | June 15th | 75 | 1,204 ft | 29,686 | 4/5
Magic City, ID | June 25th | 74 | 5,312 ft | 50 | 3/5
...and six columns, just what we expected.
Each <td> is in its own cell...
...and each <th> is in a cell as well. It looks like the browser displays headings in bold by default.

HTML Tables

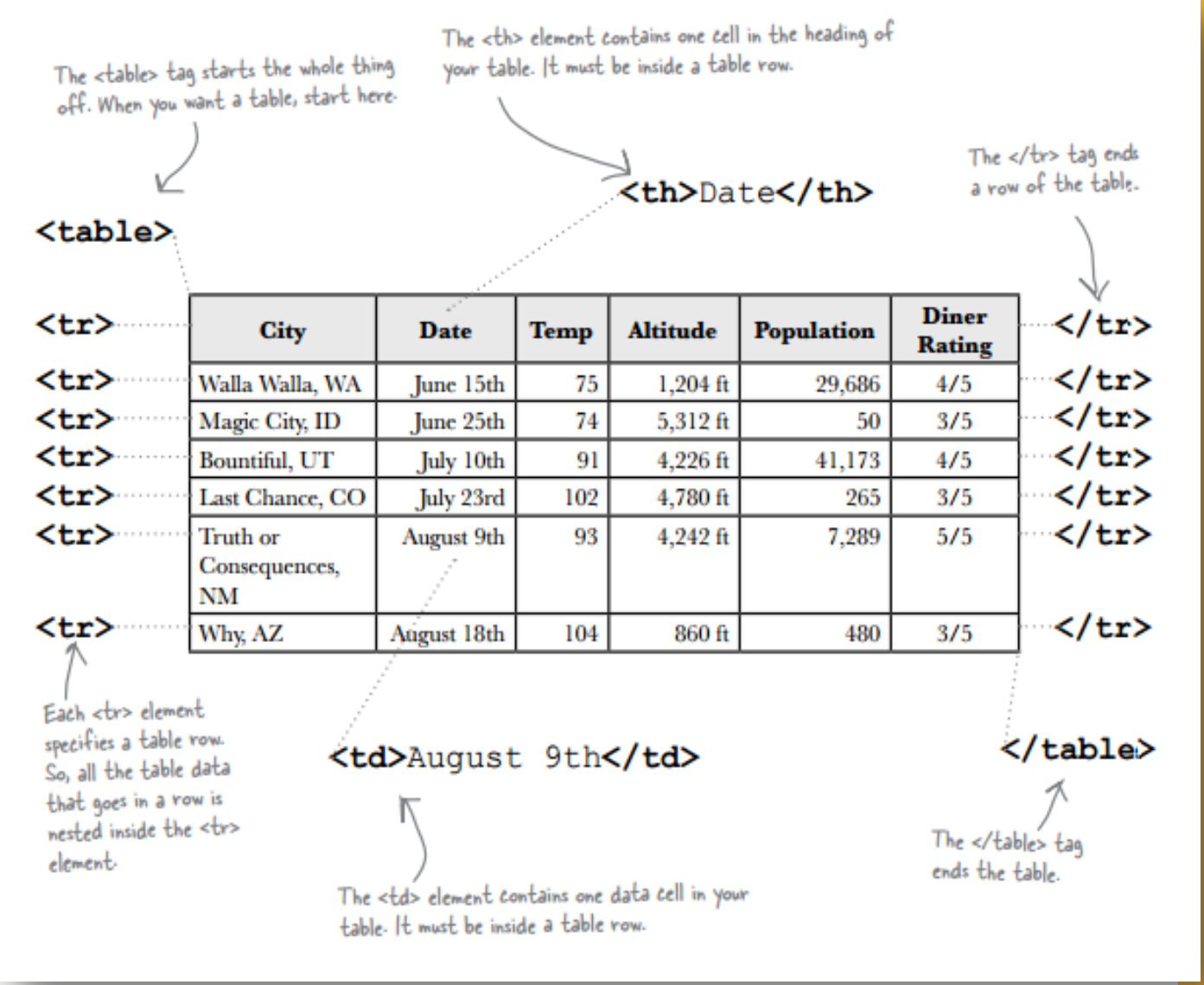
We've seen four elements used to create a single table:

<table>

<tr>

<th>

<td>.



HTML Tables

- A table gives you a way to specify tabular data in your HTML.
- Tables consist of data cells within rows. Columns are implicitly defined within the rows.
- The number of columns in your table will be the number of data cells you have in a row.
- In general, tables are not meant to be used for presentation: that's the job of CSS.

HTML Tables

- Adding a caption – you can improve your table by adding a caption.

```
<table>
  <caption>
    The cities I visited on my Segway USA travels
  </caption>
  <tr>....
</table>
```

- The caption is displayed in the browser. By default, most browsers display this above the table. If you don't like the default location of the caption, you can use CSS to reposition it.

HTML TABLES

- Table with caption added:

The cities I visited on my Segway USA travels

City	Date	Temperature	Altitude	Population	Diner Rating
Walla Walla, WA	June 15th	75	1,204 ft	29,686	4/5
Magic City, ID	June 25th	74	5,312 ft	50	3/5

STYLING HTML TABLES

- To add a border, use:

```
table, th, td {
  border: 1px solid black;
}
```

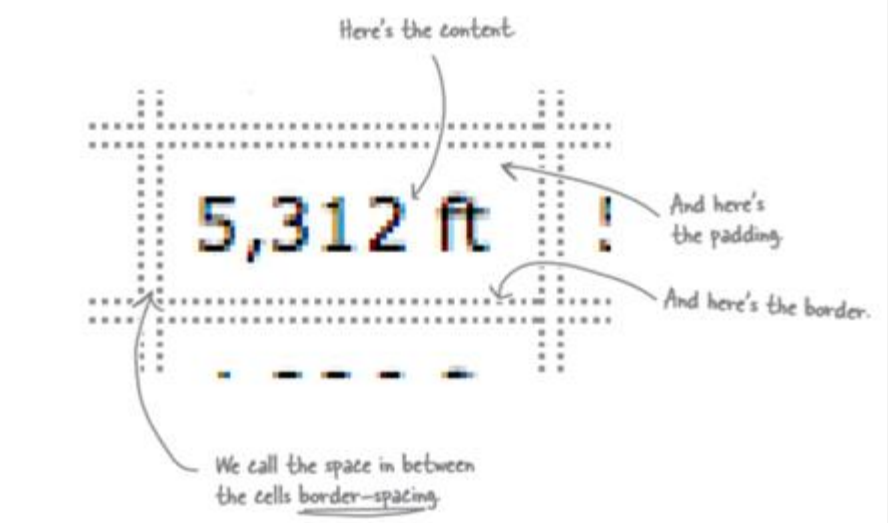
- To move the caption use:

```
table {
  caption-side:bottom;
}
```

- To specify a single or double border around cells, use **border-collapse**.
- When you have a double border , you can increase or decrease the space between each cell using **border-spacing**.

STYLING HTML TABLES

- By default each cell has a double border with some space between the borders:



STYLING HTML TABLES

- The **border-collapse** property is set to **separate** by default (double border). We can collapse the borders and have a single border:

```
table {
  border-collapse:collapse;
}
```

STYLING HTML TABLES

- If the **border-collapse** property is not set (remember it is separate by default); or is set to **separate**, you can also use the border-spacing property:

```
table {
  border-collapse:separate;
  border-spacing:.5em;
}
```

HTML TABLES

- Sometimes tables have varying size cells. This is possible to define in HTML.

<table>
<tr><th rowspan="3">Day</th><th colspan="3">Seminar</th></tr>
<tr><th colspan="2">Schedule</th><th rowspan="2">Topic</th></tr>
<tr><th>Begin</th><th>End</th></tr>
<tr><td rowspan="2">Monday</td><td rowspan="2">8:00 a.m.</td><td rowspan="2">5:00 p.m.</td><td>Introduction to XML</td></tr>
<tr><td>Validity: DTD and Relax NG</td></tr>
<tr><td rowspan="3">Tuesday</td><td>8:00 a.m.</td><td>11:00 a.m.</td><td>XPath</td></tr>
<tr><td>11:00 a.m.</td><td>2:00 p.m.</td><td rowspan="2">XSL Transformations</td></tr>
<tr><td>2:00 p.m.</td><td>5:00 p.m.</td></tr>
<tr><td>Wednesday</td><td>8:00 a.m.</td><td>12:00 p.m.</td><td>XSL Formatting Objects</td></tr>
</table>

COLSPAN

- To make a cell span multiple columns, add the attribute **colspan="*n*“** (where ***n*** is the number of columns to span) to the **<td>** (or **<th>**) tag of that cell.
- The total number of cells has to be the same in all rows, where any cells that span *n* columns are counted as *n* cells.

heading			
1	2	3	4
under 123			under 4

ROWSPAN

- To make a cell span multiple rows, add the attribute **rowspan="*n*"** (where ***n*** is the number of rows to span) to the **<td>** (or **<th>**) tag of that cell.

heading	1	2	3
	4	5	6

NESTED TABLES

- What about displaying two (or more) values in one cell?

```
<tr>
        <td>August</td>
        <td>15</td>
        <td>3.5/5</td>
</tr>
<tr>
        <td>August</td>
        <td>20</td>
        <td>4.5/5</td>
</tr>
<tr>
        <td>August</td>
        <td>24</td>
        <td>
          <table>
           <tr><th>Tess</th><td>4/5</td></tr>
           <tr><th>Jim</th><td>3/5</td></tr>
          </table>
        </td>
</tr>
```

Ratings

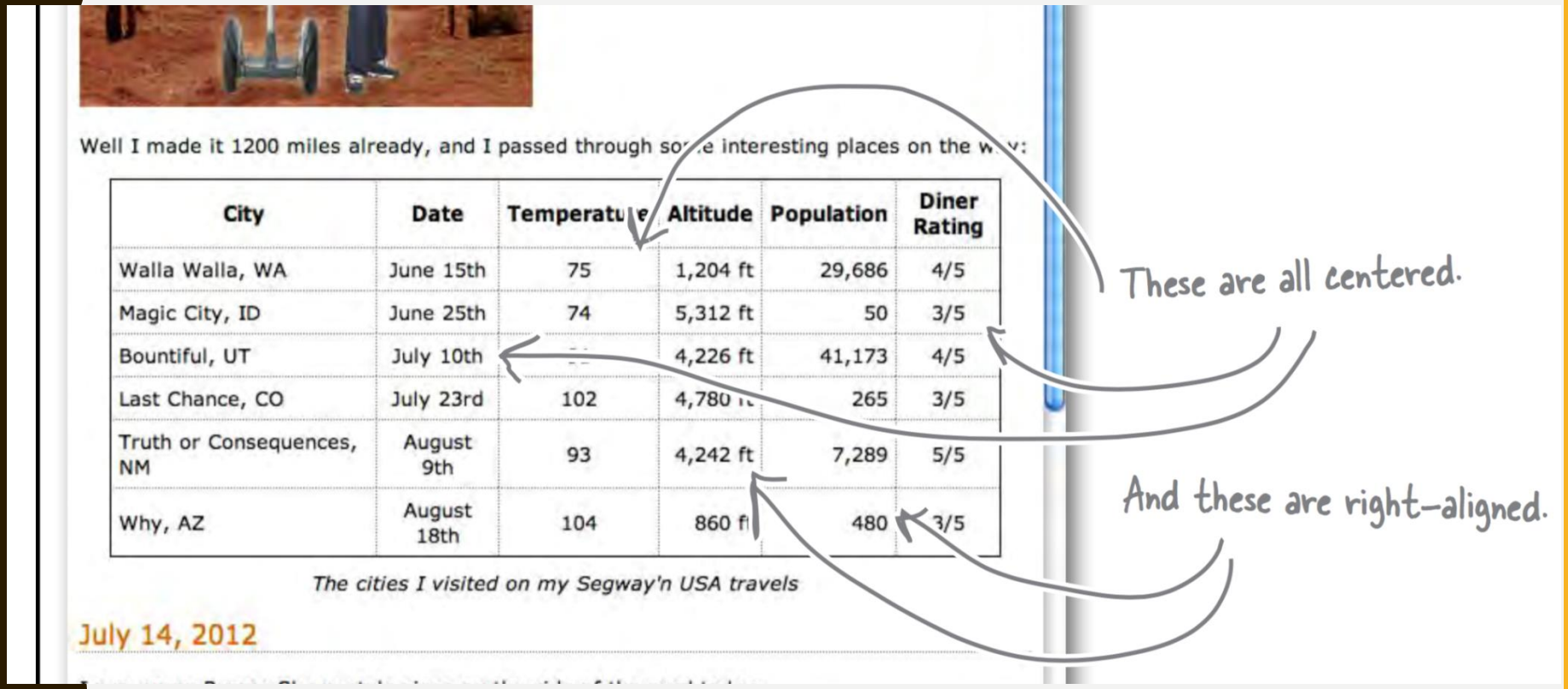
Month	Date	Rating
August	15	3.5/5
August	20	4.5/5
August	24	**Tess** 4/5 **Jim** 3/5

GROUPING ROWS

- You can group together rows and split a table into a header, footer, and body by organising rows into ***thead***, ***tfoot***, and ***tbody*** elements.
- Grouping rows can also provide a handy block to latch CSS on to, for example, if you wanted to change the background colour of a block of rows in a table.
- You can have more than one ***tbody*** elements but only one ***thead*** and ***tfoot*** elements.

TARGET CELLS

- How do we select or target cells in a column or row?



Well I made it 1200 miles already, and I passed through so[illegible]e interesting places on the w[illegible]y:

City	Date	Temperatu[illegible]e	Altitude	Population	Diner Rating
Walla Walla, WA	June 15th	75	1,204 ft	29,686	4/5
Magic City, ID	June 25th	74	5,312 ft	50	3/5
Bountiful, UT	July 10th	[illegible]	4,226 ft	41,173	4/5
Last Chance, CO	July 23rd	102	4,780 f[illegible]	265	3/5
Truth or Consequences, NM	August 9th	93	4,242 ft	7,289	5/5
Why, AZ	August 18th	104	860 f[illegible]	480	3/5

The cities I visited on my Segway'n USA travels

July 14, 2012

NTH-OF-TYPE

- The *nth-of-type* selector finds every *nth* element of a specific type using either **keywords** or a **formula**.

Keywords

- :nth-of-type(odd)
- :nth-of-type(even)
- :first-of-type
- :last-of-type
- :hover

NTH-OF-TYPE

Formula

- The *nth-of-type* selector can use formulas instead of keywords. The formula is *an* + *b*, where *b* is the offset, and *a* is a multiple.
  - tr:nth-of-type(n) // Each row
  - tr:nth-of-type(2) // Second row
  - tr:nth-of-type(2n) // Every second row
  - tr:nth-of-type(n+2) // Every row starting at the second

NTH-OF-TYPE

Formula

- tr:nth-of-type(-n+2) // First 2 rows
- tr:nth-last-of-type(2) // Second last row
- tr:nth-last-of-type(-n+2) // Last 2 rows