11 Creating Division-Based Layouts

In this chapter, you will learn how to

- ✔ Understand HTML5 semantic tags.
- ✔ Begin to think in divisions.
- ✔ Create divisions.
- ✔ Create an HTML5 semantic layout.
- ✔ Position divisions.
- ✔ Format divisions.

Until a few years ago, tables were the most popular way of structuring a Web page. You'll learn about tables and their formatting in Chapter 12, "Creating Tables," and Chapter 13, "Formatting Tables," in case that's the route you want to go with your site's design. However, as Web designers move increasingly toward separating style and content, division-based layouts are becoming more appealing.

A ***division-based layout*** defines the area of a page with <*div*> tags, or some of the new HTML5 semantic tags such as <*article*> and <*aside*>, and then applies formatting to each area using styles. One big advantage of division-based layouts is that you can place the styles in an external style sheet, and then make style changes to many pages at once simply by modifying the style sheet. For example, moving the navigation bar from the left to the right on a dozen pages is easy with a division-based layout that uses an external style sheet, but it's a huge chore with a table-based layout. Another advantage is that division-based layouts reduce the number of lines of code needed to produce a page.

In this chapter, you will learn how to create a separate area of a page (a *division*) in a document, and how to control division and element positions. Then you'll learn how to format a division (which is mostly a matter of applying the same formatting styles that you've learned about in previous chapters) and how to overcome any problems introduced by the formatting.

See Also Do you need only a quick refresher on the topics in this chapter? See the Key Points at the end of this chapter.

Practice Files Before you can use the practice files provided for this chapter, you need to install them from the book's companion content page to their default locations. See "Using the Practice Files" in the beginning of this book for more information.

Understanding HTML5 Semantic Tags

HTML5 adds some ***semantic tags*** to define layouts in more intuitive ways than the generic <*div*> tag is capable of. A semantic tag is one in which the name of a tag reflects its purpose.

Here are the major semantic tags you should know:

- **<header>** Defines the masthead or other header information on the page. Typically the header is repeated on every page of a site, although that is not required.
- **<footer>** Defines the text at the bottom of a page, such as the copyright or contact information. Again, it is typically repeated on every page of the site.
- **<article>** Defines a block of text that represents a single article, story, or message. An article can be distinguished from other text in that it can logically stand alone. For example, on a news site, each news story is an article.
- **<aside>** Defines a block of text that is tangential to the main discussion, such as a note, tip, or caution. An aside can be distinguished from other text in that it could be pulled out and discarded without disrupting the main document in which it appears.
- **<section>** Defines a generic content or application section. Examples of sections would be book chapters or the numbered sections of a thesis; a site's home page could be split into sections such as Introduction, News, and Contact Information. A section begins with a heading such as <*h1*> followed by other content. A general rule is to use <*section*> if the area being defined would be included in an outline of the document or page.

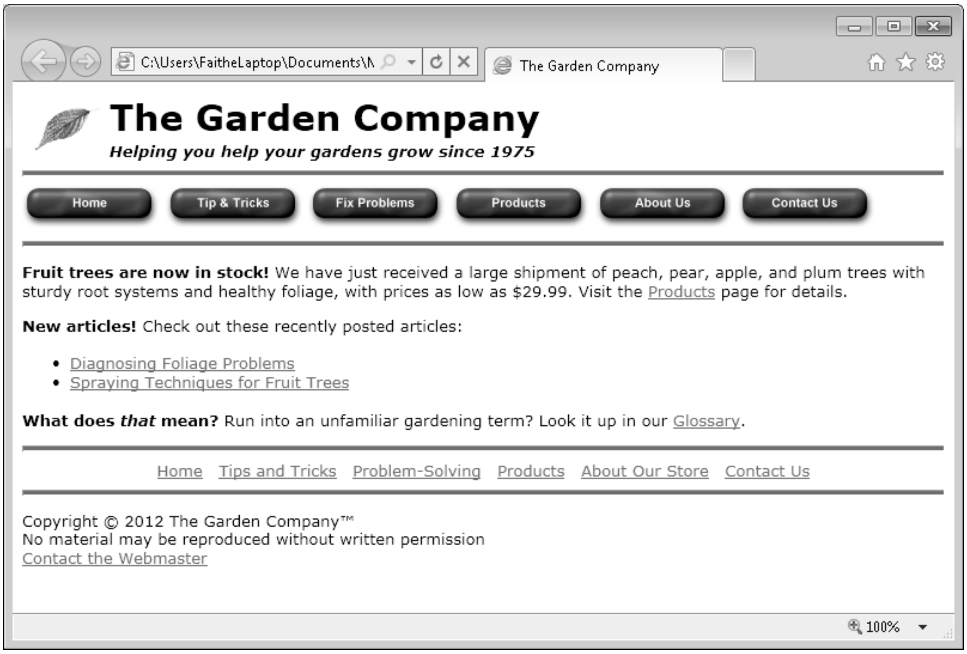
Note The <*section*> tag might sound similar to the <*div*> tag, but the HTML5 standard differentiates them, saying that <*section*> should not be used merely to define formatting. A section defines a particular type of meaningful content, not just a block of contiguous text that should be formatted the same way.

If you use semantic tags to structure your page and someone views it with a browser that doesn't support HTML5, the page might not look the way you want it to; the browser will ignore the tags it doesn't understand. That's why, for the time being, creating the page structure using <*div*> tags is the safest way to go. However, it's important that you learn the HTML5 semantic tags too, for future reference.

In this chapter, you'll learn to mark up a document both ways: with generic <*div*> tags that are readable in any browser, and with the new HTML5 semantic tags.

Beginning to Think in Divisions

In an effective division-based layout, each part of the page you want to format separately should be a *division*. For now, don't think about whether the division will be a vertical or horizontal area on the page, or how large or small it will be; just think about the content. For example, look at the following Web page. How many natural divisions do you see here?



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If you were designing with <*div*> tags, you might break down this page like this: the masthead, the top navigation bar, the body text, the bottom navigation bar, and the copyright notice.

If you were designing with HTML5 semantic tags, you might break it down like this: <*header*> for the masthead, <*nav*> for the navigation bars, and <*footer*> for the copyright notice. Formatting each of the paragraphs in the body with its own <*article*> tag might be overkill for this page, but in a page with more content, you might use <*article*>, <*aside*>, or <*section*> to break content down into manageable pieces.

Creating Divisions

You use an *id* attribute to give a name to a division, like this:

```
<div id="masthead">
```

Each ID must be unique within the document, but multiple documents can use the same division names. Such reuse is good, in fact, because it lets you define the formatting of multiple documents with a single style sheet.

In this exercise, you will create divisions within a page. Then in later exercises, you will position and format those divisions.

SET UP Use the *index.htm* file in the practice file folder for this topic. This file is located in the Documents\Microsoft Press\HTML5 SBS\11Divisions\CreatingDivisions folder. Open the *index* file in Microsoft Notepad and Microsoft Internet Explorer.

1. Enclose the logo, company name, and tagline in a <*div*> tag, and name the tag **masthead**.

```
<body>
<div id="masthead">
<a href="http://www.contoso.com" title="Home page">
<img src="images/leaf.gif class="logo""></a>
<h1 class="pagetitle">The Garden Company</h1>
<h5 class="tagline"><i>Helping you help your gardens grow since 1975</i></
h5>
</div>
```

2. Enclose the top navigation bar in a <*div*> tag, and name the tag **topnav**.

```
<div id="topnav">
<hr>
<a href="index.htm"><img src="images/btn_home.gif"
style="border:none"></a>
<a href="tips.htm"><img src="images/btn_tips.gif" style="border:none"></a>
<a href="problems.htm"><img src="images/btn_problem.gif"
style="border:none"></a>
<a href="products.htm"><img src="images/btn_products.gif"
style="border:none"></a>
<a href="about.htm"><img src="images/btn_about.gif"
style="border:none"></a>
<a href="contact.htm"><img src="images/btn_contact.gif"
style="border:none"></a>
<hr>
</div>
```

Note Make sure that you include the <*hr*> tags in the topnav division.

Note As you learned in Chapter 10, "Creating Navigational Aids," the <*nav*> tag is an HTML5 semantic tag that serves the same purpose as defining a <*div*> tag, but it is intended for a navigation bar. You'll use <*nav*> in the next exercise in the chapter, where you apply HTML5 semantic tags.

3. Enclose the body paragraphs in a <*div*> tag, and name the tag **main**.

```
<div id="main">
<p><b>Fruit trees are now in stock! </b>We have just received a large
shipment of peach, pear, apple, and plum trees with sturdy root systems
and healthy foliage, with prices as low as $29.99. Visit the <a href=
"products.htm">Products</a> page for details.</p>
<p><b>New articles!</b> Check out these recently posted articles:
<ul>
<li><a href="foliage.htm">Diagnosing Foliage Problems</a></li>
<li><a href="spray.htm">Spraying Techniques for Fruit Trees</a></li>
</ul>
<p><b>What does <i>that</i> mean?</b> Run into an unfamiliar gardening term?
Look it up in our <a href="glossary.htm" target="_blank">Glossary</a>.</p>
</div>
```

4. Enclose the bottom navigation bar in a <*div*> tag, and name the tag **bottomnav**.

```
<div id="bottomnav">
<hr>
<p style="margin:0px; text-align: center">
<a href="index.htm">Home</a> &nbsp;
<a href="tips.htm">Tips and Tricks</a> &nbsp;
<a href="problems.htm">Problem-Solving</a> &nbsp;
<a href="products.htm">Products</a> &nbsp;
<a href="about.htm">About Our Store</a> &nbsp;
<a href="contact.htm">Contact Us</a></p>
<hr>
</div>
```

5. Enclose the copyright notice in a <*div*> tag, and name the tag **copy**.

```
<div id="copy">
<p>Copyright &copy; 2012 The Garden Company&trade;<br>
No material may be reproduced without written permission<br>
<a href="mailto:webmaster@contoso.com?subject=Question/Comment" title=
"webmaster@contoso.com">Contact the Webmaster</a></p>
</div>
```

6. Save the file.

Note You do not need to view your work in Internet Explorer this time because you have not made any changes that change the rendering or appearance of the page. You will do that later in the chapter.

CLEAN UP Close the Notepad and Internet Explorer windows.

Creating an HTML5 Semantic Layout

If you prefer to use the HTML5 semantic tags to create your layout, you choose the appropriate tags based on the *purpose* of the text. It's conceptually very much the same as using a *<div>* tag with an *id* attribute, but the tag itself provides the context. For example, instead of the *<div id="masthead>* tag, you would use the *<header>* tag.

In this exercise, you will change a division-based document to one that uses semantic tags to define the layout.

SET UP Use the *index2.htm* file in the practice file folder for this topic. This file is located in the Documents\Microsoft Press\HTML5 SBS\11Divisions\UsingSemantic folder. Open the *index2* file in Microsoft Notepad and Microsoft Internet Explorer.

1. Replace the *<div id="masthead">* tag with *<header>*, and change its closing *</div>* tag to *</header>*.

```
<body>
<header>
<a href="http://www.contoso.com" title="Home page">
<img src="images/leaf.gif class="logo""></a>
<h1 class="pagetitle">The Garden Company</h1>
<h5 class="tagline"><i>Helping you help your gardens grow since
1975</i></h5>
</header>
```

2. Replace the *<div id="topnav">* tag with *<nav>*, and change its closing *</div>* tag to *</nav>*.

```
<nav>
<hr>
<a href="index.htm"><img src="images/btn_home.gif"
style="border:none"></a>
<a href="tips.htm"><img src="images/btn_tips.gif" style="border:none"></a>
<a href="problems.htm"><img src="images/btn_problem.gif"
style="border:none"></a>
<a href="products.htm"><img src="images/btn_products.gif"
style="border:none"></a>
<a href="about.htm"><img src="images/btn_about.gif"
style="border:none"></a>
<a href="contact.htm"><img src="images/btn_contact.gif"
style="border:none"></a>
<hr>
</nav>
```

Note Because the bottom navigation bar should be formatted differently than the top one, leave it formatted as a division. That way you can use the *<nav>* tag to define the formatting for only the top navigation bar.

3. Delete the *<div id="main">* tag and its closing *</div>* tag.
4. Enclose the first paragraph of the body text with an *<article>* tag.

```
<article>
<p><b>Fruit trees are now in stock! </b>We have just received a large
shipment of peach, pear, apple, and plum trees with sturdy root systems
and healthy foliage, with prices as low as $29.99. Visit the <a href=
"products.htm">Products</a> page for details.</p>
</article>
```

Note In practical usage, the individual paragraphs of body text on this page would probably not warrant their own semantic tags because this page contains so little content overall. However, for example purposes, you will mark them up anyway.

5. Enclose the second paragraph and the bulleted list that follows it with an *<article>* tag.

```
<article>
<p><b>New articles!</b> Check out these recently posted articles:
<ul>
<li><a href="foliage.htm">Diagnosing Foliage Problems</a></li>
<li><a href="spray.htm">Spraying Techniques for Fruit Trees</a></li>
</ul></article>
```

6. Enclose the last body paragraph with an *<aside>* tag.

```
<aside>
<p><b>What does <i>that</i> mean?</b> Run into an unfamiliar gardening term?
Look it up in our <a href="glossary.htm" target="_blank">Glossary</a>.</p>
</aside>
```

Leave the bottom navigation bar's *<div>* tag as is.

7. Replace the *<div id="copy">* tag with *<footer>*, and change its closing *</div>* tag to *</footer>*.

```
<footer>
<p>Copyright &copy; 2012 The Garden Company&trade;<br>
No material may be reproduced without written permission<br>
<a href="mailto:webmaster@contoso.com?subject=Question/Comment" title=
"webmaster@contoso.com">Contact the Webmaster</a></p>
</footer>
```

8. Save the file.

Note You do not need to view your work in Internet Explorer this time because the changes you have made do not change the rendering.

CLEAN UP Close the Notepad and Internet Explorer windows.

Positioning Divisions

There are two ways of positioning a division (or equivalent semantic-tagged block): you can use the *float* style rule, as you did with pictures in Chapter 9, "Displaying Graphics", or you can use the *position* style rule. The following sections explain each of these methods.

Note In the rest of this chapter, for simplicity, I use the term *division* generically to mean both the <*div*> tag and the HTML5 semantic tags. In most cases, browsers handle the formatting and positioning the same way.

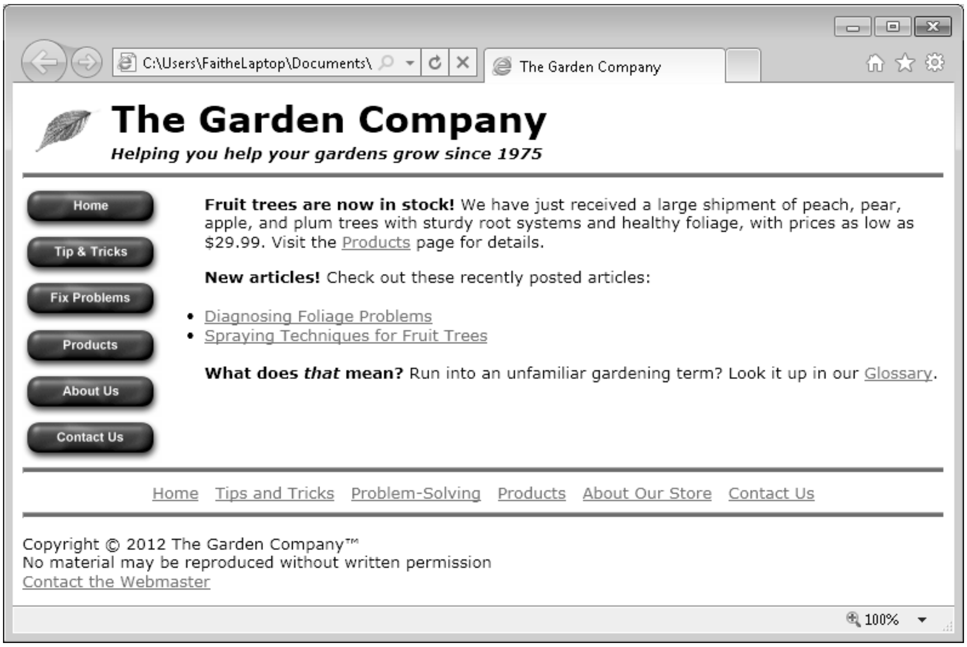
Floating a Division to the Right or Left

The easiest way to place one division beside another is to use the *float* style rule. For example, to make a navigation bar that floats to the left of the main body text, you can set the navigation bar's division to a certain width (perhaps 150 pixels or so), and then float it like this:

```
<div id="topnav" style="width: 150px; float: left">
```

Alternatively, if you were using the <*nav*> tag for the navigation bar, it would look like this:

```
<nav style="width: 150px; float: left">
```



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Because the main advantage of using divisions is to promote consistency across documents, you would probably want to set up the style rule in an external style sheet rather than in the individual division tag or an internal style sheet.

In a style sheet, you precede the names of unique elements such as divisions with a pound sign (#), as shown in the following:

```
#topnav {width: 150px; float: left}
```

Alternatively, if you were using the *<nav>* tag for the navigation bar, the style rule in the style sheet would look like this:

```
nav {width: 150px; float: left}
```

Positioning a Division on the Page

If you need a division to be in a specific spot on the page, use the *position* style rule, which has three possible values:

- *position: absolute* This value specifies a fixed position with respect to the parent element. Unless the element is within some other tag, the parent element is generally the *<body>* tag; in this case, the element would have a fixed position relative to the upper-left corner of the page.
- *position: relative* This value specifies an offset from the element's natural position. Other elements on the page are not affected, even if the new position causes elements to overlap.
- *position: fixed* This value specifies a fixed position within the browser window that doesn't change even when the display is scrolled up or down. Internet Explorer does not support this setting.

You must use each of these values in conjunction with a *top*, *right*, *bottom*, and/or *left* style rule that specifies the location to which the *position* rule refers. For example, to position a division called *main* exactly 100 pixels from the top of the page and 200 pixels from the left side, create this style rule in the style sheet:

```
#main {position: absolute; top: 100px; left: 200px}
```

Note **When using semantic tags, you won't have one that defines the entire main body of the page content, so you might want to create a division for that purpose if you want to specify an exact position for all the body text on the page. As this example illustrates, it's okay to mix up semantic tags and *<div>* tags in your work. The *<div>* tag is not deprecated in HTML5; it's still perfectly valid.**

You can combine positioning with a *width* specification to position each division in a precise rectangular area on the screen. For example, to place the top navigation bar exactly 100 pixels from the top of the page and make it 150 pixels wide, use the following:

```
#topnav {position: absolute; top: 100px; width: 150px}
```

Or, if you are using the <*nav*> tag instead, use this:

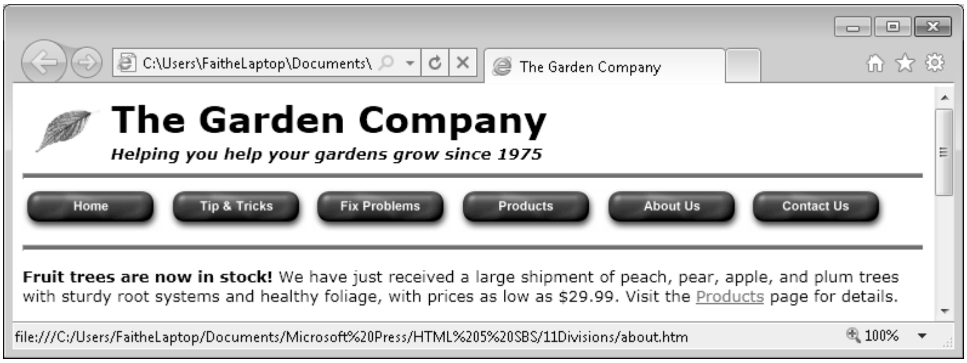
```
nav {position: absolute; top: 100px; width: 150px}
```

The *position* style rule results in positioning that does not take into regard other elements on the page. This can get you in trouble because elements can potentially overlap unattractively, but it can also be used to intentionally create overlapping elements. For example, you can use this feature to overlay text on a photo.

In this exercise, you will specify a size and position for several divisions by creating rules that refer to those divisions in an external style sheet. This example file uses a mixture of HTML5 semantic tags and generic <*div*> tags.

SET UP Use the *default.css* and *index3.htm* files in the practice file folder for this topic. These files are located in the Documents\Microsoft Press\HTML5 SBS\11Divisions\PositioningDivisions. Open the *default.css* style sheet in Notepad, and open the *index3.htm* file in Internet Explorer.

1. In Internet Explorer, view the *index3* file. Note the position of the top navigation bar.



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file:///C:/Users/FaitheLaptop/Documents/Microsoft%20Press/HTML%205%20SBS/11Divisions/about.htm

2. In Notepad, in *default.css*, add the following style rule:

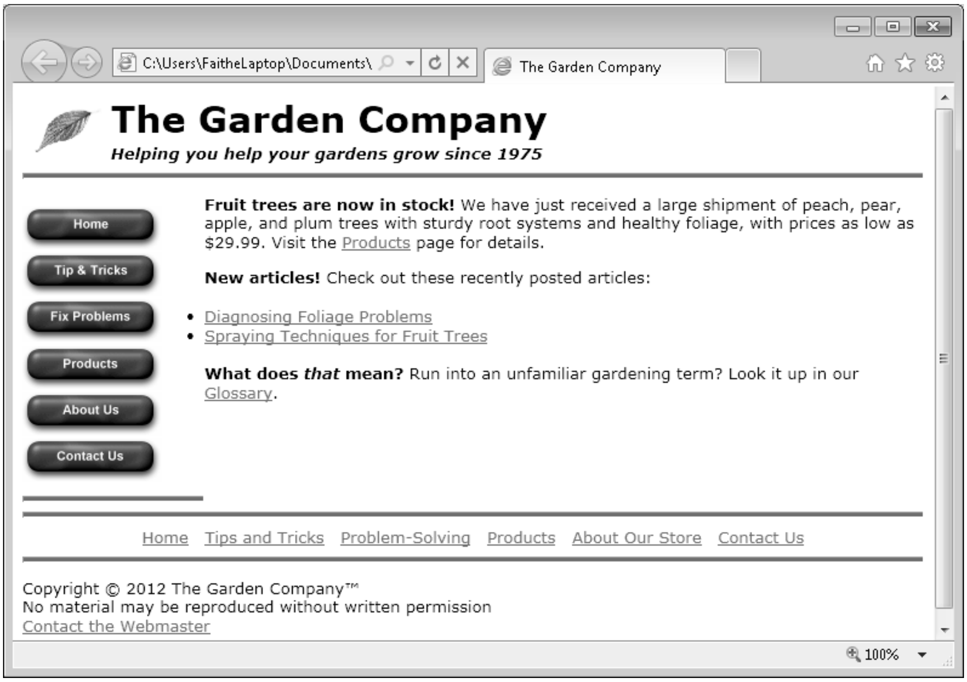
```
nav {float: left; width: 150px; padding-top: 15px}
```

Note You can add the style rule anywhere in default.css; adding it at the end of the file is fine.

3. Save the file, and then refresh Internet Explorer.

The navigation bar now appears at the left side of the page.

Note Notice that when the navigation bar is laid out vertically, the horizontal rule below it looks awkward.



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4. Open *index3.htm* in Notepad and remove the *<hr>* tag immediately before the *</nav>* tag. Save your work, and then refresh Internet Explorer to view the change.
5. Reopen *default.css* in Notepad if necessary. Add a style rule that limits the width of the main division to 500 pixels.

```
#main {width: 500px}
```

6. Save the file, and then refresh Internet Explorer.

   Notice that the body text begins higher on the page than the top button, which looks a bit awkward. We'll fix that next.
7. Specify an absolute position for the top of the main division that is 85 pixels from the top and 140 pixels from the left

```
#main {width: 500px; position: absolute; top: 85px; left: 140px}
```

8. Save the file, and then refresh Internet Explorer.

   Notice that the text in the main division now aligns nicely with the top of the buttons.

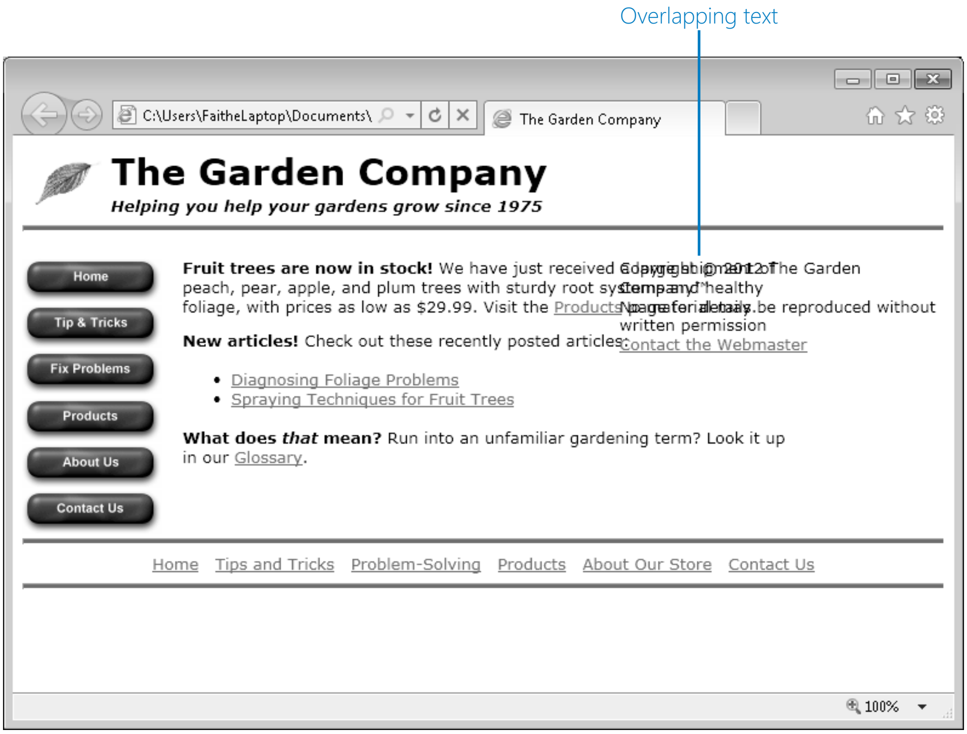
9. (Optional) Experiment with the top and left settings in *default.css*, saving your work and refreshing Internet Explorer to see the changes. Return the style rule to **top: 85px** and **left: 140px** when you are finished experimenting.

10. Position the upper-left corner of the <*footer*> section 85 pixels from the top and 500 pixels from the left side of the page.

```
footer {position: absolute; top: 85px; left: 500px}
```

11. Save the file, and then refresh Internet Explorer.

    Notice that the main and copy divisions overlap.



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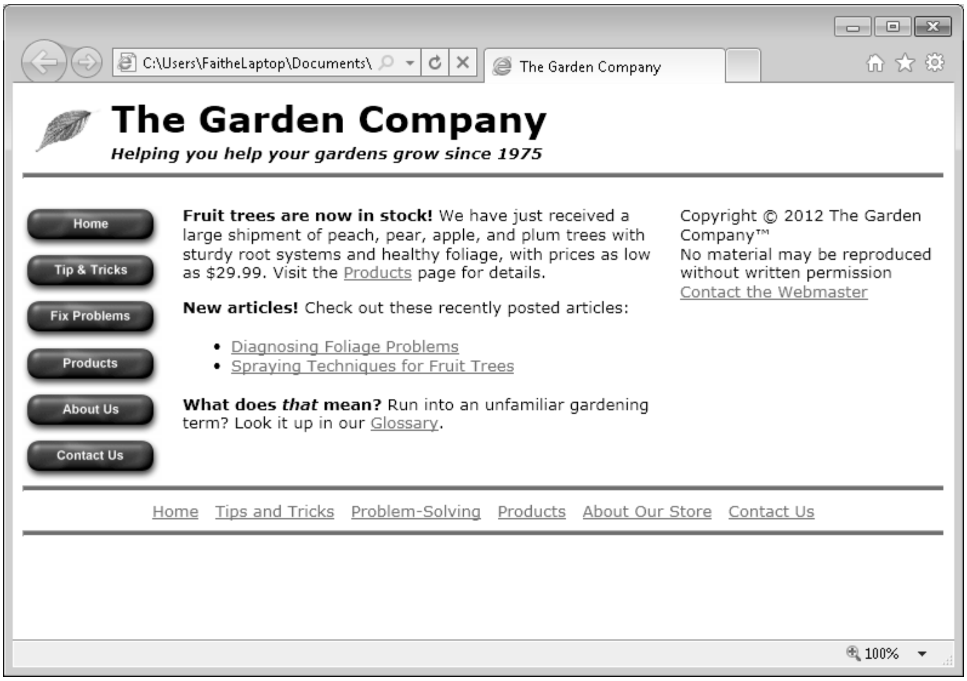
12. Modify the style rules for the main division and the footer tag so that the main division is only 400 pixels wide, and the footer starts at 550 pixels from the left:

```
#main {width: 400px; position: absolute; top: 85px; left: 140px}
footer {position: absolute; top: 85px; left: 550px}
```

13. Save the file, and then refresh Internet Explorer.

    Now the divisions share the horizontal space more attractively.



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CLEAN UP Close the Notepad and Internet Explorer windows.

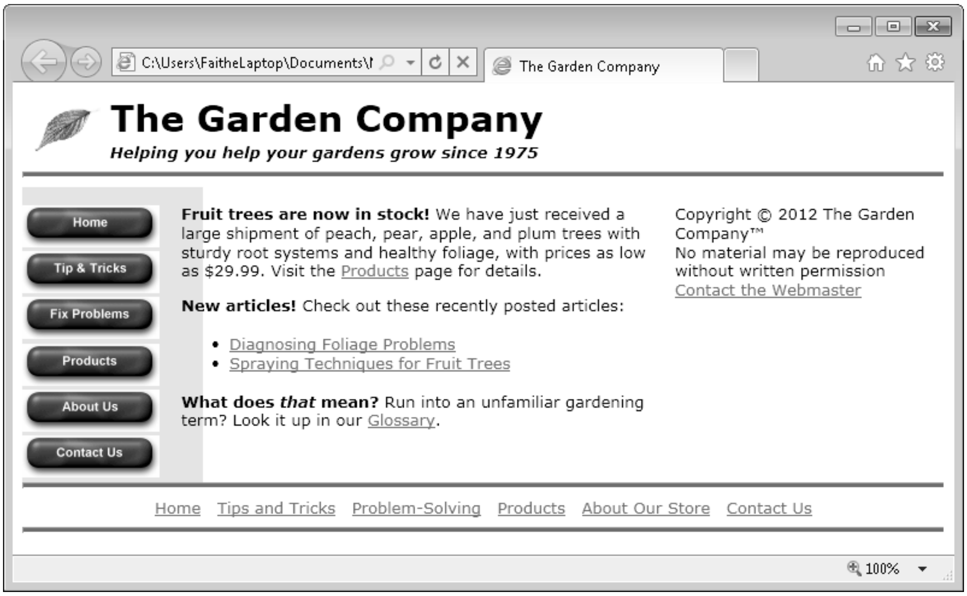
Formatting Divisions

You format divisions as you would any other elements. You can use styles to specify the font family, font style, font weight, alignment, color, and everything else covered so far in this book.

You can change the background color of a division with the *background-color* style rule. For example, to add a khaki-colored background to the navigation bar, use the following:

```
nav {float: left; width: 150px; padding-top: 15px; background-color: khaki}
```

When you start applying colors to divisions, however, you might uncover some underlying problems with your page. For example, the page for The Garden Company from the previous example looks pretty good when everything has a white background, but watch what happens when you add that khaki background to the navigation bar, as shown in the image that follows.



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There are several problems with this layout. One is that the *main* division, which has an absolute position, is overlapping the navigation bar. The root cause is that the navigation bar is wider than it needs to be. Also, the button graphics in the navigation bar have a rectangular white background—a fact that was not obvious until now.

You can fix the size and positioning issues easily enough by modifying the styles. For example, you could decrease the width of the navigation bar to 100 pixels, as shown in the following:

```
nav {float: left; width: 100px; padding-top: 15px; background-color: khaki}
```

Unfortunately, you can't fix the button background problem with HTML; you'd need to edit the button graphics in a program that supports transparency, setting each button's background to be transparent. If your graphics-editing program does not support transparency, one solution is to change each button's background color to khaki. That method is not as good, though, because you might decide to make the navigation bar some other color later. With a transparent background, the buttons will blend nicely into any background color.

Note Recall from Chapter 9 that GIF and PNG graphics formats support transparency, but JPG does not.

In this exercise, you will apply a colored background to a division and edit that division's formatting to fine-tune it.

SET UP Use the *default.css* and *index3.htm* files in the practice file folder for this topic. These files are located in the Documents\Microsoft Press\HTML5 SBS\11Divisions\FormattingDivisions folder. Open the *default.css* style sheet in Notepad, and open the *index3.htm* file in Internet Explorer.

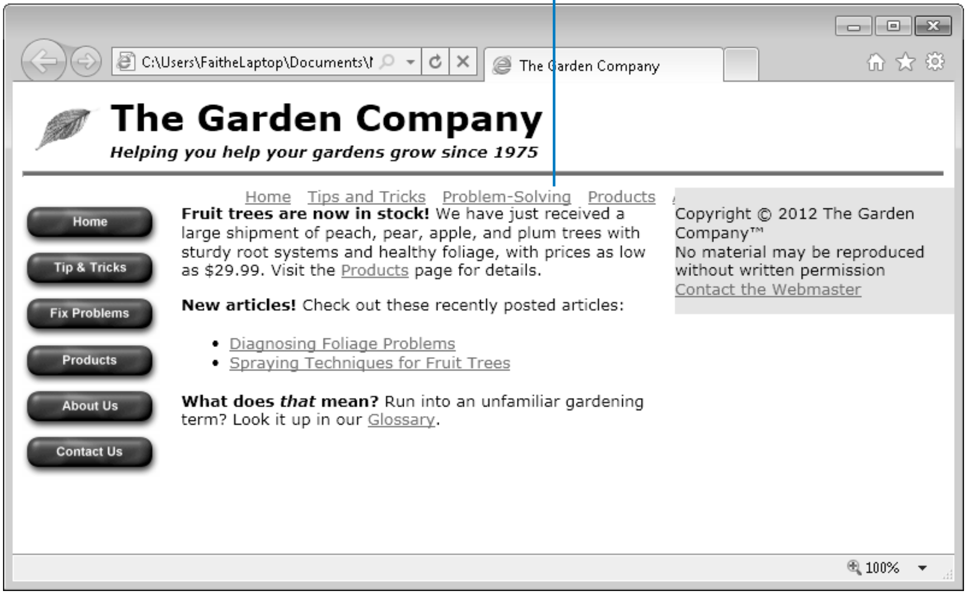
1. In the *default.css* style sheet, add the khaki background color to the footer.

```
footer {position: absolute; top: 85px; left: 550px; background-color: khaki}
```

2. Save the file, and then refresh Internet Explorer.
3. Open the *index3 file* in Notepad and delete the <*hr*> tags from the *bottomnav* division.
4. Save the file, and then refresh Internet Explorer.

   Oops! Look what has happened. Those horizontal lines were holding that division at the bottom of the page, where it belongs. Without them, the text shifted up. The browser ignores all the other divisions except the masthead because they are all absolutely positioned.

Bottom navigation bar has shifted up



Fruit trees are now in stock! We have just received a large shipment of peach, pear, apple, and plum trees with sturdy root systems and healthy foliage, with prices as low as $29.99. Visit the Products page for details.

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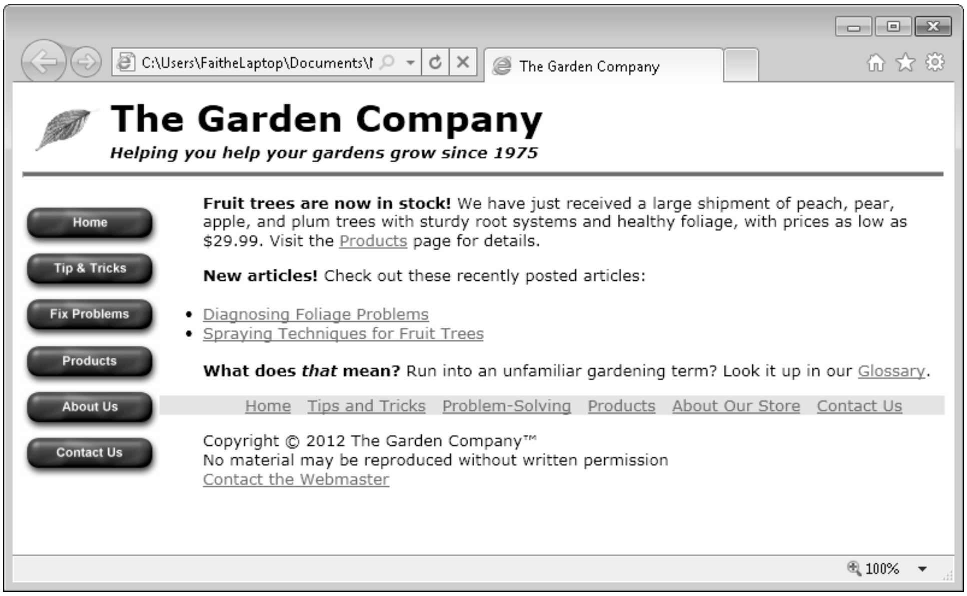
At this point you have two choices: you can set an absolute position for the *bottomnav* division, or you can get rid of the absolute positioning for all the divisions and go back to a simple float for the top navigation bar. Let's do the latter.

5. In the *default.css* style sheet, delete the *main* division's style rule as well as the style rules for the *footer*.
6. Add a style rule that changes the bottom navigation bar to khaki.

   ```
   #bottomnav {background-color: khaki}
   ```

7. Save the file, and then refresh Internet Explorer.

   Now the bottom navigation bar is back down at the bottom of the page, but it doesn't clear the navigation bar at the left.



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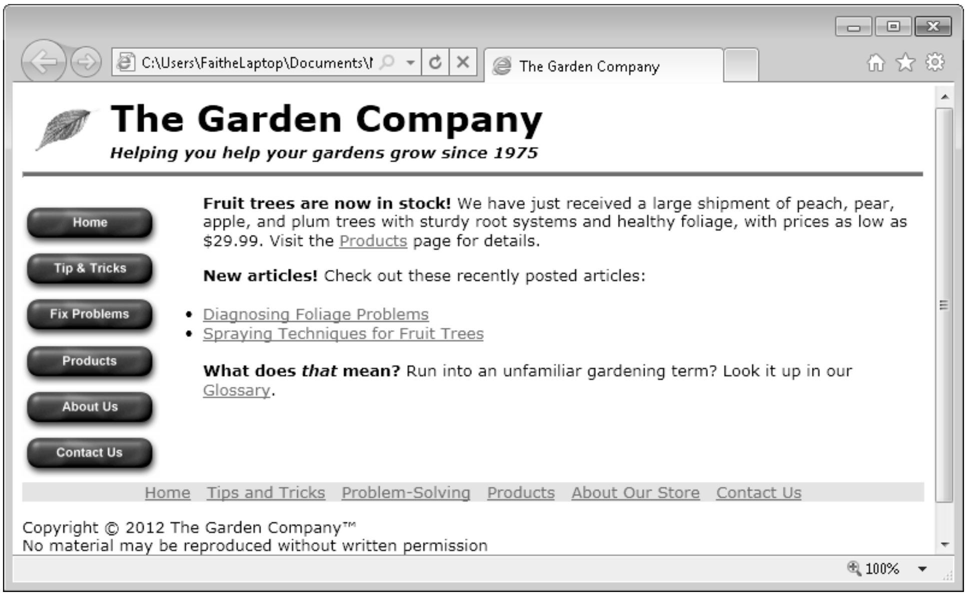
8. In the *default.css* style sheet, set the *bottomnav* division to clear any items positioned to its left.

   ```
   #bottomnav {background-color: khaki; clear: left}
   ```

9. Save the file, and then refresh Internet Explorer.



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Now give the site a new look by getting rid of the graphic and horizontal line in the masthead and inserting a background image in the *masthead* division.

10. In the *index3* file, in the header, delete the <*img*> tag for the leaf and its associated <*a*> hyperlink. Delete the horizontal line, as well. This leaves the <*header*> looking like this:

```
<header>
<h1 class="pagetitle">The Garden Company</h1>
<h5 class="tagline"><i>Helping you help your gardens grow since 1975</i></
h5>
</header>
```

Some browsers don't interpret <*header*> correctly, and the masthead is a fairly important page element to get right, so in the interest of compatibility, turn that <*header*> back into a division whose name is *header* before going any further.

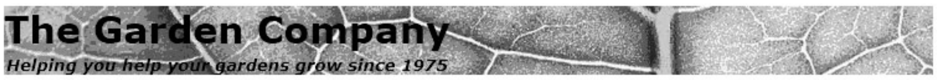
11. Change the <*header*> tag to a <*div*> tag.

```
<div id="header">
<h1 class="pagetitle">The Garden Company</h1>
<h5 class="tagline"><i>Helping you help your gardens grow since 1975</i></
h5>
</div>
```

12. Save the file.
13. In the *default.css* style sheet, add a style rule for the header division that applies an image as its background:

```
#header {background-image: url(images/leaf-green.jpg)}
```

14. Save the file, and then refresh Internet Explorer.

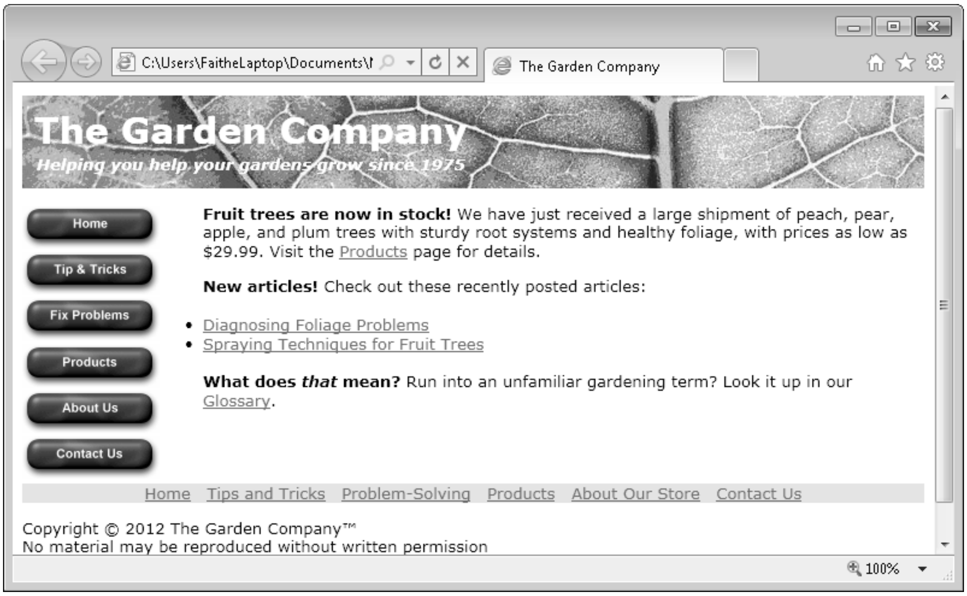


The new masthead looks interesting, but you need to add some padding and make the text easier to read.

15. Modify the style rule for the header division to use white text and to add 10 pixels of padding on all sides:

```
#header {background-image: url(images/leaf-green.jpg); padding: 10px;
color: white}
```

16. Save the file, and then refresh Internet Explorer to see the new masthead.



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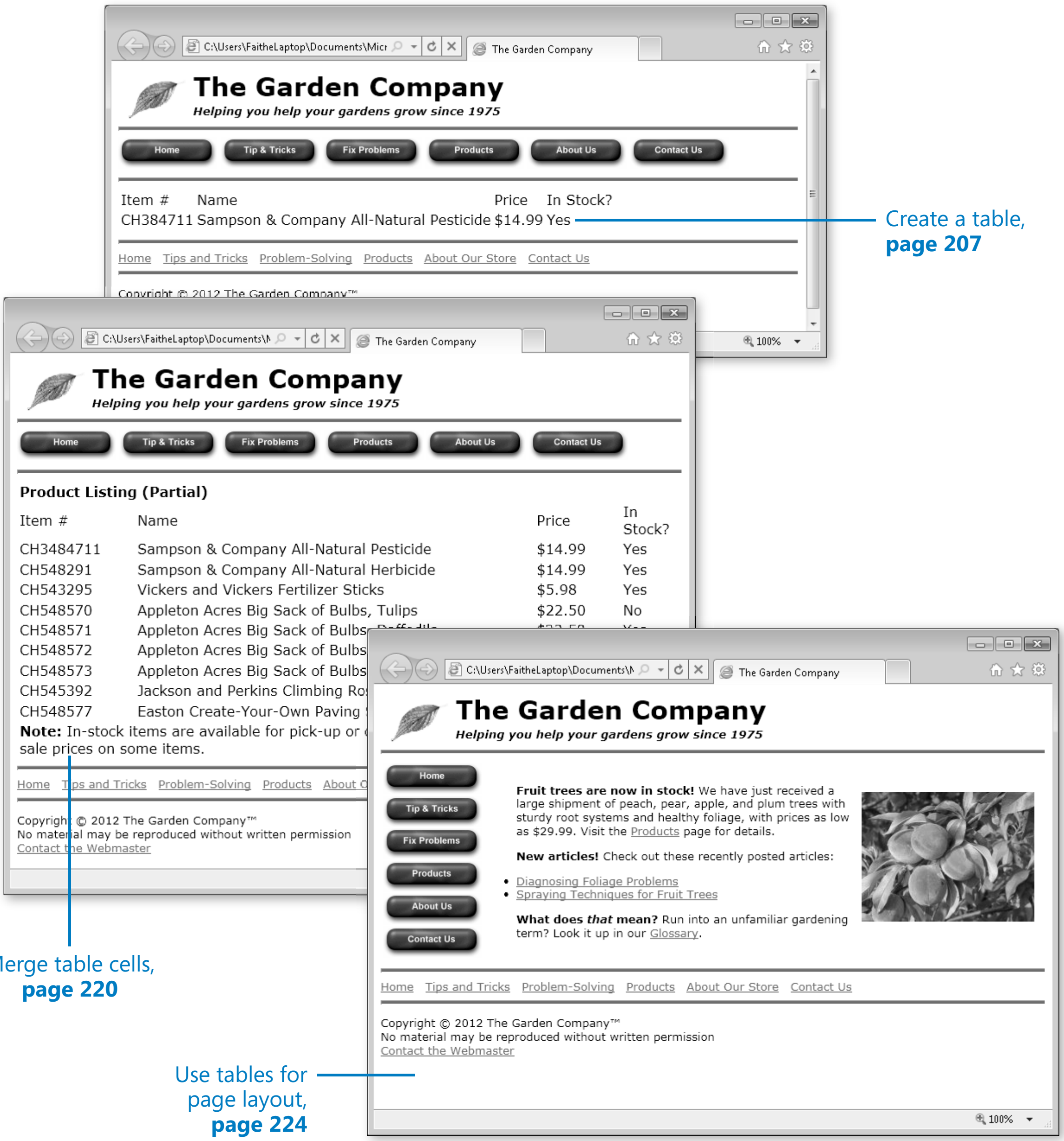
CLEAN UP Close the Notepad and Internet Explorer windows.

Key Points

- To create a division, surround a section of a page with a <*div*> tag.
- HTML5 uses semantic tags to define sections of a page. Some of the most common of these are <*header*>, <*footer*>, <*nav*>, <*article*>, <*aside*>, and <*section*>. Not all browsers support these tags yet. Internet Explorer 9.0 and higher does, as do the current versions of Google Chrome and Firefox.
- Each division tag has an *id* attribute that should be unique within that document. Multiple documents can have the same division names, though, and in fact, this is encouraged so that one external style sheet can format multiple documents.
- One way to position a division is with a *float* attribute. For example, to place a division at the left (for use as a navigation bar), use *float: left*.
- Another way to position a division is with a position attribute. The valid values are *absolute*, *relative*, and *fixed*. When you use the *position* attribute, you must also use a *top*, *bottom*, *left*, and/or *right* attribute to specify the numeric value for the position.
  - With absolute positioning, the element is positioned absolutely within its parent element, which is usually the <*body*> tag, so the element is positioned absolutely on the page.
  - With relative positioning, the element is positioned in relation to its default position.
  - With fixed positioning, the element is positioned in relation to the browser window.
- Divisions can be formatted by using the same character, paragraph, and page formatting styles you learned throughout the book, including *background-color* and *background-image*.

Chapter at a Glance



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Item # Name Price In Stock?
CH384711 Sampson & Company All-Natural Pesticide $14.99 Yes

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Product Listing (Partial)

Item #	Name	Price	In Stock?
CH3484711	Sampson & Company All-Natural Pesticide	$14.99	Yes
CH548291	Sampson & Company All-Natural Herbicide	$14.99	Yes
CH543295	Vickers and Vickers Fertilizer Sticks	$5.98	Yes
CH548570	Appleton Acres Big Sack of Bulbs, Tulips	$22.50	No
CH548571	Appleton Acres Big Sack of Bulbs		
CH548572	Appleton Acres Big Sack of Bulbs		
CH548573	Appleton Acres Big Sack of Bulbs		
CH545392	Jackson and Perkins Climbing Ro		
CH548577	Easton Create-Your-Own Paving		

Note: In-stock items are available for pick-up or
sale prices on some items.

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Create a table, **page 207**

Merge table cells, **page 220**

Use tables for page layout, **page 224**