Apply Your Knowledge

1. Predict the Result.

The students will sketch out a page with the following components: "Predict the Result" page title, "Favorite Sites" as a heading in italics, an ordered list containing hyperlinks to facebook.com and google.com, and a page footer with copyright symbol and information in a small font size.

2. Fill in the Missing Code.

The missing code is shown in red.

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Door County Wildflowers</title>
    <meta charset="utf-8">
</head>
<body>
<header>
    <h1>Door County Wild Flowers</h1>
</header>
<main>
    <dl>
        <dt>Trillium</dt>
            <dd>This white flower blooms from April through June in
wooded areas.</dd>
        <dt>Lady Slipper</dt>
            <dd>This yellow orchid blooms in June in wooded areas.</dd>
    </dl>
</main>
</body>
</html>
```

3. Find the Error.

The h1 element is coded with two opening tags. Replace the `<h1>` with `</h1>`.

Hands-On Exercises

1. **<h1>Your Name Here</h1>**

2. A suggested solution is:

Harper College

Student answers will substitute the URL and name of your school

**3. **
 **
Monday
**
 **
Tuesday
**
 **
Wednesday
**
 **
Thursday
**
 **
Friday
**
 **
Saturday
**
 **
Sunday
**
 **
**

4. <ol type="A">
 **
wake up
**
 **
eat breakfast
**
 **
go to school
**
 **
**

5. Answers will vary. Here is a sample solution.

<h1>Arthur C. Clarke</h1>
<blockquote>Any sufficiently advanced technology is indistinguishable from magic.</blockquote>

6. <p>A diagram of the organization of a web site is called a site map. A site maprepresents the structure, or organization, of pages in a website in a visual manner. Creating the site map is one of the initial steps in developing a web site.</p>

7. Answers will vary. Here is a sample with the minimum requirements.

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Blockquote Example</title>
    <meta charset="utf-8">
</head>
<body>
<h1>The Power of the Web</h1>
<p>According to Tim Berners-Lee at
<a href="https://www.w3.org/WAI/">https://www.w3.org/WAI/</a>:</p>
<blockquote>
The power of the Web is in its universality. Access by everyone
regardless of disability is an essential aspect.
</blockquote>
</body>
</html>
```

8. Answers will vary. Here is a sample with the minimum requirements.

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Network Protocols</title>
    <meta charset="utf-8">
</head>
<body>
<header>
<h1>Network Protocols</h1>
</header>
<main>
<dl>
  <dt>TCP Transmission Control Protocol</dt>
    <dd>TCP is a set of rules that breaks files and messages into individual
units called packets, verifies the integrity of the packets upon receipt, and
reassembles the packets into the file or message at the destination. </dd>
  <dt>IP Internet Protocol</dt>
    <dd>IP is a set of rules that controls how data is sent between computers
on the Internet. It usually works together with TCP. Each computer connected to
the Internet is assigned at least one numeric IP address that uniquely
identifies it. </dd>
  <dt>HTTP Hypertext Transfer Protocol</dt>
    <dd>HTTP is a set of rules for exchanging files such as text, graphic
images, sound, video, and other multimedia files on the Web. Web browsers and
web servers usually use this protocol.</dd>
</dl>
<p><a href=
"http://compnetworking.about.com/od/networkprotocols/Network_Protocols.htm">Mor
e information about protocols</a></p>
</main>
</body>
</html>
```

9. Answers will vary. Here is a sample with the minimum requirements.

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>The Beatles</title>
    <meta charset="utf-8">
</head>
<body>
<header>
<h1><a href="http://beatles.com">The Beatles</a></h1>
</header>
<main>
<h3>Group Members:</h3>
<ul type="square">
  <li>John Lennon</li>
  <li>Paul McCartney</li>
  <li>George Harrison</li>
  <li>Ringo Starr</li>
</ul>
<h3>Favorite CDs:</h3>
<dl>
  <dt>Abbey Road</dt>
```

```
    <dd>This is considered by most to be the Beatles best album. Favorite
tracks: Something, Oh! Darling, Here Comes the Sun</dd>
  <dt>Let It Be</dt>
    <dd>This is the last album that the Beatles recorded. Favorite tracks: Let
It Be, Across the Universe, The Long and Winding Road.</dd.
  <dt>Help!</dt>
    <dd>This album features Paul's masterpiece: Yesterday. Favorite tracks:
Help!, Ticket to Ride, Yesterday</dd>
</dl>
</main>
</body>
</html>
```

10. Answers will vary. Here is a sample with the minimum requirements.

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Macroni Salad</title>
    <meta charset="utf-8">
</head>
<body>
<header>
<h1>Macaroni Salad</h1>
</header>
<main>
<ul>
  <li>1 cup elbow macaroni</li>
  <li>1 cup mayonnaise (more or less to taste)</li>
  <li>1 tablespoon finely chopped onion</li>
  <li>3 or 4 medium radishes, grated</li>
  <li>2 hard boiled eggs, chopped</li>
  <li>1 dozen medium black olives, chopped</li>
</ul>
<ol>
  <li>Prepare 1 cup elbow macaroni according to directions on package. Rinse in
cold water and drain.</li>
  <li>Combine remaining ingredients in a large bowl.</li>
  <li>Stir in macaroni.</li>
  <li>Chill for several hours before serving.</li>
</ol>
Serves 8.
<div><a href="http://allrecipes.com">More Recipes</a></div>
</main>
</body>
</html>
```

11. Answers will vary. Here is a sample with the minimum requirements.

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Web Development Resource Blog</title>
    <meta charset="utf-8">
</head>
<body>
<header>
<h1>Web Development Resource Blog</h1>
</header>
<main>
<article>
<header><h2>Textbook Companion Website</h2></header>
<time datetime="2020-02-01">February 1, 2020</time>
<a href="https://webdevfoundations.net">https://webdevfoundations.net</a>
<p>This website is a companion to our textbook and provides helpful
resources for each chapter.</p>
<article>
<header><h2>HTML Validation</h2></header>
<time datetime="2020-02-02">February 2, 2020</time>
<a href="https://validator.w3.org/">https://validator.w3.org/</a>
<p>This website provides a tool to validate the HTML on our web pages.</p>
</article>
</main>
<footer>Copyright &copy; 2020 Your Name Here</footer>
</body>
</html>
```

Web Research

Your students' answers to these research assignments will vary, but they should contain most of the information described below.

A. HTML5 Tutorial Research

A sample page:

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>HTML5 Tutorial Research</title>
    <meta charset="utf-8">
</head>
<body>
<header>
<h1>EchoEcho.com</h1>
</header>
<main>
<dl>
```

```
  <dt>URL:</dt>
    <dd>http://echoecho.com/html.htm</dd>
  <dt>Level:</dt>
    <dd>This tutorial is geared for beginners, but may be useful to use as a
reference by more experienced developers.</dd>
  <dt>Recommendation:</dt>
    <dd>I would recommend this site to others. It is easy to find topics and
the examples are good.</dd>
</dl>
<h2>Two Concepts Learned:</h2>
<ol>
  <li>Links are the most fundamental part of the world wide web. It is the
links that tie it all together. There are three different kinds of links you
can have on your website: Links to anchors on the current page (Internal).
Links to other pages within the current site (Local) Links to pages outside the
current site (Global).
  </li>
  <li>Colors in HTML are specified using hexadecimal numbers. Hexadecimal
numbers are numbers based on the value of 16 rather than the classical numbers
based on the value of 10. When you count to 15 using hexadecimal numbers it
goes like this: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, A, B, C, D, E, F.
  </li>
</ol>
</main>
</body>
</html>
```

B. Web Research: Focus on Design

Expect very basic comments at this point in the course.

A Sample Page:

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Appealing Website</title>
    <meta charset="utf-8">
</head>
<body>
<header>
<h1>Focus on Web Design</h1>
</header>
<main>
<h2>Adobe</h2>
<h3>URL: http://adobe.com</h3>
<h4>This Page is Appealing Because...</h4>
<ol>
  <li>It is easy to read. There is good contrast between the text and the
background color.
  </li>
  <li>There is movement and interactivity on the page. This makes it more
interesting.
  </li>
  <li>It is easy to find what I need. The navigation is easy to use.</li>
</ol>
<h2>Galleria Furnishings</h2>
<h3>URL: http://www.galleriafurnishings.com/</h3>
```

```
<h4>This Page is Unappealing Because...</h4>
<ol>
  <li>I have to scroll down to see what I want. There doesn't seem to be any
good organization.
  </li>
  <li>The bottom of the home page has some policy information way off to the
right side. I wonder why they did that?
  </li>
  <li>I can't search for what I want. Instead I'll have to start looking at
other pages.</li>
</ol>
<h4>Suggestions for Improvement:</h4>
<ol>
  <li>I would place more information in the top portion of the web page so that
is is accessible when the page is loaded. This way visitors would not have to
scroll so much.
  </li>
  <li>I would eliminate the extra blank space on the page and move the position
of the store policy information.
  </li>
  <li>I would add a search function to the home page so that customers could
get right to the products they are looking for.
  </li>
</ol>
</main>
</body>
</html>
```