George Wythe High School Lesson Plan (Science)

Teacher: K. Allen	Content: An introduction to the use of basic html
Grade Level or Course: PLC	

STAGE 1: Desired Results ~ What will students be learning?	
Learning Objective	*The student will be able to;* • *Create a storyboard* • *Navigate a html editor* • *Create an html page with a title and a body* • *Create an html page with paragraph tags, headings, line breaks, and horizontal lines.*
Essential Questions & Understandings/Big Ideas	What is HTML? HTML (Hyper Text Markup Language) is the language used to write Web pages which consists of codes (tags) embedded in the text of a document. What are Tags? Tags are codes in an HTML document which the browser reads and then interprets for subsequent display to a reader. Tags are not visible when an HTML document is viewed in a browser, but their effects are. Tags begin with the opening symbol "<" and end with the closing symbol ">"; and usually come in pairs, one that begins an action and one that ends it.
Key Vocabulary/Formulas	<HTML>...</HTML> Encloses the entire HTML document. These tags let the browser know to start reading and displaying the information presented within. <HEAD>...</HEAD> The <HEAD> element contains all information about the document in general. It contains HTML elements that describe the document's usage and relationship with other documents. <TITLE>...</TITLE> The <TITLE> is contained in the <HEAD> of the document. It is displayed at the top of the browser window and on the bookmark list, so it is important to choose something descriptive, unique, and relatively short. <BODY>...</BODY> The <BODY> element contains all the information which is part of the document. There are a number of different attributes for the <BODY> tag (attributes are the elements included within brackets that

change the behavior or appearance of a tag). They are:

"BACKGROUND=" Specifies the image tile that is to appear in the document's background.

> EXAMPLE:
> <BODY BACKGROUND= "picturename.gif"> </BODY>

"BGCOLOR=" Sets the background color of the page. In order to do this a six digit hexadecimal number denoting a red-green-blue color value is included. Thus "000000" is black and "FFFFFF" is white and every other color in between is described using these 6 characters in different combination. In addition to the hexadecimal system, there are sixteen color names that (other than black) that can be included in the tags. They are: Aqua, Red, Green, Blue, Violet, Fuchsia, Gray, Lime, Maroon, Navy, Olive, Purple, Silver, Teal, White, and Yellow.

> EXAMPLE:
> <BODY BGCOLOR="#FFFFFF">
> This page has a white background.
> </BODY>
>   OR
>
> EXAMPLE:
>
> > <BODY BGCOLOR="W HITE">
> > This page has a white background.
> > </BODY>

"LINK=" Sets the hexadecimal color code for links that have not yet been visited.

> EXAMPLE:
> <BODY LINK="#0C6249">
> This page has blue links
> </BODY>

VLINK= Sets the hexadecimal color code for links the user has already visited.

EXAMPLE:
<BODY VLINK="#800080">
This page has purple links
after being visited
</BODY>

"ALINK=" Sets color of links that are active (ie., the color they turn when the link is clicked on).

EXAMPLE:
<BODY ALINK="#FFB50C">
This page has yellow active links
</BODY>

"TEXT=" Sets the hexadecimal color code for the default text color.

EXAMPLE:
<BODY TEXT="#00006A">
This page has blue text
</BODY>

Headings

<H1>...</H1> -- <H6>...</H6>	Used to set size of headings. Values of 1 through 6; with 1 being the largest, 6 the smallest.

Paragraphs

<P>	Used to denote a plain paragraph.

Links

<A>....</A>	Creates a link to another document or anchor.

Attributes:

HREF"..."   The URL of a document to which a given document is linked.

NAME"..."   Denotes an anchor name.

Character Formatting

<B>...</B>	Bold text.
<I>...</I>	Italic text.
<U>...</U>	Underlined text.

Frames

<FRAMESET>...</FRAMESET>	The main container for a frame document. Attributes:
	COLS="..." Specifies a frame's column size in pixels or as a percentage.
	ROWS="..." Specifies a frame's row size in pixels or as a percentage.
<FRAME>	Contains information about a single frame. Attributes:
	SRC="..." The URL of a document to be displayed in a given frame.
	SCROLLING="...." Indicates whether a frame has scroll bars (YES, NO, or AUTO).
	MARGINHEIGHT= "...." Specifies a frame margin's height in pixels.
	MARGINWIDTH="...." Specifies a frame margin's width in pixels.
<NOFRAMES>....</NOFRAMES>	Used to display text when viewed with a non-frames capable browser.

STAGE 2: Learning Plan ~ What are the strategies and activities you plan to use?	
Snapshot / Warm-up Activity	Write down HTML tags and their purposes as many as possible. The first example is shown below:

Tag Name	Purpose
<form> ... </form>	Create a form for user input

Instructional Strategies	In order to ensure optimal learning I will employ the use of • interviews; • student-centered and collaborative learning; • the use of online learning strategies; • problem based learning; and • open ended questions.

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<table>
<tr>
<td rowspan="2">Teaching and Learning Activities</td>
<td>

Power Point Presentations: https://sites.google.com/a/ttsd.k12.or.us/ms-hubbard-s-classes/class-
Assignments: https://www.washington.edu/accessit/webdesign/student/lessons.htm

Worksheets:
1. http://www.pma.com.sg/Images/ICT/9781903112618sample.pdf
2. http://www.cyberlearning-world.com/lessons/htmlws.htm

Storyboard:
1. http://nmasse.com/courses/ecom205/storyboard.php

HTTP, Client vs. Server

HTTP
1. What does HTTP stand for?

    a. What is hypertext?

    b. What are hyperlinks?

    c. What internet port number does HTTP operate on (**Hint**: Do a G
       number for HTTP")?

2. What is HTTPS?

    a. What is the difference between HTTP and HTTPS?

    b. What kinds of websites use HTTPS?

3. In all of your five internet browsers, try typing in a web site without th

    a. Does it work?

    b. In your own opinion, why do you think we still use "http://"?

Client vs. Server
       There is plenty of vocabulary to learn on the internet. None is more in
a client and a server. On the internet, **servers** are typically big, powerful co
provide content to clients. This **content** can be files, video, audio, web pag
television stations, voice mail, and much more. A **client** is anything that *us
provides*. This can be an internet browser running on a computer, a digital r
much more.

- When you type in "www.google.com" to an internet browser, what is the se

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

There are two computers involved, yours and Google's!)

- List five servers (like google.com) and the content that they provide.

Server Name	Content Provided

Fonts, Colors, Tables

In this lesson, you will learn how to change the type of font, the colors tables. If you have already done this in class, you can skip this lesson.

- **Changing Fonts**
  To change the font of certain text, surround it with <font> tags. For e

```
The cell is the <font face="Verdana">Basic Unit of Life</fo:
```

Will result in the web page below:

```
The cell is the Basic Unit of Life the cell theory.
```

Now change the font in two different sections of your web page.

- **Changing Colors**
  In order to change the color of text on your page, you can add anothe

```
<font color="red">
The cell is the <font face="Verdana"> Basic Unit of Life</font>
</font>
```

And it will result in a web page that looks like this:

```
The cell is the Basic Unit of Life – the cell theory.
```

Now, use a different color for some of your text.

- **Tables**
A table is a way to organize data on a web page. The following is a ta
rows:

First Column, First Row	Second Column, First Row
First Column, Second Row	Second Column, Second Row
First Column, Third Row	Second Column, Third Row

Here's how you would make that table in HTML:

```
<table>
    <tr>
        <td> First Column, First Row </td>
        <td> Second Column, First Row </td>
    </tr>

    <tr>
        <td> First Column, Second Row </td>
        <td> Second Column, Second Row </td>
    </tr>

    <tr>
        <td> First Column, Third Row </td>
        <td> Second Column, Third Row </td>
    </tr>
</table>
```

The rows are marked with <tr> tags and the columns are marked with
individual "cells" (the small sections of the table) to take up more than
called "COLSPAN" to change how many columns one cell takes up. For

```
<table>
    <tr>
        <td colspan="2"> First Column, First Row </td>
    </tr>

    <tr>
        <td> First Column, Second Row </td>
        <td> Second Column, Second Row </td>
    </tr>

    <tr>
        <td> First Column, Third Row </td>
```

```
            <td> Second Column, Third Row </td>
        </tr>
</table>
```

Will look like this:

First Column, First Row	
First Column, Second Row	Second Column, Second Row
First Column, Third Row	Second Column, Third Row

Now, use the table below to organize the information in your documen table; all of your text should be inside the table once you're done!

```
<table>
    <tr>
        <td colspan="2"> Put the summary of your page her
tags) </td>
    </tr>

    <tr>
        <td> Make a list of the different pages that you
</td>
        <td> Put the rest of the text of your page in her
    </tr>
</table>
```

Save your web page on line and let me know by e-mail so that I can c

Differentiation	Higher Level Thinking X Analyze data, Create diagrams and flow charts	**Resources:** E-pals Regulated Classroom E-mail (free) http://www.epals.com Internet Projects http://www.etc.bc.ca/tdebhome/int_projects.html The BIG PAGE of School Internet Projects and Educational Technology http://www.mts.net/~jgreenco/internet.html Internet in the Classroom http://www.indirect.com/www/dhixson/class.html Internet Learning Resources--Business Resources http://www.technologyindex.com/education/page5.html Classroom Technology Projects http://www.sv400.k12.ks.us/tips/projects.html

A Teacher's Guide to the Internet
http://www.solutions.ibm.com/k12/teacher/teachs.html

The Net: User Guidelines and Netiquette Index by Arlene Rinaldi
http://www.fau.edu/rinaldi/net/index.html

The Unofficial Smiley Dictionary
http://www.eff.org/papers/eegtti/eeg-286.html

WWW Searching
http://www.dsmo.com/srchres.htm

The Spider's Apprentice--Tips on Searching the Web
http://www.monash.com/spidap.html

Davesite Interactive HTML Tutorial
http://www.davesite.com/webstation.html

The Home Page Maker
http://www.wizard.com/~fifi/pagemake.html

How to Create Webpages
http://www.teleport.com/~danal/Pages/making.html

The History of the Internet
http://www.davesite.com/webstation/net-history.shtml

The Buzz--Online terms
http://www.computer-dept.com/buzz.html

Internet Lingo and Slang
http://www.dsmo.com/lingo.htm

Emoticons: Today Online Chat Dictionary
http://www.todayonline.com/social/chatdictionary.html

EFF's Extended Guide to the Internet
http://www.eff.org/papers/eegtti/eeg_toc.html

Guide to Cyberspace 6.1
http://www.eit.com/web/www.guide/guide.toc.html

Educator's Guide to the Web--by Scholastic
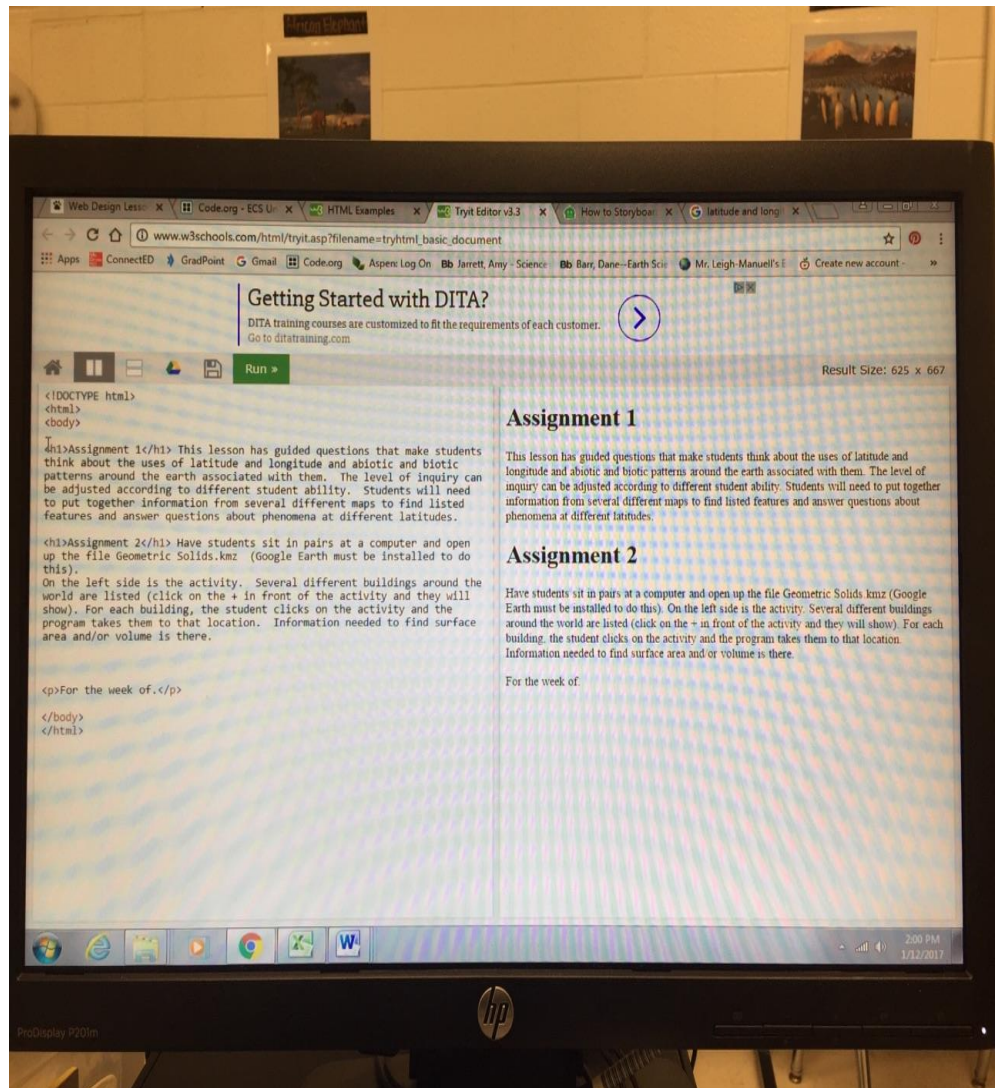http://place.scholastic.com/el/index.htm

Checking for Understanding		Question and answer Student teacher discussion Student/Group presentations Homework practice problems

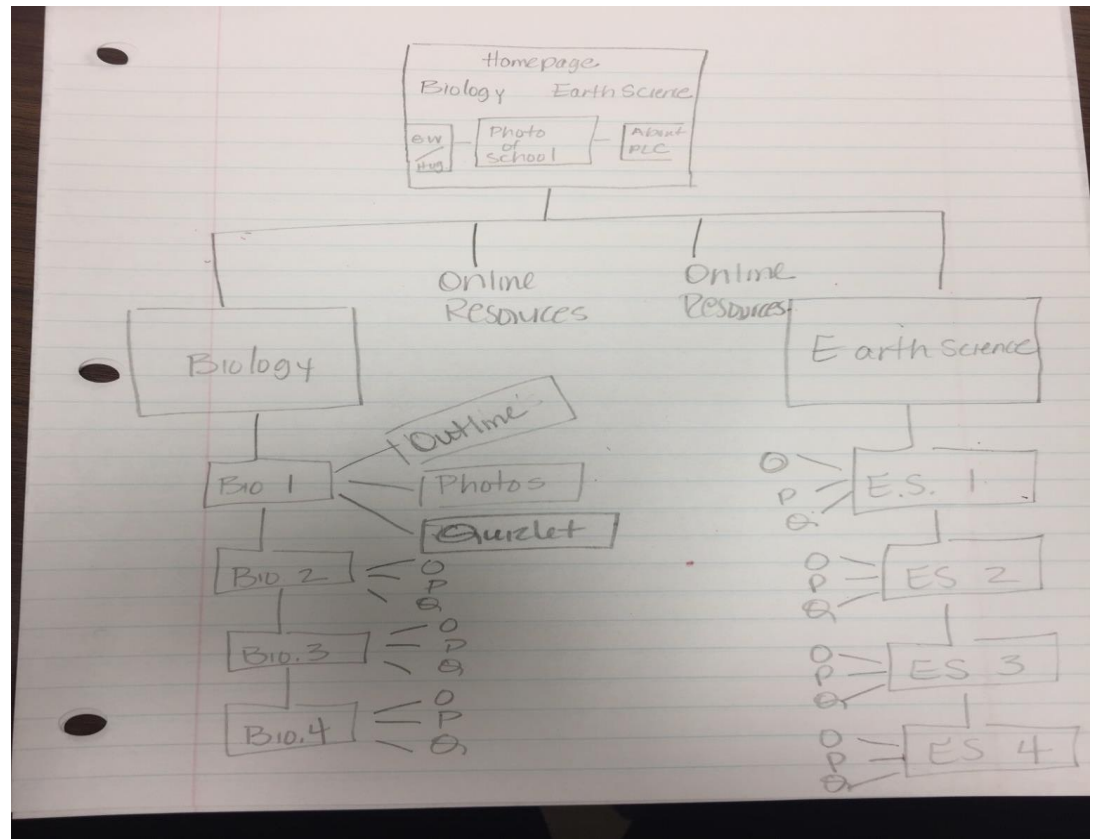|	
STAGE 3: Closure ~ What did the students master & what are they n	
Lesson Closure & Student Summarizing of their Learning	• Reviewing the key points of the lesson. • Giving students opportunities to draw conclusions from the lesson. • Describing when the students can use this new information. • Previewing future lesson. • Demonstrating student's problem-solving process.

Assessment Part 1	**The student will create a web page that utilizes one of their gradpoint topics in Bi**
	
	Anatomy or Chemistry. (http://www.how-to-build-websites.com/basic-concepts/pa
	
	## Step 1: Let's write some HTML code
	
	Open up a text editor like Notepad on Windows and type this (or: **Note:** Here's a PDF that shows yo
	
	<pre>`<html>`
	        `<head>`
	                `<title>`Your first hand coded page`</title>`
	        `</head>`
	        `<body>`
	                `<h2>`Hand coding web pages is easy! `</h2>`
	                `<p>`I would like to thank everyone who helped me type
	                 this page.`</p>`
	        `</body>`
	`</html>`</pre>
	
	## Step 2: Save the file as an HTML document
	
	Save your HTML file (save it to your desktop so you will be sure to find it!) using your text editor's 'S
	webPage.html.
	
	You can choose any name you want, as long as you follow these four rules:
	
	    Web page names cannot have spaces in them: 'web page.html' is no good but 'webPage.htm

The name has to end with either .html or .htm; by ending the file name this way you are telli
it should use a web page reader / browser to view it.

Don't use funny symbol like: $, %, ^, & in your page names. Stick to standard letters and nu

In Notepad, please save the file as UTF-8.

Mac OSX Notes: How to create an HTML document with Mac OSX (PDF)

Step 3: Marvel at your work and view your page

You should be able to now just double-click on the page or open it up with your web browser by goi
select your page.

You should be able to see your page in all its glory! Ok, not too much glory, but it was your first han
then compare what you typed with the original I gave you and just go over the process again. You w

If you're not sure if what you created is looking like it's supposed to, you can check out the final pag

STAGE 4: Assessment Evidence ~ What is evidence of mastery	
Assessment Part 2	The student will create and produce a storyboard for a web page that they will design individ
Possible misconceptions or learning gaps	The student may have trouble remembering to use correct syntax for all the different feat back and correct where they made a mistake (error). The students got bored with html la • I would first give students a completed web page and let them make changes to it and see what chart indicating the changes that occurred. • What ideas do you have about how to structure and teach this lesson? Make sure you begin with complex. What modifications do you plan to make to the lesson? Give the students templates to foll • What additional resources (if any) might be helpful in teaching this lesson? Go to other teachers
Artifacts	http://www.w3schools.com/html/tryit.asp?filename=tryhtml_basic_document

Teacher Reflection / Effectiveness of Learning: Each day I will reflect on the types of questions students ask and which processes were most difficult for students to grasp.