Number of weeks (between 6&8)	**Content of the unit**	**Assumed prior learning (**tested at the beginning of the unit)
6 Weeks	The unit is subdivided into six learning hours spread across six lessons in order to fit with most school timetables. In the first three lessons, pupils will learn the basics of HTML and CSS, and how to create a responsive design which adapts to any size of screen for viewing on, say, a mobile phone or a PC. They will learn how to create text styles and add content, including text and graphics, in a specified position on a page, as well as navigation links to other pages on their website and to external websites. The basics of good design are covered and, with the help of worksheets, pupils will develop their own templates in a text editor such as Notepad. They will decide on a topic for their websites, document their designs and collect suitable text and images. They will then use their HTML templates to create their websites, including a web form. Pupils can view the data collected by the web form into a simulated database. This also helps to stimulate discussion on the privacy of data.	Basic IT skills such as finding images and sizing or cropping them to fit a given space, selecting and editing text will be useful. Pupils should be aware of image size and its relevance to speed of loading a web page containing images.
Assessment points and tasks	**Written feedback points**	**Learning Outcomes (tested at the end and related to subject competences)**
Pupils will put evidence of their final website in an Assessment Portfolio. They will also answer questions on HTML, CSS and web design principles in order to demonstrate understanding. It is recommended that regular teacher assessment, including questioning and observation, is used in each lesson in order to reinforce the evidence of understanding in the Assessment Portfolio. The assessment describes grades as Basic, Intermediate, Advanced or Expert. It is expected that teachers will map these onto their own school assessment structure for Computing and ICT. This Scheme of Work is aimed towards GCSE Grade E-C.	Verbal feedback to be given during the lessons in order for students to improve.	**At the end of this Unit all pupils should be able to:** • Write HTML code to create a simple web page and display it in a browser • Write CSS to define the styles used in a web page • Create a simple navigation system using HTML • Use a design to create a template for a web page using HTML • Create their own multi-page website • Insert text, images and links on their web pages **Most pupils will be able to:** • Use a range of HTML tags to create well laid out web pages • Write CSS code to define the styles of different parts of a web page • Use HTML and CSS to create their web page template • Use the template to design a multi-page website with a consistent look and feel to each page • Use responsive design techniques in creating their website so that the web pages will adapt to any size of screen

		• Create a simple web form to collect user data **Some pupils will be able to:** • Add enhancements or additional features to the original basic design • Construct a good-looking, well-formatted interactive website that is suitable for its intended audience

Lesson	Clear learning intentions	Clear success criteria	Hook	Presentation of content	Guided practice	Independent practice (homework)	Closure
1	Understand that the WWW is a huge collection of websites all over the world Learn what HTML is and what it is used for Type basic HTML tags using a text editor to create a page that can be viewed in a browser Edit the HTML code and view the changes in a browser	Pupils can then create some code themselves and the instructions in the PowerPoint guide or in Web Worksheet L1 HTML	Start by discussing with pupils what the World Wide Web is. They should be able to explain that the Web is a collection of websites, each made up of multiple web pages. Explain that web pages are stored on web servers and a particular page is retrieved when a user requests it. The WWW is different from the Internet, which is a network of Interconnected Networks. The WWW is accessed via the Internet.	PowerPoint Guide: Web L1 HTML	Pupils can now be given the opportunity to try editing some existing code using the Australia.html file. Note that the activities in Web Worksheet 1 HTML are replicated on the PP slides for easy reference during the lesson. Pupils should save the Australia.html and Australia.jpg files to their own file areas with write access and then open Australia.html in a browser.	Finish off any remaining lesson tasks. i.e. New Zealand HTML.	Explain CSS has not been covered yet, there is limited scope at this stage to change font colours and styles without flaunting the rules of good practice by using deprecated html tags such as <font>. Pupils will learn how to do this in the next lesson using CSS.

2	• Learn how CSS is used to set the styles in web pages and websites • Write CSS code to set styles, e.g. background colour of sections of the page; size, font, colour and alignment of text • Learn what is meant by responsive design, and create a responsive web page • Learn the main principles of good website design	They should be able to explain that the Web is a collection of websites, each made up of multiple web pages.	Start by discussing with pupils what the World Wide Web is. Explain that web pages are stored on web servers and a particular page is retrieved when a user requests it. The WWW is different from the Internet, which is a network of **Inter**connected **Net**works. The WWW is accessed via the Internet. Explain what happens when a user types an address or URL (Uniform Resource Locator) into a browser such as Internet Explorer.	PowerPoint Guide: Web L1 HTML Web Worksheet 1 HTML	Explain that HTML is made up of **tags**. Most tags come in opening and closing pairs. All code that goes in between the tags is governed by the rules of the tags. Highlight the **Head** and **Body** sections of a webpage in a browser. In the HTML code you can point out these tags or ask the class to find them. (In the GOV.UK website, <Head> starts on line 3 and ends on line 62; <Body> starts on line 63 and ends on line 369.) Pupils can now be given the opportunity to try editing some existing code using the **Australia.html** file. Note that the activities in **Web Worksheet 1 HTML** are replicated on the PP slides for easy reference during the lesson. Pupils should save the **Australia.html** and **Australia.jpg** files to their own file areas with write access and then open **Australia.html** in a browser.	students should research on CSS and list three formats that could be done to include further CSS to their website development	Explain that as CSS has not been covered yet, there is limited scope at this stage to change font colours and styles without flaunting the rules of good practice by using deprecated html tags such as <font>. Pupils will learn how to do this in the next lesson using CSS.

3	• Complete website designs and gather content • Use an HTML template to create consistent web pages • Use **float** to position elements on a page	This lesson focuses on CSS, which is used to style web pages	Remind pupils that HTML was used in the previous lesson to describe the content of a web page. Ask pupils what styles they could change, e.g. background colour, font size, colour and alignment.	PowerPoint Guide: Web L2 CSS Web Worksheet 2 CSS	Demonstrate adding some CSS to the **NewZealand L1.html** web page. Note the American spellings; for example of 'color' and 'center'**.** **NewZealand L1.html** is a completed version of the html file at the end of lesson 1. **NewZealand L2.html** is a completed version of the html file for the end of this lesson. Show the syntax of embedded CSS styles. Demonstrate how to add multiple styles to the same tag, or styles to more than one tag: **h1 {color: white; font-size: 24pt;}** **The tag** Introduce the HTML tag. This is used like a "box" to divide up a web page into discrete sections. Each section can then be given its own CSS style rules. This can be used, for example, to create a header, a main content area and a navigation bar area within the web page. Pupils may use CSS code to define margins, borders and padding around elements. Explain that margins are the area outside of an element box to set the distance from other neighbouring elements. A border has properties for width and style, for example, solid, dotted or dashed. Padding is the distance within the box between the content and the inside border. See HTML and CSS Quick reference guide for examples of code.	Complete the Web Worksheet 3 Design Sheet and carefully label all design choices	Ask the pupils to carefully consider an audience for a new website that they will construct over the next few lessons. Some pupils may begin planning a website, using the **Web Worksheet 3 Design Sheet**. With this, they can design a new website consisting of four pages: a home page, two other pages, and a web form which they will add in lesson 5.

4	• Learn how to create a consistent look and feel throughout a website • Add well-formatted content, including text and images, to each page • Create internal and external links and make sure they all work	Pupils should be able to understand house style and what makes a consistent and professional design.	Recap on design factors from the last lesson and ask pupils to complete the **Web Worksheet 3 Design Sheet** if they have not had the opportunity yet to do so. With this, they can design a new website consisting of four pages: a home page, two other pages, and a web form which they will add in lesson 5.	PowerPoint Guide Web L3 Design Web Worksheet 3 Design Sheet	Ask pupils to copy the **Template.html** file to their own file areas with write access. This contains a basic structure of HTML and CSS for a simple website that they can use to develop the home page for their site. They may continue to use Notepad to edit the site, or alternatively, some students may find it simpler to use web development software such as Dreamweaver. This unit has, however, been written with Notepad or a similar text editor in mind. Allow pupils time to begin implementing their own designs. Pupils will probably ask how to align text beside an image; demonstrate how to use the **<float>** tag using the **L3 Home.html** page from the **Sample Website** folder.	Some pupils may have time to develop their page further by adding in bespoke buttons that they can create in a graphics package or by using an online button generator (See link	Highlight the different areas of a web page such as the main container, header, navigation bar and content areas. In the template.html file, point out the different areas in the code. Each has been commented and has a separate ** ** section with related CSS code

5	• Learn how to create a web form • Learn what happens to the input data once it has been submitted	In this lesson, pupils will learn about web forms and what happens to the data that is submitted. They will also build a 'working' web form. (The form they create will appear to post data to a web server database. In reality this is not possible without server access using a server-side script such as PHP. This example is created using JavaScript to emulate the process and demonstrate to pupils what happens to their data.)	Begin the lesson by asking pupils where web form data goes and what they think happens to it. Are the uses always legal? What are the dangers? Demonstrate a web form such as Facebook. Explain how a web form actually works: 1. You enter your personal details into a web page and click 'submit' 2. The information is sent to the web server belonging to the site owner 3. The web server processes the data and stores it in their company database 4. The server then sends a message to your browser confirming that the details have been received The company could then use this information to email you.	PowerPoint Guide: Web L5 Development	Show pupils how to begin constructing a web form using the **<form>** tags. You can demonstrate a completed form using the **Template L5 Form.html** file from the **Sample Templates** folder, or the **index.html** from the **Form Handler** folder. You can also show the form in action. A screenshot of the posted data is shown in the PowerPoint guide for reference. *(Note: This is a simulation created in javascript – the data does not really get posted anywhere!)* Ask pupils to use **Web Worksheet 4 Forms** to create their own working web form. They can also use the **readme.txt** file provided with the form handler.	Finish off web worksheet 4 Forms. Revise for upcoming test	Peer assessment Evaluate each other's work and provide www and EBI feedback

6	• Carry out final tests • Perform a self-evaluation of level of skills and understanding achieved for the unit • Complete the Assessment Portfolio • Complete the written assessment.	Complete the test to the best of their ability, remember on previous learning on the topic	Pupils should be given time, if necessary, to test their own and possibly each other's websites.	Assessment sheets.	Pupils to complete the written assessment.	Research key words for the next unit.	Update front cover for the unit.