# COMPUTING@BALCARRAS



|  |               |                                      | From strength to strength |  |
|--|---------------|--------------------------------------|---------------------------|--|
| SUBJECT  | YEAR          |                                      | TERM                      |  |
| COMPUTER SCIENCE   | 8             |                                      | 4                         |  |
| TOPIC  |               |                                      |                           |  |
| HTML & Website Development   |               |                                      |                           |  |
| CONTENT (INTENT)   |               |                                      |                           |  |
| <b>PRIOR LEARNING (TOPIC)</b> It is assumed that pupils will have  | previously le | arnt the basics o                    | of HTML and               |  |
| website layout in Year 7 and will have the understanding of how a web page is created. They will likely                    |               |                                      |                           |  |
| need to recap the programming language and general code layout basics.   |               |                                      |                           |  |
| The unit is subdivided into three learning hours spread across thr   |               | hey will learn ho                    | w to create               |  |
| navigation links to other pages on their website and to external websites. They will link their HTML page                  |               |                                      |                           |  |
| to an external CSS file to add styling to their page. They will manipulate image, saving at the correct size               |               |                                      |                           |  |
| and file format to be used within their website. The basics of accessibility in design will be covered. They               |               |                                      |                           |  |
| will decide on a topic for their websites, document their designs and collect suitable text and images.                    |               |                                      |                           |  |
| They will create their websites, including a web form. Pupils will also learn about the privacy of online                  |               |                                      |                           |  |
| data. All coding with be done on an online text editor and links sent for assessment and feedback.                         |               |                                      |                           |  |
| FUTURE LEARNING (TOPIC): HTML Project  |               |                                      |                           |  |
| IMPLEMENTATION   |               |                                      |                           |  |
| KNOWLEDGE  |               | SKILLS                               |                           |  |
| At the end of this Unit all pupils should be able to:  | Lear          | ning Skills:                         |                           |  |
| • Write HTML code to create a simple web page and display it i   | in a 🛛 Synt   | hesis: Pupils will                   | bring ideas               |  |
| browser  | toge          | ether and create                     | solutions to              |  |
| <ul> <li>Write CSS to define the styles used in a web page</li> </ul>  |               | ing safe online                      |                           |  |
| Create a simple navigation system using HTML   |               | olem solving: whe                    | en deciding               |  |
| Use a design to create a template for a web page using HTML  |               | to solve a probl                     | em and                    |  |
| Create their own multi-page website  |               | ?                                    |                           |  |
| <ul> <li>Insert text, images and links on their web pages</li> </ul>   |               |                                      |                           |  |
|  |               | Skills:                              |                           |  |
| Most pupils will be able to:   |               | aboration: on co                     | •                         |  |
| Use a range of HTML tags to create well laid out web pages   |               | al and ethical iss                   | ues in                    |  |
| <ul> <li>Write CSS code to define the styles of different parts of a web</li> </ul>  |               | puting                               |                           |  |
| page   |               | lience: when deb                     | 00 0                      |  |
| Use HTML and CSS to create their web page template   |               | e in a text-based                    | language                  |  |
| Use the template to design a multi-page website with a consistent  |               |                                      |                           |  |
| <ul> <li>look and feel to each page</li> <li>Use responsive design techniques in creating their website so that</li> </ul> |               | kills:                               |                           |  |
|  |               | ware: Using integ                    | -                         |  |
| <ul> <li>the web pages will adapt to any size of screen</li> <li>Create a simple web form to collect user data</li> </ul>  |               | elopment enviror                     |                           |  |
| Create a simple web form to collect user data  |               | s) to code progra                    | ams                       |  |
| Some pupils will be able to:   | 1:4-0         |                                      |                           |  |
| <ul> <li>Add enhancements or additional features to the original basic</li> </ul>  |               | racy Skills:                         |                           |  |
| design   |               | tal literacy: Codir                  |                           |  |
| <ul> <li>Construct a good-looking, well-formatted interactive website that</li> </ul>                                      |               | -based language<br>abulary: Learning |                           |  |
| is suitable for its intended audience  |               | learning how it l                    |                           |  |
|  |               | er subjects (varial                  |                           |  |
|  | integ         | •                                    |                           |  |
| IMPACT   | Integ         | y~'/                                 |                           |  |
|  |               |                                      |                           |  |

Pupils will write and run a program each lesson using an online IDE and submit the link to the code via the VLE. Work will be marked via the VLE using a 9-1 grading system, along with feedback on how to improve and extend their skills. A final topic assessment will be a MQC set on the VLE.

New Computing at Schools (CAS) Attainment Targets (partially covered in this Unit)

- Use two or more programming languages, one of which is textual, to solve a variety of computational problems; make appropriate use of data structures; design and develop modular programs that use procedures and functions
- Undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goals, including collecting and analysing data and meeting the needs of known users

## HOW CAN PARENTS HELP AT HOME?

Showing an interest in the topic is always the biggest help, as well as ensuring they are completing their homework to the highest effort standard. If lessons are missed, the VLE can be used to catch up with content. Pupils can practice their HTML skills at home using websites such as replit.com and w3schools.com. Parents can always join in and learn how to code too.

### HELPFUL READING/FURTHER DISCUSSION

#### READING

CGP KS3 Computing Complete Revision & Practice Hodder Compute-IT: Student's Book 1 - Computing for KS3 Smashing Magazine – A Complete Guide to HTML

#### Websites:

- Website for learning HTML: https://www.codecademy.com/learn/learn-html
- Website used for coding: <u>https://replit.com</u>
- Website used for tutorials: <u>https://www.w3schools.com/html/default.asp</u>
- Website to help theory: <u>https://www.bbc.co.uk/bitesize/guides/znkqn39/revision/8</u>

## VOCABULARY

HTML, head, body, tags, attribute, property, CSS, inline, internal, embedded, external, style, element, text editor, web browser, navigation, responsive design, hyperlink, template

| CAREERS  | EXTRA SKILLS   |
|--|--|
| <ul> <li>Junior Developer</li> <li>Website Editor</li> <li>Social Media Manager</li> <li>Digital Marketing Coordinator</li> <li>Content Editor</li> <li>Content Producer</li> <li>Digital Production Coordinator</li> <li>Website Project Manager</li> <li>Website Support Specialist</li> <li>HTML and CSS Production Specialist</li> <li>Technical Virtual Assistant</li> <li>HTML Email Developer Jobs</li> <li>Email Marketing Specialist</li> <li>Entry-Level Front End Developer Jobs</li> <li>Entry-Level Web Developer</li> <li>Webmaster Jobs</li> <li>WordPress Developer</li> </ul> | <ul> <li>Communication</li> <li>Teamwork</li> <li>Leadership</li> <li>Problem-solving</li> <li>Time management</li> <li>Organisation</li> <li>Report Writing</li> <li>Software Skills</li> </ul>   |
|  | <ul> <li>PROGRESSION <ul> <li>Online tutorials</li> <li>Cyber competitions</li> <li>Coding clubs</li> <li>GCSE Computer Science</li> <li>A-level Computer Science</li> <li>University/Apprenticeship</li> <li>Work experience</li> </ul> </li> </ul> |