## Computing - Year 8 - Learning Journey 2023-2024

| Week           | Date   | Key Construct                      | Торіс  | Assessment<br>Objectives   | Work that will be assessed              |
|----------------|--|------------------------------------|--|----------------------------|---|
| 1 (Wed)        | 04.09.23                                     | KC 1                               | Parts of a Computer System   | 1,1, 1.3                   | Written Report:                         |
| 2              | 11.09.23                                     | Impact of Digital Technology       | CPU and RAM. Clock Speed and word-size. Graphics and network cards.  | 3.1, 3.2, 3.5              | Compare the performance of              |
| 3              | 18.09.23                                     | 1                                  | Common input, output, storage & communication devices.   | 0.2, 0.2, 0.0              | different computer                      |
| 4              | 25.09.23                                     | KC 3 Computer Systems              | Comparing magnetic, optical and solid-state storage.   |                            | systems.                                |
| 5              | 02.10.23                                     |                                    | Computers in Control   |                            | Test:                                   |
| 6              | 09.10.23                                     |                                    | Examples of embedded systems. Where they are used.  Sensors, inputs, decisions and processing, forms of output.  |                            | Computers in Control.                   |
| 7              | 16.10.23                                     |                                    |  |                            |   |
| ,              | 10.10.23                                     |                                    | Contingency Lesson - Print evidence, self-assess and RAP.  |                            |   |
|                | 20.10.22                                     | KC 3                               | Half term  Different Kinds of Software   | 1.1                        | Written Report:                         |
| 9              | 30.10.23<br>06.11.23                         | Computer Systems                   | Broad types of software.   |                            | Comparison of                           |
| 10             | 13.11.23                                     | KC 2                               | Need for operating systems and common features.  Different kinds of software applications & utilities.   | 2.3                        | mobile and desktop operating systems.   |
| 11             | 20.11.23                                     | Working With                       | Different kinds of software applications & utilities.  | 3.3, 3.4                   | operating systems.                      |
| 12             | 27.11.23                                     | Software & Documents               | Working with Files Common file types for different kinds of data/application.  |                            |   |
| 13             | 04.12.23                                     | Documents                          | Overview of compression and compressed files.  |                            | Questions:                              |
| 13             | 04.12.23                                     | KC 5                               | Lifetime, management & safety of documents/data.   |                            | Keeping your                            |
| 14             | 11.12.23                                     | Data Representation                | Data Drop for books  |                            | important data safe and usable.         |
|                |  |                                    | Contingency Lesson - Print evidence, self-assess and RAP.  |                            |   |
|                | I  | 140.4                              | CHRISTMAS  |                            |   |
| 15(Tue)        | 02.01.24                                     | KC 1 Impact of Digital             | Networks and Communication Types of networks: LANs, WANs and PANs.   | 4.1, 4.2, 4.3,<br>4.4, 4.5 | Diagram of a small                      |
| 16             | 08.01.24                                     | Technology                         | Network devices: Switches, Wi-Fi adapters and routers.   | ·                          | network.                                |
| 17             | 15.01.24                                     | KC 4                               | Sending data: Data Packets, addresses and protocols.  Protecting data and networks: encryption and firewalls.  |                            | Questions:                              |
| 18             | 22.01.24                                     | Networks and                       | Issues surrounding use of networks/internet and protection   |                            | PANs, LANs and                          |
| 19             | 29.01.24                                     | Communications                     | of data.   |                            | WANs                                    |
| 20             | 05.02.24                                     |                                    |  |                            |   |
|                |  |                                    | Half term  |                            |   |
| 21             | 19.02.24                                     | KC 6                               | Algorithms to Solve Problems Breaking problems down: decomposition and sub-tasks.  | 6.1, 6.2, 6.3,             | Written Plan:                           |
| 22             | 26.02.24                                     | Problem Solving and<br>Programming | Identifying important facts and rules using abstraction.   | 6.4, 6.5                   | Decomposition of<br>Rock-Paper-Scissors |
| 23             | 04.03.24                                     |                                    | Expressing solutions as flowcharts: Linear Search.   |                            | game.                                   |
| 24             | 11.03.24                                     |                                    | Data Drop for books  |                            |   |
| 25             | 18.03.24                                     |                                    | Contingency Lesson - Print evidence, self-assess and RAP.  |                            |   |
| 26             | 25.03.24                                     |                                    |  |                            |   |
|                |  |                                    | EASTER   |                            |   |
| 27             | 17.04.24                                     |                                    | Exam Prep  |                            | Annual Exam.                            |
| 28             | 24.04.24                                     | 1                                  | Exam Prep  |                            |   |
| 29 (BH)        | 02.05.24                                     | 1                                  | Annual Exams   |                            |   |
| 30             | 08.05.24                                     | 1                                  | Annual Exams   |                            |   |
| 31             | 15.05.24                                     | 1                                  | Exam RAP / Addressing Misconceptions   |                            |   |
| 32             |  | 1                                  | Exam RAP / Addressing Misconceptions   |                            | -                                       |
|                | 22.05.74                                     | 1                                  | <u> </u>   |                            |   |
|                | 22.05.24                                     |                                    | Half term  |                            |   |
| 33             | 05.06.24                                     |                                    | Developing Computer Programs   | 6.6                        |   |
| 33<br>34       |  | KC 6                               | Developing Computer Programs Using variables, iteration and selection to solve problems.   | 6.6                        | Final Rock-Paner-                       |
|                | 05.06.24                                     | KC 6 Problem Solving and           | Developing Computer Programs Using variables, iteration and selection to solve problems. Create simple Rock-Paper-Scissors program Validating input data and making decisions about it.                              | 6.6                        | Final Rock-Paper-<br>Scissors program   |
| 34             | 05.06.24<br>12.06.24                         |                                    | Developing Computer Programs Using variables, iteration and selection to solve problems. Create simple Rock-Paper-Scissors program Validating input data and making decisions about it. Counting things that happen. | 6.6                        | •                                       |
| 34<br>35       | 05.06.24<br>12.06.24<br>19.06.24<br>23.06.24 | Problem Solving and                | Developing Computer Programs Using variables, iteration and selection to solve problems. Create simple Rock-Paper-Scissors program Validating input data and making decisions about it.                              | 6.6                        | Scissors program                        |
| 34<br>35<br>36 | 05.06.24<br>12.06.24<br>19.06.24             | Problem Solving and                | Developing Computer Programs Using variables, iteration and selection to solve problems. Create simple Rock-Paper-Scissors program Validating input data and making decisions about it. Counting things that happen. | 6.6                        | Scissors program                        |

Computing - Year 8 - Assessment Progress Tracker 2023-24

| Name:          |  |            | Autumn | Spring | Summer |
|----------------|--|------------|--------|--------|--------|
| Subject Target |  | Flightpath |        |        |        |
| Annual Exam    |  | BFL        |        |        |        |
| Grade:         |  |            |        |        |        |

|                    | Assessed Work   | Key Constructs   | Assessment<br>Objectives  | Flightpath<br>Grade |
|--------------------|---|--|---------------------------|---------------------|
| Autumn Term Part 1 | Written Report:<br>Compare the<br>performance of different<br>computer systems. | KC 3 Systems   | 1,1<br>3.1, 3.2, 3.5      |                     |
| Autumn Term Part 1 | Test:<br>Computers in Control.  | KC 1 Impact Tech.<br>KC 3 Systems                          | 1,1, 1.3<br>3.1, 3.2, 3.5 |                     |
| Autumn Term Part 2 | Written Report:<br>Comparison of mobile<br>and desktop operating<br>systems.    | KC 1 Impact Tech. KC 2 Software & Documents KC 5 Data Rep. | 1.1<br>2.3<br>3.3, 3.4    |                     |
| Autumn Term Part 2 | Questions:<br>Keeping your important<br>data safe and usable.                   | KC 1 Impact Tech. KC 2 Software & Documents                | 1.1<br>2.3<br>3.3, 3.4    |                     |
| Spring Term Part 1 | Diagram of a small network.   | KC 4 Networks & Comm.                                      | 4.1, 4.2, 4.3, 4.4        |                     |
| Spring Term Part 1 | Questions:<br>PANs, LANs and WANs   | KC 4 Networks & Comm.                                      | 4.1, 4.3, 4.4, 4.5        |                     |
| Spring Term Part 2 | Decomposing Rock-Paper-<br>Scissors game: sub-tasks,<br>rules, key variables.   | KC 6<br>Problems,<br>Programming                           | 6.1, 6.2, 6.3, 6.4, 6.5   |                     |
| Summer Term Part 2 | Final Rock-Paper-Scissors program with test results.                            | KC 6<br>Problems,<br>Programming                           | 6.6                       |                     |