## Year 7

## **Subject: Computer Science**

Year 7	Unit of work & brief outline of what will be covered.	Key Objectives – what will students learn	Assessment
1 & 2	Unit 7.1: E-Safety & Driver's license This unit covers the use of school tools such as e-praise, SMHW, Google suite and school email safely. They will be learning how to stay safe online, detect trustworthy websites, use search engines efficiently, how to deal with cyber bullying and understand laws such as Copyright Act.	By completing, this unit students will become more socially aware of using the Internet and the tools is embodies. Students should be able to use digital tools across the whole school community. In addition, they will learn to access e-mails, office 365, and they will gain a greater understanding of the implications of e-safety and cyberbullying.	Assessment is ongoing throughout the unit. Pupils complete an interim assessment (around lesson 4) which will cover websites being trustworthy, Boolean operators and laws. This will be followed by an end of unit assessment to check overall understanding. Topics will be those that are covered in the interim, plus online dangers, search engine techniques and cyber abuse. <b>Homework:</b> Three e-safety related h/w pieces to be completed every fortnight, in line with school calendar on SAMlearning and GC.
2 & 3	Unit 7.2: Programming with Scratch This unit introduces the Scratch programming environment. They will plan and develop their own games, learning to incorporate variables, procedures, lists and operators. They should be able to create a working game using computer science concepts.	By completing this unit, students can apply concepts such as sequencing, selection, subroutine, abstraction and iteration to a game in Scratch. They will be applying their knowledge of skills learnt, to create a game specified by the teacher. (Visual programming)	Assessment is ongoing throughout the unit. Pupils complete an interim assessment (around lesson 4) which will cover Scratch features, algorithms, variables and loops. This will be followed by an end of unit assessment to check overall understanding. Topics will be those that are covered in the interim, plus errors, understanding code blocks and selection. Students will submit a unit Dedicated Improvement and Reflection Time (D.I.R.T) sheet, completed for their final unit assessment. <b>Homework:</b> Students complete three scratch-based homework, in line with school calendar on SAMlearning and GC.
4 & 5	Unit 7.3: Web design with HTML This unit covers 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.	By completing this unit students 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. (Text based programming)	Assessment is ongoing throughout the unit. Pupils complete an interim assessment (around lesson 4) which will cover what is HTML, basic HTML tags and hyperlinks. This will be followed by an end of unit assessment to check overall understanding. Topics will be those that are covered in the interim, plus advanced HTML tags images, formatting and finding errors. Students will submit a unit Dedicated Improvement and Reflection Time (D.I.R.T) sheet, completed for their final unit assessment. Homework: Students complete three HTML based homework, in line with school calendar on SAMlearning and GC.
5 & 6	Unit 7.4: Modelling with Spreadsheets This unit of work cover the basics of using a spreadsheet. Students will learn many skills to enable them to model a real-world system.	By completing this unit, students will learn how to create and format a spreadsheet. They will also learn basic calculations and formulae. Students will learn how they can use spreadsheets in the real world and then model a spreadsheet for an intended purpose.	Assessment is ongoing throughout the unit. Pupils complete an interim assessment (around lesson 4) which will cover what is a spreadsheet, formulae, calculations, functions and graphs. This will be followed by an end of unit assessment to check overall understanding. This will require students creating a spreadsheet from scratch using all the tools they have learnt over the unit. Students will submit a unit Dedicated Improvement and Reflection Time (D.I.R.T) sheet, completed for their final unit assessment.

## HIGHGATE WOOD SCHOOL: CURRICULUM MAP FOR KEY STAGE 3

Homework: Students complete three spreadsheet-based homework, in line with school
calendar on SAMlearning and GC.