

## Year 7 Computer Science Curriculum Summary

Term	Unit	Threshold concepts/Core knowledge	Formative (interim) assessment & Homework	Formal assessment
<b>1 &amp; 2</b>	What's IT all about?	<p>The first unit will help students to understand the whole school computer system and use of google classroom. This unit is also designed to build upon learners computing experience from key stage 2. Students will use a range of different skills across several pieces of software packages. They will be asked to collect, analyse, and manipulate data, before turning it into graphs and charts.</p> <p>E-Safety and the importance of being a responsible and respectful user of technology is an area looked at each year with students. In this first year students will look at a range of cyber security threats and measures that can be put in place to protect against them, in order to stay safe online.</p>	<p><b><u>Literacy Homework</u></b> Key word spelling test revision sheet issued every 5 weeks</p> <p><b>Home Learning project 1</b></p> <p><b><u>Interim</u></b> Key word spelling test and extended writing task every 6 weeks.</p> <p>Do Now, Key Vocabulary and extended writing booklet</p>	<b>Baseline Assessment</b>
<b>3 &amp; 4</b>	What's under the hood?	<p>This unit of work will develop students' understanding of computer systems, digital creativity and digital awareness. The learning journey begins with a look at the development of digital technology over time before learning about the purpose of computer systems, the input-output stages, the fetch-execute cycle and the need for computer systems to convert all types of data to binary.</p> <p>Using the knowledge gained in part 1, students will then conduct a creative project using software, in order to create an interactive guide to computer system components. In the later part of this unit, students will investigate both the positive and negative impact computer systems have upon society, with a specific focus on the environment, automation and privacy.</p>	<p><b><u>Literacy Homework</u></b> Key word spelling test revision sheet issued every 5 weeks.</p> <p><b>Home Learning project 2</b></p> <p><b><u>Interim</u></b> Key word spelling test and extended writing task every 6 weeks.</p> <p>Do Now, Key Vocabulary and extended writing booklet</p>	<b>Assessment 1:</b> <i>"What's IT all about"</i> formal assessment

5	Can Pac-Man think?	<p>This unit of work will build on the learning of computational thinking skills particularly focusing on algorithmic design and programming via the software Scratch. The start of the unit will focus on consolidating computational thinking skills, before applying this to algorithms, before creating their own.</p> <p>Students will create their own Scratch game in a linear fashion whilst learning about basic programming concepts, such as variables, selection and iteration.</p>	<p><b><u>Literacy Homework</u></b> Key word spelling test revision sheet issued every 5 weeks</p> <p><b><u>Interim</u></b> Key word spelling test and extended writing task every 6 weeks. Do Now, Key Vocabulary and extended writing booklet</p> <p><b>End of unit 3 interim assessment</b></p>	
6	Comic Life!	<p>The final unit of the year allows students to work more creatively with drawing tablets and design software. The features and conventions of classic comic books and characters will be studied, as well as the importance of pre-production documentation in the graphics industry. Students will initially sketch out an original comic book character and a multiple page comic. They will then take these sketches and use them as guides to develop their own digital comic book.</p>	<p><b><u>Literacy Homework</u></b> Key word spelling test revision sheet issued every 5 weeks</p> <p><b><u>Interim</u></b> Key word spelling test and extended writing task every 6 weeks.  Do Now, Key Vocabulary and extended writing booklet</p> <p><b>End of unit 4 interim assessment</b></p>	<p><b>Assessment 2:</b> <i>"Scratch and Computational thinking"</i> formal assessment</p>