**The Sultan's School Year 6 Medium Term Curriculum plan for ICT - Information for parents**

| Block | Unit | Key Targets and Learning Objectives | Activities | Key vocabulary |
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| **Internet Safety and Digital Citizenship will be taught over the course of the year through short focused tasks, videos, peer assessment/tutoring, discussions...**<br><br>**Students in Year 6 will be enrolled in Computer Science Fundamentals Course F at www.code.org. In this course students will Design, write and debug programs that accomplish specific goals.This online course will start in Block 1 and conclude mid-way through Block 5.**<br><br>**Other short, single lesson activities which do not appear on the MTP may take place during any block dependant on school events and national holidays…** | | | | |
| 1 | **Theme Parks**<br>Digital Literacy | • Create a printable document to achieve a specific goal using *Word*<br>• Create a multimedia slideshow to achieve a specific goal using *PowerPoint*<br>• Create a spreadsheet model using a pre-prepared, macro-enabled worksheet in Excel | **Theme Parks**<br>• Students will create a spreadsheet model to explore possibilities for a theme park of their own design<br>• Students will write a persuasive letter to an imaginary bank manager requesting and justifying a loan for their park.<br>• Students will create a presentation that contains multiple forms of media including audio and video to advertise their park. | Font<br>Cut/copy/paste<br>Align<br>Layout<br>Text box<br>Image<br>Multimedia<br>Audio/video<br>Cell/row/column |
| 2 | **Spreadsheet Modelling**<br>Digital Literacy<br>Information Technology | • Enter and replicate simple mathematical formulae in Excel<br>• Understand data types and validation in order to analyse and change data to predict results<br>• Create and format graphs to represent data in a more eye-catching way using *Excel* | **Theme Parks**<br>• Students will use simple mathematical formulae such as +, -, *, / and SUM to calculate running costs, visitor spending and profit/loss<br>(*All spreadsheets must contain correct formulae, be well formatted and have graphs/charts to present data visually.*) | bar / pie chart<br>calculate<br>cell / cell format<br>chart wizard<br>data<br>fill down/series<br>formula<br>model<br>prediction<br>replication<br>x/y-axis |

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| 3 | **Programming**<br>Computer Science | • Create and edit a computer program in Scratch<br>• Use loops in a program so that commands are repeated<br>• Evaluate a program, identify mistakes and debug accordingly | **Scratch**<br>• Students continue to expand their programming skills in Scratch 2.0 by designing an interactive mathematical model.<br>• Models will use variables to calculate perimeters of regular 2D shapes from any given length | Algorithm<br>Program<br>Loop<br>If/then/else<br>Variable<br>Command<br>Block<br>Sprite<br>Background<br>Backdrop |
| 4 | **Programming**<br>Computer Science | • Write an algorithm or produce a flowchart to solve a problem or accomplish a specific goal<br>• Program a device to wait for something to happen or be controlled by a sensor using Flowol software<br>• Evaluate a program, identify mistakes and debug accordingly | **Go With the Flow Pt. 2**<br>• Students will investigate lighthouses and electrical baby mobiles to learn how they work.<br>• They will then apply this acquired logic to write flowcharts to control these devices.<br>• Success will be measured through the use of "mimics" (computer generated versions of these devices that will switch on/off or flash accordingly). | Flowchart<br>Switch on /off<br>Wait<br>Repeat<br>If<br>Then<br>Else<br>Until |
| 5 | **Webpage Design**<br>Information Technology<br>Computer Science | • Understand and use simple HTML and CSS to create a webpage<br>• Understand how data is sent over the web and how search engines work.<br>• Evaluate a program, identify mistakes and debug accordingly | **Code Avengers**<br>• Students will participate in an online introduction to HTML<br>• Students will create a simple HTML webpage in NotePad++ reflecting on their primary years.<br>• Students will explore how the internet and WWW work and how information travels and is stored. | HTML<br>CSS<br>Navbar<br>Hyperlink<br>Tags<br>Search Engine<br>Search Criteria<br>Web Browser |