Curriculum Progression

Computing

Computing		
Year 8	**Topic**	**Programme of Study**
Autumn 1	KODU (Visual Programming)	**Why This?** To show an awareness of the difference in programming mediums **Why Now?** To show the difference between block coding in year 7 and visual in year 8 **Key Knowledge** To understand game concepts (gamification) **Key Vocabulary** Terrain Path Program code World Scoring **Sources** KODU Game Lab **Curriculum Assessment tasks** Report evaluating own game. **Personal Development links** Literacy, respect
Autumn 2	APP Inventor	**Why This?** Direct experience of programming skills and creativity by creating APPS **Why Now?** Links between visual and block-based programming which then leads to text based later in the year. **Key Knowledge** How Apps are made. **Key Vocabulary** Navigate Designer Emulator Block editor Objects Attributes **Sources** MIT **Curriculum Assessment tasks** Self-assessment evidence **Personal Development links** Suitability of target audience

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Computing

Spring 1	Programming essential in Scratch 2	**Why This?** To build students confidence and knowledge of key programming constructs **Why Now?** Build on KS3 curriculum and allows students the opportunity to expand their knowledge through this study. **Key Knowledge** Focuses on key techniques used in programming. **Key Vocabulary** Sequencing Iteration Conditions Selection Operators **Sources** Scratch.mit.edu **Curriculum Assessment tasks** Summative assessment **Personal Development links** To enable students to be resilient learners
Spring 2	Media - Animations	**Why This?** To learn how animation is created in the media animation (CGI) **Why Now?** Prepares students for a media option at KS4 **Key Knowledge** Organic modelling of personalised animations **Key Vocabulary** Extrude Parenting Attributes Key frames Objects **Sources** Blender **Curriculum Assessment tasks** Rubric **Personal Development links** Graphic designers, Animators
Summer 1	Developing for the Web	**Why This?** To interpret the code behind website (HTML) **Why Now?** To differentiate between different coding concepts **Key Knowledge** HTML and CSS **Key Vocabulary** HTML Attributes

		TAGS CSS Formatting Search Engines **Sources** Txt files **Curriculum Assessment tasks** Summative Assessment **Personal Development links** Web Designer, literacy, citizenship
Summer 2	Introduction to Python (Programming)	**Why This?** To demonstrate text-based coding. **Why Now?** Last year students learnt block-based coding and Python is the next progression as its text based. **Key Knowledge** How to write programs in order **Key Vocabulary** Algorithms Syntax Assignments Integer Variables Selection **Sources** Raspberry Pi Foundation **Curriculum Assessment tasks** Summative Assessment **Personal Development links** Replicating the programming environment/transferable skills/literacy