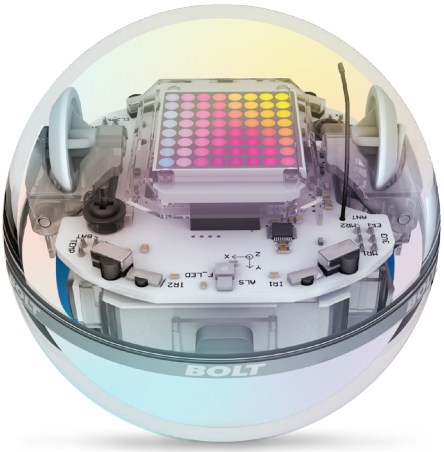
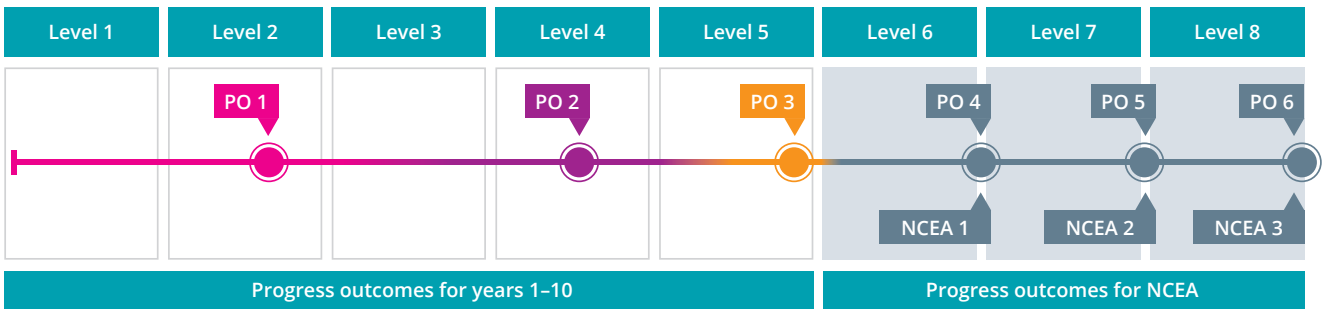
Digital Technologies Curriculum

AIM

To develop learners that have the skills, knowledge and attitudes to be digitally capable.

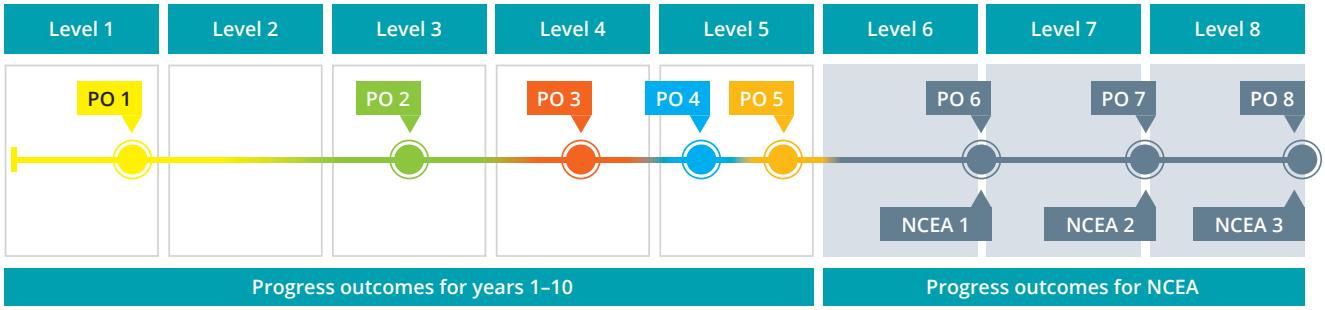


Designing and developing digital outcomes



Things we should see happening in classrooms within this strand are:		Products that support
• Identify digital devices and what they are used for • Identify inputs and outputs • Know what some applications do – e.g. FaceTime	**Progress Outcome 1**	✓3D Printers ✓iPads ✓Class VR ✓Chromebooks
• Know what parts do what and why • Use lots of different software and types of device	**Progress Outcome 2**	✓3D Printers ✓iPads ✓3D Scanners ✓Laser Cutters ✓CNC Router ✓Vacuum Forming ✓Class VR ✓Chromebooks
• Work through the design process to develop a solution to an issue • Use software and digital content to create an outcome	**Progress Outcome 3**	✓3D Printers ✓Laser Cutters ✓3D Scanners ✓Vacuum Forming ✓CNC Router
NB: will be within specialist subjects	**Progress Outcome 4–6**	✓You can choose more specialised products

Computational thinking for digital technologies



Things we should see happening in classrooms within this strand are:		Products that support	
• Giving verbal instructions to a partner to move from one side of the room to another • Giving verbal instructions for moving a toy car on a mat on the floor to a specific destination • Non-computerised activities is ok • Start to develop "debugging" – which are mistakes in their instructions	**Progress Outcome 1**	✓Art products ✓Botley ✓Code & Go Mouse ✓Sphero Indi ✓Let's Go Code ✓Dinosaur Steps	✓Sphero Bolt ✓Kai Bot
• Begin to understand term 'algorithm' • Using programming systems that use coding blocks • Understand 'debugging' and making their coding more efficient	**Progress Outcome 2**	✓Artie 3000 ✓Kai Bot ✓Sphero Indi ✓Sphero Bolt ✓Edison V3 ✓Kai's Clan ✓Dinosaur Steps	
• Difference between algorithm and programs • Binary digits introduced • Can make their coding more efficient using loops and sequences • Animation	**Progress Outcome 3**	✓Artie 3000 ✓ClassVR ✓Sphero Bolt ✓Sphero RVR ✓Edison V3 ✓Kai's Clan	✓MicroBit ✓MicroBit Expansion
• Efficient programming using sequencing, selection and iteration • Can explain inputs and outputs • Explain debugging and why/what happened • Know computers search and sort data – uses variable (like timers) • Knows binary system	**Progress Outcome 4**	✓Artie 3000 ✓ClassVR ✓Sphero Bolt ✓Sphero RVR ✓Edison V3 ✓Kai's Clan	✓MicroBit ✓MicroBit Expansion ✓Raspberry Pi
• Authentic context – given problem, need to build a solution • Solution based on 'end-user' • Use systems to document testing and debugging • Understand more complex binary digits	**Progress Outcome 5**	✓Artie 3000 ✓ClassVR ✓Sphero Bolt ✓Sphero RVR ✓Edison V3 ✓Kai's Clan	✓MicroBit ✓MicroBit Expansion ✓Raspberry Pi