





Skill	Logo	KS3 Design & Technology with links to NC		KS4 BTEC Graphic Design Practice with links to specification		
		Year 7 SOW: 1. ACCESSFM 2. Vex Robotics 3. Blockhead 4. Marquee lighting 5. J20	Year 8 SOW: 1. Design Influences 2. Vex Robotics 3. Pull Along 4. Tetris Lighting 5. Design Workshop 6. KitKat	Year 9 SOW: 1. Starpack Packaging live brief 2. Modern House Architecture	Year 10 SOW: 1. Coffee House 2. Component 3 revision	Year 11 SOW: 1. Component 3 revision
Design		<ul style="list-style-type: none"> <li>identify and understand user needs (SOW 1, 2, 5)</li> <li>identify and solve design (SOW 1, 2, 5)</li> <li>develop specifications to inform the design of innovative, functional prototypes (SOW 1, 5)</li> <li>generate creative ideas (SOW 1, 2, 3, 4, 5)</li> <li>develop and communicate design ideas using annotated sketches, 3-D oral and digital presentations and computer-based tools (SOW 1, 2, 3, 4, 5)</li> </ul>	<ul style="list-style-type: none"> <li>use research and exploration, such as the study of different cultures, to identify and understand user needs (SOW 1, 2, 6)</li> <li>identify and solve their own design problems and understand how to reformulate problems given to them (SOW 1, 2, 6)</li> <li>develop specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situations (SOW 1, 6)</li> <li>use a variety of approaches [for example, biomimicry and user-centred design], to generate creative ideas and avoid stereotypical responses (SOW 1, 2, 3, 4, 6)</li> <li>develop and communicate design ideas using annotated sketches, detailed plans, 3-D and mathematical modelling, oral and digital presentations and computer-based tools (SOW 1, 2, 3, 4, 5, 6)</li> </ul>	<ul style="list-style-type: none"> <li>Component 1 – Generating ideas in Art and Design P1, M1 and D1 exploration of art and design informed by research of art and design practice</li> <li>Component 3 – Responding to a client brief</li> </ul>	<ul style="list-style-type: none"> <li>Component 1 – Generating ideas in Art and Design P1, M1 and D1 exploration of art and design informed by research of art and design practice</li> <li>Component 3 – Responding to a client brief</li> </ul>	<ul style="list-style-type: none"> <li>Component 3 – Responding to a client brief</li> </ul>
Make		<ul style="list-style-type: none"> <li>use specialist tools, techniques, processes, equipment and machinery precisely (SOW 3, 4, 5)</li> <li>select from and use materials and components taking into account their properties (SOW 3, 4, 5)</li> </ul>	<ul style="list-style-type: none"> <li>select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computeraided manufacture. (SOW 3, 4, 6)</li> <li>select from and use a wider, more complex range of materials and components taking into account their properties (SOW 3, 4, 6)</li> </ul>	<ul style="list-style-type: none"> <li>Component 2 – Develop Practical Skills in Art and Design P1, P2, M1, D1 application of specialist skills with reasoned review and consistent improvement P3, M2, D2 – presentation and communication skills.</li> <li>Component 3 – Responding to a client brief</li> </ul>	<ul style="list-style-type: none"> <li>Component 2 – Develop Practical Skills in Art and Design P1, P2, M1, D1 application of specialist skills with reasoned review and consistent improvement P3, M2, D2 – presentation and communication skills.</li> <li>Component 3 – Responding to a client brief</li> </ul>	<ul style="list-style-type: none"> <li>Component 3 – Responding to a client brief</li> </ul>
Evaluate		<ul style="list-style-type: none"> <li>analyse the work of past and present professionals develop understanding (SOW 1, 2, 3, 4, 5)</li> <li>investigate new and emerging technologies (SOW 1, 2)</li> <li>test, evaluate and refine their ideas against a specification (SOW 1, 2, 5)</li> <li>understand developments in design and technology, its impact on individuals, society and the environment (SOW 1, 2, 4)</li> </ul>	<ul style="list-style-type: none"> <li>analyse the work of past and present professionals and others to develop and broaden their understanding (SOW 1, 2, 3, 4, 5, 6)</li> <li>investigate new and emerging technologies (SOW 1, 2)</li> <li>test, evaluate and refine their ideas and products against a specification, taking into account the views of intended users and other interested groups (SOW 1, 2, 6)</li> <li>understand developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers, engineers and technologists (SOW 1, 2, 4)</li> </ul>	<ul style="list-style-type: none"> <li>Component 1 – Generating ideas in Art and Design P1, M1 and D1 exploration of art and design informed by research of art and design practice.</li> <li>Component 2 – Develop Practical Skills in Art and Design P1, P2, M1, D1 application of specialist skills with reasoned review and consistent improvement P3, M2, D2 presentation and communication of skills.</li> <li>Component 3 – Responding to a client brief</li> </ul>	<ul style="list-style-type: none"> <li>Component 1 – Generating ideas in Art and Design P1, M1 and D1 exploration of art and design informed by research of art and design practice.</li> <li>Component 2 – Develop Practical Skills in Art and Design P1, P2, M1, D1 application of specialist skills with reasoned review and consistent improvement P3, M2, D2 presentation and communication of skills.</li> <li>Component 3 – Responding to a client brief</li> </ul>	<ul style="list-style-type: none"> <li>Component 3 – Responding to a client brief</li> </ul>
Technical Knowledge		<ul style="list-style-type: none"> <li>Use the properties of materials to achieve functioning solutions (SOW 3, 4, 5)</li> <li>understand how more advanced mechanical systems used in their products enable changes in movement and force (SOW 2)</li> <li>understand how electrical and electronic systems can be powered and used in their products [for example, circuits with light, movement, inputs and outputs] (SOW 2, 4)</li> <li>apply computing and use electronics to embed intelligence in products that respond to inputs [for example, sensors], and control outputs [for example, actuators], using programmable components [for example, microcontrollers]. (SOW 2)</li> </ul>	<ul style="list-style-type: none"> <li>Use the properties of materials and the performance of structural elements to achieve functioning solutions (SOW 3, 4, 6)</li> <li>understand how more advanced mechanical systems used in their products enable changes in movement and force (SOW 2, 3)</li> <li>understand how more advanced electrical and electronic systems can be powered and used in their products [for example, circuits with heat, light, sound and movement as inputs and outputs] (SOW 2, 4)</li> <li>apply computing and use electronics to embed intelligence in products that respond to inputs [for example, sensors], and control outputs [for example, actuators], using programmable components [for example, microcontrollers]. (SOW 2)</li> </ul>	<ul style="list-style-type: none"> <li>Component 1 – Generating ideas in Art and Design P1, M1 and D1 exploration of art and design informed by research of art and design practice</li> <li>Component 2 – Develop Practical Skills in Art and Design P1, P2, M1, D1 application of specialist skills with reasoned review and consistent improvement P3, M2, D2 presentation and communication of skills.</li> <li>Component 3 – Responding to a client brief</li> </ul>	<ul style="list-style-type: none"> <li>Component 1 – Generating ideas in Art and Design P1, M1 and D1 exploration of art and design informed by research of art and design practice</li> <li>Component 2 – Develop Practical Skills in Art and Design P1, P2, M1, D1 application of specialist skills with reasoned review and consistent improvement P3, M2, D2 presentation and communication of skills.</li> <li>Component 3 – Responding to a client brief</li> </ul>	<ul style="list-style-type: none"> <li>Component 3 – Responding to a client brief</li> </ul>