Key Stage 3 – Design Technology

Design Technology

DT1 - Use research and exploration, such as the study of different cultures, to identify and understand user needs					
Not Met	Shallow	Emerging	Developing	Deepening	Functional
DT2 - identify and solve their own design problems and understand how to reformulate problems given to them					
Not Met	Shallow	Emerging	Developing	Deepening	Functional
DT3 - develop specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situations					
Not Met	Shallow	Emerging	Developing	Deepening	Functional
DT4 - Use a variety of approaches [for example, biomimicry and user-centred design], to generate creative ideas and avoid stereotypical responses					
Not Met	Shallow	Emerging	Developing	Deepening	Functional
DT5 - Develop and communicate design ideas using annotated sketches, detailed plans, 3-D and mathematical modelling, oral and digital presentations and computer-based tools					
Not Met	Shallow	Emerging	Developing	Deepening	Functional
DT6 - Select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer-aided manufacture					
Not Met	Shallow	Emerging	Developing	Deepening	Functional
DT7 - Select from and use a wider, more complex range of materials, components and ingredients, taking into account their properties					
Not Met	Shallow	Emerging	Developing	Deepening	Functional
DT8 - Analyse the work of past and present professionals and others to develop and broaden their understanding					
Not Met	Shallow	Emerging	Developing	Deepening	Functional
DT9 - Investigate new and emerging technologies					
Not Met	Shallow	Emerging	Developing	Deepening	Functional
DT10 - Test, evaluate and refine their ideas and products against a specification, taking into account the views of intended users and other interested groups					
Not Met	Shallow	Emerging	Developing	Deepening	Functional

DT11 - Understand developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers, engineers and technologists					
Not Met	Shallow	Emerging	Developing	Deepening	Functional
DT12 - Understand and use the properties of materials and the performance of structural elements to achieve functioning solutions					
Not Met	Shallow	Emerging	Developing	Deepening	Functional
DT13 - Understand how more advanced mechanical systems used in their products enable changes in movement and force					
Not Met	Shallow	Emerging	Developing	Deepening	Functional
DT14 - 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]					
Not Met	Shallow	Emerging	Developing	Deepening	Functional
DT15 - 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].					
Not Met	Shallow	Emerging	Developing	Deepening	Functional