Introduce:

Curriculum Enrichment
AQA Design and Technology

Sandbach School Design and Technology Curriculum:

Year 9 Design and Technology Curriculum Sequence

Intent: Pupils develop creativity, imagination and practical skills and embed skills learnt in Year 7 and 8. Through developing practical experiences in Specialist Rooms, pupils draw on and develop a range of different disciplines including Mathematics, Science, Engineering and CAD. The subject embeds literacy skills through analysis and evaluation techniques.

HT1	HT2	HT3	HT4	HT5	HT6
Materials and Working Properties Presentation Box	**Materials and Working Properties Presentation Box**	**Materials and Working Properties Presentation Box**	**Materials and Working Properties Presentation Box**	**2D and 3D Sketching Techniques**	**Pine Wood Derby**

Why These modules? Introduction to practical work. Mini-project that includes the Design Process, planning, intuitive design, design fixation and basic practical skill. Pupils required to problem solve and plan their own projects		**Why These modules?** Introduction to practical work. Mini-project that includes the Design Process, planning, intuitive design, design fixation and basic practical skill. Pupils required to problem solve and plan their own projects		**Why These modules?** Building on basic presentation skills Upskilling pupils in terms of presenting ideas Developing Creativity Skills	**Why These modules?** Developing Practical Skills, planning and developing models Marking and Measuring out Materials and Creativity
National Curriculum Links **Pupils will:** Design - identify and solve their own design problems and understand how to reformulate problems given to them Design - develop and communicate design ideas using annotated sketches, detailed plans, 3-D and mathematical modelling, oral and digital presentations and computer-based tools Make - select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer-aided manufacture - select from and use a wider, more complex range of materials, taking into account their properties Evaluate - test, evaluate and refine their ideas and products against a specification, taking into account the views of intended users and other interested groups		**National Curriculum Links** **Pupils will:** Design - identify and solve their own design problems and understand how to reformulate problems given to them Design - develop and communicate design ideas using annotated sketches, detailed plans, 3-D and mathematical modelling, oral and digital presentations and computer-based tools Make - select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer-aided manufacture - select from and use a wider, more complex range of materials, taking into account their properties Evaluate - test, evaluate and refine their ideas and products against a specification, taking into account the views of intended users and other interested groups		**Specification Links** 3.2 – Specialist Technical Principles 3.2.5 – Using and Working with Materials 3.3 – Designing and Making Principles 3.3.4 – Design Strategies 3.3.5 – Communication of Design Strategies	**Specification Links** 3.3.6 – Prototype Development 3.3.7 – Selection of Materials 3.3.8 – Tolerances 3.3.9 – Material Management 3.3.10 – Specialist Tools and Equipment 3.3.11 – Specialist Techniques and Processes
Teaching These Topics Here Supports: NEA Development in Yr 10/11 Subject Knowledge and embedding understating from Years 7 and 8 Science, Maths, English		**Teaching These Topics Here Supports:** NEA Development in Yr 10/11 Subject Knowledge and embedding understating from Years 7 and 8 Science, Maths, English		**Teaching These Topics Here Supports:** Prior learning of skills learnt in Transition Phase Subject Knowledge and understanding of sketching techniques Exam Knowledge required for GCSE	**Teaching These Topics Here Supports:**
These Topics Feed From: KS3 Design and Technology		**These Topics Feed From:** KS3 Design and Technology		**These Topics Feed From:** KS3 Design and Technology	**These Topics Feed From:** KS3 Design and Technology