Curriculum Map   **Subject: DT: Product Design**   **Year Group: 13**

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Content- WHAT will be learned? What previous learning can be linked? Why this order/**sequence**?	Students are introduced to their 2 exams, one in problem solving and the other in Product Design. Two lessons a week students are given industry case studies to analyse and problem solve. Preparing for Problem Solving Product Design: Students dissect a range of case students where they have to solve problems from a designers point of view. Students learn to create products that form a solution to the problems presented, analyse information, make decisions regarding all aspects of ACCESSFM and evaluate their findings. NEA1 is a blank canvas, students come up with the need and look at the strengths, weaknesses, opportunities and threats of 4 different situations. Students create a SWAT chart for each of the 4 problems and then choose 1 to research and develop to an end product.	This term students continue on their journey of research and making. They create models to show their primary user and learn 2D design. CAD/CAM are learnt and used to create products. They also continue with their exam theory, students are working on their 2 exams, one in problem solving and the other in Product Design. Two lessons a week students are given industry case studies to analyse and problem solve.	Completion of the NEA 1 by the end of January. Students are continuing to work on exam preparation.	Exam preparation all the way from now on. Students work on mini projects to reinforce the theory.	Exam revision: Past papers, extended writing tasks, interleaving, meta cognition, recall.	
Skills- What will be developed?	Research Evaluation / Practical Strengths / Workshop and Industry Manufacturing Processes (For example CAD/CAM – Laser Cutter)	Research Evaluation / Deep thinking skills / Practical Strengths / Workshop and Industry Manufacturing Processes (For example CAD/CAM – CNC Lathe)	Research / Problem Solving / Deep Thinking Skills Workshop and Industry Manufacturing Processes (For example CAD/CAM – CNC Milling Machine)	Problem Solving / Further Research / Flash Tests / Past question analysis/Exam on a Page	Problem Solving / Metacognition / Flash Tests / Past question analysis/Exam on a Page	
Key 'How'/'Why' Questions- What **powerful knowledge** will be gained? What areas/themes/concepts will be explored?	Students must make the following: Decisions about the topic How to investigate the topic Record findings Evaluations Final conclusions.	Students need to work independently to interpret the topic in their own way while still adhering to the topic.	Coursework completed. Evaluation of exam and final conclusion for NEA coursework.	Exam Revision questions	Exam Revision questions	

	Teamwork is evident during the investigation of the topic however outcomes and evaluations must be individual.					
SEND- how will support be seen? Seating plans? Simplified questions?	Seating Plans Questions tailored to suit ability Workbook/Textbook are read through and answers to questions found. Students given individual assistance to complete theory ,not NEA. Computers are used to aid students' progress with theory Some SEND students do not have to complete every question in the workbook, depending on ability. NEA help is given but within the guidelines of the exam board. Practical: The practical task help is given but within the guidelines of the exam board. Students are teamed with more able students.	Seating Plans Questions tailored to suit ability Workbook/Textbook are read through and answers to questions found. Students given individual assistance to complete theory ,not NEA. Computers are used to aid students' progress with theory Some SEND students do not have to complete every question in the workbook, depending on ability. NEA help is given but within the guidelines of the exam board. Practical: The practical task help is given but within the guidelines of the exam board. Students are teamed with more able students.	Seating Plans Questions tailored to suit ability Workbook/Textbook are read through and answers to questions found. Students given individual assistance to complete theory ,not NEA. Computers are used to aid students' progress with theory Some SEND students do not have to complete every question in the workbook, depending on ability. NEA help is given but within the guidelines of the exam board. Practical: The practical task help is given but within the guidelines of the exam board. Students are teamed with more able students.	Seating Plans Questions tailored to suit ability Workbook/Textbook are read through and answers to questions found. Students given individual assistance to complete theory ,not NEA. Computers are used to aid students' progress with theory Some SEND students do not have to complete every question in the workbook, depending on ability. NEA help is given but within the guidelines of the exam board. Practical: The practical task help is given but within the guidelines of the exam board. Students are teamed with more able students.	Seating Plans Questions tailored to suit ability Workbook/Textbook are read through and answers to questions found. Students given individual assistance to complete theory ,not NEA. Computers are used to aid students' progress with theory Some SEND students do not have to complete every question in the workbook, depending on ability. NEA help is given but within the guidelines of the exam board. Practical: The practical task help is given but within the guidelines of the exam board. Students are teamed with more able students.	
Assessment- What? Why?	NEA: Assessment does not take place until the completion of the coursework	NEA: Assessed Moderated Marks on go4schools but not visible to students and parents	NEA: Assessment does not take place until the completion of the coursework	NEA : Assessed Moderated Marks on go4schools but not visible to students and parents.	NEA : Assessed Moderated Marks on go4schools but not visible to students and parents.	
What **memory for learning** skills will be required- modelling? Concrete answers? Retrieval?	Retrieval/Concrete answers: Testing Modelling products	Retrieval/Concrete answers: Testing Modelling products	Retrieval/Concrete answers: Testing Modelling products	Retrieval/Concrete answers: Testing Topic tests on a page.	Retrieval/Concrete answers: Testing Topic tests on a page.	Retrieval/Concrete answers: Testing Topic tests on a page.

	Independent learning: Creating products	Independent learning: Creating products	Independent learning: Creating products			
Literacy- reading, extended accurate writing and oracy opportunities	Reading around the topic Power Points Extended writing	Reading around the topic Power Points Extended writing	Reading around the topic Power Points Extended writing	Power Points Extended writing Exam on a Page	Power Points Extended writing	Power Points Extended writing
Numeracy/computing skills	Weighing Measuring Temperature control Ratio	Weighing Measuring Temperature control Ratio	Weighing Measuring Temperature control Ratio	Reading around the topic Power Points Extended writing		
Character development	All practical lessons relate directly to the NEA and are related to career opportunities.	All practical lessons relate directly to the NEA and are related to career opportunities.	All practical lessons relate directly to the NEA and are related to career opportunities. For example: Product Design, Architecture, Engineering Courses, Building Trades (Carpentry, Bricklaying, Roofing) Car Mechanics, Electrical Installation.	All practical lessons relate directly to the NEA and are related to career opportunities. For example: Product Design, Architecture, Engineering Courses, Building Trades (Carpentry, Bricklaying, Roofing) Car Mechanics, Electrical Installation. .		
Equality/Diversity opportunities	Learning styles incorporate: Visual, Kinaesthetic, Audio, Read/Write Learning accessible to all students.\n\nStudents work as teams during practical lessons to wash up, dry up and clean work areas.\n\nGlobal majority is supported in terms of curriculum and students who choose to cook products that support this. It is also supported within the textbook. Support is provided to all students and all students have equal access to enable participation and opportunities. The department actively encourages the team to avoid using stereo types within the classroom in resources and examples.	Learning styles incorporate: Visual, Kinaesthetic, Audio, Read/Write Learning accessible to all students.\n\nStudents work as teams during practical lessons to wash up, dry up and clean work areas.\n\nGlobal majority is supported in terms of curriculum and students who choose to cook products that support this. It is also supported within the textbook. Support is provided to all students and all students have equal access to enable participation and opportunities. The department actively encourages the team to avoid using stereo types within the classroom in resources and examples.	Learning styles incorporate: Visual, Kinaesthetic, Audio, Read/Write Learning accessible to all students.\n\nStudents work as teams during practical lessons to wash up, dry up and clean work areas.\n\nGlobal majority is supported in terms of curriculum and students who choose to cook products that support this. It is also supported within the textbook. Support is provided to all students and all students have equal access to enable participation and opportunities. The department actively encourages the team to avoid using stereo types within the classroom in resources and examples.	Learning styles incorporate: Visual, Kinaesthetic, Audio, Read/Write Learning accessible to all students.\n\nStudents work as teams during practical lessons to wash up, dry up and clean work areas.\n\nGlobal majority is supported in terms of curriculum and students who choose to cook products that support this. It is also supported within the textbook. Support is provided to all students and all students have equal access to enable participation and opportunities. The department actively encourages the team to avoid using stereo types within the classroom in resources and examples.	Learning styles incorporate: Visual, Kinaesthetic, Audio, Read/Write Learning accessible to all students.\n\nStudents work as teams during practical lessons to wash up, dry up and clean work areas.\n\nGlobal majority is supported in terms of curriculum and students who choose to cook products that support this. It is also supported within the textbook. Support is provided to all students and all students have equal access to enable participation and opportunities. The department actively encourages the team to avoid using stereo types within the classroom in resources and examples.	

Homework/Independent learning	Related to NEA Knowledge organisers Quizzes	Related to NEA Knowledge organisers Quizzes	Related to NEA Knowledge organisers Quizzes	Related to NEA Knowledge organisers Quizzes	Related to NEA Knowledge organisers Quizzes	
CIAG coverage/links	Progression to college Apprenticeships	Progression to college Apprenticeships	Progression to college Apprenticeships	Progression to college Apprenticeships	Progression to college Apprenticeships	