Design and Technology - Curriculum Overview - SUMMER 2027

Year 7	
What are you teaching? Summer 1	**What are you teaching? Summer 2**
Money Box Design based on Biomimicry design or cultural design. Students will work through the design process: ● *Design Ideas* ● *Design Development* ● *Prototype Modelling* *Groups will then swap after half term.*	*Money Box Design based on Biomimicry design or cultural design. Students will work through the design process:* ● *Final Workshop making* ● *Testing* ● *Evaluating* *Extra lessons depending on speed of project:* *Introduction to Google sketch Up* *Introduction to Tinker CAD.* *Groups will then swap after half term.*
Why have you chosen to teach this unit, and this time?	
● *Students have been exposed to a limited amount of practical work within a workshop.* ● *Students will gain a Health & Safety certificate to work safely in the workshop.* ● *Students will have an understanding of how to work with different materials learning their properties, how to shape, cut, finish and drill in line with the DT NC.* ● *Students will have an understanding of the design process including creating high quality design ideas, design development and final model making.* ● *Students will learn the importance and influence of biomimicry and cultural design with a user centered approach.* ● *Students are introduced to Cad via Google Sketch Up and Tinker CAD.*	
What are the 3 key pieces of knowledge you will have expected students to acquire by the end of this unit?	
● *How can we create high quality user centered products using creative design ideas and design development.* ● *What is the Design Process for a successful product and how does this relate to Biomimicry and cultural design influences.*	
Is this topic on the National Curriculum? **Yes** **Will all staff be teaching this unit?** **Yes**	

Year 8	
What are you teaching? Summer 1	**What are you teaching? Summer 2**
Gadget Tidy Design based on case studies of Apple, Under Armour and Adidas. Students will work through the design process: • *Design Ideas* • *Design Development* • *Prototype Modelling* *Groups will then swap after half term.*	*Gadget Tidy Design based on case studies of Apple, Under Armour and Adidas. Students will work through the design process:* • *Final Workshop making* • *Testing* • *Evaluating* *Groups will then swap after half term.*
Why have you chosen to teach this unit, and this time?	
• *Students need to have an understanding of working mechanisms within design and technology in line with the DT NC.* • *Students have skills in Year 7 that are spiralled down to Year 8. Students will learn further advanced workshop skills.* • *Students will discover design case studios and how they relate to everyday products.* • *What is the Design Process for a successful products and how does this relate to our chosen case studies.* • *How can we create high quality user centered products using creative design ideas and design development.*	
What are the 3 key pieces of knowledge you will have expected students to acquire by the end of this unit?	
• *How can we create high quality user centered products using creative design ideas and design development.* • *What is the Design Process for a successful product and how does this relate to our user centered design and research.*	
Is this topic on the National Curriculum? **Yes** **Will all staff be teaching this unit?** **Yes**	

Year 9	
What are you teaching? Summer 1	**What are you teaching? Summer 2**
Students will learn how to create a user centred design based on A Child's Educational Toy. *Students will receive Design and Technology as a theory delivered lesson to enable them to understand the GCSe syllabus context enabling them to make an informed decision with their GCSE options.* *Students will work through the design process:* • *Design Ideas* • *Design Development* • *Prototype Modelling* *Groups will then swap after half term.*	*Students will learn how to create a user centred design based on A Child's Educational Toy.* *Students will receive Design and Technology as a theory delivered lesson to enable them to understand the GCSE syllabus context enabling them to make an informed decision with their GCSE options.* *Students will work through the design process:* • *Final Workshop making* • *Testing* • *Evaluating* *Groups will then swap after half term.*
Why have you chosen to teach this unit, and this time?	
Students need to have an understanding of user centered design based on Educational Toys in line with the DT NC. *Students have skills in Year 8 that are spiralled down to Year 9. Students will learn further advanced workshop skills including the work of others.* *Students need to make an informed choice for GCSE options. This unit enables students to understand the demands of the GCSE and the syllabus context.*	
What are the 3 key pieces of knowledge you will have expected students to acquire by the end of this unit?	
• *Students can identify a range of electrical components and apply these to a working prototype.* • *Students understand how to adapt a design through researching the work of others.* • *Students understand further methods of workshop fabrication, fixtures and finishing techniques.* • *Students will understand a range of theory methods: Prototype modelling, annotation, The Design Process, CAD and CAM.*	
Is this topic on the National Curriculum? **Yes** **Will all staff be teaching this unit?** **Yes**	

Year 10	
What are you teaching? Summer 1	**What are you teaching? Summer 2**
AQA exam board theme released on June 1st. Start of the NEA final coursework worth 50% of their final GCSE grade. *Section A - Research and Investigation of the NEA coursework based on the theme given by the exam board.* *A bank of Exam questions focusing on exam techniques, misconceptions and areas of weakness identified in the Year 10 mock.*	*AQA exam board theme released on June 1st. Start of the NEA final coursework worth 50% of their final GCSE grade.* *Section B - Creating a Design Brief and Specification of the NEA coursework based on the theme given by the exam board.* *A bank of Exam questions focusing on exam techniques, misconceptions and areas of weakness identified in the Year 10 mock.*
Why have you chosen to teach this unit, and this time?	
The NEA coursework is 50% of the GCSE and in line with the theme given by the AQA exam board. Students are working against our NEA timeline. *Exam technique is vitally important and it's an area we would like to focus on this year to improve the exam results and exam marks.*	
What are the 3 key pieces of knowledge you will have expected students to acquire by the end of this unit?	
• *What is the best exam technique and how can I learn from my mistakes in the Year 10 mocks.* • *What does a good Section A NEA coursework look like?* • *What does a good Section B NEA coursework look like?* • *Student to draw upon prior knowledge from the mini NEA in Year 10, sketching and modelling techniques.*	
Is this topic on the National Curriculum? **No AQA SYLLABUS** **Will all staff be teaching this unit?** **Yes**	

Year 11	
What are you teaching? Summer 1	**What are you teaching? Summer 2**
Exam Revision overview. *Returning to all AQA units 1 to 7.* *Exam practice technique, mind maps, keywords, exam style questions (BUG), BBC Bitesize, YouTube revision, Seneca Learning modules.*	*Students on academic study leave.*
Why have you chosen to teach this unit, and this time?	
NEA coursework is now completed and sent to the moderator by May 7th. *Students to revise for up and coming GCSE paper (50% of final mark).*	
What are the 3 key pieces of knowledge you will have expected students to acquire by the end of this unit?	
How to navigate the exam paper, Section A, B and C. *How to understand exam style questions and answering techniques.* *What revision methods work best for you.*	
Is this topic on the National Curriculum? **No AQA SYLLABUS** **Will all staff be teaching this unit?** **Yes**	