

Subject: **Design & Technology**

Year Group: **7**

Content Delivered Core knowledge		Content Delivered Core knowledge		Content Delivered Core knowledge	
Design and Engineering Foundation 1		Design and Engineering Foundation 2		Food and Nutrition Foundation	Food and Nutrition Foundation
Materials and their properties		Communicating ideas		Healthy Food Choices	
Key Curriculum Skills:	Key Curriculum Skills:	Key Curriculum Skills:	Key Curriculum Skills:	Key Curriculum Skills:	Key Curriculum Skills:
Identify Explain Example Justify Create Working independently and accurately	Identify Explain Example Justify Create Working independently and accurately	Identify Explain Example Justify Create Working independently and accurately	Identify Explain Example Justify Create Working independently and accurately	Identify Explain Example Justify Create Working independently and accurately	Identify Explain Example Justify Create Working independently and accurately
Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):
Material properties Timbers Polymers Metals	Accurate working Papers and Boards Textiles	Analysing a context Computer aided design Isometric sketching	Prototyping and refining ideas Annotations	Eatwell guide – Fruit and vegetable focus Safe and Hygienic routines in the food room Food Practical (Fruit salad, pizza toast, layered pasta salad, carrot cakes) Sustainability in food (food miles and seasonality)	Eatwell Guide (Nutrition) Food Practical (Scone based pizza) Food Preparation Task – Healthy Food Choices
Assessment:	Assessment:	Assessment:	Assessment:	Assessment:	Assessment:
Lesson 6- Mid-term written assessment. Lesson 7- Metal practical accurate working.	Lesson 11- End of unit written assessment. Lesson 12- Textiles practical accurate working	Lesson 6- Isometric Sketching Lesson 8- Mid-term written assessment.	Lesson 10- Isometric Sketching redraft. Lesson 11- End of written assessment.	Lesson 3: Pizza Toast and Evaluation Lesson 5: Mini assessment (Food provenance/food science Lesson 6: Carrot cake and evaluation	Lesson 9: Mini assessment on food nutrition and health Lesson 12 – Food preparation task
Literacy Curriculum:	Literacy Curriculum:	Literacy Curriculum:	Literacy Curriculum:	Literacy Curriculum:	Literacy Curriculum:
Reading – Lesson 1- reading of descriptive words Lesson 6- exam style questions for independent answer in mid-term assessment.	Reading Lesson 12- exam style questions for independent answer in mid-term assessment.	Reading Lesson 6- exam style questions for independent answer in mid-term assessment.	Reading Lesson 9- Modelling of annotation structure. Lesson 12- exam style questions for independent answer in mid-term assessment.	Reading Learning materials – powerpoints, worksheets and recipes	Reading Learning materials – powerpoints and worksheets
Writing - Lesson 1- Defining descriptive words in relation to how materials would respond. Lesson 6- response to mid-term assessment. Ongoing throughout all lessons Justifying why a material would be suitable based on its physical and working properties.	Writing – Lesson 12- response to mid-term assessment. Defining key terminology in flash cards.	Writing Lesson 6- response to mid-term assessment.	Writing Lesson 9- Sentence structure of annotations, in line with English department. Lesson 12- response to mid-term assessment.	Writing Opportunity in every lesson: retrieval, flashcards, evaluations, written tasks and summative assessments	Writing Opportunity in every lesson: retrieval, flashcards, evaluations, written tasks and summative assessments Extended writing in Food Preparation task
Oracy – Lesson 1- Discussion as to how they think certain materials may respond. This continues throughout lesson based on the specific material we look at and their understanding of the working properties. Justifying why a material would be suitable based on its physical and working properties.	Oracy –	Oracy Lesson 1- Class discussion around interpretation of context presented to them. What is the problem? What would a solution be?	Oracy – Lesson 9- Discussion on how to develop emerging responses to secure.	Oracy – Q&A a feature of all lessons, all practical lessons involve verbal discussions by students, highlighting strengths and areas for development.	Oracy Q&A a feature of all lessons, all practical lessons involve verbal discussions by students, highlighting strengths and areas for development.
Home Learning	Home Learning	Home Learning	Home Learning	Home Learning	Home Learning
Students should create a set of flashcards about the key words explored in each lesson using their knowledge board and should hand these in during week 6.	Students should create a set of flashcards about the key words explored in each lesson using their knowledge board and should hand these in during week 12.	Students should create a set of flashcards about the key words explored in each lesson using their knowledge board and should hand these in during week 6. Week 4- Isometric sketching practice. Week 5- Car in isometric perspective.	Students should create a set of flashcards about the key words explored in each lesson using their knowledge board and should hand these in during week 12.	Students should create a set of flashcards about the key words explored in each lesson using their knowledge board and should hand these in during week 6. Students prepare ingredients for practical lesson	Students should create a set of flashcards about the key words explored in each lesson using their knowledge board and should hand these in during week 9 Students prepare ingredients for practical lesson

Subject: **Design & Technology**

Year Group: 8

Content Delivered Core knowledge		Content Delivered Core knowledge		Content Delivered Core knowledge	
Design and Engineering Building Blocks 1	Design and Engineering Building Blocks 1	Design and Engineering Building Blocks 2	Design and Engineering Building Blocks 2	Food and Nutrition Building Blocks	Food and Nutrition Building Blocks
Materials, Manufacturing and Scales of production		Electronics, sustainability and Innovate		Carbohydrates, Nutrition and Food Science	
Key Curriculum Skills:	Key Curriculum Skills:	Key Curriculum Skills:	Key Curriculum Skills:	Key Curriculum Skills:	Key Curriculum Skills:
Identify Explain Example Justify Create Working independently and accurately	Identify Explain Example Justify Create Working independently and accurately	Identify Explain Example Justify Create Working independently and accurately	Identify Explain Example Justify Create Working independently and accurately	Identify Explain Example Justify Create Working independently and accurately	Identify Explain Example Justify Create Working independently and accurately
Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):
Specific materials Cutting and wasting processes Shaping materials	Joining materials Finishes Scales of production Smart and modern materials	Inputs, outputs and processes How to program electronics Designing for different groups of people The work of others	Designers and the environment Analysing a context How to carry out research Experimenting with design ideas through sketching and CAD	Eatwell Guide – Carbohydrate focus Food practical (potatoes 3 ways, bread making, macaroni cheese) Staple foods: wheat, milling and bread Food science - gelatinisation	Food provenance – British and International cuisine Food practical (savoury rice) Food Preparation Task – British and international cuisine
Assessment:	Assessment:	Assessment:	Assessment:	Assessment:	Assessment:
Week 5: Shaping materials practical work and making write up	Lesson 7 – Joining materials and making write up Lesson 8 - midpoint written assessment Lesson 12 – End of unit assessment	Lesson5-6: the work of others Lesson 7: written midpoint assessment	Lesson 11: final innovate design Lesson 12: GRIT and consolidation	Lesson 2: potatoes 3 ways and evaluation Lesson 5: mini assessment on carbohydrates Lesson 6: macaroni cheese and evaluation	Lesson 9: mini assessment on Food provenance and Food science Lesson 12: Food Preparation Task
Literacy Curriculum:	Literacy Curriculum:	Literacy Curriculum:	Literacy Curriculum:	Literacy Curriculum:	Literacy Curriculum:
Reading – Key words each lesson Week 1-2: Research into material from the textbook and internet Week 3 - reading through exemplar answers Week4:5 – reading through assessment criteria and exemplar answers Lesson 6: reading through modelled answers	Reading Lesson 7: reading through modelled answers Lesson 9: reading through modelled answers Lesson 10: reading through task instructions Lesson 11: reading through modelled answers and research into different smart and modern materials	Reading Lesson 1-2: reading through crumble activity sheets Lesson3 – reading through modelled answers Lesson 4 &5: reading through modelled answers and reading research	Reading Lesson 8 – reading through 6Rs information Lesson 9 – reading through questionnaire results Lesson 10-11 – reading modelled answers	Reading Learning materials – powerpoints, worksheets and recipes	Reading Learning materials – powerpoints, worksheets and recipes
Writing - Week 1-2: writing about materials Week 3: - write up of tools and equipment Week 4-5: writing notes about different shaping processes. Writing about a manufacturing processes	Writing – Lesson 7: extended writing piece looking at joining methods Lesson 8: Mid point assessment Lesson 9: writing about different finishing techniques Lesson 10: writing about different scales of production Lesson 11 – writing about the different smart and modern materials	Writing Lessons 1-2: writing up experiments Lesson 3: Written annotations Lesson 4-5: writing about a designer and design annotations	Writing Lesson 8 – writing about ways we could reduce the impact of a product on the environment Lesson 9 – writing a questionnaire, design brief and analysing products Lesson 10-11 – writing design annotations	Writing Opportunity in every lesson: retrieval, flashcards, evaluations, written tasks and summative assessments	Writing Opportunity in every lesson: retrieval, flashcards, evaluations, written tasks and summative assessments Extended writing in Food Preparation task
Oracy – Week 1-2: class discussions around the suitability of a materials Week 3: discussions surrounding the use of tools and equipment Week 4: class discussions surrounding shaping techniques Lesson 6: discussing the uses and reasons for different joining methods.	Oracy – Lesson 7: discussing the uses and reasons for different joining methods. Lesson 9: discussions surrounding finishes and the reasons for using these Lesson 10: discussions surrounding the different scales of production and why they might be used. Lesson 11: discussions surrounding the use of smart and modern materials	Oracy Lessons 1-2: discussing experiments Lesson 3: discussing the different problems people face Lesson 4-5: discussions surrounding the work of different designers.	Oracy – Lesson 8 – discussions surrounding what happens to our waste and how we can be more responsible designers Lesson 9 – talking to clients about their wants and needs. Discussions surrounding the effectiveness of a product. Lesson 10-11 – discussing design ideas.	Oracy – Q&A a feature of all lessons, all practical lessons involve verbal discussions by students, highlighting strengths and areas for development.	Oracy Q&A a feature of all lessons, all practical lessons involve verbal discussions by students, highlighting strengths and areas for development.
Home Learning	Home Learning	Home Learning	Home Learning	Home Learning	Home Learning
Students should create a set of flashcards about the key words explored in each lesson using their knowledge board and should hand these in during week 6.	Students should create a set of flashcards about the key words explored in each lesson using their knowledge board and should hand these in during week 6.	Students should create a set of flashcards about the key words explored in each lesson using their knowledge board and should hand these in during week 6.	Students should create a set of flashcards about the key words explored in each lesson using their knowledge board and should hand these in during week 6.	Students should create a set of flashcards about the key words explored in each lesson using their knowledge board and should hand these in during week 6. Students prepare ingredients for practical lesson	Students should create a set of flashcards about the key words explored in each lesson using their knowledge board and should hand these in during week 9. Students prepare ingredients for practical lesson

Subject: **Design & Technology**

Year Group: **9**

Content Delivered Core knowledge		Content Delivered Core knowledge		Content Delivered Core knowledge	
Design and Engineering Wider Context 1	Design and Engineering Wider Context 1	Design and Engineering Wider Context 2	Design and Engineering Wider Context 2	Food and Nutrition Wider Context	Food and Nutrition Wider Context
Focus on Metals and Polymers – Designing and Manufacturing a bottle opener	Focus on Metals and Polymers – Designing and Manufacturing a bottle opener	Focus on Textiles and Sustainability – Bags for Kenya	Focus on Textiles and Sustainability – Bags for Kenya	Food Choices	
Key Curriculum Skills:	Key Curriculum Skills:	Key Curriculum Skills:	Key Curriculum Skills:	Key Curriculum Skills:	Key Curriculum Skills:
Identify Explain Example Justify Create Working independently and accurately	Identify Explain Example Justify Create Working independently and accurately	Identify Explain Example Justify Create Working independently and accurately	Identify Explain Example Justify Create Working independently and accurately	Identify Explain Example Justify Create Working independently and accurately	Identify Explain Example Justify Create Working independently and accurately
Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):
Levers and mechanisms The function of metal working tools and equipment and how to use them accurately Key terms associated with industrial processes	How to draw using CAD programs and the benefits of this. The use of anthropometrics and ergonomics when designing products People, culture and society	Knowledge of ecological issues Evaluating sustainability using the product lifestyle assessment Know the key terms surrounding design and enterprise How to annotate ideas How to communicate ideas through 2D sketching techniques.	Knowledge of fabrics and fibres Selecting appropriate fabrics for a purpose Knowledge of different surface decoration techniques used on textile products Knowledge of specific joining methods with textiles. How to communicate a final idea	Eatwell guide – focus on protein Nutrition – Healthy diet at different life stages Protein alternatives Food provenance and production Food assurance schemes Food Practical (stir fry, shepherd's pie, curry)	Functional properties of protein (eggs in pancakes) Food practical (dutch apple cake) Food Preparation Task – Street Food
Assessment:	Assessment:	Assessment:	Assessment:	Assessment:	Assessment:
Week 5- Classwork – practical outcome and Manufacturing write up. Week 6- Mid-term assessment focussed on key knowledge topics detailed above.	Week 11 -Classwork – Final practical outcome and write up of CAD designs Week 12 - End of unit assessment focussed on topics from across the whole project	Week 5 – Design ideas Week 6 – Mid-term assessment focussed on key knowledge topics detailed above.	Week 11 – Final Design Idea Week 12 - End of unit assessment focussed on topics from across the whole project.	Lesson 2: stir fry and evaluation Lesson 5: mini assessment on protein Lesson 6: curry and evaluation	Lesson 9: mini assessment on Food provenance and Food science Lesson 12: Food Preparation Task
Literacy Curriculum:	Literacy Curriculum:	Literacy Curriculum:	Literacy Curriculum:	Literacy Curriculum:	Literacy Curriculum:
Reading – Week 3-5: Instructions/ tutorial showing how to work through the steps to make the bottle opener	Reading Week 7: read through lean manufacturing study Week 11: Instructions/ tutorial showing how to work through the steps to make the bottle opener	Reading Week 1-2- reading about different ecological issues	Reading Week 8-10: reading instructions around the different sample work techniques	Reading Learning materials – powerpoints, worksheets and recipes	Reading Learning materials – powerpoints, worksheets and recipes
Writing - Weeks 3-5: Writing up manufacturing evidence Week 6 – Mid-Term assessment	Writing – Week 8-9: Writing up CAD design work Week 11: Exam style writing practice. Week 12: end of unit assessment	Writing Week 1: writing notes about ecological issues Week 2:extended writing piece evaluating sustainability of product Week 3: evaluating advantages and disadvantages of design and enterprise strategies Week 5: annotating designs Week 6: mid-term assessment	Writing Week 7: justification of material choices Week 8-10: writing up manufacturing evidence and evaluation Week 11: writing annotations for final ideas Week 12: end of unit assessment	Writing Opportunity in every lesson: retrieval, flashcards, evaluations, written tasks and summative assessments	Writing Opportunity in every lesson: retrieval, flashcards, evaluations, written tasks and summative assessments Extended writing in Food Preparation task
Oracy – Weeks 3-5: Students will be questioned and encouraged to talk about their manufacturing processes to others using the correct terminology for tools and equipment.	Oracy – Week 7: discuss the advantages and disadvantages of automation Week 11: Discussions surrounding people, culture and society	Oracy Week 1-2: discussions surrounding sustainability Week 3: discuss examples of design and enterprise Week 4-5: explanation of design ideas to peers and teacher.	Oracy – Week 7: discuss advantages and disadvantages of different fabric types Week 8-10: discussions surrounding the benefits and weaknesses of the different techniques used.	Oracy – Q&A a feature of all lessons, all practical lessons involve verbal discussions by students, highlighting strengths and areas for development.	Oracy Q&A a feature of all lessons, all practical lessons involve verbal discussions by students, highlighting strengths and areas for development.
Home Learning	Home Learning	Home Learning	Home Learning	Home Learning	Home Learning
Students should create a set of flashcards about the key words explored in each lesson using their knowledge board and should hand these in during week 6.	Students should create a set of flashcards about the key words explored in each lesson using their knowledge board and should hand these in during week 12.	Students should create a set of flashcards about the key words explored in each lesson using their knowledge board and should hand these in during week 6.	Students should create a set of flashcards about the key words explored in each lesson using their knowledge board and should hand these in during week 12.	Students should create a set of flashcards about the key words explored in each lesson using their knowledge board and should hand these in during week 6. Students prepare ingredients for practical lesson	Students should create a set of flashcards about the key words explored in each lesson using their knowledge board and should hand these in during week 9. Students prepare ingredients for practical lesson

Subject: **Design & Engineering**

Year Group: **10**

Content Delivered Core knowledge		Content Delivered Core knowledge		Content Delivered Core knowledge	
September – November	November – January	January - February	March - May	May-June	June-July
Focus on Timbers	Scientific principles in Design and Engineering	Designing and Making Principles – Research and design	Designing and Making Principles – Designing and developing	Designing and Making Principles – making and evaluation	Non-Examined Assessment - research
Key Curriculum Skills:	Key Curriculum Skills:	Key Curriculum Skills:	Key Curriculum Skills:	Key Curriculum Skills:	Key Curriculum Skills:
<i>Identify</i> <i>Explain</i> <i>Example</i> <i>Justify</i> <i>Create</i> <i>Working independently and accurately</i>	<i>Identify</i> <i>Explain</i> <i>Example</i> <i>Justify</i> <i>Create</i> <i>Working independently and accurately</i>	<i>Identify</i> <i>Explain</i> <i>Example</i> <i>Justify</i> <i>Create</i> <i>Working independently and accurately</i>	<i>Identify</i> <i>Explain</i> <i>Example</i> <i>Justify</i> <i>Create</i> <i>Working independently and accurately</i>	<i>Identify</i> <i>Explain</i> <i>Example</i> <i>Justify</i> <i>Create</i> <i>Working independently and accurately</i>	<i>Identify</i> <i>Explain</i> <i>Example</i> <i>Justify</i> <i>Create</i> <i>Working independently and accurately</i>
Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):
How to join timbers Evaluating different methods of joining timbers Evaluating the use of CAD to prototype Sources of timber Timber conversion Timber sustainability Stock forms Tolerances and material management Explaining, selecting and justifying surface finishes Common components used with timbers Commercial production methods used with timbers	Energy generation Energy storage Different types of energy Inputs, outputs and processes How to use programming software Flowchart symbols Levers and Mechanisms Working with tools and equipment The use of manufacturing specifications	Primary and secondary research techniques Writing a design brief and specification How to annotate designs The use of ACCESSFMM to analyse products The work of others How to communicate ideas and why they might be used. How to Render drawings	How to draw an Exploded drawing and why they are used Materials and their properties Advantages and disadvantages of CAD Social, cultural and moral issues surrounding materials Knowledge of orthographic drawings and why they are used	How to prepare CAD files to manufacture Independently selecting tools and equipment Working accurately Material management Selecting joining methods Wasting processes Testing and evaluating a final outcome	Primary and secondary research techniques Writing a design brief and specification How to annotate designs The use of ACCESSFMM to analyse products The work of others
Assessment:	Assessment:	Assessment:	Assessment:	Assessment:	Assessment:
Week 1-2: Practical work Week 3-4: CAD designs Week 5: Sources and ethical considerations Week 5: Written exam Week 6: surface finishes Week 7: Written exam	Week 1: energy generation and storage Week 3 – systems and devices Week 3 – written exam Week 4 – mechanism Week 6 – practical Week 6 – written exam	Lesson 1 – analysing a context Lesson 2 – client profile Lesson 5 – existing products Lesson 6 – design brief and specification Lesson 11 – Initial ideas	Lesson 1: prototyping Lesson 3: exploded drawing Lesson 4: written test Lesson 7: materials research Lesson 9: developing aesthetics Lesson 12: orthographic drawing	Lesson 3 6- practical outcome Lesson 9 – evaluation Lesson 10 – written test	Lesson 2 – analysing a context Lesson 4 – client profile Lesson 6 – existing products
Literacy Curriculum:	Literacy Curriculum:	Literacy Curriculum:	Literacy Curriculum:	Literacy Curriculum:	Literacy Curriculum:
Reading – Week 1-2: following instructions to create practical task Each week – reading key terms	Reading Week 3-4: Reading instructions and diagrams to connect and program electronic devices. Each week – reading key terms	Reading Week 2: Reading interview responses Week 3: reading through internet research and sifting out key information.	Reading Week 7: materials research	Reading Week 2-3: reading instructions Week 4: reading through evaluation materials	Reading Week 2: Reading interview responses Week 3: reading through internet research and sifting out key information.
Writing - Week 1-2: writing up practical Week 3-4: identifying, explaining and evaluating joining methods. Week 5: extended writing focusing on ethical considerations and sustainability of timbers Week 6: justification of finishes and components Week 7: evaluating commercial processes Week 7: written exam.	Writing – Week 1: evaluating different energy storage and generation techniques Week 2-3: write up of experiments Week 3: designing a program Week 4: writing a manufacturing specification	Writing Week 1 – writing responses to the context Week 2 – writing an interview/ questionnaire and client story Week 3 – extended writing regarding product analysis Week 4 – writing a design brief and specification Week 5 and 6 – design annotations	Writing Week 1: prototyping write up Week 3-4: materials research Week 5: developing aesthetics write up	Writing Week 4: writing an evaluation	Writing Week 1 – writing responses to the context Week 2 – writing an interview/ questionnaire and client story Week 3 – extended writing regarding product analysis
Oracy – Weeks 1-2: Students will be questioned and encouraged to talk about their manufacturing processes to others using the correct terminology for tools and equipment. Week 5: discussions surrounding the ethical and sustainability issues surrounding timbers Week 6: discussions surrounding the purpose of finishes.	Oracy – Week 1 – 2: discussions surrounding the use of energy storage and generation methods Week 3 -4: discussing progress with programming and writing tasks.	Oracy Lesson 2 and 3 – interviewing a client and completing a questionnaire Lesson 10 and 11 – discussing ideas with client.	Oracy – Week 1: discussions surrounding prototyping Week 2: discussions surrounding exploded drawing Week 4: discussing ideas with client	Oracy – Week 2-3: discussions surrounding practical Week 4: discussions with client and others to test and evaluate their product.	Oracy Lesson 2 and 3 – interviewing a client and completing a questionnaire
Home Learning	Home Learning	Home Learning	Home Learning	Home Learning	Home Learning
Database of materials	SENECA – Focus on timbers	Research and improving classwork SENECA – core technical principles	Improving classwork SENECA -- focus on Designing principles	Improving classwork SENECA – focus on making principles.	Improving classwork Research

Subject: **Food and Nutrition**

Year Group: **10**

Content Delivered Core knowledge.		Content Delivered Core knowledge.		Content Delivered Core knowledge	
Autumn 1 September – October	Autumn 2 November – December	Spring 1 January - February	Spring 2 March - April	Summer 1 April - May	Summer 2 June-July
Food, Nutrition and Health Introduction to Food Science investigation skills Food Science Food preparation skills	Food Science Food Science investigation skills required for NEA 1 Food Preparation skills.	Food Science Food Safety Revision of Food, Nutrition and Health Food Preparation skills	Food Safety/ Spoilage and contamination Food Choice Introduction to Food Preparation task skills NEA 2 Food Preparation skills	Food Choice-Factors which affect Food Choice Sensory Analysis Food Preparation skills	Food Provenance Food Science Investigation Food Preparation skills
Key Curriculum Skills:	Key Curriculum Skills:	Key Curriculum Skills:	Key Curriculum Skills:	Key Curriculum Skills:	Key Curriculum Skills:
<i>Demonstrate knowledge and understanding of nutrition, food, cooking and preparation. Apply knowledge and understanding of nutrition, food, cooking and preparation. Plan, prepare, cook and present dishes, combining appropriate techniques. Analyse and evaluate different aspects of nutrition, food, cooking and preparation including food made by themselves and others.</i>	<i>Demonstrate knowledge and understanding of nutrition, food, cooking and preparation. Apply knowledge and understanding of nutrition, food, cooking and preparation. Plan, prepare, cook and present dishes, combining appropriate techniques. Analyse and evaluate different aspects of nutrition, food, cooking and preparation including food made by themselves and others.</i>	<i>Demonstrate knowledge and understanding of nutrition, food, cooking and preparation. Apply knowledge and understanding of nutrition, food, cooking and preparation. Plan, prepare, cook and present dishes, combining appropriate techniques. Analyse and evaluate different aspects of nutrition, food, cooking and preparation including food made by themselves and others.</i>	<i>Demonstrate knowledge and understanding of nutrition, food, cooking and preparation. Apply knowledge and understanding of nutrition, food, cooking and preparation. Plan, prepare, cook and present dishes, combining appropriate techniques. Analyse and evaluate different aspects of nutrition, food, cooking and preparation including food made by themselves and others.</i>	<i>Demonstrate knowledge and understanding of nutrition, food, cooking and preparation. Apply knowledge and understanding of nutrition, food, cooking and preparation. Plan, prepare, cook and present dishes, combining appropriate techniques. Analyse and evaluate different aspects of nutrition, food, cooking and preparation including food made by themselves and others.</i>	<i>Demonstrate knowledge and understanding of nutrition, food, cooking and preparation. Apply knowledge and understanding of nutrition, food, cooking and preparation. Plan, prepare, cook and present dishes, combining appropriate techniques. Analyse and evaluate different aspects of nutrition, food, cooking and preparation including food made by themselves and others.</i>
Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):
Macronutrients- definition, function, sources, effects of excess and deficiency. Micronutrients- Definition, function, sources, effects of excess and deficiency. Functional properties of Fats Pastry investigation using different fats. 12 Essential Food preparation skills	Life stages and dietary requirements. Special Dietary needs. Dietary related illness. Cooking food and heat transfer. Investigation: Different methods of cooking and their impact on the sensory qualities of food. Chemical and functional properties of Protein. Bread investigation using different flours. Chemical and functional properties of Carbohydrates. 12 Essential Food preparation skills	Functional and Chemical properties of Fats & Oils Shortening, Aeration, Plasticity, Emulsification Enzymic Browning- Food investigation task Raising Agents Use of micro-organisms in Food production Cheese, Yogurt & Bread 12 Essential Food Preparation skills	Food spoilage and contamination. Micro-organisms and enzymes. The signs of food spoilage. Physical, chemical and biological contamination Buying and storing foods. Preparing, cooking and serving foods. Mini Food preparation task (NEA 2) British and International Cuisine 12 Essential Food Preparation skills	Factors which influence food choice. Religious beliefs and food choice Ethical, moral and medical factors influencing food choices. Food labelling and marketing. How to carry out sensory testing/analysis Types of sensory tests. 12 Essential Food Preparation skills	Food production techniques Types of farming- intensive farming/ Organic farming Fair Trade Primary and secondary food processing Food security Reducing Carbon footprint. Mini Food Investigation task 12 Essential Food Preparation skills
Assessment:	Assessment:	Assessment:	Assessment:	Assessment:	Assessment:
Weekly assessment of practical food preparation skills. Week 5: Food investigation task: Pastry Week 7: Written assessment/exam	Weekly assessment of practical food preparation skills Week 3: Dietary Related illness task Week 5: Food investigation task: Cooking methods Week 7: Food Investigation task: Flours and Bread making.	Weekly assessment of practical food preparation skills. Week 1: Food Science / Carbohydrates report. Week 3: Mini NEA 1 style task: Enzymic Browning. Week 6: Written assessment/exam	Weekly assessment of practical food preparation skills. Week 3: Afternoon Tea assessment (British Cuisine) Week 6: Mini Food Preparation Task: International Cuisine. Week 6: Written assessment/exam	Weekly assessment of practical food preparation skills Week 3: Fair trade assignment. Week 6: Sensory analysis comparison task	Weekly assessment of practical food preparation skills. Week 1: Portioning a chicken. Week 4: Written assessment/exam. Week 5/6: Mock NEA 1
Literacy Curriculum:	Literacy Curriculum:	Literacy Curriculum:	Literacy Curriculum:	Literacy Curriculum:	Literacy Curriculum:
Reading – Reading recipes for understanding. (Ingredients choice and method instructions) Reading from textbooks and PPTs in lessons Reading food labels. Reading subject key terms	Reading Reading recipes for understanding. (Ingredients choice and method instructions) Reading from textbooks and PPTs in lessons Reading food labels Reading subject key terms	Reading Reading recipes for understanding. (Ingredients choice and method instructions) Reading from textbooks and PPTs in lessons Reading food labels Reading subject key terms	Reading Reading recipes for understanding. (Ingredients choice and method instructions) Reading from textbooks and PPTs in lessons Reading food labels Reading subject key terms	Reading Reading recipes for understanding. (Ingredients choice and method instructions) Reading from textbooks and PPTs in lessons Reading food labels Reading subject key terms	Reading Reading recipes for understanding. (Ingredients choice and method instructions) Reading from textbooks and PPTs in lessons Reading food labels Reading subject key terms
Writing - Opportunities for writing each week. Evaluation of weekly food preparation practicals Written tasks and summative assessments Writing to explain, describe, analyse, justify and evaluate.	Writing – Opportunities for writing each week. Evaluation of weekly food preparation practicals Written tasks and summative assessments Writing to explain, describe, analyse, justify and evaluate.	Writing Opportunities for writing each week. Evaluation of weekly food preparation practicals Written tasks and summative assessments Writing to explain, describe, analyse, justify and evaluate.	Writing Opportunities for writing each week. Evaluation of weekly food preparation practicals Written tasks and summative assessments Writing to explain, describe, analyse, justify and evaluate.	Writing Opportunities for writing each week. Evaluation of weekly food preparation practicals Written tasks and summative assessments Writing to explain, describe, analyse, justify and evaluate.	Writing Opportunities for writing each week. Evaluation of weekly food preparation practicals Written tasks and summative assessments Writing to explain, describe, analyse, justify and evaluate.
Oracy – Q&A a feature of all lessons. All practical lessons involve verbal discussion of practical work by students, highlighting strengths and areas for development.	Oracy – Q&A a feature of all lessons. All practical lessons involve verbal discussion of practical work by students, highlighting strengths and areas for development.	Oracy Q&A a feature of all lessons. All practical lessons involve verbal discussion of practical work by students, highlighting strengths and areas for development.	Oracy – Q&A a feature of all lessons. All practical lessons involve verbal discussion of practical work by students, highlighting strengths and areas for development.	Oracy – Q&A a feature of all lessons. All practical lessons involve verbal discussion of practical work by students, highlighting strengths and areas for development.	Oracy Q&A a feature of all lessons. All practical lessons involve verbal discussion of practical work by students, highlighting strengths and areas for development.

Home Learning	Home Learning	Home Learning	Home Learning	Home Learning	Home Learning
Investigating recipes,selecting a suitable recipe to meet the specified criteria each week. Printing recipe and organising ingredients. Written evaluation of practical work. Revision for written assessment /exam	Investigating recipes,selecting a suitable recipe to meet the specified criteria each week. Printing recipe and organising ingredients. Written evaluation of practical work. Research task: Food Science:Chemical and functional properties of Carbohydrates	Investigating recipes,selecting a suitable recipe to meet the specified criteria each week. Printing recipe and organising ingredients. Written evaluation of practical work. Revision for written assessment /exam	Investigating recipes,selecting a suitable recipe to meet the specified criteria each week. Printing recipe and organising ingredients. Written evaluation of practical work. Revision for written assessment /exam	Investigating recipes,selecting a suitable recipe to meet the specified criteria each week. Printing recipe and organising ingredients. Written evaluation of practical work. Fair trade assignment	Investigating recipes,selecting a suitable recipe to meet the specified criteria each week. Printing recipe and organising ingredients. Written evaluation of practical work. Revision for written assessment /exam

Subject: **Design and Engineering**

Year Group: **11**

Content Delivered Core knowledge		Content Delivered Core knowledge		Content Delivered Core knowledge	
Autumn 1 September – October	Autumn 2 November – December	Spring 1 January - February	Spring 2 March - April	Summer 1 April - May	Summer 2 June-July
Non-Examined Assessment – design brief, specification, designing, modelling and developing	Non-Examined Assessment – Developing, research and writing a manufacturing specification	Non-Examined Assessment – manufacturing, evaluating and testing	Revision	Revision	
Key Curriculum Skills:	Key Curriculum Skills:	Key Curriculum Skills:	Key Curriculum Skills:	Key Curriculum Skills:	Key Curriculum Skills:
<i>Identify</i> <i>Explain</i> <i>Example</i> <i>Justify</i> <i>Create</i> <i>Working independently and accurately</i>	<i>Identify</i> <i>Explain</i> <i>Example</i> <i>Justify</i> <i>Create</i> <i>Working independently and accurately</i>	<i>Identify</i> <i>Explain</i> <i>Example</i> <i>Justify</i> <i>Create</i> <i>Working independently and accurately</i>	<i>Identify</i> <i>Explain</i> <i>Example</i> <i>Justify</i> <i>Create</i> <i>Working independently and accurately</i>	<i>Identify</i> <i>Explain</i> <i>Example</i> <i>Justify</i> <i>Create</i> <i>Working independently and accurately</i>	
Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):
Writing a design brief and specification Designing initial ideas Experimenting with ideas using SCAMPER Modelling, prototyping and testing Developing ideas using exploded drawing techniques	Materials research and testing Research and testing into sizes, finishes, components, joining and manufacturing methods. Developing aesthetics using CAD Writing a manufacturing specification	Selecting appropriate tools and equipment Working with accuracy Application of quality control methods Application of appropriate finishing techniques Testing and evaluation techniques	Materials and their properties New and emerging technologies Sustainability Smart and modern materials Composites and technical textiles Stresses and forces Energy generation and storage	Focus on timbers – sources, origins, stock forms, manufacturing including commercial manufacturing techniques Designing principles Making principles	
Assessment:	Assessment:	Assessment:	Assessment:	Assessment:	Assessment:
All work assessed as part of the NEA	All work assessed as part of the NEA	All work assessed as part of the NEA	Each week will include a mini assessment containing a range of exam style questions about the weeks topic.	Each week will include a mini assessment containing a range of exam style questions about the weeks topic.	
Literacy Curriculum:	Literacy Curriculum:	Literacy Curriculum:	Literacy Curriculum:	Literacy Curriculum:	Literacy Curriculum:
Reading – Students encouraged to read through their work to edit	Reading Students encouraged to read through their work to edit Students completing reading as part of research	Reading Students encouraged to read through their work to edit	Reading A range of materials to read from as part of revision	Reading A range of materials to read from as part of revision	
Writing - Week 1 – writing a design brief and specification Week 2 and 3 – design annotations Week 5 and 6: prototyping write up	Writing – Week 1 and 2 – materials testing and research write up Week 3 and 4 – additional research and testing write up Week 6 – CAD development write up Week 7 – writing a manufacturing specification	Writing Weeks 1-5: writing manufacturing evidence (homework) Week 6 and 7: evaluation and testing	Writing Each week students will focus on an extended response a part of the topic.	Writing Each week students will focus on an extended response a part of the topic.	
Oracy – Week 2 and 3: discussing ideas with client Week 5 and 6 – discussing prototype with client.	Oracy – Week 6 – discussing ideas with client	Oracy Week 6 and 7: discussing ideas with client and target market for testing and evaluation	Oracy – Discussions surrounding each topic when evaluating the pros and cons.	Oracy – Discussions surrounding each topic when evaluating the pros and cons.	
Home Learning	Home Learning	Home Learning	Home Learning	Home Learning	Home Learning
Completing classwork at home/ after school sessions and keeping up with deadlines.	Completing classwork at home/ after school sessions and keeping up with deadlines.	Manufacturing write up.	Revision tasks set each week	Revision tasks set each week	

Subject: **Food and Nutrition**

Year Group: **11**

Content Delivered Core knowledge.		Content Delivered Core knowledge.		Content Delivered Core knowledge	
Autumn 1 September – October	Autumn 2 November – December	Spring 1 January - February	Spring 2 March - April	Summer 1 April - May	Summer 2 June-July
Practical skills revision NEA 1: Food Investigation Task	NEA 1: Food Investigation Task NEA 2: Food Preparation Task	NEA 2: Food Preparation Task	NEA 2: Food Preparation Task Revision for final exam	Revision for final exam	
Key Curriculum Skills: <i>Demonstrate knowledge and understanding of nutrition, food, cooking and preparation. Apply knowledge and understanding of nutrition, food, cooking and preparation. Plan, prepare, cook and present dishes, combining appropriate techniques. Analyse and evaluate different aspects of nutrition, food, cooking and preparation including food made by themselves and others.</i>	Key Curriculum Skills: <i>Demonstrate knowledge and understanding of nutrition, food, cooking and preparation. Apply knowledge and understanding of nutrition, food, cooking and preparation. Plan, prepare, cook and present dishes, combining appropriate techniques. Analyse and evaluate different aspects of nutrition, food, cooking and preparation including food made by themselves and others.</i>	Key Curriculum Skills: <i>Demonstrate knowledge and understanding of nutrition, food, cooking and preparation. Apply knowledge and understanding of nutrition, food, cooking and preparation. Plan, prepare, cook and present dishes, combining appropriate techniques. Analyse and evaluate different aspects of nutrition, food, cooking and preparation including food made by themselves and others.</i>	Key Curriculum Skills: <i>Demonstrate knowledge and understanding of nutrition, food, cooking and preparation. Apply knowledge and understanding of nutrition, food, cooking and preparation. Plan, prepare, cook and present dishes, combining appropriate techniques. Analyse and evaluate different aspects of nutrition, food, cooking and preparation including food made by themselves and others.</i>	Key Curriculum Skills: <i>Demonstrate knowledge and understanding of nutrition, food, cooking and preparation. Apply knowledge and understanding of nutrition, food, cooking and preparation. Plan, prepare, cook and present dishes, combining appropriate techniques. Analyse and evaluate different aspects of nutrition, food, cooking and preparation including food made by themselves and others.</i>	Key Curriculum Skills:
Key Knowledge (Cultural Capital and Content): 12 Essential food preparation skills Section A: Students will choose a task from AQA. They will analyse the task and carry out research on the working characteristics, functions and properties of ingredients to investigate. They will write a summary of their research and write a hypothesis for practical investigations. (6 marks) Section B: Students will plan practical investigations based on research findings. They will establish a clear aim for each investigation. They will use a range of testing methods to record and present the results of the testing. Students must include annotated photos, graphs, tables and charts as well as illustrating sensory testing methods. (15 marks) Section C: Students will Analyse, interpret and evaluate the results of the investigation. Evaluate the Hypothesis. Explain how the results can be used when preparing and cooking food. (9 marks)	Key Knowledge (Cultural Capital and Content): 12 Essential food preparation skills Students' knowledge, skills and understanding in relation to the planning, preparation, cooking, presentation of food and application of nutrition to the chosen task will be examined in this NEA. Students will prepare, cook and present a final menu of three dishes within a single period of no more than 3 hours, planning in advance how this will be achieved. Section A-Researching the task 6 marks. Section B-Demonstrating technical skills 18 marks Section C-Planning for the final menu 8 marks Section D-Making the final dishes 30 marks. Section E-Analysis and Evaluation 8 marks	Key Knowledge (Cultural Capital and Content): 12 Essential food preparation skills Students' knowledge, skills and understanding in relation to the planning, preparation, cooking, presentation of food and application of nutrition to the chosen task will be examined in this NEA. Students will prepare, cook and present a final menu of three dishes within a single period of no more than 3 hours, planning in advance how this will be achieved. Section A-Researching the task 6 marks. Section B-Demonstrating technical skills 18 marks Section C-Planning for the final menu 8 marks Section D-Making the final dishes 30 marks. Section E-Analysis and Evaluation 8 marks	Key Knowledge (Cultural Capital and Content): 12 Essential food preparation skills Students' knowledge, skills and understanding in relation to the planning, preparation, cooking, presentation of food and application of nutrition to the chosen task will be examined in this NEA. Students will prepare, cook and present a final menu of three dishes within a single period of no more than 3 hours, planning in advance how this will be achieved. Section A-Researching the task 6 marks. Section B-Demonstrating technical skills 18 marks Section C-Planning for the final menu 8 marks Section D-Making the final dishes 30 marks. Section E-Analysis and Evaluation 8 marks	Key Knowledge (Cultural Capital and Content): Revision on all curriculum strands Food, Nutrition and Health Food Safety Food Science Food Choice Food Provenance	Key Knowledge (Cultural Capital and Content):
Assessment: All student work assessed using NEA marking criteria.	Assessment: All student work assessed using NEA marking criteria.	Assessment: All student work assessed using NEA marking criteria.	Assessment: All student work assessed using NEA marking criteria. Following completion of NEA 2- Each week will include a mini assessment containing a range of exam style questions about chosen topics. Questions will be multiple choice and longer response questions to give students a true experience/practice of final exam requirements.	Assessment: Each week will include a mini assessment containing a range of exam style questions about chosen topics. Questions will be multiple choice and longer response questions to give students a true experience/practice of final exam requirements.	Assessment:
Literacy Curriculum: Reading – Reading recipes for understanding. (Ingredients choice and method instructions)	Literacy Curriculum: Reading Reading recipes for understanding. (Ingredients choice and method instructions)	Literacy Curriculum: Reading Reading recipes for understanding. (Ingredients choice and method instructions)	Literacy Curriculum: Reading Reading recipes for understanding. (Ingredients choice and method instructions)	Literacy Curriculum: Reading Reading from textbooks and PPTs in lessons Reading revision materials	Literacy Curriculum: Reading

Reading from textbooks and PPTs in lessons Reading NEA 1 Student guide booklet Reading Food Science knowledge organiser Reading exemplar NEA 1	Reading from textbooks and PPTs in lessons Reading NEA 1 Student guide booklet Reading Food Science knowledge organiser Reading NEA 2 Student guide booklet Reading exemplar NEA 2	Reading from textbooks and PPTs in lessons Reading NEA 2 Student guide booklet Reading AQA skill level document for final practical exam. Reading Time plan guidance	Reading from textbooks and PPTs in lessons Reading NEA 2 Student guide booklet Reading AQA skill level document for final practical exam. Reading Time plan guidance		
Writing - Opportunities for writing each week. Evaluation of weekly food preparation practicals Extended writing for each section of the NEA	Writing – Opportunities for writing each week. Evaluation of practical food investigations Extended writing for each section of the NEA	Writing Opportunities for writing each week. Evaluation of practical skill trials Extended writing for each section of the NEA	Writing Opportunities for writing each week. Evaluation of final practical exam Extended writing for each section of the NEA	Writing Each week students will focus on an extended written response to exam style questions.	Writing
Oracy – Q&A a feature of all lessons. All practical lessons involve verbal discussion of practical work/investigations by students, highlighting strengths and areas for development. Discussion following whole class feedback.	Oracy – Q&A a feature of all lessons. All practical lessons involve verbal discussion of practical work/investigations by students, highlighting strengths and areas for development. Discussion following whole class feedback.	Oracy Q&A a feature of all lessons. All practical lessons involve verbal discussion of practical work/investigations by students, highlighting strengths and areas for development. Discussion following whole class feedback.	Oracy – Q&A a feature of all lessons. All practical lessons involve verbal discussion of practical work/investigations by students, highlighting strengths and areas for development. Discussion following whole class feedback.	Oracy – Q&A a feature of all lessons. Discussion to support revision of exam topics. Whole class revision and peer supported revision.	Oracy
Home Learning	Home Learning	Home Learning	Home Learning	Home Learning	Home Learning
Investigating recipes,selecting a suitable recipe to meet the specified criteria each week. Printing recipes and organising ingredients Investigating recipes,selecting suitable recipes to meet the specified criteria of NEA 1 Completing classwork at home/ after school sessions and keeping up with deadlines.	Investigating recipes,selecting suitable recipes to meet the specified criteria of NEA 1 Investigating recipes,selecting suitable recipes to meet the specified criteria of NEA 2 (Skill Trials) Printing recipes and organising ingredients. Completing classwork at home/ after school sessions and keeping up with deadlines.	Investigating recipes,selecting suitable recipes to meet the specified criteria of NEA 2 (Skill Trials) Printing recipes and organising ingredients. Completing classwork at home/ after school sessions and keeping up with deadlines.	Investigating recipes,selecting suitable recipes to meet the specified criteria of NEA 2 (Final practical exam/3 dishes) Final evaluation of NEA2. Revision tasks set each week. Completing classwork at home/ after school sessions and keeping up with deadlines.	Revision tasks set each week Attend after school revision sessions	

Subject: **Design and Technology**

Year Group: **12**

Content Delivered Core knowledge		Content Delivered Core knowledge		Content Delivered Core knowledge	
Autumn 1 September – October	Autumn 2 November – December	Spring 1 January - February	Spring 2 March - April	Summer 1 April - May	Summer 2 June-July
2.2.1 Designing and Innovation 2.2.2 Materials and Components 2.2.3 Processes	2.2.2 Materials and Components 2.2.3 Processes 2.3 Design Principles	2.3 Designing Principles 2.2.5 Product Analysis	2.3 Designing Principles 2.3 Making Principles 2.2.5 Product Analysis	2.3 Designing Principles 2.3 Making Principles 2.2.1 Designing and Innovation	Non-Examined Assessment: AO1a Identify and Investigate Designing Principles 2.2.7 Public Interaction Technical Principles
Key Curriculum Skills:	Key Curriculum Skills:	Key Curriculum Skills:	Key Curriculum Skills:	Key Curriculum Skills:	Key Curriculum Skills:
<i>Identify</i> <i>Explain</i> <i>Example</i> <i>Justify</i> <i>Create</i> <i>Synthesize</i> <i>Working independently and accurately</i>	<i>Identify</i> <i>Explain</i> <i>Example</i> <i>Justify</i> <i>Create</i> <i>Synthesize</i> <i>Working independently and accurately</i>	<i>Identify</i> <i>Explain</i> <i>Example</i> <i>Justify</i> <i>Create</i> <i>Synthesize</i> <i>Working independently and accurately</i>	<i>Identify</i> <i>Explain</i> <i>Example</i> <i>Justify</i> <i>Create</i> <i>Synthesize</i> <i>Working independently and accurately</i>	<i>Identify</i> <i>Explain</i> <i>Example</i> <i>Justify</i> <i>Create</i> <i>Synthesize</i> <i>Working independently and accurately</i>	<i>Identify</i> <i>Explain</i> <i>Example</i> <i>Justify</i> <i>Create</i> <i>Synthesize</i> <i>Working independently and accurately</i>
Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):
2.2.1 Designing and Innovation User centred design; anthropometrics and ergonomics 2.2.2 Materials and Components Classification, characteristics, stock forms and uses of timbers, synthetic materials (polymers and aramids), regenerated, natural, alloys and composites. Physical, working and chemical properties of range of materials and how they impact the form and function of a product. Modern and Smart functional materials Selection of materials for specific service requirements Selection of finishes for specific service requirements 2.2.3 Processes Hand and machine methods of processing and manipulating materials Use of production aids in production of products Combining and forming materials to enhance their properties. CAD/CAM processing of materials. 2.3 Designing Principles AO1a identifying opportunities and problems in familiar and unfamiliar contexts	2.2.2 Materials and Components Classification, characteristics, stock forms and uses of timbers, synthetic materials (polymers and aramids), regenerated, natural, alloys and composites. Physical, working and chemical properties of range of materials and how they impact the form and function of a product. Modern and Smart functional materials Selection of materials for specific service requirements Selection of finishes for specific service requirements Components and applications 2.2.3 Processes Hand and machine methods of processing and manipulating materials Use of production aids in production of products Combining and forming materials to enhance their properties. CAD/CAM processing of materials. 2.3 Designing Principles AO1a identifying opportunities and problems in familiar and unfamiliar contexts	2.3 Designing Principles Primary and secondary research methods Client needs analysis Above the line and below the line product analysis Curating visual sources and responding creatively Primary and secondary design criteria Qualitative and Quantitative design criteria Design strategies to generate and develop design ideas into an initial design proposal Sustainability, economic, social and ethical factors when designing 2.2.5 Product Analysis Processes involved in the design and production of manufactured products Form and function of different products Trends, styles, new technical capabilities, Sustainability, economic, political, social and ethical influences on designing and making products Intellectual property and standards	2.3 Designing Principles Modelling and testing to evolve and refine a design proposal using a range of techniques including CAD and physical methods Iterative designing 2.3 Making principles Detailed designing communication methods Selecting and using tools and equipment Working independently and accurately Application of quality control methods Selection of appropriate materials and finishing techniques Ongoing functional and aesthetic testing against measurable criteria. 2.2.5 Product Analysis Processes involved in the design and production of manufactured products Form and function of different products Trends, styles, new technical capabilities, Sustainability, economic, political, social and ethical influences on designing and making products	2.3 Designing Principles Modelling and testing to evolve and refine a design proposal using a range of techniques including CAD and physical methods Iterative designing Detailed designing communication methods 2.3 Making principles Detailed designing communication methods Selecting and using tools and equipment Working independently and accurately Application of quality control methods Selection of appropriate materials and finishing techniques Ongoing functional and aesthetic testing against measurable criteria. 2.3 Evaluation Functional and aesthetic testing, client feedback, comparison to specification. 2.2.1 Designing and Innovation Communication techniques in designing and making	NEA: AO1a Identifying opportunities and problems in familiar and unfamiliar contexts Outlining project aims and planning Primary and secondary research methods Client needs analysis Above the line and below the line product analysis Curating visual sources and responding creatively 2.2.7 Public Interaction Innovation in the market; factors influencing product innovation and evolution including social, ethical sustainability, technological and consumer needs and wants Market research: marketing strategies and methods, market segmentation, market trends Selling the product: 4Ps marketing mix, 4Es of marketing, product lifecycles. Product diffusion: who buys products and when, penetration, purchasing decisions. Enterprise in the market; entrepreneurs and product champions Feasibility of products in the market: product costing – Maths for D&T
Assessment:	Assessment:	Assessment:	Assessment:	Assessment:	Assessment:
2.2.1 Designing and Innovation L2 User centred design solution review L3 Ergonomics and Anthropometrics questions 2.2.2 Materials and Components L2 Material categories questions L3 Properties of Materials and testing questions L4 Timber Materials questions L5 Metal Materials Questions L6 Polymer Materials Questions L7 Paper and Board Materials Questions L8 Smart and Modern Materials Questions L9 Mid Unit assessment L10 Composite Materials L11 Enhancing Timbers L12 Enhancing Metals L13 Enhancing Polymers L14 Standard and bought in components L15 Unit test 2.2.3 Processes L4 Concrete Casting and Maths for D&T questions L5 Polymer hand processes questions L6 Polymer Industrial processes questions L7 CAD/CAM design and make mini activity L8 Forming and wasting timber questions L9 Joining timber questions L10 Metal forming questions L11 Jigs and fixtures questions L12 unit test	2.2.2 Materials and Components L8 Smart and Modern Materials Questions L9 Mid Unit assessment L10 Composite Materials L11 Enhancing Timbers L12 Enhancing Metals L13 Enhancing Polymers L14 Standard and bought in components L15 Unit test 2.2.3 Processes L8 Forming and wasting timber questions L9 Joining timber questions L10 Composite Materials L11 Enhancing Timbers L12 Enhancing Metals L13 Enhancing Polymers L14 Standard and bought in components L15 Unit test 2.2.3 Processes L8 Forming and wasting timber questions L9 Joining timber questions L10 Composite Materials L11 Enhancing Timbers L12 Enhancing Metals L13 Enhancing Polymers L14 Standard and bought in components L15 Unit test 2.2.3 Processes L4 Concrete Casting and Maths for D&T questions L5 Polymer hand processes questions L6 Polymer Industrial processes questions L7 CAD/CAM design and make mini activity L8 Forming and wasting timber questions L9 Joining timber questions L10 Metal forming questions L11 Jigs and fixtures questions L12 unit test	January Mock Exam; mix of questions based on term 1 content. 2.3 Designing Principles AO1a L1 Analysis of context L2 Client needs analysis L3 Inspiration boards and hazy ideas L4 Product Analysis 2.3 Designing Principles AO1b L5 Design brief and specification 2.3 Designing Principles AO2c L6 Initial design ideas 2.2.5 Product Analysis L2 Historical influences case studies L3 Iconic design essay L4 Intellectual property questions L5 Standards questions L6 Technological influences questions L7 Performance Modelling questions	2.3 Designing Principles A2c L1 Initial design ideas L2 Design strategies essay. Developing design ideas L3 Initial final design L4 Modelling and prototyping 2.3 Making principles AO2d L5/6/7 Ongoing manufacturing processes 2.2.5 Product Analysis L1 Technological influences questions L2 Performance Modelling Questions L3 Global manufacturing essay L4 Consumer society and design consciousness essay L5 End of unit test	2.3 Making Principles AO2d L1-3 Ongoing manufacturing processes, diary and detailed designing. 2.3 Designing Principles AO3 L4 Final Evaluation and project submission 2.2.1 Designing and Innovation L1-4 Communication techniques in designing and making including solid modelling. Assessed through designing and making Summer Mock Exam; mix of questions based on Yr12 content so far.	NEA: AO1a L2 – Analysis of potential contexts and possible solutions L3 – Outline project aims and overall project plan L4 – Client profiling and needs analysis L5 – Primary product analysis L6 – Secondary product analysis L7 – Inspiration boards and hazy ideas 2.2.7 Public Interaction L1– Market research question responses L2 – Selling the product question responses L4 – Product evolution case study L5 – Enterprise question responses L6 – Feasibility question responses L7 – Written test including Maths for D&T questions.
Literacy Curriculum:	Literacy Curriculum:	Literacy Curriculum:	Literacy Curriculum:	Literacy Curriculum:	Literacy Curriculum:
Reading – 2.2.1 Designing and Innovation L1 Wider reading articles for case studies L2 Ergonomics and Anthropometrics data	Reading 2.2.2 Materials and Components L9-12 Reading technical information about properties of materials and components	Reading 2.3 Designing Principles AO1a L9-12 Reading information about target market and client needs as appropriate to student choice. L3 Reading technical information about existing products 2.3 Designing Principles AO1b	Reading 2.3 Designing Principles A2c Ongoing reading of additional research for 2.3 Making principles AO2d L5/6/7 Reading appropriate technical information for product.	Reading AO2c/d Designing and Making principles Reading further research information as appropriate to student need – signposted by student or teacher. Reading any written responses to client feedback on product.	Reading NEA: Throughout: Reading research sources as appropriate to individual project context chosen. L4 reading client and target market responses to surveys L5/6 Reading technical information about existing products.

<p>2.2.2 Materials and Components L1-8 Reading technical information about properties of materials and components</p> <p>2.2.3 Processes L1-8 Reading technical information about processes.</p>	<p>2.2.3 Processes L9-11 Reading technical information about processes.</p>	<p>L4 Reading own research to synthesise into a design brief and specification.</p> <p>2.2.5 Product Analysis L1 Reading case studies L2 Iconic design reading research information L3 IIP0 website information L4 What does a standard look like – reading the type of technical layout</p>	<p>2.2.5 Product Analysis L2 Research for global manufacturing essay L3 Reading around consumer society</p>	<p>Exam preparation Reading for analysis of exam question requirement in exam prep starters.</p>	<p>2.2.7 Public Interaction L1 – Flipped learning product lifecycles and wider reading SENECA GCSE Business Studies L2 – Wider reading SENECA GCSE/A Level Business Studies L4 – Reading self selected research sources to support case study of product chosen.</p>
<p>Writing -</p> <p>2.2.1 Designing and Innovation L1/2 evaluating response to challenge task; analysis of data</p> <p>2.2.2 Materials and Components Throughout; writing technical case study notes for a range of different materials and components and their properties. Developing written answers to questions both short and longer answer.</p> <p>2.2.3 Processes Throughout; writing technical case study notes for a range of processes. Using annotation and evaluation within sketch book to reflect on own practice. Developing answers to a range of short and longer answers questions across the whole unit.</p>	<p>Writing –</p> <p>2.2.2 Materials and Components Throughout; writing technical case study notes for a range of different materials and components and their properties. Developing written answers to questions both short and longer answer.</p> <p>2.2.3 Processes Throughout, wiring technical case study notes for a range of processes. Using annotation and evaluation within sketch book to reflect on own practice. Developing answers to a range of short and longer questions across the whole unit.</p>	<p>Writing</p> <p>2.3 Designing Principles AO1a L2 Writing client profile and needs analysis. L4 Writing above the line and below the line product analysis</p> <p>2.3 Designing Principles AO1b L5 Writing design brief and specification criteria</p> <p>2.2.5 Product Analysis L1 Writing responses to questions L2 Iconic design essay case study –persuasive argument L3 Writing features of IP standards in note format L4 Written exam style questions</p>	<p>Writing</p> <p>2.3 Designing Principles A2c Annotating of design notes in sketch book and formal folder.</p> <p>2.3 Making principles AO2d L5/6/7 Manufacturing diary in formal format.</p> <p>2.2.5 Product Analysis L1 – short and longer answer questions L2 – Global manufacturing essay L3 – Consumer society and design consciousness essay L4 – writing responses for unit test</p>	<p>Writing</p> <p>AO2c/d Designing and Making principles Written notes explaining final detailed design and manufacturing of prototyping including technical details as appropriate to student context chosen Extended writing to set out critical analysis and review of product covering user feedback, functional testing expert feedback, comparison to specification, adaptations and improvements for commercial production and commercial viability.</p> <p>Exam preparation Writing recap notes in a variety of format. Developing responses to a range of exam question types in depth and breadth and at appropriate speed including planning notes for longer answer questions and writing extended pieces.</p>	<p>Writing</p> <p>NEA: L1/2/Mind mapping methods of note taking L3 Writing project outline scope L4 Writing client profile and summarising their needs from analysis of different sources of evidence. L5/6 Written analysis of evaluation of existing products L7 Key point notes when responding to visual stimuli and annotating design ideas.</p> <p>2.2.7 Public Interaction L1 – exam question responses L2 – exam question responses L4 – Written case study detailing the evolution of a product over time with consideration of the key factors that influenced the changes L5-7 exam question responses</p>
<p>Oracy –</p> <p>2.2.1 Designing and Innovation L1 Discussion the needs of different users</p> <p>2.2.2 Materials and Components Throughout; class discussions on properties of materials and their applications to particular products.</p> <p>2.2.3 Processes During practical process testing opportunities to use technical vocabulary and discuss problems and solutions with peers and staff.</p> <p>2.3 Designing Principles AO1a Discuss problems and opportunities as a group</p>	<p>Oracy –</p> <p>2.2.2 Materials and Components Throughout; class discussions on properties of materials and their applications to particular products.</p> <p>2.2.3 Processes During practical process testing opportunities to use technical vocabulary and discuss problems and solutions with peers and staff.</p> <p>2.3 Designing Principles AO1a Discuss problems and opportunities as a group</p>	<p>Oracy</p> <p>2.3 Designing Principles AO1a L2 Interviewing a client L4 Discuss products with client</p> <p>2.2.5 Product Analysis L1 Class discussion on case studies L2 Presenting case for products to be considered iconic</p>	<p>Oracy –</p> <p>NEA: Ongoing discussion one to one with teaching and technical support staff with some opportunity to share progress with other students in plenaries. Ongoing discussions with client and target market to obtain feedback on their views for response design development.</p> <p>2.2.5 Product Analysis L2 – Global manufacturing class discussion L3 – Consumer society and design consciousness discussions</p>	<p>Oracy –</p> <p>AO2c/d Designing and Making principles Interviews with client and specialists to discuss strengths, weaknesses and areas for development.</p> <p>Exam preparation Writing recap notes in a variety of format. Developing responses to a range of exam question types in depth and breadth and at appropriate speed including planning notes for longer answer questions and writing extended pieces.</p>	<p>Oracy</p> <p>NEA: L1/2/3 one to one discussion with staff and peers around chosen contexts with opportunity for group work when analysing possible contextual areas. L4 Interview techniques when working with a client to identify needs and wants L5/6 surveying client views on existing products L7 client feedback on ideas developed from visual stimuli</p> <p>2.2.7 Public Interaction L1/2/5/6 – class discussion on examples presented L3 – student feedback on examples of crowdfunding products they have selected as of interest L4 – brief summary of research findings for chosen product as a plenary</p>
<p>Home Learning</p> <p>2.2.1 Designing and Innovation L1 User centred design questions L2 Ergonomics and Anthropometrics questions</p> <p>2.2.2 Materials and Components L1 Material categories questions L2 Properties of Materials and testing questions L3 Timber Materials questions and case studies L4 Metal Materials Questions and case studies L5 Polymer Materials Questions and case studies L6 Paper and Board Materials Questions and case studies L7 Smart and Modern Materials Questions and case studies unit test</p> <p>2.2.3 Processes L3 Concrete casting case study and questions L4 Polymer hand processes question and case studies L5 Polymer Industrial processes questions and case studies L6 CAD/CAM design and make mini activity write up L7 Forming and wasting timber questions</p>	<p>Home Learning</p> <p>2.2.2 Materials and Components L9 Mid Unit assessment L10 Composite Materials and case studies L11 Enhancing Timbers questions L12 Enhancing Metals questions L13 Enhancing Polymers questions L14 Standard and bought in components questions and revision L15 Reading SOL for 2.2.5</p> <p>2.2.3 Processes L3 Concrete casting case study and questions L8 Joining timber questions and case studies L9 Metal forming questions and case studies L10 Jigs and fixtures questions and revision L11 Reflect on context for D&M project DIRT.</p> <p>2.3 Designing Principles AO1a L12 Analysis of context complete and carry out client needs and analysis research.</p>	<p>Home Learning</p> <p>2.3 Designing Principles AO1a L1 Client needs analysis write up L2 Hazy ideas and DIRT L3 Product Analysis and DIRT L4 Design brief, specification, and DIRT L5 Initial design ideas and DIRT</p> <p>2.2.5 Product Analysis L2 Historical influences case studies L3 Iconic design essay L4 Intellectual property questions L5 Standards questions L6 Technological influences questions</p>	<p>Home Learning</p> <p>2.3 Designing Principles AO1a L1 Design strategies essay and idea development L2 Initial final design L3/4 Modelling and prototyping write up L5/6 Manufacturing diary and DIRT</p> <p>2.2.5 Product Analysis L1 – performance modelling questions L2 – Global manufacturing essay L3 – Design consciousness and consumer society essay L4 – DIRT L5 – Design communication practice</p>	<p>Home Learning</p> <p>AO2c/d Designing and Making principles L1/2 Manufacturing diary, finalise detailed designing and DIRT. L3/4 Final evaluations</p> <p>2.2.1 Designing and Innovation L1-4 Detailed design drawings</p> <p>L1-6 Summer Mock exam revision</p>	<p>Home Learning</p> <p>NEA: Completing individual research according to need of personalised response to context and should be at least 2 hours of personal learning time. As a guide: L1 – Identification of opportunities and problems L2 – Contextual analysis L3 – Project Scoping and planning L4 – Client needs analysis and profiling L5 – Primary Product analysis L6 – Secondary product analysis L7 – other appropriate research according to student identified need Improving work in response to general feedback given.</p> <p>2.2.7 Public Interaction L1 – exam question responses and flipped learning L2 – exam question responses and wider reading L3 – Improvement time L4 – Product Case study – written essay L5 – worksheet questions L6 – worksheet questions and revision for test L7 – reading next SOL in preparation for next lesson</p> <p>Wider reading linked to topical articles and news are signposted on Teams on an ad-hoc basis as they are released.</p>

Content Delivered Core knowledge		Content Delivered Core knowledge		Content Delivered Core knowledge	
Autumn 1 September – October	Autumn 2 November – December	Spring 1 January - February	Spring 2 March - April	Summer 1 April - May	Summer 2 June-July
Non-Examined Assessment: AO1b Design Brief and Specification AO2c Designing Prototypes 2.2.4/2.2.5 Industrial and Commercial Practice and Systems	Non-Examined Assessment: AO2c Designing Prototypes AO2d Manufacturing Prototypes 2.2.6 Human Responsibility	Non-Examined Assessment: AO2c Designing Prototypes AO2d Manufacturing Prototypes 2.2.4 Industrial and Commercial Practice 2.2.3 Processes	Non-Examined Assessment: AO3 Analysis and Evaluation 2.2.1 Designing and Innovation 2.3 Designing and Making Principles Exam preparation	Exam preparation	Exam preparation
Key Curriculum Skills:	Key Curriculum Skills:	Key Curriculum Skills:	Key Curriculum Skills:	Key Curriculum Skills:	Key Curriculum Skills:
<i>Identify</i> <i>Explain</i> <i>Example</i> <i>Justify</i> <i>Create</i> <i>Synthesize</i> <i>Working independently and accurately</i>	<i>Identify</i> <i>Explain</i> <i>Example</i> <i>Justify</i> <i>Create</i> <i>Synthesize</i> <i>Working independently and accurately</i>	<i>Identify</i> <i>Explain</i> <i>Example</i> <i>Justify</i> <i>Create</i> <i>Synthesize</i> <i>Working independently and accurately</i>	<i>Identify</i> <i>Explain</i> <i>Example</i> <i>Justify</i> <i>Create</i> <i>Synthesize</i> <i>Working independently and accurately</i>	<i>Identify</i> <i>Explain</i> <i>Example</i> <i>Justify</i> <i>Create</i> <i>Synthesize</i> <i>Working independently and accurately</i>	<i>Identify</i> <i>Explain</i> <i>Example</i> <i>Justify</i> <i>Create</i> <i>Synthesize</i> <i>Working independently and accurately</i>
Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):	Key Knowledge (Cultural Capital and Content):
NEA: Primary and secondary design criteria Qualitative and Quantitative design criteria Design strategies to generate and develop design ideas into a initial design proposal Modelling and testing to evolve and refine a design proposal using a range of techniques including CAD and physical methods Iterative designing Sustainability, economic, social and ethical factors when designing Detailed designing communication methods Selecting and using tools and equipment Working independently and accurately Application of quality control methods Selection of appropriate materials and finishing techniques Assessing risk and working safely Ongoing functional and aesthetic testing against measurable criteria. 2.2.6 Human Responsibility Customer Service and consumer protection Energy sources and conservation Sustainability and circular economy Ethical values when designing and making products	NEA: Modelling and testing to evolve and refine a design proposal using a range of techniques including CAD and physical methods Iterative designing Sustainability, economic, social and ethical factors when designing Detailed designing communication methods Selecting and using tools and equipment Working independently and accurately Application of quality control methods Selection of appropriate materials and finishing techniques Ongoing functional and aesthetic testing against measurable criteria. 2.2.6 Human Responsibility Customer Service and consumer protection Energy sources and conservation Sustainability and circular economy Ethical values when designing and making products	NEA: Detailed designing communication methods Production Planning and control Selecting and using tools and equipment Working independently and accurately Application of quality control methods Selection of appropriate materials and finishing techniques Assessing risk and working safely Ongoing functional and aesthetic testing against measurable criteria. 2.2.3/2.2.4 Industrial Practice and processes Manufacturing Specifications Production planning methodologies Quality management; Quality control and quality assurance Safe working practice: 5 step risk assessment.	NEA: Critical analysis and review referencing design specification, user testing and feedback, expert feedback and testing against qualitative and quantitative criteria. Identification of modifications required for different scales of production and commercial viability. 2.2.1 Designing and Innovation Critical analysis and review Exam preparation and recap	Exam Preparation: Designing and Innovation Materials and their Properties Processes Industrial and Commercial Practice Product analysis and Systems Public Interaction Designing Principles Making Principles	Exam Preparation: Designing and Innovation Materials and their Properties Processes Industrial and Commercial Practice Product analysis and Systems Public Interaction Designing Principles Making Principles
Assessment:	Assessment:	Assessment:	Assessment:	Assessment:	Assessment:
NEA: L2 Design Brief and Specification L3 Initial Ideas L4 Development of initial ideas L5 Intended final design L7 Modelling and testing 2.2.4/2.2.5 Industrial Practice and Systems L2 – Scales of production question responses L3 - Lean Manufacturing question responses L4 - Stages of production question responses L5 - Use of ICT question responses L6 – Unit test	NEA: L2 Modelling and Testing L4 Modelling and Testing L6 Modelling and testing, design development and manufacturing products 2.2.6 Human Responsibility L2 - Customer Service and consumer protection exam questions L3 - Energy sources and conservation questions L4/5 Sustainability and circular economy L6 Ethical values when designing and making products longer answer response L7 – Unit test depending on timing of mock exam	NEA: L1 Detailed designing, manufacturing products and evidence of manufacture L3 Detailed designing, manufacturing products and evidence of manufacture L5 Detailed designing, manufacturing products and evidence of manufacture L6/7 Final product deadline January Mock Exam – 3 hours, single paper, mix of question types 2.2.3/2.2.4 Industrial Practice and processes L2 Production planning for NEA L3 Manufacturing specification for NEA L4 QA/QC plan for NEA L5 Risk assessment plan for NEA	NEA: L1 Detailed designing, and evidence of manufacture L3 Final evaluation and initial NEA submission L5 Final NEA submission 2.2.1 Designing and Innovation Critical analysis and review questions Exam preparation and recap questions focused on mock exam topics. April Mock Exam – 3 hours, single paper, mix of question types	Exam recap Twice -weekly questions focusing on the topic to be studied with a mix of question types and responses completed both in and out of lessons.	Final written exam is usually timetabled for first week of this term.
Literacy Curriculum:	Literacy Curriculum:	Literacy Curriculum:	Literacy Curriculum:	Literacy Curriculum:	Literacy Curriculum:
Reading – NEA: Reading own research information to identify key reference points and synthesise into a design brief and specification. 2.2.4/2.2.5 Industrial Practice and Systems Reading technical information about industrial and commercial practice both in text book and internet sourced links.	Reading NEA: Reading further research information as appropriate to student need – signposted by student or teacher. 2.2.6 Human Responsibility Range of wider reading articles to reference historical and topical developments around sustainable and ethical designing and making. This area is constantly evolving so text books can be out of date quickly. Links posted weekly with homework tasks or via teams as appropriate.	Reading NEA: Reading further research information as appropriate to student need – signposted by student or teacher. 2.2.3/2.2.4 Industrial Practice and processes L2 Reading technical information for materials and components to identify key information such as costings. L5 Reading existing risk assessments to identify key hazards and control measures.	Reading NEA: Reading further research information as appropriate to student need – signposted by student or teacher. Reading any written responses to client feedback on product. Exam recap: Reviewing notes around exam topics, reading text as directed for recap activities.	Reading Exam recap: Students will be signposted to appropriate reading materials to support responses to exam questions and preparation for the exam. These can include texts in book form, electronic format as both historical and topical information. Reading exam questions and analysing command and key words using CUSTARD method to support understanding of what type of answer and response is required. Read and analysis of previous responses to questions for personal marking.	Reading Exam recap: Reading exam questions and analysing command and key words using CUSTARD method to support understanding of what type of answer and response is required. Read and analysis of previous responses to questions for personal marking.
Writing - NEA:	Writing – NEA:	Writing NEA:	Writing NEA:	Writing	Writing

