## <u>Curriculum Map – DT year 7</u>

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Topic Title: Engineered product - CAD / CAM Torch Project	Topic Title: Healthy living and Planning, preparing, and producing healthy meals.	Topic Title: Materials Product – Pull along toy	Topic Title: Graphics – Pop-Up Card Design
<ul> <li>Big Questions:</li> <li>Health and Safety</li> <li>How do I promote Health and Safety in the Engineering Workshop in an engaging way? <ul> <li>- CFU Assessment &amp; Homework</li> </ul> </li> <li>Design <ul> <li>What new components will I need to make the torch? And how will they be connected together?</li> <li>Who are you wanting to appeal to with your torch project?</li> <li>How can you realise your theme as a key-ring torch that will appeal to your target market? CFU Assessment</li> <li>Can you create a camera as a 3D solid model using the latest industrial software? Yes, you</li> </ul> </li> </ul>	Big Questions:         Health and Safety         O       What does good hygiene, health and safety look like?         CFU Assessment - HWK         Design         O       How does the way in which we combine ingredients affect the outcome of our dish? (Rubbing in)         O       What constitutes a balanced diet?         O       How do we use knives safely? CFU Assessment         O       How do we get energy?         O       How do we measure and	Big Questions:         Health and Safety         • Why is health and safety important in the workshop?         CFU Assessment         Design         • How do I communicate my ideas using a graphical skill?         • How do I use graphical drawing skills to communicate my ideas? CFU Assessment         Manufacturing         • How do I use final design to create pull along train? What considerations are needed? What tools and processes are required?         • Why is a high-quality finish required on the pull along train? Who is the finish for? How is it applied?         • How are the components going to be assembled? How can they be fixed together?         • What is quality control? How do we access how well we are doing? CFU	Big Questions:         Design <ul> <li>How does our Design Brief and Specification impact our design ideas and why is the Design brief so important?</li> <li>What makes the Aesthetic properties of a product so essential when designing a new product? In which ways does colour and colour theory affect the design process?</li> <li>What are Ergonomics and Anthropometrics and how would they influence our designs?</li> <li>How do our initial ideas, no matter how different, meet the requirements of the design brief and specification?</li> <li>How will the creative features from your initial ideas impact your chosen design? What refinements/ changes can you make to improve your design?</li> </ul> <li>Manufacturing         <ul> <li>How do we ensure a high</li> </ul> </li>
	<ul> <li>How do I organise my time when cooking?</li> </ul>	Assessment	<ul> <li>How do we ensure a high level of finish on our pop-up cards? How do we ensure the</li> </ul>

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0	can! - <i>Retrieval based</i> <i>Homework</i> Can you create your final design as a 3D solid model on	<ul> <li>How do we maintain healthy teeth?</li> <li>What is the difference between an allergy and an intolerance?</li> </ul>	Evaluation • How to use mid-point evaluation to make a trailer with a letter ensuring quality of finish is high?	net made for the envelope will be to size and fit our pop- up cards? <u>Evaluation</u> • What do our
	Autodesk inventor? Taking design features from across your initial ideas?	<ul> <li>What are the functional properties of food?</li> <li>What does a healthy plate look like?</li> </ul>	<ul> <li>Why is it important to evaluate a product? What purpose does it serve? How would they evaluate in industry?</li> </ul>	peers/customers think of our final design? Why would a survey detailing customer responses be useful to a designer once a prototype
0	Can you create an imaginative and creative advertisement to promote your torch? You might want to include your final 3D model?			has been made? How do you ensure you are reflecting on the success of your pop-up cards taking into consideration the feedback from you target market?
Manut	facturing			
0	Now it is time to assemble your laser cut torch, how do we ensure that it works reliably?			
0	You have learnt how to design and manufacture your torch, but what specific engineering skills have you learnt? How would we make a batch of 100 torches? – <b>Production Plan</b> <b>Homework</b>			
Evalua	ition			
0	Are you happy with your completed torch? What do your peers think? Have you been able to ask members of			

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your target market? – <i>Live</i> <i>evaluation feedback</i>		
Can you remember all the knowledge you have gained throughout the project? – <i>Score in</i> <i>assessment record</i>		