KNOWLEDGE	SKILLS
YEAR 7 **Key Fob** **Design** Use research and exploration the key fob, to identify and understand user needs. Identify and solve their own design problems and understand how to reformulate problems given to them. Develop specifications to inform the design of innovative, functional, appealing key fobs that respond to needs in a variety of situations. Use a variety of approaches, to generate creative ideas and avoid stereotypical responses. Develop and communicate design ideas using annotated sketches. Modelling design concepts to understand success criteria. **Make** Select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer-aided manufacture. Select from and use a wider, more complex range of materials and components, taking into account their properties. **Evaluate** The use and environmental impact of plastics. Investigate new and emerging technologies. Test, evaluate and refine their ideas and products against a specification, taking into account the views of intended users and other interested groups. Understand developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers, engineers and technologists.	1. I have set targets/specification to achieve with my practical 2. I have created a recognisable design 3. I have created a suitable shape 4. I have created a relevant shape for user 5. I have used the material economically 6. I know about the impact of the materials I am using 7. I can transfer an accurate shape onto material 8. I have cut allowing space for if I go wrong (tolerances) 9. I can cut across the edge (90°s) 10. I can use the vice correctly 11. I can use coping saw correctly 12. I can correct problems independently 13. I can use the file effectively 14. I can use the emery paper 15. I have made independent choices 16. I have used quality control tests 17. I can always work safely 18. I can use the buffer safely and successfully 19. I can use the drill safely and accurately 20. I know health and safety rules 21. I can use 2D design independently 22. I can use 2D design creatively and accurately 23. I can test and modify my design 24. I can use laser cutter effectively, safely and independently 25. I have tested my product and it works 26. I have kept an accurate diary of the manufacturing process 27. I have judged my final key fob against my original targets

		First Half Term	Second Half Term
YEAR 7	Content	Key fob	Key fob
	Skills	1 - 13	13 - 27
	Assessment	Written test – Knowledge based (50%) Folder and practical – point score based on descriptors (50%) Monthly 'skill and safety review' Half termly Homework Menu	Written test – Knowledge based (50%) Folder and practical – point score based on descriptors (50%) Monthly 'skill and safety review' Half termly Homework Menu

	KNOWLEDGE	SKILLS
YEAR 8	**Architecture – Formbyville** **Design** Use research and exploration to understand architecture and interior planning. To investigate a town plan, to identify and allocated the buildings needed. Consider the function of building and the lay out and plan of the interior. Identify and solve their own design problems and understand how to reformulate problems given to them. Develop specification to inform the design of innovative and functional building. Use a variety of approaches, to generate creative ideas and avoid stereotypical responses. Develop and communicate design ideas using annotated sketches, detailed plans, 2D and 3D CAD software. Also including scale and mathematical based working drawings. Modelling, oral and digital presentations and computer based tools. **Make** Select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer-aided manufacture. Select from and use a wider, more complex range of materials always taking into account their properties. **Evaluate** Analyse the work of past and present professionals and others to develop and broaden their understanding. Investigate new and emerging technologies. Test, evaluate and refine their ideas and products against a specification, taking into account the views of intended users and other interested groups. Understand developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers, engineers and technologists.	1. I can research and identify information to develop my thinking 2. I can set targets to achieve - specification 3. I can design for a suitable for function 4. I can design for a suitable for user 5. I can investigate designers and use this information to influence 6. my ideas 7. I can develop alternative proposals 8. I can evaluate my own work to develop my ideas further 9. I can draw accurately to scale 10. I can use 2D design with confidence and precision 11. I can use different drawing skills to communicate my ideas 12. I can use CAD both to sketch and produce final ideas 13. I can model in CAD 14. I can understand, work with and convert measurements and scale 15. I can use CAD software confidently and independently 16. I can test and modify my own design as needed 17. I can use the 3D printer independently 18. I have kept an informative and well-presented diary of this whole process 19. I have evaluated my final design against the original specification 20. I can formally present my final idea to the class 21. I have contributed to Formby-Ville with my unique and creative building design

		Autumn 1	Autumn 2
YEAR 8	Content	Architecture	Architecture
	Skills	1 - 14	15 - 21
	Assessment	Written test – Knowledge based (50%) Folder and practical – point score based on descriptors (50%) Monthly 'skill and safety review' Half termly Homework Menu	Written test – Knowledge based (50%) Folder and practical – point score based on descriptors (50%) Monthly 'skill and safety review' Half termly Homework Menu