## 14-week plan- Yr 11 Design and Technology (Product Design / Graphic products)

Week	Routine homework	NEA work	Revision topic	Resource links	Suggested tasks	Revision strategy	Revision check	Explicit Vocabulary instruction: command words	Intervention
27 January	Structured revisions – all tasks to be set on firefly	Focus - Practical – making of final prototype	Maths- Area of a Square — Wilmslow High School	Area of a Square — Wilmslow High School	Complete the firefly task set		Score on firefly shared with teacher (markbook)	Command words in exam questions – back of do now book for reference	Thursday after school
			Core Technical Principles- industry and enterprise	3.1.1 Industry and Enterprise — Wilmslow High School	Make cue cards on industry and enterprise	Create cue cards/ revision cards	Exam Q as Do now in lesson	Fairtrade/ virtual marketing/ crowd funding/ co- operative/ automation	
3 Feb	Structured revisions – all tasks to be set on firefly	Focus - Practical – making of final prototype	Maths- Area of a Triangle — Wilmslow High School  Core Technical Principles- sustainability	Area of a Triangle — Wilmslow High School  3.1.1 Sustainability — Wilmslow High School	Complete the firefly task set  Complete the sustainability exam question	Mind map – sustainability in do now book – highlight key words and add definitions of vocab.	Score on firefly shared with teacher (markbook) Exam Q as Do now in lesson	6 R's / sustainability / environmental/ social/ moral/ ethical/ forest stewardship council	Thursday after school

10 Feb	Structured revisions – all tasks to be set on firefly	Focus - Practical – making of final prototype	Maths- Area volume and waste — Wilmslow High School	Area volume and waste — Wilmslow High School	Complete the firefly task set	Share model answer to homework question	Score on firefly shared with teacher (markbook)		Thursday after school
			Core Technical Principles- Production techniques	3.1.1 Production Techniques — Wilmslow High School	Complete table on production techniques	Table to illustrate advantages / disadvantages of CAD/ CAM And manufacturing methods	Exam Q's as Do now in lesson	CAD/ CAM/ CNC/ advantages / Disadvantages Lean production/ mass/ batch/ one off/ continuous/ just in time	
HOLIDAY		Making day in the half term	Specialist Principles-	Seneca learning — task set by teacher on materials and their properties (refocus on specialism) Timbers - Timber-based materials - AQA - GCSE Design and Technology Revision - AQA - BBC Bitesize  Papers and boards -	Teacher will set a task on Seneca to recap and complete quiz assignment on materials and their properties – this will be linked to your chosen specialism	Quizzing	Score on seneca shared with teacher Teacher can identify gap analysis from this data.	Timbers Polymers Paper and boards  Properties of materials – physical and mechanical  Finishes to materials  Manufacturing processes used with different materials  - Die casting	Making day Monday 17 <sup>Th</sup> Feb 10am- 3.30pm

				Papers and boards - AQA - GCSE Design and Technology Revision - AQA - BBC Bitesize  Polymers - Polymers - AQA - GCSE Design and Technology Revision - AQA - BBC Bitesize				- Lathe – wood turning - Laser cutting - 3d printing - Vacuum forming - Injection moulding - Blow moulding	
24 Feb	Structured revisions – all tasks to be set on firefly	Focus – plan of making/ documenting making process including quality control	Maths- Calculating the circumference and area of a circle — Wilmslow High School  Core Technical Principles- energy generation and storage	Calculating the circumference and area of a circle — Wilmslow High School  3.1.2 Energy Generation and Storage — Wilmslow High School	Seneca assignment on energy generation and storage Quiz Exam questions – practice question on energy generation	Complete quiz on Seneca Highlight key words and add definitions of vocab to do now book Share model answer to exam Q – long worded answer	Score on firefly shared with teacher (markbook)  Exam Q as Do now in lesson	Wind power/ Fossil fuels/ finite/ non-finite/ solar/ tidal/ biomass/	Thursday after school

3 March	Structured revisions – all tasks to be set on firefly	Focus – Testing and Evaluation	Maths- Calculating the surface area of a rectangular prism — Wilmslow High School	Calculating the surface area of a rectangular prism — Wilmslow High School	Complete the firefly task set		Score on firefly shared with teacher (markbook)		Thursday after school
			Core Technical Principles- new materials	3.1.3  Developments in New  Materials — Wilmslow High School	Complete table on smart and modern materials	Cue cards	Do now exam on smart / modern materials	Thermochromic/ phosphorescent/ hydrochromic/ metal foams/ precious metal clay/ PLA/ LCD	
10 March	Structured revisions – all tasks to be set on firefly	Focus – Response Tasks	Maths- Moments of Force — Wilmslow High School	Moments of Force — Wilmslow High School	Complete the firefly task set		Score on firefly shared with teacher (markbook)		Thursday after school
			Core Technical Principles- systems approach to design	3.1.4 Systems approach to Design — Wilmslow High School	Quiz GCSE bitesize Systems - Systems approach to designing - AQA - GCSE Design and Technology Revision - AQA - BBC Bitesize	Video / reading/ quiz retrieval	Do now Q on systems approach to design in lesson- in do now book	Input/ process/ output	
17 March	Structured revisions – all tasks to	Focus – response Tasks	Maths- Ratios Quiz — Wilmslow High School	Ratios Quiz — Wilmslow High School	Complete the firefly task set		Score on firefly shared with		Thursday after school

	be set on firefly	DEADLINE	Core Technical Principles- mechanical devices	3.1.5 Mechanical Devices — Wilmslow High School	Levers and linkages- practical task in lesson	Modelling / exam Q's	teacher (markbook) Practice questions	Levers / linkage/ cams/ first order levers/ second order levers/ third order levers	
24 March	Structured revisions – all tasks to be set on firefly	Final Printing	Maths- Volume of a cube — Wilmslow High School	Volume of a cube — Wilmslow High School	Complete the firefly task set		Score on firefly shared with teacher (markbook)		Thursday after school
			Design and make principles – isometric drawing	Isometric and perspective - Designing - AQA - GCSE Design and Technology Revision - AQA - BBC Bitesize	Watch the video and practice isometric drawing for independent practice	Practice question in lesson	Marking of question	Isometric	
31 March: inset	Structured revisions – all tasks to be set on firefly	Moderation of NEA by Teachers	Maths- Volume of a Prism — Wilmslow High School	Volume of a Prism — Wilmslow High School	Complete the firefly task set		Score on firefly shared with teacher (markbook)		Thursday after school
			Design and make principles – orthographic drawing	GCSE D&T Question walkthrough Orthographic isometric Drawing	Watch the video on exam question walkthrough practice orthographic drawing – sheet activity	Practice exam question in lesson	Marking of question	Orthographic- first angle projection/ third angle projection	

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21 April	Structured revisions – all tasks to be set on firefly	Design and make principles – 1 and 2 point perspective drawing	Isometric and perspective - Designing - AQA - GCSE Design and Technology Revision - AQA - BBC Bitesize	Read/ Watch the video and practice 1 and 2 point perspective / test on GCSE bitesize Isometric and perspective - Designing - AQA - GCSE Design and Technology Revision - AQA - BBC Bitesize	Practice exam question in lesson	Marking of question	Vanishing point/ construction lines/ perspective	Thursday after school
28 April	Structured revisions – all tasks to be set on firefly	Design and make principles – exploded drawing	Working drawings - Designing - AQA - GCSE Design and Technology Revision - AQA - BBC Bitesize	Read/ watch / test on GCSE bitesize - Working drawings - Designing - AQA - GCSE Design and Technology Revision - AQA - BBC Bitesize	Practice question – exploded/ working drawings	Marking of question	Exploded Working drawing	Thursday after school