

Week		Key Learning			Design Technology Year 10		Homework	
1		<u>Modelling ideas</u> <ul style="list-style-type: none">Modelling using card.Developing design ideas using modelling clay to develop ergonomics					Seneca learning for ergonomics and anthropometrics	
		<u>We will be learning about...</u> During the next 5 spring term, we are going to explore CAD and Digital design in 2D and 3D. You will investigate the design tools and software, work with CAM settings and created 3D rendered products.						
		Alongside CAD Project will explore some core content that you will cover within your exam, including Space Evaluation, Production planning, Social, moral, Cultural and ethical considerations.					Robotic Space	
		<ul style="list-style-type: none">Colour for tool paths and enabling plotter and laser cutter toolsUnderstanding nets and packaging on their importance to product Safety						
3		<u>CAD Project</u> <ul style="list-style-type: none">Basic and extended tool boxesShapes revolutions extrusions of designsWorking within millimetres and selecting work planesSelection and use of rendering patternsView points and exporting images for use in design portfolios					Gathering furniture specifications	
4		<u>CAD Project</u> <ul style="list-style-type: none">How to work within preset parameters and specificationsUse of multiple angles and surfaces in Google sketchupBuild on knowledge and learning to construct a range wooden product design items					IKEA Knock Down Fittings	
5		<u>CAD Project</u> <ul style="list-style-type: none">Model examples of what a final design should look like <u>Core</u> <ul style="list-style-type: none">hydrophobic coatings, budgeting, manufacture time scaleshow to make correct material choices for productsthe future of 3D printing and intergalactic travelWorldwide environmental agreements					Planning worksheet and past paper questions	
6		<u>Core</u> <ul style="list-style-type: none">How ethical considerations impact design choicesGovernment subsidies on green technologies by reducing CO2International trade reduces costs set up what environmental impact focus on pollutionSafe working practices human rights globallyLife cycle assessment identifying 7 key points, raw materials, manufacture, distribution, product use disposal, recycling, 6Rs					SMEC case study	
Key Vocabulary								
Parameters		Rendering	Product analysis	Modelling	LCA	Extrusions	Subsidies	

Enrichment opportunities:

Students do have the option to attend catch up sessions if needed during lunchtimes or after school if they feel they need more time and support on their practical product.

How can you help?

Parents can support their child in DT by talking to them about the project they are undergoing and encourage them to do their best. It is also helpful if students are provided with a quiet place to do their homework tasks.

Excellent links can be found on the internet such as

www.technologystudent.com

www.senecalearning.com

www.bbc.co.uk/bitesize/subjects then selecting Design Technology.

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