What we already know:	Topic:	What's next
• Upcycling Project – Using techniques and machinery to restore timber for box • Set's of coasters with paint design	**Design & Technology** **Year 8/9 Cycle B Term 5**	• 3D Printing- produce step by step plans for his/her idea for their 3D Model

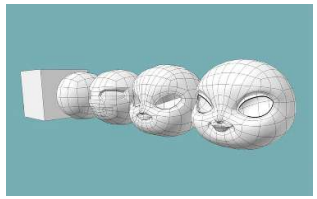
Golden Concepts				
Design Process	D & T Skills	Tools & Equipment	3D Printing	Evaluation

What I will know by the end of the unit: Understand key concepts in DT and develop skills along with terminology and improve their safety techniques

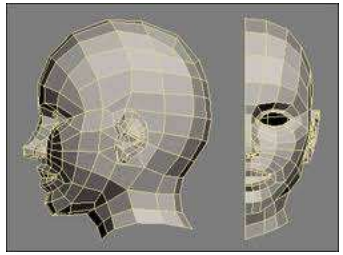
Key Vocabulary	
Core Concepts 3D Printing	A manufacturing process that creates three-dimensional objects by building layers of material based on a digital model.
CAD (Computer-Aided Design)	Software used to create detailed 2D or 3D models for printing.
Filament	Thermoplastic material (like PLA, ABS) used in most desktop 3D printers.
ABS (Acrylonitrile Butadiene Styrene)	A strong plastic filament, tougher than PLA but harder to print.
Technical Drawing	Using sketches, designs and text to create an original design
Model	The digital design (CAD file) that tells the printer what to create.
FDM (Fused Deposition Modelling)	A common 3D printing method that melts and extrudes plastic filament.
Finishing	Adding any further details to final piece to final format
Evaluation	Group feedback, re-assess for any improvements.

- Research: Gather information on different graphic designs, materials, and functions
- Sketching: Draw initial ideas of what the model will look like
- Planning: Create detailed plans, including measurements and material requirements
- Making: Use CAD design program to input details for model
- Finishing: Complete the 3D model by adjusting the surface to it's final stage of production
- Evaluation: Assess the model in its entirety of design and production
- Adhere to Health & Safety Rules at all times

Research your design of your 3D model and develop your idea through sketching



Use the correct tools and materials to achieve desired outcome



Make final original and formatted 3D Model. Reflect on design and get feedback.

At all times adhering to Health & Safety Rules