

SUBJECT NAME



ALDER
Community High School

YEAR GROUP

Official NEA	
Autumn	Composites - To know what stakeholders are - To know what potential users are - To know what users, require based on wants and needs - To know that primary research will inform and influence design decisions - To know what empirical modelling is - To know what design iteration is - To know that design ideas should be solution focused - To know what design fixation is - To know what empirical modelling is - To know that health and safety rules should be followed - To know what the iterative design process is - To know what materials are suitable for intended outcome
	Key Vocabulary Potential Users Stakeholder Analysis Primary Research Secondary Research Iteration Empirical modelling Iteration Development Modification Feedback Improvement
	Assessment Students will be assessed at regular intervals when completing the official NEA in line with course assessments against the specification.
	ILS Using knowledge organisers create: - Flashcards - Knowledge drop - Mind map - Practice key vocabulary definitions
	Wider reading Research the Design Process and how designers develop products.
	How to help at home Support the ongoing revision of key vocabulary using flashcards and quizzes.



	- Encourage students to explain how their ideas meet a design brief. - Encourage students to attend P6 catch-up sessions to complete outstanding NEA tasks - Encourage students to complete NEA tasks independently as part of their independent learning expectations	- Read about health and safety in workshops and manufacturing industries. - Explore examples of product design sketches and technical drawings. - Investigate how designers use modelling and prototyping to test ideas. - Research famous designers and inventors
	SMSC Social: Working cooperatively, sharing resources responsibly and communicating effectively with others. Moral: Understanding personal responsibility for health and safety and making safe choices in a workshop environment. Spiritual: Developing creativity, confidence and resilience through designing and problem-solving. Cultural: Exploring how products are designed to meet the needs of different cultures, communities and users.	Careers Links Games designer Programmer Interior Designer Joiner Architect Graphic Designer Illustrator Animator Engineer
Spring	Official NEA	
	Composites - To know that empirical modelling is a method of communication - To know that design development should be informed by user feedback - To know that CAD Modelling is a method of communication and design realisation - To know what stages, need to be followed to produce a final outcome - To know what materials can be used to create the final prototype - To know that user feedback should inform design development - To know that different tools have uses for specific materials - To know that a making diary is used to document progress - To know that evaluations should reflect on areas of success and areas for improvement	Key Vocabulary User feedback Development Modification CAD CAM Prototyping Quality Assurance Timber Polymer Processes Manufacturing



	• To know that evaluations inform product viability • To know that evaluations highlight further improvements • To know that user feedback influences improvements through prototype evaluation	Specification Technical drawing Evaluation Viability Commercial Processes
	Assessment Students will be assessed at regular intervals when completing the official NEA in line with course assessments against the specification.	ILS Using knowledge organisers create: • Flashcards • Knowledge drop • Mind map • Practice key vocabulary definitions
	How to help at home • Support the ongoing revision of key vocabulary using flashcards and quizzes. • Encourage students to explain how their ideas meet a design brief. • Encourage students to attend P6 catch-up sessions to complete outstanding NEA tasks • Encourage students to complete NEA tasks independently as part of their independent learning expectations	Wider reading • Research the Design Process and how designers develop products. • Read about health and safety in workshops and manufacturing industries. • Explore examples of product design sketches and technical drawings. • Investigate how designers use modelling and prototyping to test ideas. • Research famous designers and inventors
	SMSC Social: Working cooperatively, sharing resources responsibly and communicating effectively with others. Moral: Understanding personal responsibility for health and safety and making safe choices in a workshop environment and the impact of sourcing materials. Spiritual: Developing creativity, confidence and resilience through designing and problem-solving in response to a design brief/ contextual challenge. Cultural: Exploring how products are designed to meet the needs of different cultures, communities and users.	Careers Links Games designer Programmer Interior Designer Joiner Architect Graphic Designer Illustrator Animator Engineer



Summer	Core Technical Principles & Exam Techniques	
	Composites - To know that materials are converted from a raw state before manufacture - To know that timbers are available in stock forms - To know that polymers are available in stock forms - To know that sustainability issues are key to design and product generation - To know exam techniques, offer clarity when answering extended questions	Key Vocabulary Sustainability SMSC Alloy Polymer Technical Textiles Smart Materials Modern Materials Biodegradable Air Miles Malleability Corrosion Fair Trade Raw Materials Processing
	Assessment Students will be assessed on their NEA (50%) and written examination (50%) to generate a final grade	ILS Using knowledge organisers create: - Flashcards - Knowledge drop - Mind map - Practice key vocabulary definitions
	How to help at home - Support the ongoing revision of key vocabulary using flashcards and quizzes. - Encourage students to explain how their ideas meet a design brief. - Encourage students to attend P6 catch-up sessions to refine exam techniques - Encourage students to complete revision tasks independently as part of their independent learning expectations	Wider reading - Research the Design Process and how designers develop products. - Read about health and safety in workshops and manufacturing industries. - Explore examples of product design sketches and technical drawings. - Investigate how designers use modelling and prototyping to test ideas. - Research famous designers and inventors



	SMSC Social: Working cooperatively, sharing resources responsibly and communicating effectively with others. Moral: Understanding personal responsibility for health and safety and making safe choices in a workshop environment and the impact of sourcing materials. Spiritual: Developing creativity, confidence and resilience through designing and problem-solving in response to a design brief/ contextual challenge.	Careers Links Games designer Programmer Interior Designer Joiner Architect Graphic Designer Illustrator Animator Engineer
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