

DESIGN AND TECHNOLOGY



ALDER
Community High School

YEAR GROUP 8

Design and Technology 1	Design Ideas	
	<u>Composites</u> •To know that a design brief informs design ideas & developments •To know what typography is •To know what graphics are •To know what colour theory is •To know how to work safely within a workshop to prevent hazards and injury •To know how to use tools and equipment safely and independently •To know how to follow the design process and present high-quality design ideas •To know how to develop design ideas	<u>Key Vocabulary</u>
	<u>Assessment</u> Design: Students will create a range of design ideas based on their chosen designers which will be applied as surface graphics to their card net, including logos & symbols and design an alliterative title Make: Students will solder a working circuit that reacts to light – when light is detected the buzzer will sound. Students will also plan and apply surface graphics to their chosen 2D net which they will cut and score before laminating and assembling Evaluate: Students will complete an evaluation of their strengths and weaknesses through the project	<u>ILS</u> Using knowledge organisers create: • Flashcards • Knowledge drop • Mind map • Practice key vocabulary definitions
	<u>How to help at home</u>	<u>Wider reading</u>



	• Discuss examples of typography and graphics seen in everyday products and advertisements. • Encourage students to explain how colour choices influence consumer decisions. • Practise sketching and annotating design ideas. • Support revision of key vocabulary through flashcards and quizzes. • Encourage students to analyse packaging, logos and branding around the home. • Discuss how products are designed to meet a specific user's needs.	• Research the principles of graphic design and visual communication. • Explore how colour theory is used in branding and advertising. • Read about famous product designers and graphic designers. • Investigate the stages of the design process. • Research how typography influences the effectiveness of products and advertising.
	<u>SMSC</u> Social: Working collaboratively to share and discuss design ideas, giving constructive feedback to others. Moral: Understanding the importance of creating designs that are safe, inclusive and suitable for their intended users. Spiritual: Developing creativity and self-expression through visual communication and design. Cultural: Exploring how graphics, typography and colour are used differently across cultures and societies.	<u>Careers Links</u> Product Designer Industrial Designer Design Engineer Architect Mechanical Engineer Manufacturing Engineer CAD Technician Construction Manager Surveyor Project Manager Design and Technology Teacher Health and Safety Officer
Design and	Drawer Detective Project	
	<u>Composites</u> •To know that specific tools have specific uses •To know that health & safety rules should be followed •To know what steps should be followed to create an end product •To know how to behave in a workshop and identify hazards •To know how to follow step by step instructions accurately and independently •To know how to use electronics within a product	<u>Key Vocabulary</u>



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	<u>How to help at home</u> • Encourage students to identify electronic products used in everyday life. • Discuss how simple electronic devices work. • Support revision of key vocabulary using flashcards and quizzes. • Encourage students to follow instructions carefully when completing practical tasks. • Discuss the importance of testing and evaluating products before use. • Explore battery-powered products and identify their inputs and outputs.	<u>Wider reading</u> • Research basic electronic components and their functions. • Explore how circuits are used in everyday products. • Read about product manufacturing and assembly processes. • Investigate how designers incorporate electronics into products. • Research developments in smart products and electronic design.
	<u>SMSC</u> Social: Working cooperatively and sharing equipment responsibly during practical activities. Moral: Understanding the importance of following safety procedures when working with tools and electronics.	<u>Careers Links</u> Product Designer Design Engineer Manufacturing Engineer Mechanical Engineer Construction Technician Industrial Designer



	Spiritual: Developing confidence, resilience and independence through practical problem-solving. Cultural: Exploring how electronic products have transformed communication, entertainment and daily life across different societies.	CAD Technician Workshop Technician Quality Control Inspector Architect Design and Technology Teacher Project Manager
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