JAMES CALVERT SPENCE COLLEGE

Curriculum Overview

BE KIND
WORK HARD
AIM HIGH

DT

At James Calvert Spence College, we provide a broad and balanced, ambitious curriculum for all pupils. Our design technology curriculum builds upon the knowledge and skills pupils have developed earlier in their education through a well-planned and sequenced curriculum. Our curriculum plans follow the National Curriculum as well as drawing upon best practice within the field of design technology and electronics. We draw on evidence-based research to ensure our curriculum is high quality and meets the needs of our pupils. We provide regular opportunities to revisit learning, so it becomes embedded in our pupils' long-term memory. The overview of our plan is below:

Assessment: Assessments are provided in line with the school's assessment schedule and written feedback is calendared for pupils. We also provide live feedback as described below.						
Year	**Autumn 1**	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
7	**Toy Aeroplane** The toy aeroplane project is a mixed material project designed to be an introduction to the workshop and health & safety. Y7 pupils will produce a decorative toy aeroplane using a mixture of hand tools and workshop machinery while exploring additional manufacturing techniques of plastic forming, vinyl cutting, CAD/CAM manufacturing methods, and heat forming. Pupils will have the opportunity to be able to apply and demonstrate their understanding of different materials while safely manufacturing. 13 WEEKS - ON ROTATION WITH FOOD & GRAPHICS		**Zoo project** The zoo project provides the opportunity for pupils to solve a real and relevant problem in our world. Pupils will research, investigate, design - including rendering, develop and evaluate a product to help educate young children about zoos and endangered animals. Pupils will make a prototype as part of the project. 13 WEEKS - ON ROTATION WITH FOOD & GRAPHICS		**Zoo project** The zoo project provides the opportunity for pupils to solve a real and relevant problem in our world. Pupils will research, investigate, design - including rendering, develop and evaluate a product to help educate young children about zoos and endangered animals. Pupils will make a prototype as part of the project. 13 WEEKS - ON ROTATION WITH FOOD & GRAPHICS	
8	**Tape Dispenser** Pupils in Y8 will be given the opportunity to deepen their understanding of the creative		**Aztec project** Pupils in Y8 will be given the opportunity to deepen their understanding of the creative		**Aztec project** Pupils in Y8 will be given the opportunity to deepen their understanding of the creative	

	design process through a design and make project. Pupils will explore a variety of design movements from different time periods and use these as inspiration to design an authentic and functional tape dispenser. Pupils will build upon their knowledge and application of both CAD and CAM while developing and exploring new manufacturing skills through the making of a final product. 13 WEEKS - ON ROTATION WITH FOOD & GRAPHICS	design process through a design and make project. Pupils will research and explore a variety of designs from the past linked to the Aztecs and use these as inspiration to design an authentic Aztec mask, tile and sun stone which will then be evaluated. 13 WEEKS - ON ROTATION WITH FOOD & GRAPHICS	design process through a design and make project. Pupils will research and explore a variety of designs from the past linked to the Aztecs and use these as inspiration to design an authentic Aztec mask, tile and sun stone which will then be evaluated. 13 WEEKS - ON ROTATION WITH FOOD & GRAPHICS
9	**DT - Pizza Cutters** Moving into Y9, pupils will experience a snapshot of GCSE DT to deepen their knowledge and experience of the design process. The project is intended to develop their understanding of the iterative design cycle and user centred design, looking specifically at ergonomics. While doing so pupils will broaden their knowledge of materials and manufacturing processes through the opportunity of working with both metals and timbers to manufacture a functioning pizza cutter. ON ROTATION WITH FOOD & GRAPHICS	**Trainer project** Moving into Y9, pupils will deepen their knowledge and experience of the design process. The project is intended to develop their understanding of the design cycle and user centred design. While doing so, pupils will also look at marketing with consideration to their design brief and specification and will evaluate their logo, trainer, label, trainer box and advertisement designs. ON ROTATION WITH FOOD & GRAPHICS	**Trainer project** Moving into Y9, pupils will deepen their knowledge and experience of the design process. The project is intended to develop their understanding of the design cycle and user centred design. While doing so, pupils will also look at marketing with consideration to their design brief and specification and will evaluate their logo, trainer, label, trainer box and advertisement designs. ON ROTATION WITH FOOD & GRAPHICS
10	**GCSE 3D Art (DT)** **Component 1a - Picture Frame** For this mini project, pupils will undergo a series of skills based exercises to deepen their knowledge and understanding of essential elements required to complete this GCSE course independently. This includes: isometric drawing, computer aided design, rendering techniques, presentation of design, computer aided manufacturing, workshop skills, marking, measuring and research all while compiling a comprehensive recorded journey in the form of a portfolio.	**GCSE 3D ART (DT)** **Component 1b - Sustained Project: Design Movements** In this module of work, pupils will utilise learned skills from the mini project to work through a full design process resulting in the manufacture of a functioning prototype. Their product is to be designed and inspired by a design movement of their choosing (Pop Art, Gothic, Modernism, Art Deco, Art Nouveau, Bauhaus, Cubism, De Stijl, Brutalist and Memphis). Pupils will be able to personalise their outcome to something of interest, making each project and outcome different	

11	**GCSE 3D Art (DT)** **Component 1b - Sustained Project: Design Movements** Continuing with their coursework, pupils will work towards their mock 10 hour exam where they will be tasked with producing a final piece or a series of work that brings together all their learning throughout Component 1. This two day mock exam is a way to allow our pupils to understand the expectations and experience the exam conditions they will face at the end of Y11. 10 HOUR MOCK EXAM / 2 DAYS	**GCSE 3D Art (DT)** **Component 2 - Externally Set Assignment** In January of Y11, pupils will be given 8 titles by our exam board AQA, and be asked to select one title to investigate independently. They are asked to develop their own ideas through sustained and focused investigation informed by contextual and other sources, demonstrating analytical and critical understanding. Practically, they are required to explore and select appropriate processes, then review and refine their work in the time frame leading to a final 10 hour exam before or after Easter, producing a final piece or series of work that brings together all their learning throughout the ESA. 10 HOUR EXAM / 2 DAYS

Examples of on-going assessment and feedback in lessons
● Verbal feedback by the teacher to the whole class which pupils act on in the lesson ● Pupils self-assess or peer-assess work with a clear framework guiding them through this ● Teachers circulate to give 'LIVE' and immediate feedback as pupils are working independently ● Pupils may complete mini quizzes or retrieval activities that revisit prior learning and receive verbal feedback ● Use of tailored questioning by the teacher ● All coursework and the ESA is marked by their teacher, standardised within the Art and Design directorate and moderated by AQA