

Curriculum plan: D&T

"Design is not just what it looks like and feels like. Design is how it works."
- Steve jobs, co-founder of apple, inc.

"There are three responses to a piece of design - yes, no and WOW! Wow is the one to aim for." - Milton Glasser, Designer of I • NY icon.

Intent

At Woodhouse Academy Design & Technology is taught in our specialist design environment. Here students get to experience hands on practical projects, enabling them to utilise our full range of tools and machinery to complement their learning. Our design and technology curriculum is designed to develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world.



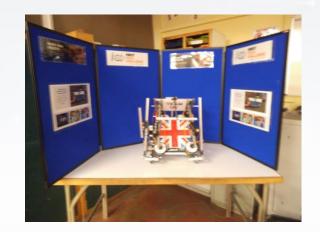


ENRICHMENT IN D&T

Sharing our passion and deep subject knowledge equips our students with high quality learning experiences which will inspire, ensure outstanding progress and provide them with a range of skills to enable them to be effective participators in society.



We have links with other establishments that our students may experience; including 'Lego' at Newcastle College or using a laser cutter at Newcastle Under Lyme school. In KS3 we also offer the opportunity to compete in a robot building competition facilitated by First Tech UK.







y5 Curriculum plan: D&T

	Autumn Aut 1	umn 2 Spring 1	Spring 2	Summer 1	Summer 2
Year 5	Chocolate Wrappe	r Key Tag		 Rolling Board Game Key elements: Design to solve a problem Creation of wood joints Joining techniques Decoration & finishing Testing Peer & self evaluation 	
	 Key elements: Introduction to subject Designing with Accurate cuttin Testing & Evaluation 	 Design fonts. Use of the second second	plastics n challenge f cutting tools thing & finishing		
	Bitesize Bitesize	Bitesize	BI G Bitesize		iesize





y6 Curriculum plan: D&T

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 6	Mini Light Key element Problem s Electroni Componer Assembly Self & perevaluation	solving c circuits nt history & Testing eer	Acrylic Techno Key elements: Plastic knowl Shaping tech Joining techi Polishing & fi Testing & Ev	edge Iniques niques Inishing	Cam Toy Key elements Use of cam Build on work skills Knowledge materials Testing & B	ns oodwork of joining
		li3 G tesize	BIG Bitesize	BiB C Bitesize	Bitesize	





y7 Curriculum plan: D&T

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 7	Money Box Key elements Problem so Graphic dr Accurate r cutting Joining tec Decoration techniques Testing &	olving rawing marking & chniques n & finishing	Pencil Holde Key element Design de Accurate drawing Product r Material s Using jigs Wood finitechnique Test & Ev	s: velopment graphical esearch selection ishing	Steady Hand G Key elements: Design reservable solutions Complex electrical journal techniques Circuit asservable test & Evaluations	arch & ctronic oining mbly
	Bitesize Bitesize			BIB G Bitesize	BIBC Bitesize	





y8 Curriculum plan: D&T

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 8	Accurate meUse of TapsJoining of m	n to metalworking easuring & mark & Die etals Finishing techniq	ing	 Graphical Accurate	rs: a theme & design A3 fol techniques & co cutting list f materials to be	olour rendering
	Bitesize Bitesize			Bitesize	Bitesize	





Developing all existing skills acquired during KS1 and the start of KS2 (in the first school setting,) through specialist teaching in middle school.

PERSONAL SAFETY

You will develop skills and knowledge of how to work in this new environment keeping yourself and others safe.

Chocolate Wrapper design

You will learn how use graphical techniques to create informative and decorative designs as illustrated in the many existing wrappers.



Chocolate Wrapper making

You will learn how to manipulate media to construct a 3D container using existing scissor skills and introducing more advanced knife and board techniques Leacher Christmas



Rolling Ball Game

You will learn some wood working basics with the design and construction of this wooden game. You will be taught how to use marking out tools, general wood saws, wood files, gluing techniques as well as decorative elements including paint.



PERSONAL SAFETY

You will build upon previous skills and knowledge of how to work in this unusual environment keeping yourself and others

Mini Light Project

You will undertake a design and make assignment where you will explore basic electronic circuits using modern man made materials.

Machinery

You will be introduced to different machines during this year: namely a Pillar Drill and Hegner electric saw. These should allow you to work faster and more accurately.



Graphical Techniques

Building on previous work you will examine new and existing ways of presenting written word through differing techniques.

Point of Sale displays

Marketing plays a major part in the stages after design and making have ended. How do our products reach the market place. Undertake a short research task giving historical, present and future examples.



Steady Hand Game

Design and make project building on previous electronic skills to build a challenging game to test your nerves. New skills will include soldering and using Vacuum Former to create new shapes in High Impact Polystyrene.

Using 2D Design

Introduction to a design software package which will enable students, with practise, to design and make products using a laser cutter.



Money Box Project

For this project you will learn more of the design process that all items are designed against. You will discover that its not just about making a money box but about designing to given criteria, set by another person. This will require a lot of background work, completion of a design folder, before any making takes place.



KS3 D&T will build on the skills and techniques you have developed in Years 5 and 6 to prepare you for GCSE study.

Key Fob Project

Create a tag for a set of keys using Acrylic materials. Develop skills using new tools to measure. mark and cut out said material.



Packaging

Looking at the history of the box, how it has developed over the past 100 years or so and what do we expect to see in the future.

The department has a wide range of resources to help you with your studies, from design history books, books on specific design houses, a school library of others resources, not forgetting the use of the IT rooms or laptops/I pads for research. Why not select a specific designer and discover more about them during Reading Time?

Visiting the high school within our partnership Allows students access to designs done by past students giving them an insight into possible future aspirations.



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During your time in KS3 you will have the opportunity to join our Robotics club, an extra curricular session building, programming and competing in challenges with and against other schools.



Balance Toy

An introduction to developing skills and techniques whilst working in metal. Two types namely Brass and Copper coated Mild Steel. Developing more tool skills using Hack saw, Taps & Die set, emery cloth to polish.

Usually the final project allowing the students to apply all their previous learning and knowledge into a keepsake product.

This will be a design and make product, students will work on A3 paper, preparing them for work in Y9.



Ready for the next step Fully equipped to tackle the remaining year of KS 3 and make the all important choices for

Year 9 will build on all of your art skills and develop knowledge that you acquired in middle school.

Clock

KS4



