

Knowledge Progression in Design Technology

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
KS1 Cycle A	3D Modelling - Robots Explore and evaluate existing robots Explore a range of materials and design a robot Make, evaluate and improve the robot against design criteria			<i>Link to history: explore the process of wattle and daub</i>	Food Technology – Dips Explore and evaluate a range of existing dips Design a purposeful, functional and appealing product, with consideration given to having a healthy, varied diet Follow a plan to make a new dip and evaluate its success <i>DNA: your self</i>	Moving Parts – Books Explore existing books with moving parts Draw a simple design for a picture with a moving mechanism and begin to understand what design criteria are for Evaluate the finished product
KS1 Cycle B		<i>Link to science: make rain gauges featuring scales, sun catchers and wind socks</i>				Textiles – India-Inspired Products Explore and evaluate existing Indian products such as bags, pencil cases and book marks Stitch two pieces of fabric together using a running stitch Follow the design, make and evaluate process Diversity links: Indian artefacts

LKS2 Cycle A	<i>Link to history: make woolly mammoths incorporating cutting, shaping, joining and finishing skills</i>		<i>Link to history: experience Roman cooking of bread and honey cakes</i>	Food Technology – Healthy Pizzas Understand what makes a healthy diet and apply this to making pizzas Order the stages of making Choose appropriate tools and equipment to perform cooking tasks Know how and where healthy ingredients are grown and understand seasonality <i>DNA: your self, your world</i>		Textiles – Fabric Tote Bags Use a wide range of textile materials to create an environmentally friendly solution Generate ideas for a purpose Evaluate the effectiveness of a product <i>DNA: your future, your world</i>
LKS2 Cycle B		Electrical Systems - Electrical Games Apply understanding of electrical circuits to produce a working electrical game Create annotated designs to inform planning of a product Create and appealing product that is fit for a purpose <i>DNA: your learning, your future</i>	<i>Link to history: make Viking longships incorporating cutting, shaping, joining and finishing skills</i>		Levers and Linkages – Mechanical Posters Select materials and correct tools and techniques for different purposes Develop and use a set of design criteria to create a product Assemble, join and combine materials and components with some accuracy <i>DNA: your learning, your future</i>	<i>Link to history: investigate traditional Maya handicrafts</i>

UKS2 Cycle A	Food Technology - Bread Learn about health and safety in food preparation Investigate and evaluate different breads from around the world Design, make and evaluate a bread product <i>DNA: your self, your world</i>			3D Modelling - Morrison Shelter and Gas Mask Select materials to design, make and evaluate a diorama air raid shelter Using 2Design, move points to design a 3D model of an air raid shelter before refining and printing Create a 3D gas mask, exploring materials and methods of joining them <i>Link to computing: 3D modelling; link to history: WWII</i>	<i>Link to history: WWII make do and mend using sewing vocabulary, basic stitches and embroidery</i> <i>Link to history: WWII healthy ration recipes</i>	
UKS2 Cycle B	Textiles – Tudor Purses Build and apply a repertoire of skills and knowledge to design and make high quality products Select appropriate materials for the required functionality of a purse Develop sewing skills to join and finish the purse decoratively		Electrical Circuits and Pneumatics – Robots Investigate and evaluate existing robots Apply understanding of circuits to create a robot which performs a function Include moving parts using levers <i>Link to history: artificial intelligence</i> <i>DNA: your future</i>		<i>Link to geography: Survival including knowing food origins and understanding seasonality</i>	

	Critique, evaluate and test products <i>Link to history</i>					
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