

Design Technology Curriculum Overview - Year 5

	Unit	Details
Autumn Two	Mechanical systems: making a pop up book	<ul style="list-style-type: none"> • Designing a pop-up book which uses a mixture of structures and mechanisms. • Naming each mechanism, input and output accurately. • Storyboarding ideas for a book; following a design brief to make a pop up book, neatly and with focus on accuracy. • Making mechanisms and/or structures using sliders, pivots and folds to produce movement. • Using layers and spacers to hide the workings of mechanical parts for an aesthetically pleasing result. • Evaluating the work of others and receiving feedback on their own work.
Spring One	Food and Nutrition: pitta pizzas	<ul style="list-style-type: none"> • Adapting a traditional recipe, understanding that the nutritional value of a recipe alters if you remove, substitute or add additional ingredients. • Writing an amended method for a recipe to incorporate the relevant changes to ingredients. • Cutting and preparing recipes safely. • Using equipment safely, including knives and ovens. • Knowing how to avoid cross-contamination. • Following a step-by-step method carefully to make a recipe. • Identifying the nutritional differences between different products and recipes. • Identifying and describing healthy benefits of food groups.
Spring Two	Electrical systems: Doodlers	<ul style="list-style-type: none"> • Identifying factors that could be changed on existing products and explaining how these would alter the form and function of the product. • Developing design criteria based on findings from investigating existing products. • Developing design criteria that clarifies the target user. • Altering a product's form and function by tinkering with its configuration. • Making a functional series circuit, incorporating a motor. • Carry out a product analysis to look at the purpose of a product along with its strengths and weaknesses. • Determining which parts of a product affect its function and which parts affect its form. • Peer evaluating a set of instructions to build a product.
Summer Two	Structures: bridges	<ul style="list-style-type: none"> • Designing a stable structure that is able to support weight and creating a frame structure with focus on triangulation. • Making a range of different shaped beam bridges. • Using triangles to create truss bridges that span a given distance and support a load. • Independently measuring and marking materials accurately. • Selecting appropriate tools and equipment for particular tasks and using the correct techniques to cut safely. • Identifying where a structure needs reinforcement and using card corners for support. • Explaining why selecting appropriate materials is an important part of the design process. • Adapting and improving own bridge structure by identifying points of weakness and reinforcing them as necessary. • Suggesting points for improvements for own bridges and those designed by others.

Design technology is taught on a carousel with Art, which is then taught for the remainder of the year.