

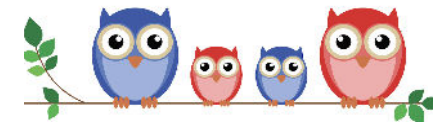


### As a Year 5 Designer I will know...

Unit title <b>Doodlers</b>  FOCUS: Electrical systems	To know series circuits only have one direction for the electricity to flow.	To know when there is a break in a series circuit, all components turn off.	To know that an electric motor converts electrical energy into rotational movement, causing the motor's axle to spin
	To know a motorised product is one which uses a motor to function	To know that product analysis is critiquing the strengths and weaknesses of a product	To know that 'configuration' means how the parts of a product are arranged
Unit title <b>Pop-up book</b>  FOCUS: Mechanisms	To know that mechanisms control movement.	To understand that mechanisms can be used to change one kind of motion into another.	To understand how to use sliders, pivots and folds to create paper-based mechanisms.
	To know that a design brief is a description of what I am going to design and make.	To know that designers often want to hide mechanisms to make a product more aesthetically pleasing.	



<p>Unit title <b>What could be healthier?</b></p>	<p>To understand where meat comes from – learning that beef is from cattle and how beef is reared and processed, including key welfare issues.</p>	<p>To know that I can adapt a recipe to make it healthier by substituting ingredients.</p>	<p>To know that I can use a nutritional calculator to see how healthy a food option is.</p>
<p>FOCUS: Food and Nutrition</p>	<p>To understand that ‘cross-contamination’ means that bacteria and germs have been passed onto ready-to-eat foods and it happens when these foods mix with raw meat or unclean objects.</p>		



## As a Year 5 Designer I can...

### Electrical systems: Doodlers

- ✓ 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 finding 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.
- ✓ Constructing a product with consideration for the design criteria.
- ✓ Breaking down the construction process into steps so that others can make the product.
- ✓ 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.
- ✓ Analysing whether changes in configuration positively or negatively affect an existing product.
- ✓ Peer evaluating a set of instructions to build a product.

### Mechanisms: Pop-up book

- ✓ 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 own work.
- ✓ Suggesting points for improvement.



## As a Year 5 Designer I can...

### **Food and nutrition: What could be healthier?**

- ✓ 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.
- ✓ Designing appealing packaging to reflect a recipe.
- ✓ Cutting and preparing recipes safely.
- ✓ Using equipment safely, including knives, hot pans and hobs.
- ✓ 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.