



## Year 4: D&T

Designing and Evaluating	Making	Cookery and Nutrition <small>*Revisit and recall opportunities/PSHRE curriculum</small>
<b>D1</b> I can design with purpose by identifying opportunities to design and justify my choices.	<b>M1 Materials</b> I can measure and mark out to the nearest mm	<b>C1</b> I can say where food comes from, from around the world.
<b>D2</b> I can make products by working efficiently and with precision (such as by carefully selecting from a wide range of materials and tools.)	<b>M2 Materials</b> I can cut materials accurately and safely by selecting appropriate tools.	<b>C2</b> I know that different foods are best produced in different seasons around the world.
<b>D3</b> I can refine work and techniques as work progresses, continually evaluating the product design.	<b>M3 Materials</b> I can apply appropriate cutting and shaping techniques that include cuts within the perimeter of the material (such as slots or cut outs).	<b>C3</b> I can name all of the food groups and sort ingredients into them (Carbohydrates, fruit and vegetables, protein, dairy, oils and spreads, foods high in fats and sugars).
<b>D4</b> I can use software to design and represent product designs including labels.	<b>M4 Materials</b> I can select appropriate joining techniques – running, back and over stitch.	<b>C4</b> I can follow a recipe, including selecting appropriate ingredients.
<b>D5</b> I can identify some of the great designers in all the areas of study (including pioneers in sustainability) to generate ideas for designs.	<b>M5 Textiles</b> I can select the most appropriate techniques to decorate textiles.	<b>C5</b> I can prepare ingredients hygienically selecting and using appropriate utensils.
<b>D6</b> I can disassemble products to understand how they work.	<b>M6 Textiles</b> I can understand the need for a seam allowance.	<b>C6</b> I can measure ingredients to the nearest gram.
	<b>M7 Textiles</b> I can join textiles with appropriate stitching.	<b>C7</b> I can assemble and cook ingredients (controlling the temperature of the oven or hob if cooking).



	<b>M8 Electricals and electronics</b> I can recognise if a battery operated device works or not.	
	<b>M9 Electricals and electronics</b> I can diagnose faults in battery operated devices (such as low battery, water damage or battery terminal damage).	
	<b>M10 Electricals and electronics</b> I can create series circuits.	
	<b>M11 Electricals and electronics</b> I can create parallel circuits.	
	<b>M12 Computing</b> I can monitor models using software designed for this purpose.	
	<b>M13 Computing</b> I can control models using software designed for this purpose.	

**Year 4 coverage**

<b>Autumn</b> Materials and Textiles	<b>Spring</b> Electricals and Electronics Cookery and Nutrition	<b>Summer</b> Computing Cookery and Nutrition
D1, D2, D3, D5, D6 M1, M2, M3, M4, M5, M6, M7	D1, D2, D3, D4, D5 M12, M13 C1, C2, C3, C4, C5, C6, C7	D1, D2, D3, D5 M8, M9, M10, M11 C1, C2, C3, C4, C5, C6, C7
<b>Vocabulary</b>	<b>Vocabulary</b>	<b>Vocabulary</b>



**Materials**

millimetre, accuracy, perimeter, finishes

**Textiles** Textiles, back stitch, over stitch, seam and seam allowance.

**Computing**

monitor, observe, model, software.

**Electricals and electronics**

battery operated, device, diagnose, faults, battery terminal, series, parallel, circuit, wires, crocodile clips, battery, bulbs, motors, buzzers.

**Cookery and Nutrition**

Europe, produce, seasonality, food groups, carbohydrates, fruit and vegetables, protein, dairy, oils and spreads, high in fats and sugars, ingredients, varied, prepare, utensils, sterilise, gram, assemble, control, temperature

**Designing and Evaluating:**

justify, efficiency, precision, refine, continual, software, label, sustainability, disassemble, critical  
Also include the names of designers studied

**I will know**

**I will know**

**I will know**



### **Materials**

- How to use a ruler/tape measure to measure to the nearest mm.
- How to mark fabric.
- That the different tools for cutting and shaping give different finishes.
- How to use the tools to cut and shape material accurately.
- How to use the tools safely when cutting and shaping material.
- How to cut to create slots or cut-outs within the perimeter of the material.
- How to choose the most appropriate method of joining materials (gluing, stitching etc). in the context of the product that I am making.

### **Textiles**

- How to decorate textiles using different mediums.
  - How to select the most appropriate technique to apply decorations to fabrics.
- How to thread a wide-eyed needle.
- How to stitch materials together- running, cross and back stitch.

### **Computing**

- That models can be monitored using computer software.
- The name of the software that I can use to monitor a model.
- How to use computer software to monitor a model.
- That models can be controlled using computer software.
- The name of the software that I can use to control a model.
- How to use computer software to control a model.

### **Electricals and electronics**

- How to test to see if a battery-operated device is working or not.
- How to find a fault with a battery-operated device.
- That a series circuit is one that has more than one resistor (light bulbs), but only one path through which the electricity flows.
- How to build and test a series circuit.
- That a parallel circuit is one that has more than one resistor (light bulbs, buzzer etc), and more than one path (usually two) through which the electricity flows.
- How to build and test a parallel circuit.

### **Cookery and Nutrition – Opportunity to revisit/recall**

#### **Year 3 skills**

- That food can source from all around the world.
- That food grows best in certain seasons e.g. strawberries in the Summer.
- The names of the food groups (carbohydrates, fruit and vegetables, protein, dairy, oils and spreads, foods high in fats and sugars).
- How to sort foods into the food groups.



- How to select the most appropriate method of stitching to join the materials together with increasing accuracy and neat finish.
- That a seam allowance is the area between the edge of the fabric and the stitching line when joining two pieces of material together.
- That without taking into consideration a seam allowance, the material that you cut to make a product may be too small.

- How to follow a recipe.  
How to select and use the most appropriate utensil to prepare ingredients for the meal that I am making e.g. grater, knife etc.
- How to weigh ingredients to the nearest gram using electronic scales or analogue scales accurately.  
How to assemble and cook food safely and hygienically.
- How to use cooking equipment such as the microwave, hob, or oven.
- How to control the temperature of the hob/oven when being used.

**Designing and Evaluating:**

- How to research and identify opportunities to develop designs.
- How to disassemble products to understand how they work.
- How to work efficiently with precision.
- How to discuss my own and others current designs with some criticality.
- The name and works of some great designers.
- How to use work and ideas from great designers to generate ideas for my own designs, including pioneers in sustainability.
- How to adapt, change and refine designs to improve them.
- How to refine my design as I work and give reasons for the changes to my design.
- How to evaluate my own product against my own design criteria and take on board the ideas of others.
- How to design/represent a product, including the use of labels, using computer software.