



LITERATURE-LED  
CURRICULUM

# DESIGN TECHNOLOGY

## Curriculum Intent

Spa's **Design Technology** curriculum aims to equip pupils so that they will:



develop the **creative, technical** and **practical expertise** needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world



build and apply a repertoire of knowledge, understanding and skills in order to **design and make high-quality prototypes and products** for a wide range of users



**critique, evaluate** and test their **ideas** and **products** and the work of others



understand and apply the **principles of nutrition** and **learn how to cook**.

## National Curriculum Coverage

	Y3 Sewing	Y3 Grilling	Y4 Stitching	Y4 Frying	Y5 Structures	Y5 Baking	Y6 Mechanisms	Y6 Boiling	'Great Inventors' Dear Day
use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups	✓		✓		✓		✓		
generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design	✓		✓		✓		✓		
select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately	✓		✓		✓		✓		
select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities	✓		✓		✓		✓		
investigate and analyse a range of existing products	✓		✓		✓		✓		
evaluate their ideas and products against their own design criteria and consider the views of others to improve their work	✓		✓		✓		✓		
understand how key events and individuals in design and technology have helped shape the world									✓
apply their understanding of how to strengthen, stiffen and reinforce more complex structures					✓		✓		
understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]							✓		

understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]	Covered in Science curriculum (Year 4 & Year 6 – Spring 1)								
apply their understanding of computing to program, monitor and control their products							✓		
understand and apply the principles of a healthy and varied diet		✓		✓		✓		✓	
prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques		✓		✓		✓		✓	
understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.		✓		✓		✓		✓	

# Curriculum Sequencing

1. Research (Nutrition)

2. Design (Seasonality)

3. Technical Drawing (Research)

4. Make

5. Evaluate

	Autumn	Spring	Summer
<b>Year 3</b>	<b>Sewing</b> <ol style="list-style-type: none"> <li>1. Research – products</li> <li>2. Design – design criteria</li> <li>3. Technical Drawing – pattern piece</li> <li>4. Make – sewing</li> <li>5. Evaluate – strengths and weaknesses</li> </ol>		<b>Grilling</b> <ol style="list-style-type: none"> <li>1. Nutrition – balanced diet</li> <li>2. Seasonality – growing foods</li> <li>3. Research – sandwich ingredients</li> <li>4. Make – grilling</li> <li>5. Evaluate – strengths and weaknesses</li> </ol>
<b>Year 4</b>	<b>Sewing</b> <ol style="list-style-type: none"> <li>1. Research – textile materials</li> <li>2. Design – relevant or irrelevant</li> <li>3. Technical Drawing – pattern piece</li> <li>4. Make – sewing</li> <li>5. Evaluate – alterations</li> </ol>		<b>Frying</b> <ol style="list-style-type: none"> <li>1. Nutrition – fibre</li> <li>2. Seasonality – fishing</li> <li>3. Research – wrap fillings</li> <li>4. Make – frying</li> <li>5. Evaluate – alterations</li> </ol>
<b>Year 5</b>	<b>Structures</b> <ol style="list-style-type: none"> <li>1. Research – products</li> <li>2. Design – sketch</li> <li>3. Technical Drawing – exploded diagram</li> <li>4. Make – woodwork</li> <li>5. Evaluate – technique</li> </ol>		<b>Baking</b> <ol style="list-style-type: none"> <li>1. Nutrition – carbohydrates</li> <li>2. Seasonality – processing</li> <li>3. Research – pizza/pasta</li> <li>4. Make – baking</li> <li>5. Evaluate – ingredients</li> </ol>
<b>Year 6</b>	<b>Mechanisms</b> <ol style="list-style-type: none"> <li>1. Research – mechanisms</li> <li>2. Design – cross-section</li> <li>3. Technical Drawing – scale</li> <li>4. Make – using joints to strengthen</li> <li>5. Evaluate – structure</li> </ol>		<b>Boiling</b> <ol style="list-style-type: none"> <li>1. Nutrition – fat</li> <li>2. Seasonality – rearing</li> <li>3. Research – noodles/curry</li> <li>4. Make – boiling</li> <li>5. Evaluation – proportions</li> </ol>