

### 3Cert Design & Technology Curriculum Overview

Year 7		Year 8	
<b>The Design Process &amp; Structures</b>	<ul style="list-style-type: none"> <li>What is D&amp;T at secondary school?</li> <li>How to work safely in the D&amp;T workshops</li> <li>The design process and how we use it</li> <li>Understanding the performance of structures</li> </ul>		
<b>Interactive Greetings Cards</b>	<ul style="list-style-type: none"> <li>Properties of paper and card</li> <li>Mechanical systems - change in movement and force</li> <li>Simple electrical circuits</li> <li>Evaluation of products made by others</li> <li>Communication techniques - annotated sketches, 2-point perspective</li> </ul>	<b>Interactive Greetings Cards</b>	<ul style="list-style-type: none"> <li>Properties of paper and card</li> <li>Mechanical systems - change in movement and force</li> <li>Simple electrical circuits</li> <li>Evaluation of products made by others</li> <li>Communication techniques - annotated sketches, 2-point perspective</li> </ul>
<b>Toys, toys, toys</b>	<ul style="list-style-type: none"> <li>Overview of materials - properties and manipulation</li> <li>Properties of wood and board</li> <li>Research into ID and understanding user needs</li> <li>Using basic workshop tools to cut, shape and finish wood</li> <li>Sustainability and environmental issues - 6Rs</li> <li>The impact of D&amp;T on people and the environment - toy industry</li> <li>Sinclair C5 and literacy</li> <li>Product analysis of wooden toys from historical perspective</li> </ul>	<b>Passive speakers</b>	<ul style="list-style-type: none"> <li>Overview of materials - properties and manipulation</li> <li>Properties of plastics</li> <li>Research into ID and understanding user needs</li> <li>Generating ideas - using specific strategies</li> <li>Developing ideas through modelling</li> <li>Using basic workshop tools to cut, shape and manipulate plastics</li> <li>Sustainability and environmental issues - 6Rs</li> <li>Product analysis of electronic products from historical perspective</li> </ul>
<b>Chelsea Academy Food Encyclopaedia</b>	<ul style="list-style-type: none"> <li>Safety and hygiene related to cooking</li> <li>Healthy eating guidelines (Eatwell Guide)</li> <li>Nutrient sources and function</li> </ul>	<b>Cooking &amp; Nutrition; Street Food</b>	<ul style="list-style-type: none"> <li>Safety and hygiene related to cooking</li> <li>Food choices related to health, culture, economics and food sources</li> </ul>

	<ul style="list-style-type: none"> <li>• Sources of food products (fruits, vegetables and cereals)</li> <li>• Heat transfer related to cooking</li> <li>• Browning of foods</li> </ul>		<ul style="list-style-type: none"> <li>• Sources of food products (protein foods)</li> <li>• Foods from other cultures</li> <li>• The science of gelatinisation and of raising agents</li> </ul>
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All year 7 students will study the introduction and structures unit in the first 3 weeks of the year at the end of which they will take a baseline test. The results of the test, along with KS2 results will be used to set students. Students will study the three remaining units in a different order depending on which class they are in. They are assessed formally at the end of each unit as well as a final end of year assessment to assess all work from the year.

All year 8 students will be taught in sets dependent on their year 7 attainment. Students will study the three units in a different order depending on which class they are in. They are assessed formally at the end of each unit as well as a final end of year assessment to assess all work from the year.

All 3Cert courses are assessed formally through exams at the end of each term. These dates are in the Academy calendar.