



## CHS Curriculum Intent

**SUCCESSFUL:** Learners who gain deep and powerful knowledge in preparation for life; combining academic rigour, curiosity and creative flair.

**CREATIVE:** Learners who are imaginative, optimistic and inventive; finding their voice to become effective communicators prepared for lifelong adaptability

**HAPPY:** Learners who are confident, resilient, well-rounded citizens; they understand the world's communities and are ready to discover their place in it.

## CHS Curriculum Area Framework for Learning – Computing and Technology – Year 7

SUBJECT	Computing	Design and Technology	Food Preparation and Nutrition
<b>INTENT</b>	<p>“Those who can imagine anything, can create the impossible.” — Alan Turing</p> <p>As we live in an ever-changing digital world, Computer Science impacts everything from gaming, to medicine, banking, communications and connectivity. Most individuals and businesses rely on sophisticated computer systems and software throughout their daily lives and operations.</p> <p>Learners today are preparing for careers that might not even exist yet, and we hope our students can be one of the Computer Scientists who makes the world better, faster and more interconnected!</p> <p>Studying Computer Science at Chorlton High School, will provide our learners with the tools, knowledge and skills to develop their computational thinking, programming, problem solving and analytical skills. Our learners can then apply these to a variety of programming projects. Studying Computer Science will also allow our learners to access a wider range of topics including digital literacy, e-safety, computer systems, networks, data representation and the positive and negative impact of computing on modern society.</p>	<p>“There are three responses to a piece of design – yes, no, and WOW! Wow is the one to aim for.” — Milton Glaser</p> <p>By studying Design and Technology we want students to be secure in the core skills of teamwork, communication, co-operation, and empathy by immersing them into the world of tomorrow and inspiring them to solve real world problems using practical solutions. We aim to inspire our students to become reflective and creative individuals who have the confidence to explore and question the world around them.</p> <p>Everything we use in life has been designed by someone, by people who are risk takers, experimenters, who are not afraid to make mistakes and learn from them. Therefore, through the in-depth knowledge of materials, products and innovations, students learn to interact positively with the ever-changing world around them and how this can have potential implications on societies, cultures, environment, and new innovations.</p> <p>Our aim is to develop curious, confident young people who are introduced to a vibrant range of activities and cultural experiences covering a broad-spectrum of design disciplines. We encourage creativity supporting students to go beyond the classroom creating responsible consumers, and successful innovative designers and engineers of tomorrow.</p> <p>We aim to develop happy, creative and successful learners that can change the ever-developing Design and Technology landscapes, such as product design, engineering, fashion design and Sustainable futures, preparing them for A-Level, level 3 BTECs or apprenticeships.</p>	<p>“To eat is a necessity, but to eat intelligently is an art.” - La Rochefoucauld</p> <p>Food Preparation and Nutrition at Chorlton High school inspires students to develop and understand the relevance and importance of healthy eating in order to contribute to a healthy future.</p> <p>The food and drink industry is the UK’s largest manufacturing sector and a vital part of the UK economy. It is a diverse, vibrant, innovative and exciting industry, offering employment to people with a wide array of skills and talent.</p> <p>Studying Food preparation and Nutrition will enable students to acquire a wide range of specialist skills covering problem solving, creativity, logical thinking, an analytical approach, good communication, and teamwork. These skill sets are highly sought after by employers transferable across all industries. In studying this curriculum, we equip students both personally, preparing them for their understanding of food and nutrition but also within their potential future careers.</p> <p>Food Preparation and Nutrition provides progression to A Level, further education or onto an apprenticeship as well as supplementing as a building block to a future career in the Food and Hospitality sector.</p>



Department: **Computing & Technology 2021 - 2022**

Subject: **Computing and Technology – Year 7 Rotation**

<b>Year Group</b>	<b>Year 7</b>					
<b>Rationale/ Narrative</b>	<p><b>Introducing</b> - Students in Year 7 will have one term of two-hour lessons in Computing, one term of two-hour lessons in Design and Technology and one term of two hour lessons in Food Preparation and Nutrition. This is done in a rotation cycle throughout the academic year. Some learners will have little or no experience in these subject areas from KS2 so the schemes across all areas aims to support learners with their transition as part of the 5-year learning journey.</p> <p><b>Computing in Year 7:</b> Students will develop a knowledge in ICT and the practical application of software and understand how hardware in a computer functions before starting to consider computational thinking through aspects of Computer science.</p> <p><b>Design and Technology in Year 7:</b> Students will develop knowledge of a range of materials and have the opportunity to work with them to produce a selection of small practical outcomes. They will learn about specific manufacturing tools and processes as well as developing specific technological drawing techniques.</p> <p><b>Food Preparation and Nutrition in Year 7:</b> Students will develop a knowledge in food related to food hygiene, nutrition, Food provenance and food preparation having the opportunity to work with a range of equipment and ingredients to produce a variety of different dishes as well as sensory exploration of different food products.</p>					
	<b>Computing</b>		<b>Design and Technology</b>		<b>Food Preparation and Nutrition</b>	
<b>KNOWLEDGE</b>	<p><i>Students will all start with a tutorial lesson on MS Office and specific apps within Office 365 including MS Teams (Digital Literacy)</i></p> <p><b>ICT (Information Communication Technology) Skills</b></p> <p>Students will learn information around the key topics of: Office 365 introduction</p> <ul style="list-style-type: none"> <li>• Use of ICT</li> <li>• Software (office suite)</li> <li>• E-Safety, social wellbeing, cyber bullying.</li> </ul> <p>Computer systems:</p> <ul style="list-style-type: none"> <li>• Memory and storage, Operating systems.</li> <li>• Data Representation.</li> </ul>	<p><b>Computer Science</b></p> <p>Students will learn information around the key topics of:</p> <ul style="list-style-type: none"> <li>• Algorithms</li> <li>• Flowcharts/Flowol</li> <li>• Bubble sort and Binary</li> <li>• Practical application; Microbits</li> <li>• Python (coding)</li> </ul>	<p><b>Materials</b></p> <p>Students will be introduced to Design &amp; Technology through the following area:</p> <p><u>Health and safety</u> (specifically in relation to workshop behaviors, use of tools and equipment.</p> <p>Students will learn about the sources and origins, and the properties of key materials:</p> <ul style="list-style-type: none"> <li>• Timbers</li> <li>• Plastics</li> <li>• Metals</li> <li>• Fabrics</li> <li>• Paper and board</li> </ul> <p><i>Students will also look at Sustainability in relation to materials</i></p>	<p><b>Design and Make Processes</b></p> <p>Students will learn information around the key topics of:</p> <ul style="list-style-type: none"> <li>• Drawing tools</li> <li>• Isometric projection</li> <li>• Colour, shading and rendering techniques</li> </ul> <p>Students will learn the key methods to <u>shape</u> and <u>form</u> materials:</p> <ul style="list-style-type: none"> <li>• Timbers</li> <li>• Plastics</li> <li>• Metals</li> <li>• Fabrics</li> <li>• Paper and board</li> </ul>	<p><b>Basic Food Principles</b></p> <p>Students will learn information around the key topics of:</p> <ul style="list-style-type: none"> <li>• Food Hygiene and safety including bacterial contamination and key temperatures.</li> <li>• Preparing for cooking-how to prepare themselves and their environment hygienically and safely including the cooker – areas, key features. Units of measure. <i>Apply knowledge during a practical</i></li> <li>• The Eatwell Guide</li> <li>• Balanced Diets- how to adapt a dish to make it more balanced.</li> </ul>	<p><b>Healthy Eating Goals</b></p> <p>Students will learn information around the key topics of:</p> <ul style="list-style-type: none"> <li>• Healthy Eating Goals (macronutrients) – carbohydrates (Fibre and sugar)- <i>apply knowledge during a practical</i></li> <li>• Healthy Eating Goals (macronutrients) – Fat</li> <li>• Food Provenance-Seasonality/food sources (farm to fork)- <i>sensory analysis of seasonal produce</i></li> </ul>
<b>SKILLS</b>	Students will:		Students will:		Students will:	



	<ul style="list-style-type: none"> <li>Identify and select information, breaking down key information.</li> <li>Analysis Practical application of knowledge will also be a developed skill this term.</li> </ul> <p>Students will:</p> <ul style="list-style-type: none"> <li>Use evaluation skills, analysis and Metacognitive practice.</li> <li>Practical application of knowledge will also be a developed skill this term. This will be done using suitable software and programs that relate to the topics being covered in lessons including Python etc.</li> </ul>		<p><b>Theoretical skills:</b></p> <ul style="list-style-type: none"> <li>Identify, select and break down key information.</li> <li>Analyse and evaluate information relating to a range of materials.</li> <li>Use creativity to create ideas and present these through suitable communication techniques.</li> </ul> <p><b>Practical skills:</b></p> <ul style="list-style-type: none"> <li>Develop skills, techniques and processes in relation to drawing and the various materials.</li> <li>Develop their ability to use specialist technical equipment.</li> <li>Develop their understanding of health and safety and specific regulations for working with tools and equipment</li> <li>Independently build their confidence and resilience levels as they work with specific materials.</li> </ul> <p><b>Other skills students will develop:</b></p> <ul style="list-style-type: none"> <li>Time management</li> <li>Organisation</li> <li>Initiative and independence</li> <li>Problem solving and decision making</li> <li>Application of math's/numeracy</li> </ul>		<p><b>Theoretical skills:</b></p> <ul style="list-style-type: none"> <li>identify, select and break down key information.</li> <li>Evaluation skills, analyse (inc. sensory analysis), reflect, plan and improve.</li> <li>Practical application of knowledge and reflection</li> </ul> <p><b>Practical skills:</b></p> <ul style="list-style-type: none"> <li>General practical skills (weighing and measuring)</li> <li>Knife skills-quesadillas, salad dish, savoury rice.</li> <li>Cooking methods- all practicals</li> <li>Use of equipment- all practicals (including electrical-equipment)</li> <li>Sauce making- salad (emulsion dressing)</li> <li>Dough making- scones</li> <li>Raising agents- scones</li> </ul> <p><b>Other skills students will develop are:</b></p> <ul style="list-style-type: none"> <li>Quality Control</li> <li>Time Management</li> <li>Teamwork</li> <li>Organisation</li> <li>How to prepare themselves and their area for cooking.</li> <li>Initiative and independence.</li> <li>Application of maths (units of measure)</li> </ul>	
<p><b>ASSESSMENTS</b></p>	<p><b>Term 1</b></p> <p><b>Key Assessment Piece</b> E-Safety and social wellbeing.</p> <p><b>Key Assessment Piece</b> Algorithms (Flowcharts and Flowol)</p>	<p><b>Term 2</b></p> <p><b>Cp Progress Checkpoint</b> Students will have a progress checkpoint assessment to assess their knowledge and understanding of the topics covered in this unit.</p> <p><b>End Point assessment.</b> At the end of this unit of work a topic 'test' will assess their key understanding through the scheme.</p>	<p><b>Term 1</b></p> <p><b>Key Assessment Piece</b> Students will complete a written assessment on sustainability (assessment tiered by ability for students)</p> <p><b>Key Assessment Piece</b> Students to complete research and create a leaflet based on the benefits of recycled materials.</p>	<p><b>Term 2</b></p> <p><b>D&amp;T Progress Checkpoint</b> Students will have a progress checkpoint assessment to assess their knowledge and understanding of the topics covered in this unit.</p> <p><b>End Point assessment.</b> At the end of this unit of work a topic 'test' will assess their key understanding through the scheme.</p>	<p><b>Term 1</b></p> <p><b>Key Assessment Piece</b> Assessment of practical lesson and evaluation- Students will be expected to produce an extended reflection piece on their practical.</p> <p><b>Key Assessment Piece-</b> information booklet/extended piece of writing on the importance of a balanced diet including health benefits and implications.</p>	<p><b>Term 2</b></p> <p><b>FP&amp;N Progress Checkpoint</b> Students will have a progress checkpoint assessment to assess their knowledge and understanding of the topics covered in this unit.</p> <p><b>End Point assessment.</b> At the end of this unit of work a topic 'test' will assess their key understanding through the scheme- the focus will be on Food Provenance.</p>

