



## 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 – Year 8

SUBJECT	Computing	Design and Technology	Food Preparation and Nutrition
INTENT	<p>Within computing students should be prepared for a digital world, digital careers and how to use digital systems safely and responsibly.</p> <p>Students will be taught the key skills to develop their digital literacy and awareness of computational thinking.</p>	<p>Design and Technology aims to develop students understanding of how, and why we use materials and technologies to manufacture the products we consumer in our daily lives.</p> <p>Students will be taught about materials and apply their knowledge through practical activities.</p>	<p>Food Preparation and Nutrition aims to support students understanding of the sources of food, nutritional valued and how to lead a healthy and balanced lifestyle.</p> <p>Students will be taught about key food areas and apply their knowledge through practical lessons.</p>

**Department: Computing & Technology 2020-2021**

**Subject: Computing, Design and Technology, Food Preparation and Nutrition**

Year Group	8
Rationale/ Narrative	<p>Following on from their Year 7 Curriculum, students in Year 8 will have 1 term of two hour lessons in Computing, 1 term of 2 hour lessons in Design and Technology and 1 term of 2 hour lessons in Food Preparation and Nutrition. This is done in rotation cycle throughout the academic year.</p> <p><b>Computing in Year 8:</b> In Year 8 students will develop their knowledge of computational thinking and understand some of the science behind computers, software and processing, students will be able to apply think knowledge through practical exercises in preparation for KS4.</p> <p><b>Design and Technology in Year 8:</b> In Year 8 students will develop and continue to enhance their knowledge of technological drawing techniques. They will also complete a design and make project using and developing knowledge and manufacturing techniques acquired in Year 7.</p>



# CHORLTON HIGH SCHOOL: Computing & Technology Curriculum

**Food Preparation and Nutrition in Year 8:** In Year 8 students will continue to enhance their knowledge of food hygiene, nutrition and practical skills. In addition, they will develop an understanding of food provenance and the scientific processes involved in food preparation.

*\*All students will start Year 8 in their previous rotation from Summer of Year 7. This will provide all students with an opportunity to have in class support and knowledge progress missed due to the summer term school closure. It is hoped this will support students with some restorative curriculum engagement also.*

## Computing

## Design and Technology

## Food Preparation and Nutrition

### DISTANCED LEARNING AND RESTORE CURRICULUM

The computing curriculum is in a unique position to be able to complement the develop of students' progress and lessons regardless of their engagement in distanced learning principles or if they are in school. Lessons in Computing will all be supported through MS Office and MS Teams next year as part of Digital Learning Developments. Some Practical Coding lessons will be subject to software support for students outside of the classroom. In class support and interventions for MS Office will be made available to support students across their curriculum with specialist staff able to support learners.

**Blended Learning:**  
Students will be able to access all key topics within the first term regardless of either being in school or engaged in distance learning. Access to some of the topics within the 'Design and Make (Realize)' process carried out in the second half term, in particular the evaluation of products and processes will be limited as students will be unable to participate in practical activities. Suitable lesson substitutions will take place to ensure students are able to make progress with lessons. Teacher practical sessions may also be recorded and uploaded online.

**Blended Learning:**  
Students will access all theory based topics regardless of being in school or engaged in distance learning. When in school students will participate in the practical element of the subject if possible (recipes may need adapting to enable social distancing measures). Recipe books will be provided to students to allow them to participate in practical lessons from home although this will be optional. Teacher cooking sessions may also be recorded and uploaded online.

### KNOWLEDGE

**Computing:**  
Students will all start with a tutorial lesson on MS Office and specific apps within Office 365 including MS Teams  
  
Students will learn information around the key topics of:  
• Computer modelling (mini project including some ICT software and business information)  
• Computer networks & Cyber security  
• Binary, logic gates, truth tables  
• Computational thinking and algorithms

**Computing:**  
Students will learn information around the key topics of:  
• Computer programming and coding (Python)  
• Input, Output, Variables  
• Arithmetic and Operators  
• Sequence selection  
Students will also complete a practical application topic focusses on web design.

**Design & Technology:**  
Students will learn information around the key topics of:  
• Drawing: perspective  
• Forces  
• Motion  
• Sustainability  
• History of industry  
• Industrial Techniques and practices

**Design and Make Process:**  
Students will learn information around the key topics of:  
• Product analysis through ACCESS FM  
• Developing design ideas  
• Modelling  
• Work flow plans  
• Evaluation of products and processes

**Food Preparation and Nutrition: Food Safety and Food Science**  
• Food Poisoning causes and prevention.  
• Function of ingredients.  
• Role of eggs in cooking.  
• Bread  
• Raising agents

**Food Preparation and Nutrition: Food, Nutrition and Health, Food Choices and Food Provenance.**  
• Macronutrients  
• Nutritional Labelling  
• Sauces  
• Environmental impact and sustainability- Fairtrade/carbon footprint  
• Quality Control/ Pastry

### SKILLS

Students will:  
• Identify and select information, breaking down key information.

Students will:  
**Theoretical skills:**  
• Identify, select and break down key information.

Students will:  
**Theoretical skills:**  
• identify, select and break down key information.



# CHORLTON HIGH SCHOOL: Computing & Technology Curriculum

	<ul style="list-style-type: none"> <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. 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>	<ul style="list-style-type: none"> <li>Analyse design briefs and produce manufacturing specifications.</li> </ul> <p><b>Practical skills:</b></p> <ul style="list-style-type: none"> <li>Develop skills, techniques and processes in relation to drawing.</li> <li>Develop their ability to use specialist technical equipment.</li> <li>Develop skills in model making to produce prototypes.</li> <li>Measure, mark out, cut, join, finish a variety of materials selected for inclusion in their practical product.</li> <li>Develop their understanding of health and safety and specific regulations for working with tools and equipment</li> </ul> <p><b>Other skills students will develop are:</b></p> <ul style="list-style-type: none"> <li>Independently build their confidence and resilience levels as they work with specific materials.</li> <li>Time management</li> <li>Organization</li> </ul> <p><b>Blended /distance learning:</b> Alteration of the practical outcomes will mean that students will no longer be able to access some of the specialist equipment and workshop space. As a consequence, development of some of the above skills will be suspended.</p>	<ul style="list-style-type: none"> <li>Evaluation skills, analyse (sensory), reflect, plan and improve.</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</li> <li>Preparing Fruit and Vegetables</li> <li>Cooking methods/Use of cooker</li> <li>Use of equipment</li> <li>Sauce making</li> <li>Dough making</li> <li>Raising agents</li> <li>Setting mixture</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/Organization</li> <li>How to prepare themselves and their area for cooking.</li> </ul>			
	<p><b>NB: please note that in line with Dfe guidelines traditional practical lesson will not take place until further notice.</b></p>					
<p><b>ASSESSMENTS</b></p>	<p>Some assessments written below and as outlined in our framework for learning may differ should be engaged in Distanced Learning. In this situation students will be informed of this and will have a Digital Assessment likely using MS Office. In particular MS Forms.</p>					
<p><b>ASSESSMENTS</b></p>	<ul style="list-style-type: none"> <li><b>Classwork piece:</b> Computer modelling project.</li> <li><b>Classwork piece:</b> Computational thinking and algorithms</li> </ul>	<ul style="list-style-type: none"> <li><b>Progress Tests</b> will be issued to students to formally assess their knowledge and understanding in this term.</li> <li><b>Classwork piece:</b> Python coding</li> </ul>	<ul style="list-style-type: none"> <li><b>Classwork piece:</b> Students will complete an extended reading and writing assessment task based on sustainability and fashion miles.</li> <li><b>Classwork piece:</b> Student practical work will be assessed using a range of criteria:             <ul style="list-style-type: none"> <li>Health and safety</li> <li>Quality control/ finish</li> <li>construction skills</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li><b>Progress Tests</b> will be issued to students to formally assess their knowledge and understanding in this term.</li> <li><b>Classwork piece:</b> Students will produce a fully annotated and colour rendered perspective or isometric drawing of periscope design.</li> </ul>	<ul style="list-style-type: none"> <li><b>Classwork Piece:</b> Assessment of practical lesson and evaluation./<b>Distance learning assessment Fact sheet into the science of cake making</b></li> </ul>	<ul style="list-style-type: none"> <li><b>Progress Tests</b> will be issued to students to formally assess their knowledge and understanding in this term.</li> <li><b>Classwork piece:</b> Macronutrients exam question response.</li> </ul>



# CHORLTON HIGH SCHOOL: Computing & Technology Curriculum

			<p>- Selection and use of tools</p> <p>Distance learning alternative task: Teams quiz on moral, social, ethical and cultural issues in design.</p>			
--	--	--	--	--	--	--