



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 9

SUBJECT	Computing	Design and Technology	Food Preparation and Nutrition	Business
<p>INTENT</p>	<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. 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 inter-connected!</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. 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>“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. 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>	<p>“Your most unhappy customers are your greatest source of learning” - Bill Gates</p> <p>Studying Business at Chorlton High School allows learners to be exposed the various ways in a which a Business is established, run and the benefits of business on key stakeholders associated with that business. We aim to provide students with the tools and knowledge needed to learn to appreciate the variety of Business sectors, be it small independent businesses or large corporations and understand how they operate, considering Human resources, Finance, and Business ownership.</p> <p>Students will consider the practical application of business concepts. The units provide opportunities to explore theories and concepts in the most relevant way, through the context of events in the business and economic world.</p> <p>We aim to inspire, to challenge and to help develop happy, creative and successful learners through our expertly planned, colourful curriculum.</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.

Department: Computing & Technology 2021 - 2022
Subject: Computing and Technology – Year 9 Core Rotation

Year Group	Year 9			
Rationale/ Narrative	<p>The Wider World Students will extend their learning across Computing, Design and Technology, and Food Preparation and Nutrition with these classes in Year 9. Students will study these subjects focusing a thematic approach across the curriculum of ‘The wider world’ giving them an opportunity to understand the array of ways in which we are connected to the wider world, be it through connectivity in Computing and exploring the role Computing plays in travel industries or exploring cuisines from around the world in Food Preparation and Nutrition and how different cultures utilize spices and seasonings, or presenting dishes in different ways. In Design and Technology this will involve looking at designs and products from around the world and how these vary in other cultures, exploring how manufacturing methods vary too. Business (Enterprise) lessons will allow students to look in greater depth at some aspects of their Food Preparation and Nutrition lessons through the ideas of Business (Focusing on Hospitality industries and Food industries, exploring how smaller and larger business companies operate.</p> <p><i>Where possible these lessons will support an extension of practical skills learnt throughout Years 7 and 8 and build upon their knowledge and understanding of key topics to support them with their future curriculums. For those who have taken any of these subjects as a GCSE pathway in KS4 these topics will complement their curriculum in those subjects.</i></p>			
SUBJECT	Computing	Design and Technology	Food Preparation and Nutrition	Business (Enterprise)
KNOWLEDGE	<p>Travel apps</p> <p>Students will develop their understanding of Design and Technology through the following areas:</p> <ul style="list-style-type: none"> • Look at a project brief and decide on a target audience by reading a client brief. • Look at existing Apps and discuss the design limitations and key features that make them popular. 	<p>International Houses - Architecture</p> <p>Students will develop their understanding of Design and Technology through the following areas:</p> <ul style="list-style-type: none"> • Careers and industries – focusing on a range of industries and qualification routes into professions (Engineering, Architecture, Interior Design, Trade Professions). 	<p>International Street Food</p> <p>Students will develop their understanding of Food Preparation and Nutrition through the following areas:</p> <ul style="list-style-type: none"> • Careers and industries- focusing on a range of industries and qualification routes into the profession (food science and manufacturing, nutrition, hospitality, and catering) 	<p>Bringing a product to market</p> <p>Students will develop their understanding of Business and Enterprise through the following areas:</p> <ul style="list-style-type: none"> • What is a business? Exploring Start up loads and sources of finance. • Careers and industries – focusing on a range of industries and qualification routes into professions (Food focus)



	<ul style="list-style-type: none"> • How to come up with design ideas and create a corporate image using image editing software. • Learn how to use app labs (a mix of block based and text-based programming). • Create an app suitable for target audience. • Students will create an infogram that they can produce to represent their completed app. This will help them to market their app to others. • Students will undertake evaluation activities for their project exploring how they have met their project outline and their own requirements written in the specification. • How to publish this app and share with others. 	<ul style="list-style-type: none"> • Architect focus – Learn about the style and design of key architects from home or abroad and their impact on the profession. <u>Zaha Hadid</u> • Structures, forces and stresses. • International Home Designs and Global variations to home types. • Designing: Plan drawing, Elevation Drawing and Scale Drawing techniques. • Models and Prototypes. • Use of tools and equipment - Craft Equipment to make models and prototypes. • Materials and Technologies using in construction industries. • Evaluation Techniques 	<ul style="list-style-type: none"> • Hospitality and catering focus- Learn about different international cuisines with a particular focus on street food from around the world- Michelin star guide. • Origins and types of different street foods. • Cooking methods and techniques. • Exploration of ingredients- origin, function, grown, reared, caught. • Food Provenance- farming techniques and ingredients usage around the world (fair trade/palm/rice) • Food Processing how different international staples are prepared e.g. noodles/pasta/bread • Practical links throughout 	<ul style="list-style-type: none"> • Customers & Target audience – considering market research and primary/secondary research activities. • Finances associated with a business (expenses, profits, loss, costs etc.). • Product – Students will look at the concept of a product and product planning and devise their own ideas for a new cereal launch. • Marketing – Designs – Students will create ideas for a new cereal product to pitch to “investors” • Development of a product idea – Legislation to be considered associated with the product (food labelling and requirements). • Business planning and planning objectives – students will create a business plan that supports their new product to meet the requirements of the project. • Presenting a pitch – communicating a business idea.
<p>SKILLS</p>	<ul style="list-style-type: none"> • Design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems. • Use two or more programming languages, at least one of which is textual, to solve a variety of computational problems; make appropriate use of data structures [for example, lists, tables or arrays]; design and develop modular programs that use procedures or functions. • Students complete self-reflection of the skills they have learnt/developed over the previous lessons and what skills to develop further in Computing. • Create a project that involve selecting, using, and combining multiple applications, across a range of devices, to achieve challenging goals, including 	<p>Theoretical skills:</p> <ul style="list-style-type: none"> • Identify, select and break down key information. • Analyse and evaluate information relating to a range of materials. • Use creativity to create ideas and present these through suitable communication techniques. <p>Practical skills:</p> <ul style="list-style-type: none"> • Develop skills, techniques and processes in relation to drawing and the various materials. • Develop their ability to use specialist technical equipment. • Develop their understanding of health and safety and specific regulations for working with tools and equipment • Independently build their confidence and resilience levels as they work with specific materials. <p>Other skills students will develop:</p>	<p>Theoretical skills:</p> <ul style="list-style-type: none"> • Identify, select, break down and summarise key information. • Recognise key terminology, define, utilize and embed in written work. • Reflect, analyze (sensory), plan and improve through practical evaluation. • Analyse nutritional data/ costs etc and justify changes. <p>Practical Skills: Throughout the term students will have the opportunity to practice and hone various practical skills including:</p> <ul style="list-style-type: none"> • General practical skills (weighing, measuring, testing, cooking times) • Knife skills- knife cuts vegetables and fruit • Preparing fruit and vegetables. • Use of the cooker- hob, grill and oven 	<p>Knowledge, Understanding and application</p> <ul style="list-style-type: none"> • Use business terminology to identify and explain business activity • Apply business concepts to familiar and unfamiliar contexts • Develop problem solving and decision-making skills relevant to business • Investigate, analyse and evaluate business opportunities and issues • Make justified decisions using both qualitative and quantitative data including its selection, interpretation, analysis and evaluation, and the application of appropriate quantitative skills.



	<p>collecting and analysing data and meeting the needs of known users.</p>	<ul style="list-style-type: none"> • Time management • Organisation • Initiative and independence • Problem solving and decision making • Application of math's/numeracy 	<ul style="list-style-type: none"> • Cooking methods- water, fat-based cooking methods, dry methods. • Dough- pasta/pastry/ bread • Raising agents- bread • Sauce making- reduction/ starch based/emulsion. • Prepare, combine and shape. • Use of equipment • Tenderise and marinate <p>Other skills students will develop are:</p> <ul style="list-style-type: none"> • Quality Control • Time Management • Teamwork • Organization • Initiative and independence. 	
<p>ASSESSMENTS</p>	<p>Key Assessment Piece</p> <ul style="list-style-type: none"> • Knowledge assessment: Assessment of student's response to questioning relating to key concepts that have been covered through the initial sequence of lessons relating to graphical user interface (GUI) and command line interface. • End Point assessment. At the end of this unit of work a topic 'test' will assess their key understanding through the scheme and measure their progress in this subject. 	<p>Key Assessment Piece</p> <ul style="list-style-type: none"> • Creative Task: Students will be expected to complete a set of drawings to represent their chosen space and home style, using Plan drawings and elevations. This will inform the modelling of a product lesson. Students will be assessed on the technical details and skills shown in their design. • End Point assessment. At the end of this unit of work a topic 'test' will assess their key understanding through the scheme and measure their progress in this subject. 	<p>Key Assessment Piece</p> <ul style="list-style-type: none"> • Practical evaluation: Students will be assessed on their comprehensive evaluation of a practical task they have completed in lesson. Students will be expected to identify skills used in the practical as well as improvements that can be made following sensory analysis. • End Point assessment. At the end of this unit of work a topic 'test' will assess their key understanding through the scheme and measure their progress in this subject. 	<p>Key Assessment Piece</p> <ul style="list-style-type: none"> • Creative Task: Students will be assessed on their outcomes/ideas for the cereal packaging making sure that they have considered all the requirements of the brief/project outline and included suitable labelling to make the product viable. • End Point assessment. At the end of this unit of work a topic 'test' will assess their key understanding through the scheme and measure their progress in this subject.