Roundwood Park School Curriculum Map – DESIGN AND TECHNOLOGY YEAR 7

A curriculum that stimulates curiosity, values diversity and offers challenge.
We help every student to love learning for life, to follow their passions and to reach their full potential.
Students rotate through the units of work so may complete at a different time to the one shown below.

Year 7	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Unit of Work	**Introduction to drawing skills**	**Introduction to drawing skills**	**Introduction to design and technology**	**Introduction to design and technology**	**Introduction to food**	**Introduction to food**
Key knowledge Or Enquiry Question	Students complete technical drawing skills. They are introduced to 3D modelling through CAD software. Skills obtained to draw and recognise 1&2-point perspective, Isometric, Oblique and free hand sketching. They gain an understanding what CAM/CAM means using problem solving tasks and questions and have an Introduction to the design industry.		Students start their journey in the iterative design process in researching, Problem solving, Communicating, Designing, Building, Peer assessing, Testing and evaluating. They look at Calculating surface areas, Visualising and representing 2D and 3D forms including two dimensional representations of 3D objects. Their theory knowledge covers Investigating existing products, Types of materials. Computer aided design. Computer aided manufacturing. All Health and safety and risk assessment are covered and students complete a workshop practise module to familiarise themselves to tools and machinery and produce a final product keyring using CAD/CAM software and equipment.		**Students gain the key knowledge of** Food hygiene and the 4C's and have an Introduction to the Eatwell guide They follow diet through life and what determines a healthy diet. Topics are covered in Carbohydrates and the function of yeast, High risk foods, Sensory analysis. Function of ingredients and evaluation of food. They gain skills in . Rubbing in method, all in one method, melting method and glazing. How to make bread. Preparing ingredients and equipment. Enrobing skills, preparing meat and testing food	
Concepts	By the end of year 7 a design and technology student should be able to recognise and replicate Isometric and technical drawing standards. They should have knowledge and understanding of kitchen and workshop H&S practises and how to be safe in our area. They will have learnt how to create simple prototypes in wood and plastic and the theory behind this. They will have experimented with basic CAD software and begin to gather, present and use data and numeracy. They will be able to use the oven and cooker confidently, have gained knife skills and be able to combine a variation of ingredients using the all in one method and rubbing in.					
Key Vocabulary	Design and technology, tolerance, stakeholders, viability, pillar drill, manufacture, brief, environmentally friendly, symbol, hazard, adhesive, digital, primary user, laser cutter, Investigation , working practice, carbohydrate, protein, nutrition, ingredients, creative, kneading, healthy, cross contamination, sensory analysis, evaluation.					
ASPIRE Habits	Persevere, plan, organise, focus, think creatively.		Make links, think logically, plan, organise.		Practise, focus, plan, organise.	
Reading Opportunities	A wide variety of texts are used during reading week, along with the books which are detailed through the super-curricular process					