Year 7 Curriculum Plan – D&T, RMT

YEAR 7	SUBJECT D&T / RMT	LEARNING PROGRAMME

TOPIC	LEARNING OBJECTIVES	KEY VOCABULARY	LEARNING SEQUENCE	LINKED LEARNING	HOME LEARNING
D&T in our world (What is D&T & how does it link to my Primary School experience).	Understand what D&T is about and explain how the work that you have done at Primary school is linked to this subject Understand how the work done at Primary school links to KS3 Design and Technology	Design and Technology, Resistant Material Technology, wood, metal, plastic. Tools, equipment, materials.	Primary Design and Technology.	Circuits, mechanisms, buggies, puppets, kites, cam toys, pizzas, bread, cards, decorations, models, fruit salad, phone cases, shelters, tomato mover etc.	Describe two Design & Technology related tasks which you completed at primary school using both notes and sketches.
Year 7 Graphics	Be aware of the 3 different ways of drawing in 3D and be able to use at least 1 independently.	Two-point perspective, oblique, isometric.	• 3D Sketching (First Attempt) • Two-point perspective • Oblique • Isometric • 3D Sketching (Second Attempt)	• Drawing Ideas	Revise all three ways of drawing in 3D for a class test in books and on firefly.

Self-assessment sheets	Be able to keep track of your practical and understand what you must do next. Understand what a Manufacturing Specification is and to be able to alter it where necessary.	Specification.	Project: Door Sign Project: Laser your name on a pencil Project: Thermometer using a Smart Material.	Building on the simple techniques experienced at primary school	Home Learning is covered in the next section.
Manufacturing Experience	Be able to name the equipment and use it with the materials safely, skilfully and independently.	Laser cutter, vinyl cutter, plane, hot wire strip heater, pillar drill, belt sander, plywood, thermo chromic liquid crystals, high impact polystyrene.	Demonstration showing hazards and safety precautions.	These projects are linked to the Self-assessment sheets.	Revision for test on machinery and materials.
Resistant Material Classification	Be able to name specific materials and know how they are classified.	Hardwood, deciduous, softwood, coniferous, ferrous, non-ferrous, alloy, thermo plastic, thermosetting plastic, manufactured boards, smart materials, Thermochromic liquid crystals, Shape	Produce a teaching /learning sheet, take notes from other groups, create a revision sheet.	Building knowledge on materials and how they are classified.	Revise for the class test on material classification.

		memory alloy, polymorph, phosphorescent pigment			
2D CAD	Be able to use a CAD package independently	Computer aided design, Tinker cad, 2d Design, google sketch up.	Use the PowerPoint slides teach yourself the different functions of the 2d Design package. Screen shot the assessment points and print them off.	Links to manufacturing techniques.	Revise for the key word test.
Snakes and ladders	Make sure that your book is as complete and up to date	Key words, extension tasks, think do cards, WAGOLL's, self-assessment, key points and facts.	Play snakes and ladders completing each square that you land on. The object of the game is not to get to the end first but to have the best book!		
Extended Reading & Writing task.	To be able to read an article on how a different culture has influenced design ideas and write a short report on it.	▪ Fashion ▪ Architecture ▪ Furniture ▪ Toys in different cultures ▪ Recipes ▪ Signs ▪ Garden design ▪ Vehicles	Use the websites provided to find & read an article then write a two-paragraph explanation \ report about it, including both good and bad points with a conclusion. The types of design you could look at could be: ▪ Fashion ▪ Architecture ▪ Furniture ▪ Toys in different cultures	Links to the world of Science, Technology, Engineering & fashion.	Write a two-paragraph report about your chosen article.

			▪ Recipes ▪ Signs ▪ Garden design ▪ Vehicles		