Siddal Moor Technology Curriculum Outline - Key stage 3

Year group	Material Area Covered	Project
Year 7	Computer Aided Design and manufacture (CAD/CAM)	Students design a small flat pack product using CAD/CAM.
	Electronic Products	Students make a skill based game, using Thyristor latching and 555 timing circuits.
	Graphic Products	Students conduct research in to materials, symbols, packaging and existing products. They learn a range of presentation skills, design their own mug with packaging. Students learn the process of sublimation printing.
	Resistant Materials (Wood)	Students develop basic woodworking skills to create a picture frame on displayed on a miniature easel.
Year 8	Food Technology	Students make a selection of sweet cakes and savoury treats. Students also learn a variety of knife skills and basic meal construction.
	Graphic Products	Students conduct research into existing products, materials and symbols. They use CAD to design and make an educational board game for a client of their choice.
	Mechanisms	Students learn about basic mechanisms, including levers, linkages, cams, pulleys and gears. They use construction kits to build and test their own mechanisms.
	Resistant Materials (Metal)	Students use CAD, CAM and traditional workshop skills to design and make a gardening hand tool.
Year 9	Electronic Products	Students learning about microprocessor control and build an electronic game of their own design.
Students choose 3 subjects from a choice of 5 areas.	Food Technology	Students make breads and pastries from scratch. They also make cakes, sauces and cultural dishes. Pupils have the opportunity to develop their cake making skills.
	Graphic Products	Students study the function, design and social, moral and environmental factors relating to the packaging industry. They design and make a unique product and are challenged to create creative and functional packaging.
	Mechanisms and Structures	Students learn about complex mechanisms, including levers, linkages, pulleys and gears. They use construction kits to build and test their own mechanisms. They use engineering calculations to inform their design process.
	Resistant Materials (Wood)	Students continue to develop their woodworking skills whilst designing and making a storage container.