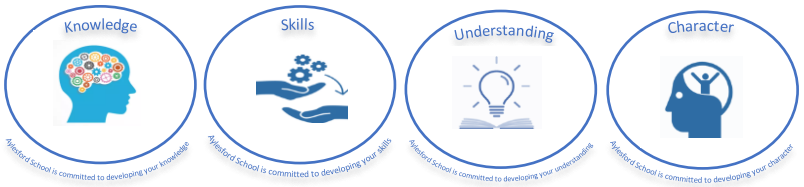
Aylesford School

COURAGE
CONFIDENCE
CHARACTER



Curriculum Intent, Implementation & Impact

Vision: Develop students' knowledge and skills of using a wide range of tools, Machinery and materials

Intent	Implementation	Impact
Develop students' knowledge and skills of using a wide range of tools, machinery and materials. Analyse gaps between prior and current learning to improve recall memory skills. ● Develop the creative, technical and practical expertise needed to perform everyday tasks independently and with **Confidence.** To also have the ability to participate successfully in an increasingly technological world. ● Build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users. **Open-Mindedness** ● Critique, evaluate, peer assess and test their designs and prototypes. **Curiosity** ● To support progression to GCSE courses. **Motivation**	• Power of three at the start of every lesson. (Last Lesson, Last Term and Last Year.) • Students levelled using Exploring, Developing, Securing and Extending to aid progression of learning. • Use research and exploration to understand user needs. Students will do this by developing a clock in year 7 (Pine / Acrylic), Pewter keyring in year 8 (Casting Metals) and Lamp in year 9. (Programming 2D Tech soft) • Identify and solve their own design problems. • Develop specifications to inform the design of innovative, functional and appealing products that respond to needs in a variety of situations. Specifications are written into homework tasks for year 7 and 8. • Produce sketches though hand drawing and CAD to generate creative ideas. • Select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer-aided manufacture to overcome design problems. (Scroll saw, Pillar Drill, Sander, Brazing hearth and Tenon saw) • Select from and use a wider, more complex range of materials considering their properties; Pine, MDF, Plywood, Acrylic plastic, Aluminium, Steel and Pewter • After school KS3 club where student develop their own projects **Culture Capital**	• Students will be able to work to a design brief and specification. • Students will be able to produce a range of creative design to suit a target market. • Students will be able to select and use a range of tools and materials to solve problems. • Ks3 will equip students with a suitable foundation to progress onto GCSE Design and Technology. • Students will be able to explain processes used to plan, monitor, and assess personal understanding and performance. **Metacognition** • Students will be **Reflective Learners** who are aware of their strengths and weaknesses and can motivate themselves to engage in and improve, their learning.
