Clare Mount Scheme of Learning

Subject: Design and Technology

Title of Unit: Year 12 BTEC Construction Introduction Level 1

Overview of unit:	This unit of work introduces pupils to a range of trades within the construction industry, including bricklaying, bathroom installation, and carpentry. Pupils will learn to describe the distinctions between these trades and identify specific examples in real-world contexts. The unit also emphasizes the importance of health and safety in the workplace, including relevant laws that employers and employees must follow. Alongside this knowledge, pupils will build practical skills and confidence by completing small tasks, safely using a variety of hand tools and machinery to manufacture set projects. They will also learn how to service machines, such as the belt sander and bench drill, and carry out site safety inspections. This unit is designed as a taster for further study at college, helping pupils develop essential skills, resilience, and an understanding of industry practices.
Key skills:	• Using a range of hand tools safely and effectively • Operating and servicing machinery, such as belt sanders and bench drills • Carrying out basic construction tasks in bricklaying, carpentry, and bathroom installation • Completing site safety inspections and following health and safety procedures • Understanding the distinctions between different trades in construction • Awareness of workplace laws and health and safety requirements • Understanding how tools and machinery are maintained for safe use • Developing confidence and independence in practical tasks • Building resilience through trial, error, and problem-solving • Planning and organizing tasks to meet safety and quality standards
Link to focus priorities:	This unit supports key priorities by helping pupils develop practical, technical, and personal skills that are essential for the construction industry. It encourages safe, independent working and builds resilience through hands-on tasks where trial and error are part of the learning process. Pupils also develop problem-solving, planning, and organizational skills, while gaining awareness of workplace laws and health and safety requirements. By linking practical tasks to real-world trades, the unit prepares pupils for future study and career pathways, fostering confidence, responsibility, and employability skills.
Numeracy opportunities:	Pupils will develop their numeracy skills through practical construction tasks, including measuring and marking materials accurately in millimetres and centimetres. They will calculate dimensions, areas, and quantities needed for projects such as brickwork, carpentry, and bathroom installation. Pupils will also apply mathematical reasoning when scaling drawings, interpreting plans, and estimating materials, helping to ensure accuracy and efficiency in both practical and planning tasks.

Personal development:	This unit supports pupils' personal development by encouraging them to take responsibility for their own learning, work safely and independently, and develop confidence in practical tasks. Pupils build resilience through trial, error, and problem-solving, learning that mistakes are part of the process and an opportunity for growth. The course also promotes teamwork, communication, and respect for others, helping pupils develop interpersonal skills that are essential in the workplace. Through completing practical tasks and reflecting on their progress, pupils gain self-esteem, a sense of achievement, and the confidence to take on more complex challenges in the future.
Cultural capital:	This unit enhances pupils' cultural capital by connecting practical construction skills to the wider world. Pupils will explore the history and evolution of trades such as bricklaying, carpentry, and plumbing, and consider their impact on society and iconic buildings. They will learn about professional workplace culture, ethics, and collaboration, while also examining modern innovations in construction, including sustainable building methods and emerging technologies. Real-world applications, including guest speakers or site visits, help pupils understand how the skills they are developing contribute to communities, infrastructure, and future career pathways.
CEIAG:	Pupils will explore careers related to Design Technology and construction, gaining an understanding of the range of pathways available and the skills required for different roles. They will investigate how knowledge of materials, tools, and practical skills can be applied in real-world professions such as carpentry, bricklaying, plumbing, architecture, and engineering. This supports pupils by linking classroom learning to potential careers, helping pupils make informed choices about further study or apprenticeships, and encouraging them to consider their own skills, interests, and aspirations within the construction and design industries.
Key assessment tasks:	Pupils will complete a series of focused practical tasks throughout this unit of work, culminating in a final project that will be assessed for accuracy, quality, and application of skills and knowledge. In addition to the practical assessment, pupils will complete an end-of-unit written or verbal assessment to demonstrate their understanding of the concepts covered, including materials, tools, health and safety, and the design process. These assessments will provide a clear measure of pupils' learning and progress in both practical and theoretical aspects of the subject.
Pathway objectives:	**Exceptional Performance (based distinction objectives))** • Identify a realistic progression goal with details of the skills and behaviours needed to achieve it. • Describe how own skills and behaviours meet personal progression goal. • Produce a detailed and achievable progression plan, identifying most of the steps needed to meet intended progression goal. • Produce a detailed plan that explains the stages of making a wooden fr Select and use correct tools and materials to make an attractive wooden frame. ame and why types of joints have been chosen.

	Pathway 1 Objectives (based on merits objectives) • Identify a clear progression goal with some details of the skills and behaviours needed to achieve it. • Identify how own skills and behaviours meet personal progression goal. • Produce a clear progression plan, identifying some steps towards meeting intended progression goal. • Produce a coherent plan that describes the stages of making a wooden frame and why types of joints have been chosen. **Pathway 2 Objectives (based on pass objectives)** • Identify an intended progression goal • Outline the skills and behaviours needed to meet personal progression goal. • Produce an outline progression plan to meet intended progression goal. • Produce a plan that identifies the stages of making a wooden frame and why types of joints have been chosen, • Produce a plan that identifies the stages of making a wooden frame and why types of joints have been chosen, • Select and use appropriate tools and materials to make a suitable wooden frame. • **Pathway 3 Objectives based on Clare Mount objectives** • Identify a progression goal for College with guidance. • Select two skills to focus on and improve for College with support. • Develop a clear, step-by-step plan for designing and creating a picture frame. • Accurately measure and mark out materials with guidance. • Assemble all components of the picture frame and apply finishing touches with support
Key questions:	Questioning techniques will be adapted to meet pupils' individual abilities, using both verbal and non-verbal methods. For example, pupils may respond with thumbs up or down, select from multiple-choice options, or participate in interactive activities to make learning engaging. Each lesson will begin with a short recap, encouraging pupils to recall prior knowledge of construction trades, tools, and health and safety procedures. Pupils will be supported to use correct construction-specific terminology and asked a variety of questions using for, problem-solving, critical thinking, and communication skills within practical and theoretical tasks.