

CONSTRUCTION KS4 CURRICULUM

CURRICULUM INTENT:

The Vocational Award in Construction and the Built Environment (Technical Award) has been designed to support learners in schools who want to learn about this vocational sector and the potential it can offer them for their careers or further study. It is most suitable as a foundation for further study. This further study would provide learners with the opportunity to develop a range of specialist and general skills that would support their progression to employment.

	AUTUMN TERM	SPRING & SUMMER TERMS (CROSSOVER Y1-11)
Main Topic / Focus	Unit 1: Introduction to the Built Environment On-screen examination: 1 hour 30 minutes 40% of qualification	Unit 3: Constructing the Built Environment Controlled assessment: 30 hours 60% of qualification
Secondary Topics (if applicable)	Unit 1 introduces learners to the built environment and provides them with the opportunity to develop skills, knowledge and understanding in identifying, explaining and evaluating different ideas and concepts of the built environment. Learners will explore a range of profession and trade roles, and some of the different structures and buildings of the built environment	Unit 3 offers learners the opportunity to develop skills, knowledge and understanding of three construction trade areas of the built environment, including planning, undertaking and evaluating construction tasks
Curriculum links	1.1 The sector 1.2 The built environment life cycle 1.3 Types of building and structure 1.4 Technologies and materials 1.5 Building structures and forms 1.6 Sustainable construction methods 1.7 Trades, employment and careers 1.8 Health and safety	3.1 Interpreting technical sources of information 3.2 Planning and organising work 3.3 Identifying resource requirements 3.4 Calculating the materials required 3.5 Writing and setting success criteria 3.6 Prepare for construction tasks 3.7 Carrying out techniques 3.8 Removing and disposing of materials 3.9 Working practices that promote health and safety 3.10 Evaluating construction tasks.
Cross-curricular links	Maths: Area, volume, perimeter, time, ration, levels of tolerance, measuring, angles. D&T/Art: Interpret two dimensional (2D) drawings/ plans and elevations. Science/Geography: Environment, pollution, waste, recycling. Business studies: Economy and infrastructure.	Maths: Calculating materials required. Area, volume, perimeter, time, ration, levels of tolerance, measuring, angles. D&T/Art: Creating three dimensional (3D) models. Science: Sustainability of materials, fuel/power, Life cycle of construction, Business studies: Costing
Interleaving of skills	This unit introduces learners to the construction sector and the type of professional and trade roles and activity that is undertaken. The learner will explore the different types of buildings and structures that the built environment forms. Sustainability and the impact of the built environment on the local community is explored along with reduction measures that can be employed.	In this unit, learners are required to develop knowledge, skills and understanding in three areas, selected from: • textiles • wood • brick • plaster • decoration • tiles • electrical • plumbing • heritage
Literacy	Keywords and definition. Reading and interpreting design briefs and specifications	Keywords and definition. Reading and interpreting design briefs and specifications
Cultural capital	The environmental, financial, cultural and social benefits of sustainable construction methods. Risk for employees, employers and the public during construction and the built environment projects.	Building life cycle: construction. Disposal, reuse and recycling. Waste disposal, re-use and recycling. Sustainability and environmental impact of construction.

	Relevant legislation including the health and safety at work act and control of substances hazardous to health (COSHH) regulations.	
STEM Opportunities	Geography / Science: Ethical factors and consideration of ecological and social footprint. How to choose appropriate energy sources. Life cycle of construction industry. The action of forces and how levers and gears transmit and transform the effects of forces. Arithmetic and numerical computation eg use ratios. Use angular measures in degrees, visualise and represent 2D and 3D objects including 2D diagrams of buildings and infrastructure. Scientific vocabulary. Properties across a range of materials. Using materials, composition of some important materials and substances. Selection of materials for enhanced durability in a particular construction project.	
Gatsby Benchmark 4 - Linking Curriculum to Careers	Routes of progression after Weaverham discussed with class: Further education and training either through apprentices or further and higher education - A-levels, BTEC, apprenticeship and university. Transferable skills: Problem solving, using tools & equipment, processes, teamwork, communication.	Career links: Designer/architect, civil engineer, structural engineer, contracts manager, site manager, surveyor, quantity surveyor, bricklayer, stonemason, plastering, carpenter/joiner, furniture maker, cabinet maker, Electrician, Plumber, gas engineer, painter/decorator, flooring & tiling, builder, property renovation.
Assessment	Unit 1: Introduction to the Built Environment On-screen examination: 1 hour 30 minutes 40% of qualification 80 marks Questions requiring objective responses, short and extended answers, based around applied situations. Learners may be required to use stimulus material to respond to questions. This unit is externally assessed through a written examination available in January/February and May/June each year. Duration: 1 hour 30 minutes Number of marks: 80 Format: objective responses, short and extended answer questions based around applied situations. Learners may be required to use stimulus material to respond to questions. This assessment contributes 40% to the overall qualification grade.	Unit 3: Constructing the Built Environment Controlled assessment: 30 hours 60% of qualification 120 mark. An assignment brief will be provided by WJEC. Vocational Awards are awarded on an 8-point scale: Level 2 Distinction*, Level 2 Distinction, Level 2 Merit, Level 2 Pass, Level 1 Distinction*, Level 1 Distinction, Level 1 Merit, Level 1 Pass. Candidates who do not achieve the uniform marks required to achieve a Level 1 Pass will have their achievement recorded as U (unclassified) and will not receive a certificate.