AUTUMN TERM	Health and Safety Unit A2- Developing a personal progression plan. A. Explain the skills and behaviours needed to meet a personal progression goal B. Produce a progression plan to meet an intended goal Unit Con07- Making carpentry joints A. Plan tasks and manage own responsibility when making carpentry joints B. Use selected tools and materials to make a wooden frame	Health and Safety Personal Protective Equipment Accuracy Various tool names Specific Measured Goals Relevant SMART Short term Long term Skills Essential Desirable Research Accuracy Various tool names See H&S Skill Measuring Various Joint Names	Key stage 2: Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of relevant contexts [for example, the home, school, leisure, culture, enterprise, industry and the wider environment]. When designing and making, pupils should be taught to: Design □ use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups □ generate, develop, model and communicate their ideas through discussion, annotated sketches, crosssectional and exploded diagrams, prototypes, pattern pieces and computer-aided design Make □ select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately □ select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities Evaluate □ investigate and analyse a range of existing products □ evaluate their ideas and products against their own design criteria and consider the views of others to improve their work □ understand how key events and individuals in design and technology have helped shape the world Technical knowledge □ apply their understanding of how to strengthen, stiffen and reinforce more complex structures □ understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] □ understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] □ apply understanding of computing to program, monitor and control their products. Key Stage 3: See Long Term Plans: KS3 Technology	Art- Links to 'My World' in Art at KS3/4. - sculpting techniques Food Tech- Health and Safety PSHE- QA techniques and the importance in the industry PSHE -Planning All BTEC Subjects- Running the same unit Careers- Work experience students based in the carpentry industry
SPRING TERM	Unit A1- Being Organised A. Explore the skills and behaviours needed to meet personal progression goal. B. Produce a progression plan to meet intended progression goal. Unit Con11- Decorating and inside wall A. Manage self and communicate information when decorating an inside wall. B. Decorate an inside wall	Specific Measured Goals Relevant Plan Preparation Paint Primer Undercoat Preparation Emulsion Tape Technique Various painting tool names	**<u>Key stage 3</u>** Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. They should work in a range of domestic and local contexts [for example, the home, health, leisure and culture], and industrial contexts [for example, engineering, manufacturing, construction, food, energy, agriculture (including horticulture) and fashion]. When designing and making, pupils should be taught to: **<u>Design</u>** ♣ use research and exploration, such as the study of different cultures, to identify and understand user needs ♣ identify and solve their own design problems and understand how to reformulate problems given to them ♣ develop specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situations ♣ use a variety of approaches [for example, biomimicry and user-centred design], to generate creative ideas and avoid stereotypical responses ♣ develop and communicate design ideas using annotated sketches, detailed plans, 3-D and mathematical modelling, oral and digital presentations and computer-based tools **<u>Make</u>** ♣ select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer-aided manufacture ♣ select from and use a wider, more complex range of materials, components and ingredients, taking into account their properties Evaluate ♣ analyse the work of past and present professionals and others to develop and broaden their understanding ♣ investigate new and emerging technologies ♣ test, evaluate and refine their ideas and products against a specification, taking into account the views of intended users and other interested groups ♣ understand developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers, engineers and technologists Design and technology – key stage 3 3 **<u>Technical knowledge</u>** ♣ understand and use the properties of materials and the performance of structural elements to achieve functioning solutions ♣ understand how more advanced mechanical systems used in their products enable changes in movement and force ♣ understand how more advanced electrical and electronic systems can be powered and used in their products [for example, circuits with heat, light, sound and movement as inputs and outputs] ♣ apply computing and use electronics to embed intelligence in products that respond to inputs [for example, sensors], and control outputs [for example, actuators], using programmable components [for example, microcontrollers].	Careers- Work experience students based in the carpentry industry
SUMMER TERM	Unit Con05- Drawing a plan of a room A. Produce a plan of a room B. Manage and communicate construction information on a plan	Accuracy Computer aided design Scale Various drawing tool names		Careers- Work experience students based in the carpentry industry Art- Links to designing and interpretation