CURRICULUM OVERVIEW KS3 D&T

Purpose of the Curriculum

We recognise in D&T that in order to shape independent and resilient learners, there must be a curriculum that promotes confidence and high academic aspirations. This will be achieved through providing students with personalised challenge and creating an environment where everybody is able to experience success. students must be aware of their physical safety by understanding and adhering to rules on safe working practices and by following the Schools code of conduct. Creating a safe environment will be a vital element of establishing expected behaviours to ensure students are successful in their learning and confident enough to reach their personal best.
We will encourage pupils to be accountable for their learning by establishing clear expectations and maintaining good communication with parents. We want to create successful learners who enjoy learning, which can only be achieved through strong teaching and learning and exciting, yet challenging Schemes of work, which will ensure a successful transition into Key stage 4.

KEY LEARNING OBJECTIVES

Establishing a safe working environment will be an essential introduction to KS3 D&T. Pupils need to feel safe in order for their confidence to thrive and to develop the necessary manufacturing skills required. **Pupils at KS3 must be able to demonstrate the they are able to use D&T tools and equipment safely and accurately** to the ability level of the learner, the success of this will be assessed through the practical outcomes.
Pupils will need to understand the theoretical and working properties of a range of D&T materials, including timbers, polymers, fibres and paper and board. This knowledge is an important base for building their knowledge of the D&T technical principles, which contributes to almost 50% of the GCSE content.
Pupils must also be able identify and demonstrate the ability to use an iterative design process in order to prepare themselves for for responding to a design context in the appropriate way. Pupils should be able to design using CAD, hand drawn sketches and through modelling materials. At KS3 pupils will be afforded opportunities to be creative by responding to design challenges which are open ended to a degree.
Pupils should be able to demonstrate their evaluative skills through the continual evaluation of their work. After practical activities are complete, pupils will complete a formal evaluation, which will be assessed based on both the quality of responses and the level of literacy used.

CURRICULUM OVERVIEW (subject)

KEY CONCEPTS

An effective KS3 D&T curriculum will provide learners with a platform to develop their creative thinking and practical capabilities. This will be challenged through a range of practical activities and contexts to enable pupils to experience working with a broad range of tools and materials. The level of independence required in D&T increases significantly at KS4, therefore at KS3 pupils must develop a strong core of technical skills and critical understanding of D&T materials and their working properties.
Building confidence will also be a key indicator of success, this includes increased confidence when using D&T equipment, and also confidence in their ability to produce creative solutions to contextual challenges and personalised design briefs. These solutions should be discovered through an iterative design process in order to support effective transition into KS4.
Pupils must also be reflective through regular evaluations, which should be assessed for both their content and also for the level and quality of literacy used by the learner.

SEQUENCE OF LEARNING

Before pupils can begin to make progress in a D&T setting, it is vital that all pupils are required to complete a 'Health and safety passport'. This will not only help to safeguard pupils from the potential dangers of a workshop setting, but it will also build the confidence of the learners and improve the pace and accuracy of the practical work they produce. D&T health and safety will continually be referred to throughout the delivery of the KS3 curriculum.
At KS3 the aim will be to provide pupils with experience in working with a range of different materials in a design context. Each material will be introduced to pupils as part of a practical activity and outcome. This will provide learners with a platform to develop their practical skills and technical understanding. Each practical activity will have a consistent sequence of learning which will be in line with the stages of the design process. This process includes the interpretation of a design brief, project research (Including technical understanding), design ideas and the development of ideas using an iterative approach. Pupils will then manufacture their products and complete product testing and evaluation. Pupils will complete all projects with an assessment to assess their technical understanding.
As pupils progress from year 7 to year 8, the sequence of learning within the practical activities will remain, however the complexity of the outcome and the level of expectation from the learner will be increased. This includes greater confidence and accuracy when using tools and equipment and greater quality use of literacy and analysis.