Design & Technology Yr7

Curriculum Intent: The broad aims of DTA are for students to be able to understand and intervene in the made natural worlds around them. These aims will be realised by students achieving a combination of technological capability and technological perspective.

In **Year 7** students will continue to study the combined areas of Design Technology, Art & Design and Food & Nutrition on a carousel that provides further opportunities to experience the breadth and depth of each discipline, this time in greater detail. The experiences of Year 7 provide an excellent foundation for students to build and further develop their subject knowledge, skills and understanding of the subject. Students will start to **consolidate** the core skills of each discipline and investigate different materials and manufacturing processes through a variety of given contexts.

Projects will include manufacturing with production aids, scale models and the application of ergonomics and detailed fabrication techniques; students will develop in their confidence to create for themselves, solve problems accordingly and make decisions and judgments based on their developing knowledge and understanding of the subject areas.

DT: Wooden Pencil Box, Bag Tag and Keyring Holder

Interleaving	Designing and communication skills, manufacturing and production processes, materials and technologies, specialist technical principles
Practical Skills	Using production aids such as jigs and templates. Workshop machinery. CAD/CAM and making models. Annotated sketches, research skills, material identification.
Knowledge	Manufacturing processes and production, technical drawings and quality control. Identifying Timbers and Plastics. Ergonomics, anthropometrics and emerging technologies. Design decisions and purpose/User needs.
Understanding	Technological capability and understanding of workshop skills and practice. Accuracy and functionality of products.
Skills	Investigation | Analyse | Generate Ideas | Make | Evaluate
Assessment	Final product and booklet. Self, peer and teacher evaluation. DTA quiz on SMH.

Design & Technology Yr8

Curriculum Intent: The broad aims of DTA are for students to be able to understand and intervene in the made natural worlds around them. These aims will be realised by students achieving a combination of technological capability and technological perspective.

In **Year 8** students will continue to study Design Technology that provides further opportunities to experience the breadth and depth of each discipline, this time in greater detail. The experiences of Year 7 provide an excellent foundation for students to build and further develop their subject knowledge, skills and understanding of the subject. Students will start to **consolidate** the core skills of each discipline and investigate different materials and manufacturing processes through a variety of given contexts.

Projects will include manufacturing with production aids, scale models and the application of ergonomics and detailed fabrication techniques; students will develop in their confidence to create for themselves, solve problems accordingly and make decisions and judgments based on their developing knowledge and understanding of the subject areas.

	Design & Make Activities **Logo light & Prototype Mobile Phone Holder**
Interleaving	Designing and communication skills, manufacturing and production processes, materials and technologies, specialist technical principles
Practical Skills	Using production aids such as jigs and templates. Workshop machinery. CAD/CAM and making models. Annotated sketches, research skills, material identification.
Knowledge	Manufacturing processes and production, electronics, metals and their properties, technical drawings and quality control. Identifying Timbers and Polymers. Ergonomics, anthropometrics and emerging technologies. Design decisions and purpose/User needs.
Understanding	Technological capability and understanding of workshop skills and practice. Accuracy and functionality of products.
Skills	**Investigation** | **Analyse** | **Generate Ideas** | **Make** | **Evaluate**
Assessment	Final product and booklet. Self, peer and teacher evaluation.

Design & Technology Yr9

Curriculum Intent: The broad aims of DTA are for students to be able to understand and intervene in the made natural worlds around them. These aims will be realised by students achieving a combination of technological capability and technological perspective.

In **Year 9** students will continue to study Design Technology that provides further opportunities to experience the breadth and depth of each discipline, this time in greater detail. The experiences of Year 7 & 8 provide an excellent foundation for students to build and further develop their subject knowledge, skills and understanding of the subject. Students will start to **consolidate** the core skills of each discipline and investigate different materials and manufacturing processes through a variety of given contexts.

Projects will include manufacturing with production aids, scale models and the application of ergonomics and detailed fabrication techniques; students will develop in their confidence to create for themselves, solve problems accordingly and make decisions and judgments based on their developing knowledge and understanding of the subject areas.

	Design & Make Activities: **Photo Frame – Multi-Skills Task – Focussed Practical Activities.**
Interleaving	Designing and communication skills, manufacturing and production processes, materials and technologies, specialist technical principles
Practical Skills	Using production aids such as jigs and templates. Workshop machinery. CAD/CAM and making models. Annotated sketches, research skills, material identification.
Knowledge	Manufacturing processes and production, technical drawings and quality control. Identifying Timbers and Polymers. Ergonomics, anthropometrics and emerging technologies. Design decisions and purpose/User needs.
Understanding	Technological capability and understanding of workshop skills and practice. Accuracy and functionality of products.
Skills	**Investigation** | **Analyse** | **Generate Ideas** | **Make** | **Evaluate**
Assessment	Final product and Modular and assessments. Self, peer and teacher evaluation.