



THE ARNEWOOD SCHOOL

KEY STAGE 3

TECHNOLOGY



Implementation

To ensure students have a safe and fulfilling transition to KS3 they are introduced to a broad curriculum achieved through our specialist modules. Safe working practices are reinforced along with experiencing the enjoyment of learning through practical activities.

Year 7

Half term	Curriculum focus	Landmark assessment
Rotation 1 Workshop	Development of students' creative design skills and safety awareness in the workshop. Identifying a variety of hand tools and practise the safe use of tools and workshop machinery to produce a quality product. Students produce a feature money box in the theme of an animal.	Baseline test – Designing and making a mechanical card. Continuous assessment throughout creative, technical and manufacturing challenges. Module test and summative assessment at the end of the module.
Rotation 2 Systems	Students' analytical and problem-solving skills developed through the use of basic programming concepts such as variables, decision statements and code repetition. The student's complete programs for a microcomputer detecting ambient light levels or exchanging information using Bluetooth.	Continuous assessment throughout technical challenges. Module test and summative assessment at the end of the module and the academic year.
Rotation 3 Food	Development of students' cooking skills including kitchen safety, knife skills, basic cooking and preparation methods. Pupils learn about healthy nutrition and the importance of a balance diet.	Continuous assessment throughout practical and theory tasks. Summative assessment at the end of the





		module and the academic year.
Rotation 4 Workshop	Understanding and advancing skills in Computer Aided Design and laser cutting. Understanding the basic principles of circuit design and practising the safe use of soldering irons to produce a quality product. Students design and produce a light box lamp in their own chosen theme.	Continuous assessment throughout creative, technical and manufacturing challenges. Module test and summative assessment at the end of the module and the academic year.
Rotation 5 Textiles	Further development of students' creative design skills and safety awareness in a textiles room. Developing a variety of embroidery skills and practising the safe use of sewing machines and equipment to produce a wall hanging influenced by different cultures from around the globe.	Continuous assessment throughout creative, technical and manufacturing challenges. Module test and summative assessment at the end of the module and the academic year

Co-Curricular: The Technology curriculum provides a variety of co-curricular opportunities such as calculating quantities and measurements, extensive use of ICT, practicing drawing techniques and developing evaluative and analytical skills.

Year 8:

Half term	Curriculum focus	Landmark assessment
Rotation 1 Workshop	Utilising cross-curricula links with the Humanities Department the project builds on research of the Maori people to develop a pewter casting of a Maori symbol contained in a small presentation box. The project builds on existing workshop practices and introduces more advanced use of CAD and CAM. Pupils improve their manual skills by producing a high quality 'finish' to the artefacts.	Continual assessment is essential throughout the project to ensure critical stages in the CAD section are correctly completed prior to production. A module test and summative assessment at the end of the year help establish progress made.
Rotation 2 Systems	Development of student's analytical and problem-solving skills through the use of programming concepts such as variables,	Continuous assessment throughout creative and technical





	decision statements and code repetition, all introduced during year 7. The student's complete programs for a microcomputer using built-in sensors (temperature, heading, light levels, ...) to program and test a working prototype.	challenges. Self-evaluation of programs created by students. Summative assessment at the end of the rotation and the academic year.
Rotation 3 Food	Development of students' cooking skills including kitchen safety, knife skills, basic cooking and preparation methods. Pupils begin to learn about the science of their food. Chemical and functional properties of ingredients are investigated through practical and theory work.	Continuous assessment throughout practical and theory tasks. Summative assessment at the end of the module and the academic year.
Rotation 4 Workshop	Using the Art Deco design movement to develop student's creative design skills whilst building safety awareness and workshop skills. Identifying and practicing a variety of manufacturing skills safely in the workshop to produce a quality product. Students design and produce an Art Deco themed trinket box.	Continuous assessment throughout creative, technical and manufacturing challenges. Module test and summative assessment at the end of the module and the academic year.
Rotation 5 Textiles	Using the influences of other cultures to develop students' creative design skills whilst building health and safety awareness within a textile's environment. Students will build upon their machine sewing and manufacturing skills to produce a multicultural wall hanging. They will develop skills in hand embroidery and block printing as a way of decorating their final product.	Continuous assessment throughout creative, technical and manufacturing challenges. Module test and summative assessment at the end of the module and the academic year.

Co-Curricular: In year 8 the Technology curriculum incorporates a variety of multicultural and historical themes. Art movements are investigated a long with sustainability and ICT skills are practised and developed.

