

Design Technology

YEAR 7	Term 1	Timbers - Racing Cars. This project acts as an introduction to the use of basic technology tools and processes when working with timbers. This includes the use of a steel ruler, tri-square, coping saw and belt sander. The project allows students to get to grips with workshop safety rules and the basic skills of design when creating a product. Students will complete an end of topic theory test on timbers.
YEAR 7	Term 2	Metals - Animal Designs. This project acts as an introduction to the use of basic technology tools and processes when working with metals. This includes the use of a steel ruler, metal scribes, tin snips and files. The project allows students to get to grips with workshop safety rules and the basic skills of design when creating a product. Students will complete an end of topic theory test on metals.
YEAR 7	Term 3	Polymers - Blister Packaging. This project acts as an introduction to the use of basic technology tools and processes when working with polymers. This includes the use of a vacuum former, craft knife, and emery paper. Students will develop a knowledge of the different types of plastics, when they should be used and what for. Students will complete an end of topic theory test on polymers.
YEAR 7	Term 4	Papers/ Boards - Music festival. This project acts as an introduction to the use of basic technology tools and processes when working with papers and boards. This includes the use of a steel ruler, safety ruler, craft knife. students will learn how to encapsulate as well as learning about smart and modern materials. Students will complete an end of topic theory test on papers and boards.
YEAR 7	Term 5	The students will be learning about the 4 C's, food safety, food nutrition and health, food provenance, food choice and with complimentary food practicals.
YEAR 8	Term 1	Timbers - Wooden Box/ Maze Design. Students will learn how to design and make a variety of different wood joints, including mitre, dowel and finger joints. They will also learn about different types of wood finish- stains, oils, wax. Students will complete an end of topic theory test on timbers.
YEAR 8	Term 2	Metal - Metal Structures. Students will learn how to mark out and shape metal. They will also learn about cold form bending to create a metal structure. Students will complete an end of topic theory test on metals.
YEAR 8	Term 3	Polymers - Laser cut rulers. Students will learn how to use CAD (2D Design) and CAM (laser cutting). Students will learn the basics of using a laser cutter. They will use CAD to design their ruler and CAM to make it. Students will complete an end of topic theory test on polymers.
YEAR 8	Term 4	Papers/ Boards - Scene in a box. Students will develop their design skills and knowledge of perspective. They will develop their skills of using colour and shade to enhance their designs. They will make 2D nets to form their 3D object and will have to think about where they want certain details of their design on the net. Students will complete an end of topic theory test on papers and boards.
YEAR 8	Term 5	The students will be learning about food safety, food nutrition and health, food provenance, food choices and food science. They will also have food practical's through the term to support the theory.
YEAR 9	Term 1	•Energy consumption, Emerging technologies, Smart modern materials, mechanical devices, electronic systems, ferrous and non-ferrous metals•Polymers, Fabrics and Fibres, Timbers, Structures, Paste and present designers, Design strategies
YEAR 9	Term 2	•Specialist material area(at teacher's discretion)
YEAR 9	Term 3	•Specialist material area(at teacher's discretion)
YEAR 9	Term 4	•Re-cap on 'core' theory
YEAR 9	Term 5	•Contextual Challenge NEA

Design Technology

YEAR 10 Term 1 •Energy consumption, Emerging technologies, Smart modern materials, mechanical devices, electronic systems, ferrous and non-ferrous metals•Polymers, Fabrics and Fibres, Timbers, Structures, Paste and present designers, Design strategies

YEAR 10 Term 2 •Specialist material area(at teacher's discretion)

YEAR 10 Term 3 •Specialist material area(at teacher's discretion)

YEAR 10 Term 4 •Re-cap on 'core' theory

YEAR 10 Term 5 •Contextual Challenge NEA

YEAR 11 Term 1 Contextual Challenge NEA

YEAR 11 Term 2 Contextual Challenge NEA

YEAR 11 Term 3 Contextual Challenge NEA

YEAR 11 Term 4 Exam preparation for exam theme

YEAR 11 Term 5 Exam preparation for exam theme