Love Wisdom Fairness Self- control

Design And Technology

Next steps/careers

Practical element of course

Exploring key topics

End of year exam (50%)

Gcse Coursework (50%)

Exploring different mediums and processes

Isometric drawing

Orthographic drawing

Drawing techniques

1 and 2point perspective

Basic electronics

Strength and weakness

Textiles

Metal

Wood +

Fabric

Material restraints

Strength and weakness

Year 11

Developing course work

Research: Linkages and mechanism research.

Research: Use of mechanism.

Design: 1 point, 2 point perspective.

Key Concepts: Lap joints

Make: Mdf mechanism

Exploring and using prototyping

Evaluate: a working mechanism

Exploring wood and its properties.

Year 10

Understanding mechanisms

A-ASTHETICS
C-COST
C-CUSTOMER
E-ENVIROMENT
S-SIZE
S-SAFTEY
F-FUNCTION
M-MATERIAL

Year 9

Evaluate: process and finishing techniques. NETS - packaging

Research Casting

Processes Cutting plastics, woods and metals.

Evaluate: Packaging

Key Concepts: Hand tools.

Design: Single point perspective Two point perspective

Year 8

Practical skills: Sanding machine and Pillar Drill, hot glue gun.

Key Concepts: Hand tools. (mallet, chisel)

Design and develop the use of ACCESS FM

Use of different saws.
- Panel
- Coping
- Hack

Make/Key Concepts: Sanding machine and Pillar Drill.

Research: ACCESS FM

Research: Design and make a Bird box.
- Research
- Moodboard
- Questionniare
- Designs
- Making skills

Year 7

Research: a cams model with moving parts

Design: a cams model with moving parts

Make: a cams model with a pulley mechanism

Evaluate: does it meet the design criteria?

Make: Slipper

Design: Slipper

Evaluate: does it fit criteria/ fir for purpose.

Research: Slipper designs and materials

Evaluate – does it meet the criteria

Spring 2: Slippers (textiles)

Application Technology

Year 6

Autumn 2: cams model

Summer 2: Electronic Alarms

Design: A car alarm

Research: Car Alarms

Make: a working car alarm

Evaluate: does it meet the criteria? Do the mechanism work.

Click to add text
Click to add text
Click to add text

Year 5

Make Anglo Saxon house

Design Anglo Saxon House

Research: Anglo Saxon House's

Autumn 2: Anglo Saxon House

Making: a nightlight which works – electronical system.

Design: using the research children to design a well with pulley system

Research: Pulley system, Wells what are they how do they work?

Evaluate: does it meet criteria?

Design: A night light and materials to use

Make: a well with a pulley mechanism

Research: night lights and electronic systems.

Summer 2: Nightlight

Evaluate: does it meet the design criteria?

Autumn 2: making a well with a pulley system

Year 4

Evaluate: testing the litter picker and mechanism involved.

Making a litter picker Mechanism using the lever.

Design a litter picker

Research: litter pickers and lever mechanisms

Summer 2: Litter picker (grabbing tool)

Evaluate: testing the mechanism

Research: different bridges and how they move

Make bridge out of wood.

Spring 2: bridges with a mechanism

Design: bridge and explore materials to use

Evaluate: does it meet the criteria?

Year 3

Research: landing crafts and how they move using an axel.

Design: landing craft using an axel to move

Autumn 2: Landing Craft

Making: making a landing craft

Evaluate: does it meet the design criteria?

Summer 2: Windmill

Research: Windmills and how they move

Evaluate: does it meet the criteria? Do the mechanism work.

Make: windmill out of wood

Making: Tent

Design: a tent with materials and stitching to attach.

Autumn 2: Textiles Tents

Research: materials to make a tent out of, stitching techniques.

Year 2

Spring 2: Textiles Puppets

Design: hand puppets and the materials to use

Evaluate: does it meet the design criteria?

Research: styles of puppets, researching ways to attach materials together stitching.

Making: hand puppet – stitching techniques

Design: windmills using an axel

Evaluate: does it meet the design criteria?

Making: Card following their designs

Design: card using a lever mechanism.

Research: Style of cards. Researching levers & how they work.

Spring 2: Cards with Moving Parts

Year 1

Evaluate: testing the home

Design: using research decide features and design homes

Autumn 2: - Houses & homes

Make: Model of a home

Research & compare homes local environment

EYFS

Within the continuous provision, Children will have access to cardboard, plastic, masking tape, celotape, glue, PVA glue, String, etc.
Available all year round. Children will be encouraged to make and create some models and objects

Children will be supported with Making and Evaluating their projects.
Children will be supported to test and evaluate their models.

Courage Humility Integrity