

Design & Technology

Parent Forum
November 2024



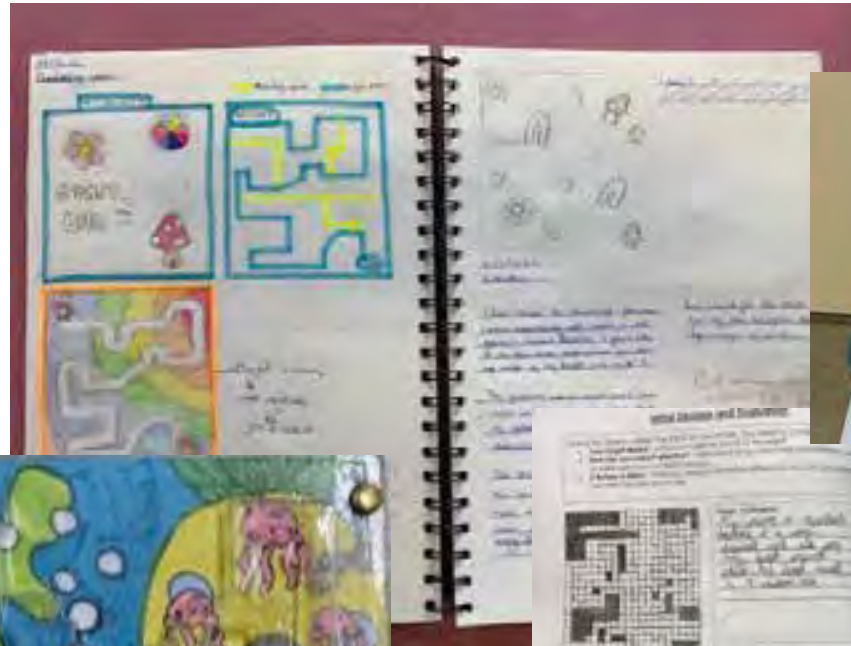
Commitment - Respect - Excellence - Self-belief - Strength

Induction Phase

Induction Phase- Rotations each term

Product Design/ Textiles/ Food

Year 7 Maze Game



Year 8 - Grabber Toy



Key Skills:

- Analysing a brief
- Research and design skills
- Knowledge of timbers and plastics
- Use of tools and equipment

Excellence - Self-belief - Strength

Induction Phase

Induction Phase- Rotations each term - Product Design/ Textiles/ Food

Year 7 Keyrings/Bookmarks



Year 8 Pencil Cases & notebooks



Key Skills:

- Analysing a brief
- Research into artists and designers
- Knowledge of fibres and fabrics
- Decorative processes
- Use of tools and equipment



Commitment - Respect - Excellence - Self-belief - Strength

Induction Phase

Induction Phase- Rotations each term

Product Design/ Textiles/ Food

Year 7
The Food Detectives



Year 8 Food Around
the World



Key Skills:

- Knife skills
- Nutrition
- Tools and equipment
- Organisation for practical lessons
- Development of independent and teamwork skills



Commitment - Respect - Excellence - Self-belief - Strength



WJEC Level 1/2 Hospitality and Catering

60% Controlled Assessment

This is set in September of Year 11 and includes planning and making a meal

40% Written Exam

1 hr 20mins

How to support your child:

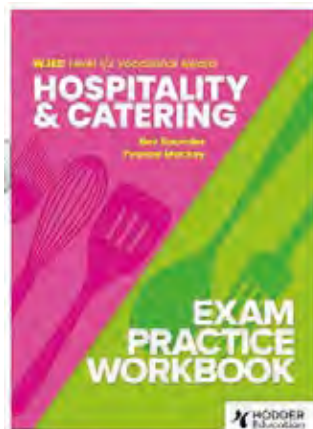
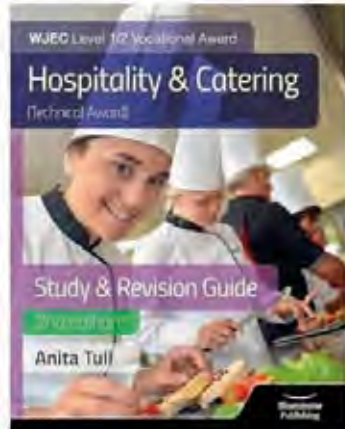
- ensure they are revising the exam content regularly
- to remember ingredients
- encourage them to attend support sessions when offered



Common misconceptions:

-NOT JUST COOKING!

It is about the whole industry, high level skills and understanding of the entire range of job roles



AQA GCSE Art & Design

3D Design



60% Portfolio

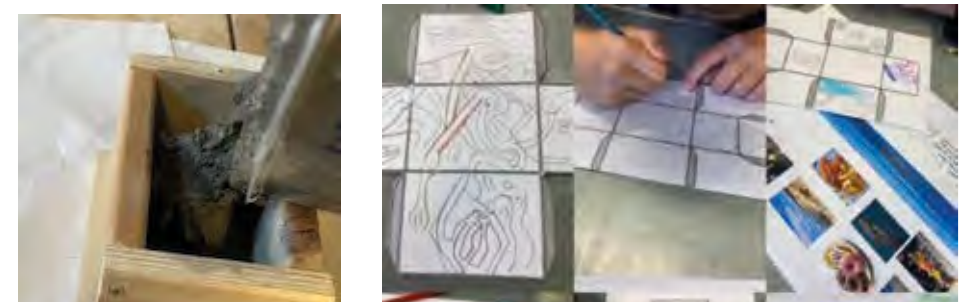
This is made up of a range of projects

40% Exam

10hr final practical exam

How to support your child:

- ensure they are researching and drawing at home
- keep to deadlines
- read through their annotations and evaluations
- encourage them to attend support sessions when offered



Edexcel GCSE DT-Timbers



CAD Design



50% NEA (coursework)

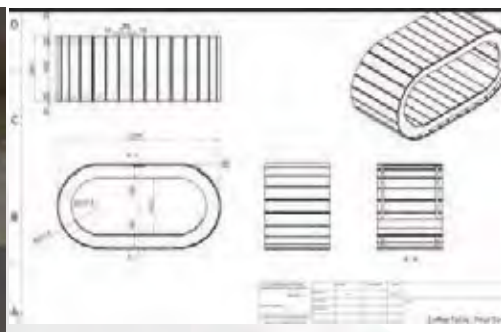
This is set in June of Year 10 through to March of Year 11

50% Exam

1 hr 45min written exam

How to support your child:

- ensure they are regularly revising
- keep to deadlines, especially NEA
- Encourage them to practice drawing/designing at home

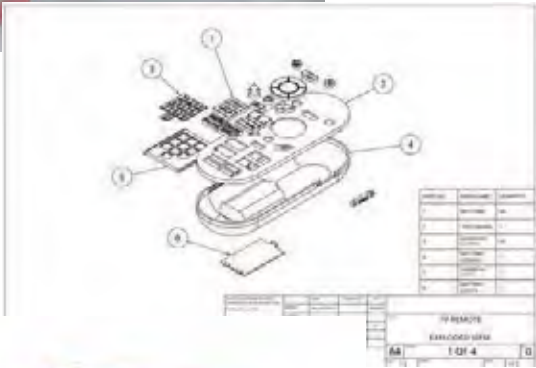


Common misconceptions:

- Not just about making
- Lessons are 50/50 theory and skills
- Specialism is Timbers but knowledge of wide range of material areas required for the exam, papers, plastics, fibres, sustainability, CAD/CAD, electronics etc.
- Maths is very important, in exam and NEA

self-belief - Strength

OCR Cambridge National Engineering Design

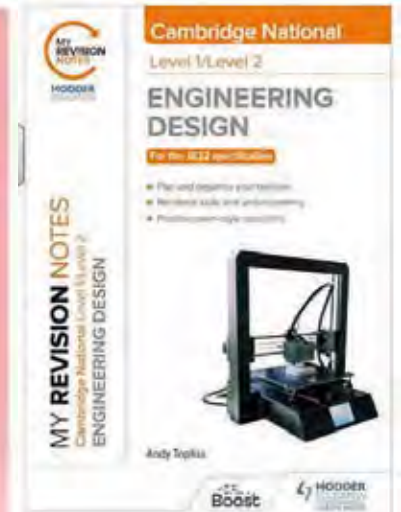


3 Units

R038- Written theory exam 1hr 15mins

R039 & R040

Coursework units, briefs set by the exam board each year. One submitted in Year 10, one in Year 11



How to support your child:

- ensure they are revising theory knowledge regularly
- keep to deadlines for the units
- encourage them to attend support sessions when offered

Eduqas GCSE Art & Design-Textiles

60% Portfolio

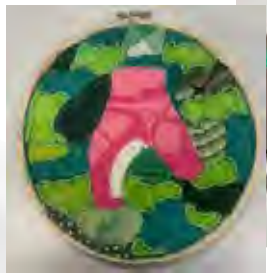
This is made up of a range of projects

40% Exam

10hr final practical exam

How to support your child:

- ensure they are researching and drawing at home
- keep to deadlines
- remember their equipment and sketchbooks
- read through their annotations and evaluations



Commitment - Respect - Excellence - Self-belief - Strength

Edexcel A Level Product Design

50% Coursework

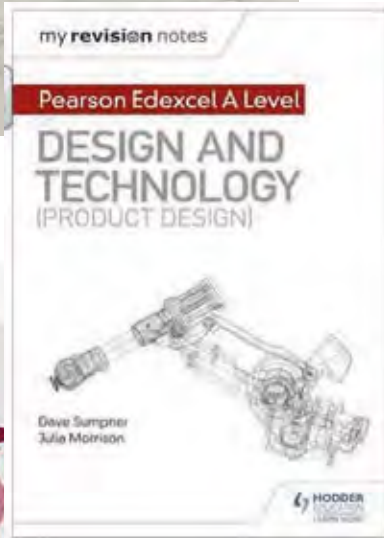
This is a project selected by the student

50% Exam

2hr 30min written exam

How to support your child:

- ensure they are regularly revising
- keep to deadlines, especially coursework
- Encourage them to practice drawing/designing at home
- Encourage them to use the department in study/free time



Commitment - Respect - Excellence - Self-belief - Strength

Level 3 Cambridge Technical Engineering

How to support your child:

- ensure they are regularly revising for exam units
- keep to deadlines
- Encourage them to practice processes and skills at home
- Encourage them to use the department in study/free time and support sessions offered

6 Units

4 Examined Units

Unit 1- Mathematics for Engineering

Unit 2- Science for Engineering

Unit 3- Principles of mechanical Engineering

Unit 4- Principles of Electronic and Electrical Engineering

2 exams May Year 12

2 exams January Year 13

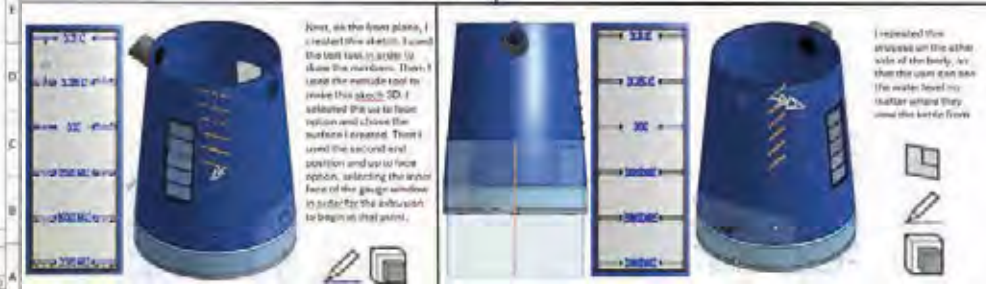
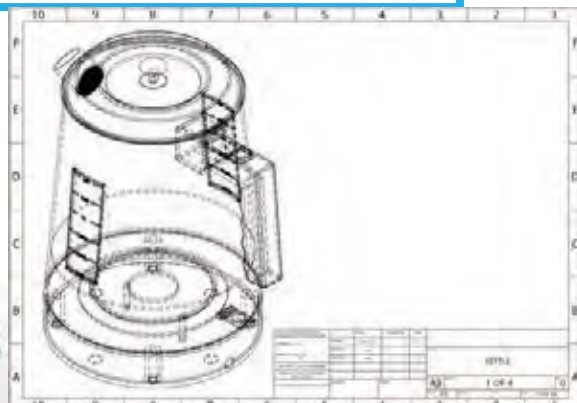
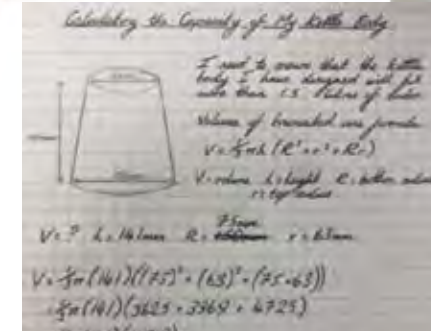
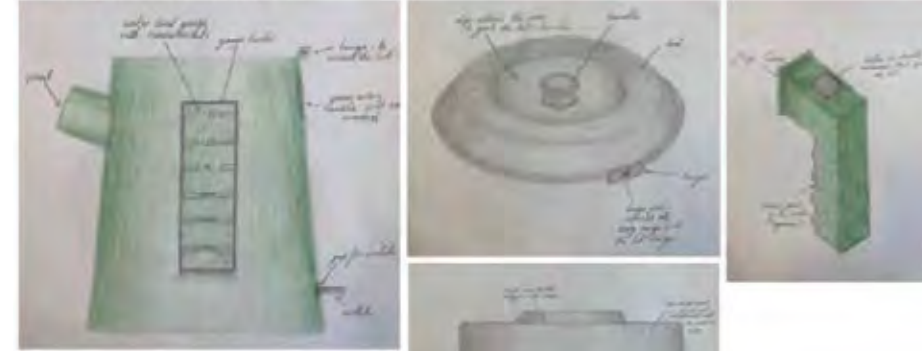
(any resits May Year 13/14)

2 Coursework Units

Unit 9- Mechanical Design

Unit 10- Computer Aided Design

Final Design of Each Part of my Kettle



Extra-Curricular- South Essex College

Visit to SEC/ High House Production Park

Allowing students to understand HE courses and careers and see where Royal Opera House costumes are made/ stored to link to their current project.



Rubbish Fashion Competition

Year 9 had to research, design and make a costume for a chosen character, with sustainability in mind.



Commitment - Respect - Excellence - Self-belief - Strength

Hospitality at the Summer Creative Exhibition



Commitment - Respect - Excellence - Self-belief - Strength



Extra-Curricular- Crafts Council Competition

Make a Sustainable Future with The Eden Project

Our chosen theme:

Reclaim and Reuse
Save materials that would otherwise become waste to tackle sustainability, climate justice and making practices from around the world




How we started: We generated lots of different mind maps with our individual ideas of what "Reclaim and Reuse" meant. Then we talked about it and came up with our final mindmap below.



As we live by the Sea, we decided to look at beach waste and ocean pollution. We know plastic getting into our Oceans is a big problem, so we thought we could base our project on this.

We were inspired when we found out Adidas made trainers from recycled Ocean plastic!!!!



Reclaim and Reuse Mindmap



Make a Sustainable Future with The Eden Project



Our Idea: We decided to use plastic waste from the oceans, recycle it and put it to good use! We collected 100s of bottle lids and experimented melting them, moulding them and turning them into slabs of plastic. We then decided we could use the slabs to make a 'flatpack' homeless / disaster shelter.

Our design: We all came up with lots of design ideas and sketches. We decided to keep it simple and have 4 sides, a base and a roof, which fitted together like a puzzle. The front and back would slide into place so people could get in and out of the shelter. We designed our finally idea on CAD and made some templates to help us piece the plastic together properly.

We decided to make a small, scale model of our design as a full size one couldn't be made in our school oven!




Commitment - Respect - Excellence - Self-belief - Strength



Extra-Curricular- STEM CLUB

REIMAGINE

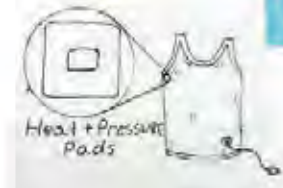
Clean Energy Competition 2024

What is CREST?

CREST is a scheme that inspires young people to think and behave like scientists and engineers.

We created a people power vest with charging port power pack connected to the 2 types of pad - made from piezoelectric and thermoelectric generating materials. The pads will be constructed into vest at key heat or pressure points

- Thermoelectric generating material pads.
- Piezoelectric crystal pressure pads positioned under elbow and armpit connection points.



Commitment - Respect - Excellence - Self-belief - Strength