RAISING ACHIEVEMENT

IN GCSE DESIGN AND TECHNOLOGY

ASHLYNS SCHOOL

Some background….

Assessment for the course is split between:

- The NEA (project)
- The written exam

Both are worth 50% of the GCSE

….more background….

The **content** of the subject is taught in 3 sections:

1. The core technical principles
2. The specialist technical principles
3. Designing and making principles

This is where the Textiles and Product Design divide happens - students following the Textiles specialism have learned about textiles materials in greater depth

The core

- New technologies
- Energy
- New materials
- Systems approach
- Mechanical devices
- Introduction to **all** materials

The specialism

- Selecting materials
- Forces and stresses
- Ecology
- Sources
- Using materials
- Stock forms
- Scale of production
- Specialist techniques
- Surface finish

Designing and making

- Investigation
- Environment, social, economic
- The work of others
- Design strategies
- Communication of designs
- Prototype development
- Selection of materials and tools
- Tolerances
- Materials management
- Specialist tools
- Specialist techniques

NEA (project) worth 50% of the GCSE

Project tasks	NEA marks
Research	10
Design brief and specification	10
Generating ideas	20
Developing ideas	20
Realising ideas	20
Analysing and evaluating	20
TOTAL	100

Written paper

Section and style of question	% of the GCSE
A - Core **10 multiple choice marks and 10 marks for short answer questions**	**10%**
B - Specialist **Longer answer questions**	**15%**
C - Designing and making principles **Mixture of short and longer answer questions**	**25%**

Exam questions - long answer

The product - a powered, adjustable reclining chair.

Analyse and evaluate this product, considering how effective this design might be for use in a hospital waiting room.

8 marks available

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How would the 8 marks be awarded?

It’s not just 8 features of the chair

Analyse - this part of the question requires students to show some understanding of how the chair would ‘work’ in the hospital waiting room by using their design strategy knowledge - ergonomics, working environment, materials selection, safety etc

They could look for features that would work well and some that wouldn’t - and explain why.

How would the 8 marks be awarded?

Evaluate - for each of the points that students raise about the chair they can make a judgement about whether it's a good thing or a bad thing or even both!

They can then 'finish' the question with a concluding judgement.

How would the 8 marks be awarded?

Answer plan

positive	negative
Comfortable lift idea for elderly / poorly people - might make them feel safe/cared for/relaxed	Shape might not be easy to keep clean because of grooves - cleaning in hospitals is really important to reduce infections spreading
Material might be easy to clean as it has a shiny surface - hygiene important - stops infection	Takes up a lot of room where most waiting rooms have smaller plastic chairs - can't get many people sat in waiting room
Nice for comfort but impractical size, cost etc	

Make practice questions!

Products

Situations

5 things to raise achievement in D&T

1. **Get the NEA finished!** - completing all sections of the NEA including the evaluation section is really important - there are good marks available in each section
2. **Do ½ an hour!**.....
3. **Use the resources**:
   a. quick questions on the cards
   b. Use the 2, 3 and 4 mark questions in the workbook
   c. Use the past papers and mark schemes to practice longer answer questions
   d. Seneca online for just going over the content
4. **Wallpaper** (read, reduce, write - colour code - topics positioned on the wall)
5. **Question what's around you** - pick up products - think about what people need - listen to the news