



The Bridge to Post-16 Summer Work



A Level Design and Technology Exam Board: AQA

This pack contains a programme of activities and resources to prepare you to embark on your Post-16 course in Design and Technology in September.

It should be completed throughout the remainder of the Summer term and over the Summer Holidays to ensure you are ready to start your course in September.

You MUST have this pack completed before your first lesson in the subject

The resources include:

1. Links to three websites where you can research the topics you will be exploring in the course and get a flavour of what you will be learning about in Post-16
2. Research task on key pre-knowledge topics that will help you to be successful in your course.
3. Other relevant revision/questions to help bridge between GCSE and Post-16 courses
4. Suggested therapies to help you if you are struggling with the tasks

Overall we suggest you spend around 3 hours of total work working through the tasks for Design and Technology

Therefore in total, across your 3 subjects you should be completing 9 hours of Summer Work.

Useful Websites

[ENGINEERING - DESIGN AND TECHNOLOGY \(technologystudent.com\)](http://technologystudent.com)

[The Work of Other Designers – GCSE Design and Technology AQA Revision – Study Rocket](#)

[How the work of designers has shaped our world GCSE DT - YouTube](#)

Research Task

You must create a sketchbook/ portfolio (1 designer per page) exploring the work of any of the designers attached below. AQA compulsory designers are marked with an asterisk (*) and will have been the designers you researched in GCSE.

Other Tasks

Use the research sheets attached to further your understanding of mechanical and physical properties of materials. This can be completed using the useful websites or general research, as long as it is product based properties and not general properties.

Suggestions if you are struggling

Technology Student has a variety of reading, tasks and video to support you if you don't know where to start. Annotate images collected from google.

Use the helpsheets attached below to understand what a A grade portfolio should look like.

A LEVEL DESIGN & TECHNOLOGY

INDEPENDENT STUDY

Your portfolio/sketchbook will be collected in on the last lesson of each half term for grading. It will be graded using A LEVEL grading A-U

TASK: You must create a sketchbook/portfolio (1 designer per page) exploring the work of any of the following designers. Compulsory designers are marked with an asterisk (*).

WHY?; To be an exceptional designer you will need to have a wide visual vocabulary and knowledge of designers, & design movements. The ones marked with an asterisk (*) are in the exam.

| | | | |
|-----------------------|---------------------|--------------------|----------------------|
| Philliipe Starck* | Product Designer | Stefan Sagemeister | Designer |
| James Dyson* | Product Designer | Tom Dixon | Designer |
| Magaret Calvert* | Graphic Designer | Yves Behar | Designer |
| Dieter Rams* | Industrial Designer | Eero Saarinen | Architect & Designer |
| Charles & Ray Eames* | Designers | Peter Saville | Designer |
| Marianne Brandt* | Designer | Ross Lovegrove | Product Designer |
| Harry Beck | Graphic designer | Erik Spiekermann | Typographer |
| Marcel Breuer | Designer | Milton Glaser | Designer |
| Coco Chanel | Fashion designer | Thomas Heatherwick | Designer |
| Norman Foster | Architect | Massimo Vignelli | Designer |
| Sir Alec Issigonis | Designer | Wolfgang Weingart | Typographer |
| Wililam Morris | Designer/ Craftsman | Saul Bass | Designer |
| Mary Quant | Fashion designer | Joseph Muler | Designer |
| Louis Comfort Tiffany | Designer | Brockman | Product designer |
| Marcel Breuer | Designer | Ron Arad | Architect |
| Gerrit Reitveld | Designer | Frank Gehry | Architect |
| Charles Rennie | Designer | Oscar Niemeyer | Designer |
| Macintosh | Architect | Herbert Bayer | Designer |
| Aldo Rossi | | Walter Gropius | |

5 STEP SUCCESS CRITERIA FOR A GRADE A/ B

EACH PAGE SHOULD HAVE...

1. A short summation of the person, what they do and their design style. (3 Sentences max)
2. At least 10 images of their work. (Titled, your opinions welcomed)
3. 5 Keywords which you will use to memorise their work.
4. Sketches, CAD models of 1 design you have generated based on their work/ style. This will help you 'design in the style of', which will be a key feature in the exam.
5. A short evaluation of what you think of their work. (3 Sentences max)

GRADE A EXAMPLES

Robert Delaunay: PROFILE

Early life: Robert Delaunay was born in Arras, France, in 1885. He was a pioneer of Orphism, a branch of Cubism that focused on color and light. He was married to Sonia Delaunay, who was also a prominent artist.

Style: Delaunay's work is characterized by its use of primary colors and geometric shapes. He believed that color and light were the most important elements of art. His work was influenced by the theories of Paul Signac and the Impressionists.

CHUCK CLOSE

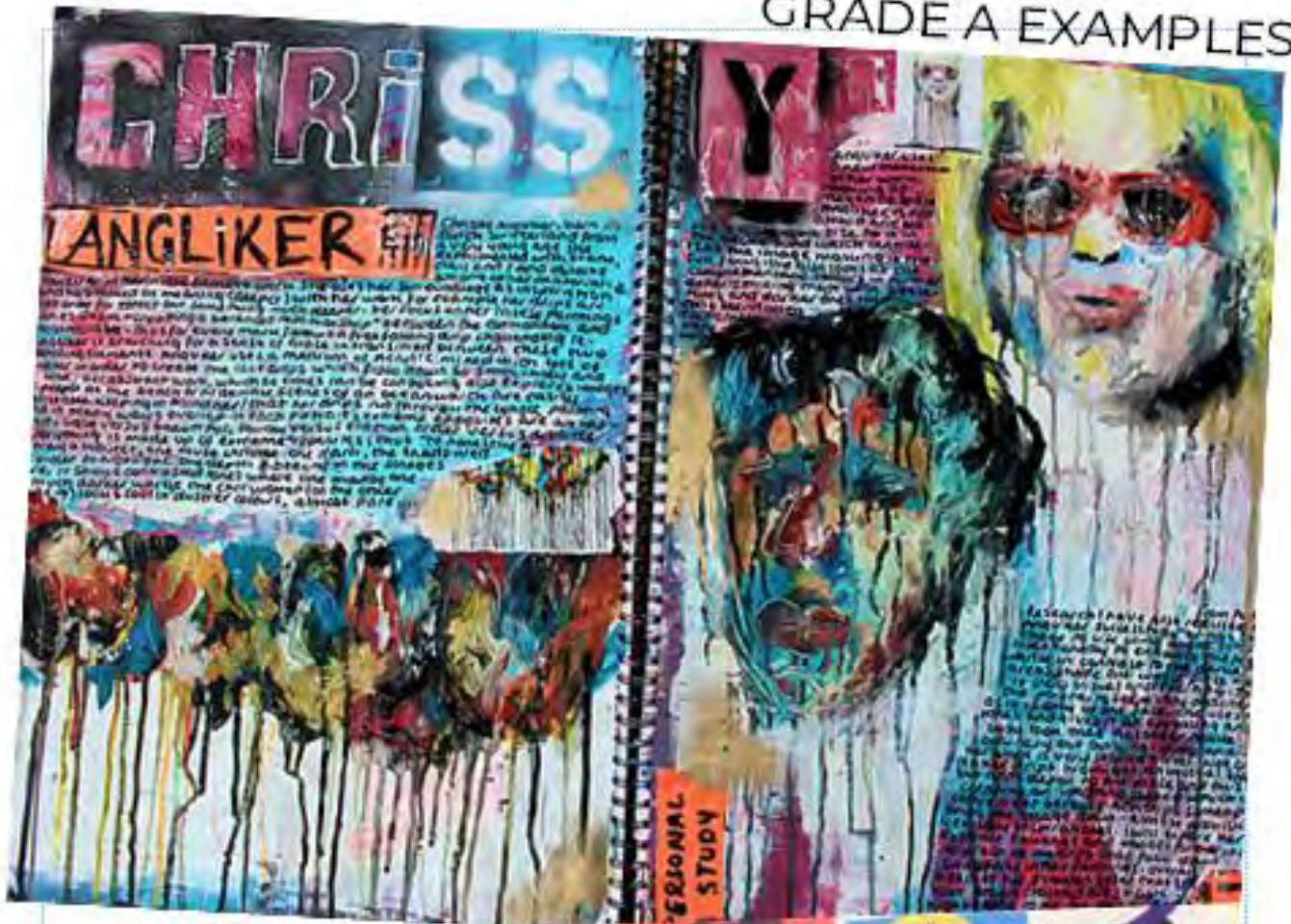
Contemporary Graphics and Illustration

Robert RAUSCHENBERG

Robert Rauschenberg is an American abstract painter. He is known for his color field paintings and his use of color and light. He was a member of the New York School and was influenced by the work of Piet Mondrian and the Abstract Expressionists.

His work is characterized by its use of color and light. He believed that color and light were the most important elements of art. His work was influenced by the theories of Paul Signac and the Impressionists.

GRADE A EXAMPLES



Torsional strength

| | |
|------------|---|
| Definition | Which category of property? <input type="radio"/> Physical <input type="radio"/> Mechanical |
|------------|---|

Task: Find 3 products and state why this property is suitable for each product. (You must refer back to the product)

| | |
|--|--------|
| | |
| | Reduce |

Hardness

| | |
|------------|---|
| Definition | Which category of property? <input type="radio"/> Physical <input type="radio"/> Mechanical |
|------------|---|

Task: Find 3 products and state why this property is suitable for each product. (You must refer back to the product)

| | |
|--|--------|
| | |
| | Reduce |

Toughness

| | |
|------------|---|
| Definition | Which category of property? <input type="radio"/> Physical <input type="radio"/> Mechanical |
|------------|---|

Task: Find 3 products and state why this property is suitable for each product. (You must refer back to the product)

| | |
|--|--------|
| | |
| | Reduce |

Plasticity

| | |
|------------|---|
| Definition | Which category of property? <input type="radio"/> Physical <input type="radio"/> Mechanical |
|------------|---|

Task: Find 3 products and state why this property is suitable for each product. (You must refer back to the product)

| | |
|--|--------|
| | |
| | Reduce |

Fusibility

| | |
|------------|---|
| Definition | Which category of property? <input type="radio"/> Physical <input type="radio"/> Mechanical |
|------------|---|

Task: Find 3 products and state why this property is suitable for each product. (You must refer back to the product)

| | |
|--|--------|
| | |
| | Reduce |

Magnetism

| | |
|------------|---|
| Definition | Which category of property? <input type="radio"/> Physical <input type="radio"/> Mechanical |
|------------|---|

Task: Find 3 products and state why this property is suitable for each product. (You must refer back to the product)

| | |
|--|--------|
| | |
| | Reduce |

Elasticity

| | |
|------------|---|
| Definition | Which category of property? <input type="radio"/> Physical <input type="radio"/> Mechanical |
|------------|---|

Task: Find 3 products and state why this property is suitable for each product. (You must refer back to the product)

| | |
|--|--------|
| | |
| | Reduce |

Density

| | |
|------------|---|
| Definition | Which category of property? <input type="radio"/> Physical <input type="radio"/> Mechanical |
|------------|---|

Task: Find 3 products and state why this property is suitable for each product. (You must refer back to the product)

| | |
|--|--------|
| | |
| | Reduce |

Ductility

| | |
|------------|---|
| Definition | Which category of property? <input type="radio"/> Physical <input type="radio"/> Mechanical |
|------------|---|

Task: Find 3 products and state why this property is suitable for each product. (You must refer back to the product)

| | |
|--|--------|
| | |
| | Reduce |

Malleability

| | |
|------------|---|
| Definition | Which category of property? <input type="radio"/> Physical <input type="radio"/> Mechanical |
|------------|---|

Task: Find 3 products and state why this property is suitable for each product. (You must refer back to the product)

| | |
|--|--------|
| | |
| | Reduce |

Corrosion resistant

| | |
|------------|---|
| Definition | Which category of property? <input type="radio"/> Physical <input type="radio"/> Mechanical |
|------------|---|

Task: Find 3 products and state why this property is suitable for each product. (You must refer back to the product)

| | |
|--|--------|
| | |
| | Reduce |

Electrical conductor

| | |
|------------|---|
| Definition | Which category of property? <input type="radio"/> Electrical <input type="radio"/> Thermal <input type="radio"/> Optical |
|------------|---|

Task: Find 3 products and state why this property is suitable for each product. (You must refer back to the product)

| | |
|--|--------|
| | |
| | Reduce |

Compressive strength

| | |
|------------|---|
| Definition | Which category of property? <input type="radio"/> Physical <input type="radio"/> Mechanical |
|------------|---|

Task: Find 3 products and state why this property is suitable for each product. (You must refer back to the product)

| | |
|--|--------|
| | |
| | Reduce |

Tensile strength

| | |
|------------|---|
| Definition | Which category of property? <input type="radio"/> Physical <input type="radio"/> Mechanical |
|------------|---|

Task: Find 3 products and state why this property is suitable for each product. (You must refer back to the product)

| | |
|--|--------|
| | |
| | Reduce |

Bending strength

| | |
|------------|---|
| Definition | Which category of property? <input type="radio"/> Physical <input type="radio"/> Mechanical |
|------------|---|

Task: Find 3 products and state why this property is suitable for each product. (You must refer back to the product)

| | |
|--|--------|
| | |
| | Reduce |

Shear strength

| | |
|------------|---|
| Definition | Which category of property? <input type="radio"/> Physical <input type="radio"/> Mechanical |
|------------|---|

Task: Find 3 products and state why this property is suitable for each product. (You must refer back to the product)

| | |
|--|--------|
| | |
| | Reduce |