Surname:	**First Name:**

Current School:

Shrewsbury School

SHREWSBURY SCHOOL

SIXTH FORM ENTRANCE EXAMINATION
2025 ENTRY

DESIGN & TECHNOLOGY
(1 Hour)

Instructions to candidates:

Use blue or black ink or ball-point pen. Use pencil and coloured pencils only for drawing.

All working must be shown. Mark allocations are shown in brackets.

Do all rough work in this book. The maximum mark for this paper is 60.

Wherever calculations are needed you should show your working.

You are reminded of the need for good English and clear presentation.

In addition to this paper you will require:

A pen, pencil, ruler, eraser, pencil sharpener and coloured pencils.

Shrewsbury School
Design & Technology
A Level Design & Technology

Aptitude Examination Paper
Time allowed: 1 hour

Instructions
Use blue or black ink or ball-point pen. Use pencil and coloured pencils only for drawing.
Give your response to ***all*** **tasks in the spaces provided.**
All working must be shown.
Do all rough work in this book. Cross through any work you do not want marked.

Information
The maximum mark for this paper is **60.**
Mark allocations are shown in brackets.
Wherever calculations are needed you should show your working.
You are reminded of the need for good English and clear presentation.

In addition to this paper you will require:
a pen, pencil, ruler, eraser, pencil sharpener and coloured pencils;

Name:	

For Examiner's Use		
N0.	**Mark**	**Mark Available**
1		20
2		40
Total		**60**

DESIGN BRIEF

More than ever before, designers are needing to consider the needs of the broadest range of people when designing products

You are challenged to re-design an existing product and to ensure that it is more inclusive & ergonomically designed

TASK ONE: Mind Mapping

Use the figures below as a starting point. To help you consider a product design that you can make more inclusive, you should mind-map as many related products as you can to think of, and then note down as many functional elements of these products that you feel could make them more inclusive and ergonomically designed. All drawings to be completed on page 2 and 3.

The scale of assessment is presented opposite. ***Please present your response in the space below.***

In your answer also analyse and evaluate the environmental impact of all three cups shown and state the cup material in each, cup production method, lid material, lid production method and insulation sleeve material. Please display this as you would like to.

In your answer you should refer to:

- raw materials
- product manufacture
- disposal

PRODUCT DESIGN

Investigating the Design Context: 1		
Mark Band	***Mind Mapping & Research Planning***	**Mark**
20	A comprehensive range of design considerations are presented;	
	All points are clearly relevant to the design brief;	
	There is a clear structure to the mind-map, with considerations being increasingly focused.	
15	A good range of design considerations are presented;	
	Most points are relevant to the design brief;	
	There is a structure to the mind-map.	
10	Some Design considerations are presented;	
	Some points are relevant to the design brief;	
	The mind-map shows some structure.	
5	Few design considerations are presented;	
	There is little relevance to the design brief;	
	The mind-map presented is superficial.	
	Final Mark:	

TASK TWO: Idea Development

You should **present 2 ideas** for a design in the space below. Use your mind-map and drinks cups Figures to assist.

Please present your idea using **3D sketches**, but you can also use 2D and detail sketches to explain your idea further. Remember you should aim to annotate and explain aesthetic, function, materials, and the unique selling points that would make the design ergonomic. Clear communication is crucial.

The scale of assessment is presented opposite. ***Please present your response in the space below, and on the following page. Consider a target audience of your choice.***

CONCEPT **ONE**

Development of Design Proposals: 2		
Mark Band	**Quality of Initial Ideas**	**Mark**
40	Sketching is of an excellent quality, and is consistently clear and legible;	
	Annotation is comprehensive; accounting for all relevant details of materials, function and construction;	
	2 ideas are presented	
	Ideas take full account of, and are relevant to, the design brief, and specification criteria if appropriate;	
30	Sketching is of a good quality and is mostly clear and legible;	
	Annotation is good; accounting for most of the decisions made including materials, function and construction;	
	2 ideas are presented;	
	Ideas account for most of the considerations presented in the design brief, and if appropriate, the criteria in the design specification;	
20	Sketching is of a sound quality, and ideas presented show some clarity;	
	Annotation shows some details of material, functional and construction decision-making;	
	1 complete idea + 1 partial is presented;	
	Ideas show some relationship to the design brief, and if appropriate, to the specification criteria;	
10	Limited quality is evident in the sketching, and ideas are difficult to understand;	
	There is little annotation to support the ideas, showing a limited understanding of the material, functional, and constructional details of the ideas;	
	A partial response is presented;	
	Ideas demonstrate little relevance to the considerations in the design brief, and if appropriate, to the specification criteria;	
	Final Mark:	

TASK TWO: Idea Development Continued

please continue the presentation of your design ideas in the space below

CONCEPT **TWO**