

Leaving Certificate Technology

Consultative Document

Draft Sample Thematic Brief - Ordinary Level

Theme: A Safe Environment

There is an increased awareness of the importance of safety in the home for both adults and children. Items such as personal alarms, child locks, burglar alarms, warning devices, temperature alarms etc. help to create a safer environment.

With reference to the above theme, design and make a device that will improve personal safety in the home. The device must incorporate a mechanical or electrical or electronic system.

Suggested candidate instructions issued on the project examination paper.

1. Each project must consist of a design folder and an artefact.
2. The solution presented must be the candidate's own individual work. The design folder should include a record of all stages of the candidate's work from analysis to realisation.
3. The project must be completed in school under the supervision of the Technology teacher.
4. The solution presented should display a combination of the knowledge and skills developed through the candidate's study of the core and chosen optional modules.
5. The candidate must indicate the chosen optional modules on the table of contents page in the design folder.
6. The solution presented should take account of ergonomics and safety requirements.
7. All important operating features must be clearly visible and easily accessible without dismantling.
8. Where specialised equipment is required to operate the final solution, this must be set up by the candidate with clear instructions for the examiner regarding operation.
9. Multimedia presentations, where submitted, must be of **maximum 3** minutes duration and must be set up ready for viewing.
10. The project must be completed by 13th February 2009

Proposed sections for the marking scheme

Design Folder

1. Analysis, research & investigation
2. Project management
3. Design ideas & selection of optimum solution
4. Sketches & drawings for manufacture
5. Production planning
6. Product realisation
7. Evaluation & critical reflection on manufacture
8. Presentation & ICT.

40%

Artefact

1. Artefact meets theme & specification
2. Creativity
3. Production skills
4. Quality of the artefact
5. Functionality
6. Presentation of the finished artefact.

60%

DRAFT

Draft Assessment Criteria

Design Folder			
<i>No.</i>	<i>Heading</i>	<i>Description</i>	<i>Marks</i>
1	Analysis, research & investigation	Analysis of Thematic Brief. Research into chosen area. Analysis of existing solutions.	15
2	Project management	Analysis of available resources, time and budget constraints. Proposed timeframe.	5
3	Design ideas & selection of optimum solution	Annotated sketches & drawings outlining three possible solutions. Optimum solution selected, identified & justified.	15
4	Sketches & drawings for manufacture	Detailed annotated sketches & drawings including all elements/aspects of solution; circuit diagrams/flowcharts/models/prototypes/dimensions/scale/assembly details.	15
5	Production planning	Materials & components list, scheduling, work breakdown structure, costing.	10
6	Product realisation	Sequence of manufacture including photographic evidence.	5
7	Evaluation & critical reflection on manufacture	Testing against chosen brief. Evaluation of final artefact. Comparison of planned schedules and actual schedules. Suggested modifications with justification.	10
8	Presentation & ICT	Correct sequence of presentation. Quality of material presented. ICT skills in production of folder.	5

Total marks for the design folder: **80**

Artefact			
<i>No.</i>	<i>Heading</i>	<i>Description</i>	<i>Marks</i>
1	Product meets theme & specification	Solution presented meets the thematic brief and specifications as identified by the candidate.	20
2	Creativity	Creativity in design, aesthetics & ergonomics; Creativity in use of materials.	20
3	Production skills	Processing of materials; Assembly of materials and components; Factor of difficulty.	20
4	Quality & finish of artefact	Quality and finish of the final artefact. Due regard for health & safety.	20
5	Functionality	Artefact working well. Limited use of commercial components.	20
6	Presentation of the finished artefact	Artefact well presented. Parts well integrated and labelled where appropriate.	20

Total marks for the artefact: **120**