

THE KENYA NATIONAL EXAMINATION AND ASSESSMENT PREDICTION SERIES

Teacher's Name		TSC NO.	
School Name		School Code	
Teacher's Signature		Date	

KENYA JUNIOR SCHOOL EDUCATION ASSESSMENT

812/2

PAPER 2 (*project*)

TERM 2 ENDTERM 2025

PRETECHNICAL STUDIES (PROJECT) - 811/2

Project Scenario: Simple Tool Holder

Overall Guidance for Teachers:

- a) The aim of this paper project is to give learners practical skills and competencies required at junior school level. This is in line with preparing learners for National Examinations and future careers thereafter.
- b) This is a group project. Emphasize collaboration and active participation from all members.
- c) Encourage learners to be innovative and use locally available materials.
- d) The duration of 1 month allows for iterative design, construction, and refinement.
- e) Safety is paramount. Ensure learners are aware of and practice safety precautions, especially when handling tools.
- f) Assessment should be ongoing, observing group dynamics, individual contributions, and the final product.
- g) Focus on the concept of joining different materials and practical application.
- h) Locally available materials are key.
- i) Reinforce safety protocols, especially with cutting tools.

Task 1: Technical Skills (14 Marks)

1. Design and Planning:

a) Brainstorming and Design Agreement:

Teacher's Role: Guide groups to think about the types of tools the holder will organize (pens, rulers, small hand tools) and how the design will accommodate them.

Expected Outcome: Group discussion leading to a consensus on the design.

b) Freehand Pictorial Sketch (4 marks):

Teacher's Role:

Look for clarity, representation of the tool holder, and inclusion of approximate dimensions.

Marking Guidance: 2 marks for a clear, recognizable pictorial sketch of a simple tool holder. 2 marks for indicating approximate dimensions for main parts (e.g., height, width, depth of compartments).

Common Challenges: learners may struggle with accurate drawing or dimensioning.

c) List of Main Materials (2 marks):

Teacher's Role: Encourage creative use of diverse materials.

Marking Guidance:

1 mark for listing 2-3 appropriate materials. 2 marks for listing 4 or more appropriate and relevant materials (e.g., wood pieces, plastic bottles, cardboard tubes, wire, fabric, recycled plastic containers).

Expected Outcome: A list of at least four materials suitable for the tool holder.

2. Material Preparation and Tool Selection:

a) List of Appropriate Hand Tools (4 marks):

Teacher's Role: Ensure tools are appropriate for the materials chosen.

Marking Guidance:

1 mark for each correct and appropriate hand tool listed (max 4 marks).

Examples: Ruler, pencil, scissors, utility knife, saw, sandpaper, glue gun, hammer, staple gun, tape measure.

Expected Outcome:

A list of at least four hand tools for marking, cutting, shaping, and joining.

b) Safety Precaution for Sharp-edged Tools (1 mark):

Teacher's Role: Reinforce specific safety practices for sharp tools.

Marking Guidance: * 1 mark for a clear and relevant safety precaution (e.g., "Always cut on a stable surface," "Keep fingers away from the cutting path," "Use sharp tools carefully," "Wear gloves if appropriate").

Expected Outcome: A concise and correct safety precaution.

3. Construction and Submission:

a), b), c) Construction Process:

Teacher's Role: Observe construction for accuracy, neatness, and appropriate joining methods. Guide on finishing techniques.

d) Submission of Completed Tool Holder (3 marks):

Teacher's Role: Assess the final product.

Marking Guidance:

1 mark for accuracy of construction (Does it match the sketch? Are pieces cut reasonably well?).

1 mark for stability (Is it firm and does it hold items without tipping?).

1 mark for finish (Is it neatly completed, decorated, or covered? Is it visually appealing?).

Expected Outcome:

A functional, stable, and reasonably well-finished simple tool holder.

Task 2: Business/Entrepreneurship (3 Marks)

5. Usefulness and Cost:

a) Explanation of Usefulness (1 mark):

Teacher's Role:

Guide learners to articulate the primary function and benefit of their tool holder.

Marking Guidance:

1 mark for a clear explanation of how the tool holder organizes items (e.g., "Keeps pens and rulers tidy," "Prevents small tools from getting lost," "Makes a desk look neater").

Expected Outcome: A concise explanation of the tool holder's utility.

b) Factors Determining Cost (2 marks):

Teacher's Role: Encourage learners to think beyond just materials and consider the production process.

Marking Guidance: 1 mark for each relevant factor (max 2 marks).

Examples: Cost of materials, time/labor involved in making, complexity of design, tools used, quantity produced (bulk vs. individual).

Expected Outcome:

Two distinct factors influencing the cost of production.

Task 3: Computer Studies (3 Marks)

7. Documentation and Presentation:

a) Taking Photos/Video Clips (1 mark):

Teacher's Role: Emphasize capturing key stages of construction.

Marking Guidance: 1 mark for clear photos/videos showing at least 3 distinct stages of the project.

Expected Outcome: Digital visual evidence of the project's progress.

b) Creating Electronic Document/Digital Poster (2 marks):

Teacher's Role:

Guide learners to organize images and brief descriptions logically within a document or poster.

Marking Guidance:

1 mark for creating a simple electronic document/digital poster.

1 mark for including the photos/videos and showing the steps followed.

Expected Outcome:

A simple digital document or poster effectively documenting the project.

General Notes for Exams:

- ☞ **Teacher Supervision:** Continuous supervision is crucial, especially for practical aspects involving tools, heat, and chemicals.
- ☞ **Differentiation:** For group projects, encourage varied roles for learners with different strengths.
- ☞ **Record Keeping:** Ensure learners are diligently recording their observations and data as they go.
- ☞ **Post-Practical Discussion:** A follow-up discussion helps reinforce the concepts and correct any misconceptions.
- ☞ **Cleanliness:** Emphasize keeping the workspace clean and tidy throughout and after the practical.
- ☞ **Fairness:** Ensure equal access to materials and tools for all groups/learners.