

**SANGAM SKM COLLEGE – NADI**

**YEAR 13**

**APPLIED TECHNOLOGY**

**WORKSHEET : 5**

**Question 1 Material science: Mechanical Properties**

Define the following Mechanical Properties:

Ductility

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Brittleness

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Malleability

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Toughness

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Hardness

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Plasticity

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**Question 2 Material Science - Timber**

Draw the sketch of Kiln and Air seasoning

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**Question 3                      Design**

**Problem:** During dry weather, students easily settle down under the shade of the trees. In times of wet weather, students are left without options.

**Brief:** Design a **sheltered study table** with seats for your school that could accommodate at least 8 students.

**Specification:**        The sheltered study table to be designed should:

1. be strong and long lasting.
2. be structurally safe and be easily constructed.
3. employ traditional design features and be aesthetically pleasing.
4. provide comfortable seating and working spaces.
5. be made of locally available materials and be cheap to make.

**Requirements:**

(a)    Produce a Final Solution of the **sheltered study table**.

(b)    Evaluate under the following headings

1. Materials

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2. Functionality

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