

AUTUMN BREAK HOLIDAY HOMEWORK

Class: VIII

Subject: Kaushal Bodh (Vocational Education)

Activity: Home Automation – Design a Smart System

Task: Design any **ONE** simple home automation system on paper, based on NCERT Kaushal Bodh, Project 4: Home Automation.

Suggested Models:

- Automatic night lamp using a light sensor (LDR)
- Motion-sensor security alarm
- Automatic garden watering system using a soil moisture sensor
- Automatic room light using a motion sensor
- Temperature-controlled fan

Instructions

- Choose any one automation system from the suggested models.
- On an A4 sheet, draw a neat, labelled block diagram showing **Input (Sensor) → Processing (Controller) → Output (Device)**.
- Write the name of your system, components required and how it works in 4–5 steps.
- Mention two benefits of your system and two electrical safety precautions.
- You may draw a circuit or make a simulation if resources are available; a physical working model is **not compulsory**.
- Bring your completed A4 sheet to school after the autumn break.

Assessment: Understanding of automation, correct input–process–output diagram, creativity, clarity and neatness.

AUTUMN BREAK HOLIDAY HOMEWORK

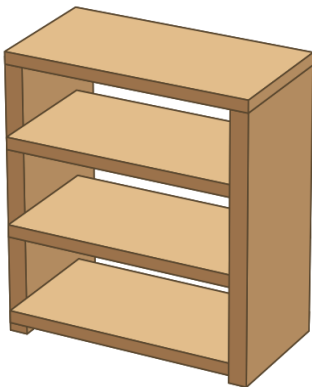
Class IX | Kaushal Vikas | Chapter 5: Shaping Materials

Activity: Make a Miniature Furniture or Storage Item

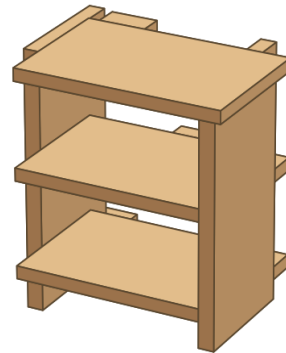
Create any ONE model using cardboard, wood, bamboo sticks or twigs, as available.

Use the 3D illustrations below as design references. You may develop your own design.

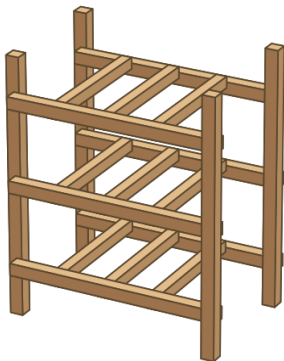
1. Mini bookshelf



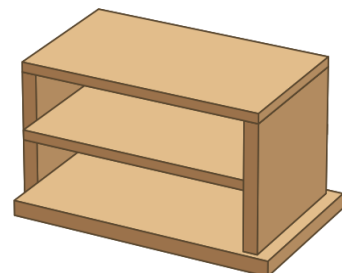
2. Flower-pot display shelf



3. Twig / bamboo rack



4. Desk organiser with shelves



Submit your model along with an A4 sheet containing:

1. Model name and materials used
2. Labelled sketch with approximate dimensions
3. Steps: measuring, marking, cutting, joining and finishing
4. Uses of the model

Safety: Use scissors and sharp tools only under adult supervision.

Assessment: Creativity, accuracy, stability, finishing and presentation.

Bring the completed model and A4 sheet after the autumn break.

Class: VI

Subject: Kaushal Bodh (Vocational Education)

Activity: Maker's Skills - Best Out of Waste

Task: Create any **ONE** useful item using waste materials available at home.

Suggested Models:

- Pen stand using waste cardboard
- Bird feeder using an old plastic bottle
- Desk organiser using waste materials
- Decorative item using old newspapers
- Photo frame using waste cardboard

Instructions

- Use easily available waste materials.
- Make your model useful, creative and eco-friendly.
- Write the following details on an A4 sheet:
 - Name of the model
 - Materials required
 - Steps involved in making the model
 - Uses of the model
- Bring your completed model and A4 sheet to school after the autumn break.

Assessment: Creativity, usefulness, neatness and proper use of waste materials.

AUTUMN BREAK HOLIDAY HOMEWORK

Class: VII

Subject: Kaushal Bodh (Vocational Education)

Activity: AI Assistant – Helping a Newcomer to Our Locality

Task: Design a simple AI Assistant on paper that could help a person who has recently moved to your locality. (Based on NCERT Kaushal Bodh, Project 4: AI Assistant.)

Suggested Topics:

- Important places (school, hospital, post office, market)
- Local plants, trees, birds or animals
- Local food, festivals and useful services

Instructions

- Choose any **three categories** from the suggested topics.
- Collect or draw **two examples** for each category and write their names.
- On an A4 sheet, write **five questions** a newcomer might ask and the answers your AI Assistant should give.
- Draw a simple flowchart showing: **Question / Image → AI Assistant → Answer**.
- Write **two precautions** for using AI safely (for example, do not share private information and verify important answers).
- Bring your completed A4 sheet(s) to school after the autumn break.

Assessment: Relevance to locality, organisation of information, creativity, clarity and responsible use of AI.