

Design Brief

You have to design a storage box of your own choice. This box can be designed to hold pencils, jewellery, watches, small trinkets or anything of your choice.

This storage box will mean I will be able to store the objects and not be able to lose them. It will also mean that I will be able to find and keep these objects safe and secure.



Research

Make a list of items the storage box maybe used for to hold.
Choose what items from the list to use in your design
Note the sizes of these items.
From the research complete the specifications.

Market research depending on ICT availability. Review the different designs for a wooden storage box. Print off any designs that you find interesting in terms of shape colour pattern etc.

There are many objects that can be made from trees.

Name three Hardwoods.

Name three softwoods

Name three Manufactured Boards.

Name one object that can be manufactured from each of the three groups.

Name one property for one of the three materials chosen.



Specifications

MATERIAL

The storage box will be constructed from PINE.
Other materials can be added if necessary.

SAFETY

FUNCTION

AESTHETICS

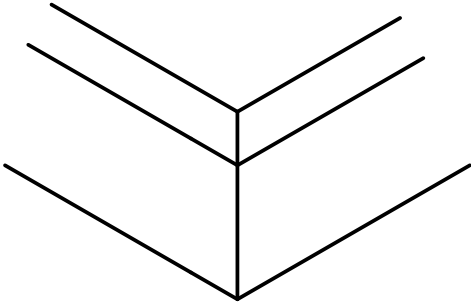
ENVIRONMENT

The storage box will be able to sit on a desk ,shelf, or in a drawer in my room.
It will also be easily transported home in a school bag

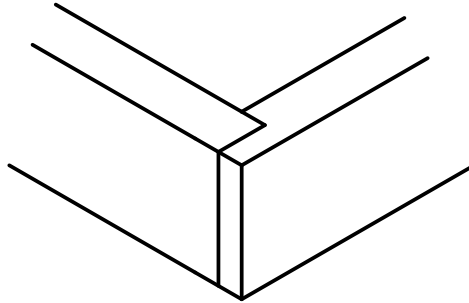
FINISH



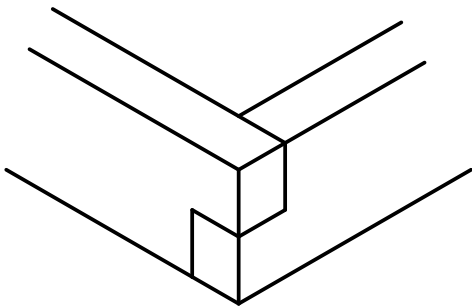
Design Ideas



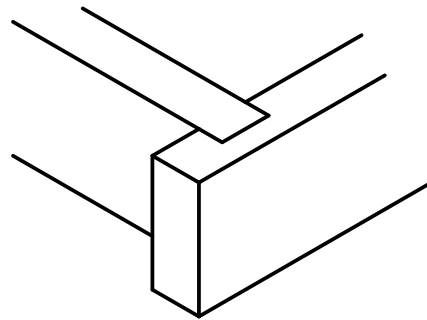
MITRE JOINT



REBATE JOINT



FINGER JOINT



THROUGH HOUSING

Draw or trace 4 different ways your box could be constructed and name the 4 possible joints as shown above.

Render the sketches to look like wood.

You will now manufacture two of these joints as a group activity as shown by your class teacher.



Design Ideas

Draw out five or more possible designs for the LID of the storage box. Think about colour pattern and shapes.

Use colour to illustrate your designs

Show how you could make your storage box unique and bring your own individuality to the design.

Comment on your own ideas with reference to the specifications and why you have chosen a specific wood joint in the construction of your box.

Think how the box will be opened and closed. This can be written out or illustrated with a drawing.



Solution

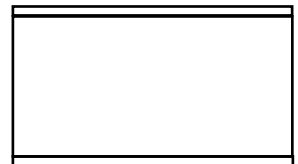
ORTHOGRAPHIC VIEWS



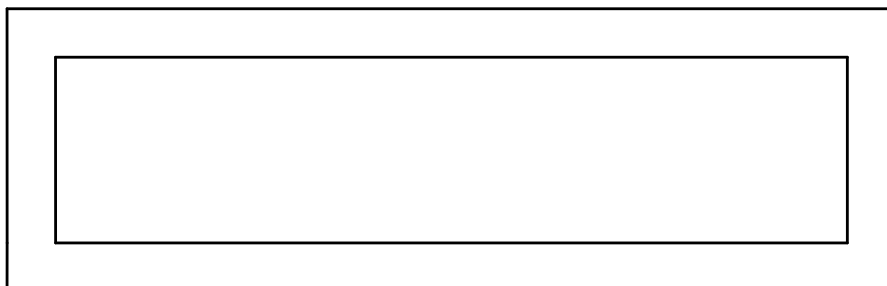
PLAN



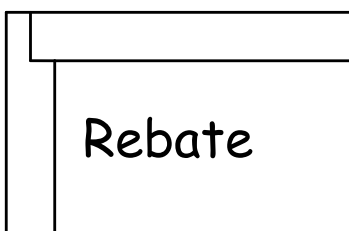
ELEVATION



END ELEVATION



**Draw the box to
your own sizes.**



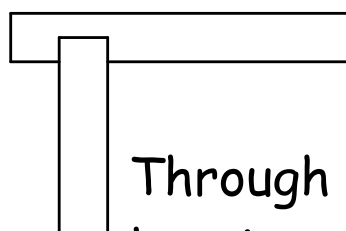
Rebate



Mitre



Finger



Through
housing



Solution

From the DESIGN IDEAS and DEVELOPMENT of IDEAS draw out your box as an ORTHOGRAPHIC VIEW .

On the orthographic views draw out the SIZES drawn to BRITISH STANDARDS (B.S.)

Draw out the cutting list shown below and put in the sizes of your solution.

PART	LENGTH	BREADTH	THICKNESS	MATERIAL	NO OF OFF
SIDES			12		
ENDS			12		
TOP / BASE			3		



Manufacture

Write out the possible steps that you will take to manufacture your storage box in your jotter as you manufacture the storage box. Pictures can be used to explain.

PLANNING FOR MANUFACTURE

SEQUENCE OF OPERATION

STAGE	OPERATION	TOOLS AND EQUIPMENT



EVALUATION

Write up the EVALUATION of the storage box you have manufactured and consider how this product could have been improved. Draw out at least two changes that you would make to make the product better.

Write out 5 questions based on the specifications you could ask your class about your model to help you evaluate your product.

Now ask these questions to 10 of your peers.

Use these opinions of others in the class to assist with the Evaluation.

Use the design factors on the specifications page to help write up the evaluation.

