

# Mug Tree

Write your name: .....

## Introduction

This exercise is about product analysis and design development.

During this exercise you will analyse the mug tree shown opposite and describe how it could be made, how it could be improved and how the design could be modified for a completely different use.

## 1. Product Analysis

Product analysis involves looking very closely at a product to investigate what it is used for, how it is made, what it is made from, how the parts are fixed together etc.

You may need to carry out research in order to be able to answer the questions below.

**Important information: all parts of the mug tree are made from a wood called beech.**



Briefly explain why beech is a suitable wood for the mug tree.	
How many parts are used to make the mug tree?	
Explain how the shaped centre column could be fixed firmly to the base.	
Explain how the wooden cup hangers could be fixed firmly to the centre column.	
What is the name used to describe long lengths of cylindrical wooden material?	
Name a machine that could be used to shape the centre column and base of the mug tree.	

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Name the process that you would use to make the centre column of the mug tree.	
Name the process that you would use to make the base of the mug tree.	
Name three tools that you would use with your chosen machine to shape the stand and the base of the mug tree.	
Name a "finish" that would protect the mug tree in use and make it shine, as in the photograph above.	
Briefly describe the stages involved in producing a smooth, shiny, protective finish on a mug tree made from beech.	
Of the research methods listed below, name the methods that you used to find the information that you needed to complete the questions above.  Explain the reasons for your choice.  <ul style="list-style-type: none"><li>• Product analysis</li><li>• Value analysis</li><li>• Library search</li><li>• Internet search</li><li>• Experiments</li><li>• Observation</li><li>• Site visit</li><li>• Case study</li><li>• Interview.</li><li>• Surveys</li><li>• Role play</li></ul>	

## 2. Design Development

When you have finished the product analysis, you should work on plain paper and use notes and sketches to show:

- how the mug tree could be modified so that it looks better
- how the design could be modified so that it could be used as a floor standing coat hanger.