

Here is a list of prices and a bit more information on certain woods: (For a 30cm x 30cm piece)

MDF – is inexpensive, smooth and easy to work with. It's not very strong in thin or narrow sections but it is good enough for many purposes. It is usually painted.

- 6mm – 19pence
- 8mm – 25pence
- 12mm – 28pence
- 15mm – 34pence
- 18mm – 35pence

Birch Plywood – has a close grained natural wood surface and is pale in colour. It is strong and relatively light in weight. It can be stained darker and varnished. In thin sections it can be bent and hammered to make curved pieces. It is water and boil proof (WBP). It is expensive but high in quality.

- 4mm – 69pence
- 6mm – 79pence
- 9mm – 84pence
- 12mm – 90pence
- 15mm 'skin ply' – £1

Hardwood Ply – is darker and tougher in texture, but it is strong and is cheaper than Birch. It's WBP and good for outdoor use.

- 9mm – 53pence
- 12mm – 65pence
- 15mm – 83pence

Product Development

OCR Technology GCSE
Resistant Materials
Assessment Objective 4

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|-----------------------|---|
| Materials/production | ✓ |
| Modelling/testing | ✓ |
| Product specification | |

Production Methods

I am making a Bagatelle board which means that I need to have a curved edge at the top of the board. The best material for this would be birch plywood as it can be bent when it is in thin sections. I would bend it by curving it around or inside of a mould and then attach it to the base of the board using wood glue and nails. To strengthen the curve, it is possible to add more layers by gluing more on. I will probably use 2 or 3 layers because I want it to be sturdy but not too thick. Here is a picture of my testing and trialling of this particular manufacturing method:



← The wood used here is 'skin' ply cut across the grain

I think that this method of curving the wood and of attaching it to the base is a reliable one although it requires quite a bit of accuracy. The base of my board (where the target area will be) will need to be quite thick if I am going to be hammering nails into it to create some of the targets, and drilling holes. However, it can't be really thick because I don't want the board to be really heavy.