

1. The kitchen utensils shown below are manufactured from melamine with hardwood handles.



- (a) (i) State the name of the manufacturing process used to produce the melamine heads of the utensils. 1
- (ii) Explain why this process is suitable for the production of these parts of the product. 2

This range of products comes with a variety of hardwood handles.

- (b) (i) State two valid reasons for using hardwood for the handles. 2
- (ii) Explain the implications, for both the manufacturer and consumer, of using a range of hardwoods. 3
- (8)

2. For many years, tennis racquet frames were made using laminated timber. Manufacturers can now make racquet frames from composite materials.



Spalding Young America
Tennis Racquet, 1920–30.
Made with wooden laminates.

Prince Airstick Tennis Racquet.
Composite frame made with graphite,
carbon, copper and tungsten titanium



Explain the advantages that composite materials bring to modern tennis racquets such as the one illustrated above.

(4)

[Turn over