NON-WOOD MATERIALS USED IN WOODWORK

These are materials used in either holding wood joints firmly or smoothening rough surfaces. They include adhesives and abrasives.

Adhesives

Adhesives are normally called glue. An adhesive or glue is any substance capable of holding or bonding to pieces of wood together. There are three main types of adhesives in wood work. These are protein, synthetic and contact adhesives.

- **Protein adhesives.** These are from plant or animal protein, and are available as vegetable protein, casein glue or hide glue.
- **Synthetic adhesives.** These are made from formaldehyde or from epoxy resins.
- **Contact adhesives.** These are made from synthetic rubber materials. They are used mainly as Evostic and Superglue. Different adhesives are used in different jobs.

Abrasives

An abrasive is a paper or cloth coated with hard minerals that can wear away the surface of other materials by rubbing. It is used on wood products to give a smooth finish. The process of using abrasives to smoothen wood is called sanding. Examples of abrasives include glass paper (sand paper), emery and carbodum. To be effective, an abrasive must be harder than the material to be rubbed away.

An abrasive should also be in the form of small particles, so that it presents numerous cutting surfaces while in operation. Different types of materials used as abrasives are crushed glass, crushed quartz (flint), garnet (crushed semi-precious stone) and emery.

Before an abrasive can be used, it is bonded to a base called *backing*. The backing may be a cloth, paper, or some other fibre that does not tear easily. The extent of bonding is very important. This ensures that the grits do not wear out easily. Also very important is the grade of the grit. This

determines the type of use and quality of surface finish that could be achieved. Abrasives are graded: *very fine*, *fine*, *medium*, *coarse* and *very coarse*.

Abrasives are used to smoothen wood surfaces before gluing, polishing and spraying. In order to use abrasives properly, a piece of the glass paper should be mounted on a piece of flat wood. It is then rubbed slightly on the wood surface such that the abrasive cuts or wears away the wood to expose a smoother surface.