The use of adhesives is a form of permanent joining. Most wood adhesives are made up of solid particles of glue being dissolved in a solvent (water or spirit). The solvent needs to evaporate (dry) before the adhesive works. The time this takes is called the setting time and the joint should not be handled until this time is up.

Strong joints rely upon the adhesive soaking into the wood before setting. It is therefore very important that the surfaces to be glued are freshly cleaned with glass paper to remove any dirt or oily residue left by touching the surface with your fingers. Any dirt or residue stops the adhesive from soaking in.

The glue soaks into the pores of the wood and then sets like lots of little fingers grabbing onto the wood on both sides. Using a cramp to hold the two halves of a joint together firmly helps to force glue into the pores of the wood. Cramping also holds the joint still while the glue is setting.

When the joint is cramped excess glue should squeeze out of the joint. If it doesn’t, not enough glue has been used. The excess glue should be wiped away with a damp cloth quickly, before it sets.

1. What type of jointing are adhesives used for?
2. Explain the term ‘setting time’.
3. How is an adhesive made up?
4. How does a water-based adhesive work on wood?
5. What preparations should be made before using an adhesive?
6. What is the purpose of cramping a joint together?
7. How can you avoid a glue stain showing through a clear varnish finish?
8. How can you use glue to fill a gap in a badly cut joint?
9. Which adhesive would you choose for holding together a garden seat and why would you choose it?
10. What precaution should you take when using contact adhesive?

**KEY WORDS** Adhesive: Cramp: Setting time: Toxic: