

Revision & Exam Tips Sheet

If there are things you can't do move on and go back later. Sometimes another question later in the test might jog your memory and help you with a question you thought you couldn't answer.

When answering questions in either section, look at the marks available and don't spend too much time on those with only a few marks. If you don't know the answers think about other jobs that were made by your friends and use those to help you.

Look at the information below for most areas included in section B.

In tests it often says name a **SPECIFIC** material or process. When it uses the word **SPECIFIC** you have to name the material or process, not just say wood or plastic moulding. It would have to be a specific wood, say **MAHOGANY** and a specific type of plastic moulding, say **INJECTION MOULDING**.

1. Woods - Try to remember hardwoods are good for furniture and softwoods for construction (window frames and stuff). Two good hardwoods to remember are **OAK** and **MAHOGANY** and a good softwood is **PINE**. Man made boards are good for large pieces that don't **WARP or TWIST**. The two most common types are **MDF** and **PLYWOOD**

2. The most versatile joints for wood are **DOWEL JOINTS**, **MORTISE & TENON JOINTS** and **FINGER or COMB JOINTS**. **DOWEL JOINTS** can be used for frames and boxes **MORTISE & TENON JOINTS** are used for frames and **COMB JOINTS** are used for boxes. The best glue is **PVA** for inside and **EXTERIOR PVA** for outside. **SCREWS** are a temporary way of fixing wood. Another way of fixing wood is using pins e small (like small nails), shown on the same page as screws and glue.

3. Metals are either **FERROUS** (contain iron) or **NON-FERROUS** (don't contain iron), **PURE METALS** or **ALLOYS**. **ALLOYS** are mixtures of metals and other materials. The most common ferrous metals steel **STEEL** or **STAINLESS STEEL**. **STEEL** needs painting because it rusts, but it is tough and widely used. **STAINLESS** is rustproof and is used for such as cutlery and pans.. The most common non-ferrous metals are **ALUMINIUM** and **BRASS**. **ALUMINIUM** is light and strong and is used for such as aircraft. **BRASS** is an **ALLOY** of copper and zinc, used for electrical fittings and ornaments.

4. The most common ways of permanently fixing metals are **BRAZING**, **RIVETING** and **SOFT SOLDERING**. **BRAZING** and **RIVETING** form strong joints, **SOFT SOLDERING** is more for electrical work. The best temporary fittings are **NUTS & BOLTS**

5. The two most common plastics are **HIPS** and **PET**. The most common ways of forming them are **INJECTION MOULDING** and **VACUUM FORMING**. **INJECTION BLOW MOULDING** is used for making hollow shapes such as plastic bottles.

6. You may well be asked about **AESTHETICS** or **ERGONOMICS**, make sure you read up about them.

7. Unusual materials are **SMART MATERIALS**, you could be asked!!

8. Check out a few **MECHANISMS**. Most common are **CAMS** and **PULLEYS**. Here there are more videos showing **MECHANISMS**. **LINKAGES** are worth revising.

Revision Sites

www.technologystudent.com - **Best one.**

<http://hognosesam.co.uk/RevisionExamTechnique.aspx> - Good one

<http://www.bbc.co.uk/schools/gcsebitesize/design/resistantmaterials> - useful for tests

www.designmuseum.org - useful for finding info for designers and products/design classics.

Others:

www.dtonline

www.dyson.co.uk

www.howstuffworks.com

www.u2learn.com/gcse-products-links.html