GCSE Graphic materials tips

Consider these points on your sheet:

- o What materials would you make your model from?
- o State materials and the materials properties.
- o How will you cut and join your materials?
- o What tools will you use?
- o What finishes could you use?
- What materials do designers use in industry use, the same, more expensive tools, CAD CAM equipment?
- o Environmental issues.

On your research sheet you should consider what materials you could use and the materials properties. You can only use materials that you can cut easily with a craft knife! Include some small material sample and list the materials properties. Note you should cover six to eight materials E.g. -

Example answer - Foam board sample



Foam board is extremely strong, yet lightweight and is easy to cut. I might use this for my shop front walls or a pos unit. I can cut it with a steel rule and a scalpel. This can be fixed with masking tape and PVA glue only, solvent glues will dissolve the foam. Foam board can be sanded.

Paper and card

Cartridge, layout, bleed proof, tracing, cardboards mounting, Duplex and foamboard.

More info: -

 $\underline{http://www.bbc.co.uk/schools/gcsebitesize/design/graphics/materials and components rev2.shtml}$

Plastics

You can only use these thermoplastics, including acetate, polyethylenes, Polystyrenes and PVC.

More info: -

 $\underline{http://www.bbc.co.uk/schools/gcsebitesize/design/graphics/materials and components rev4.shtml}$

Wood

You can only use balsa wood.

Finish

You can use fillers (body filler, plaster) and finishing with acrylic, cellulose and water based paints.

More info: -

Finishing techniques -

http://www.bbc.co.uk/schools/gcsebitesize/design/graphics/materialsandcomponentsrev6.shtml

Paints -

http://www.bbc.co.uk/schools/gcsebitesize/design/graphics/materialsandcomponentsrev3.shtml

Gluing

How will you glue these materials you can use a range of appropriate adhesives including PVA, epoxy resins, spray glues / hot glue, cements, tape, adhesive plastic film and masking fluid.

More info: -

 $\underline{http://www.bbc.co.uk/schools/gcsebitesize/design/graphics/materials and components rev5.shtml}$

What tools will you use?

You can use a range of cutting tools including scalpels and craft knives with mats, scissors, rotary cutters, compass cutter, small fret saw; you can even use the laser cutter!

More info: -

A graphic materials shop

http://www.londongraphics.co.uk/

Laser cutting

http://www.crclarke.co.uk/Products/LaserCutting.htm