

Knowledge Organiser AQA Design & Technology 8552

1. Paper

Type	Description and uses
Layout paper	<ul style="list-style-type: none"> lightweight, thin white paper used for initial ideas takes colour media well low cost
Tracing paper	<ul style="list-style-type: none"> thin, translucent paper making copies of drawings high cost
Cartridge paper	<ul style="list-style-type: none"> good quality white paper available in different weights general purpose work can be used to make simple models medium cost
Bleedproof paper	<ul style="list-style-type: none"> smooth, hard paper used with water-based and spirit-based felt-tip pens medium cost
Grid paper	<ul style="list-style-type: none"> printed square and isometric grids in different sizes a guide for quick sketches and working drawings low cost

2. Selection of materials or components

When selecting materials and components considering the factors listed below:

- Functionality: application of use, ease of working
- Aesthetics: surface finish, texture and colour.
- Environmental factors: recyclable or reused materials, product mileage.
- Availability: ease of sourcing and purchase.
- Cost: bulk buying.
- Social factors: social responsibility.
- Cultural factors: sensitive to cultural influences.
- Ethical factors: purchased from ethical sources such as FSC.

What is the FSC? <http://www.fsc-uk.org/en-uk/about-fsc/what-is-fsc/fsc-principles>

3. Boards

Type	Description and uses
Corrugated card	<ul style="list-style-type: none"> strong and lightweight used for packaging protection and point of sale stands available in different thicknesses
Duplex board	<ul style="list-style-type: none"> large foam-based board different finishes available including metallic and hologrammatic used for food packaging, e.g. take-away pizza boxes
Foil lined board	<ul style="list-style-type: none"> quality cardboard with a aluminium foil lining ideal for ready made meals or take away meal cartons The foil retains the heat and helps keep the food warm
Foam core board	<ul style="list-style-type: none"> very light, very stiff and very flat. It has a white, rigid polystyrene foam centre, with smooth white paper laminated onto both faces. It is easy to cut with a knife, a mount cutter or on a wall cutter great for modelling
Ink jet card	<ul style="list-style-type: none"> Has been treated so that it will give a high quality finish with inkjet ink available in matt and gloss
Solid white board	<ul style="list-style-type: none"> top quality cardboard made from quality bleached wood pulp. used for hard backed books and more expensive items excellent print finish

4. Paper and Boards- Stock sizes and weights

Paper and board is available in sizes from A0 (biggest) to A7 (smallest). The most common size is A4.

Each size is half the one before, eg A4 is half the size of A3.

They are also sold by weight:

GSM – grams per square metre.

Card thickness or calliper is traditionally measured in **Microns**. 1000 **Microns** = 1mm, so the higher the value, the thicker the **card** or paper.



5. Properties of paper and boards.

Type	Weight or thickness	Uses	Relative cost (10= high)
Newsprint	50gsm	Newspapers	1
Layout Paper	60gsm	Sketches and tracing	3
Tracing Paper	70 gsm	Tracing	4
Sugar Paper	90gsm	Cheap mounting work	2
Inkjet/Photo paper	150-230gsm	Photos/Pres entations	9
Board (Card)	230-750 microns	Model-making	5
Mount Board	230-1000 microns	Model-making, High picture quality mounting	9
Corrugated Card	3000-5000 microns	Packaging protection	5

7: KEY WORD FOCUS

You should be able to explain the meaning of each of these words by the end of this rotation.

GSM	Grams per Square Metre
Microns	Thickness of paper or card. 1000microns =1mm thickness