

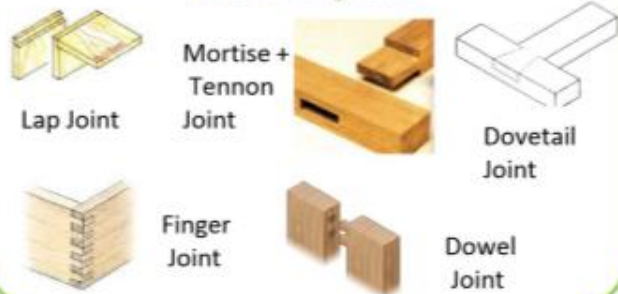
Knowledge organiser home accessories

1: Joining Methods

Wood joints can be either permanent or temporary depending on the type and if glue is used.

Permanent:	Temporary:
When we do not want to take the pieces apart again	When we will, or might need to take pieces apart again
Glues, welding, rivets	Screws, bolts, nails

1.1 Wood Joints



2. Scales of Production

One off: when you make a unique item

Batch: when you make a few/set amount

Mass: when you make thousands

Continuous: open ended production

3. Adhesives

P.V.A. – Poly Vinyl Acetate – best for joining 2 pieces of wood together

Epoxy – a *thermosetting* resin that can be used to bond most types of material

Contact Adhesive – a glue type that creates a tacky bond on both surfaces to be joined. It can be used with most materials.

4: Materials

4.1 Woods:

Hardwoods:	Softwoods:
Beech	Scots Pine
Oak	Cedar
Ash	Spruce

4.2 Engineered Boards

Engineered boards are manmade materials usually made by mixing wood chips and glues to make wooden sheets.

Examples:

Medium Density Fibreboard (MDF)
Chipboard, Plywood and Hardboard

4.3 Plastics

Plastics are made of polymers, and are mostly refined from oil. There are 2 main categories:

Thermoplastics	Thermosetting plastics
Acrylic	Urea Formaldehyde
Polypropylene (PP)	Melamine Formaldehyde
High Impact Polystyrene (HIPS)	Epoxy Resin

4.4 Metals

Metals are hard and usually shiny, containing one or more elements dug and refined from the ground

Ferrous metals are any metal that contains iron and will rust	Non-Ferrous metals do not contain iron and will not rust
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Alloys are metals made from a mix of 2 metals – brass is made of copper and zinc.

Composite materials are a mix of 2 different types of material to get the best qualities from each – eg: GRP (Glass Reinforced Plastic)



5: TOOLS

6: Surface Finishes

Finishing is usually one of the last stages of making a project. It will usually involve sanding and applying a surface coating to **protect** your material and **improve its visual appearance**.


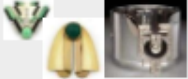





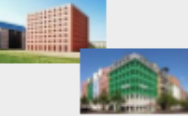
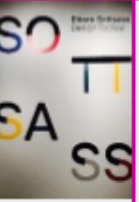
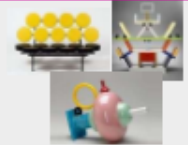
Some examples:



Paint, Stain, Varnish, Oil, Danish Oil, Wax, Polish & Dip Coating.

7: KEY WORD FOCUS

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

CAD	Computer Aided Design
CAM	Computer Aided Manufacture
CNC	Computer Numerical Control

Designer Name	Facts	Logo	Examples
Raymond Templier	RAYMOND TEMPLIER (1891 - 1968) like many of his contemporaries in jewelry, was born to a family with a long tradition as jewelers.		
Gerrit Rietveld	Gerrit Thomas Rietveld ; 24 June 1888 – 25 June 1964) was a Dutch furniture designer and architect. One of the principal members of the Dutch artistic movement called De Stijl, Rietveld is famous for his Red and Blue Chair.		
Charles Rennie Macintosh	Charles Rennie Mackintosh (7 June 1868 – 10 December 1928) was a Scottish architect, designer, water colourist and artist. His artistic approach had much in common with European Symbolism. His work was influential on European design movements such as Art Nouveau and Secessionism.		
Aldo Rossi	Aldo Rossi (3 May 1931 – 4 September 1997) was an Italian architect and designer who achieved international recognition in four distinct areas: theory, drawing, architecture and product design. He was the first Italian to receive the Pritzker Prize for architecture.		
Ettore Sottsass	Ettore Sottsass (14 September 1917 – 31 December 2007) was an Italian architect and designer during the 20th century. His work included furniture, jewellery, glass, lighting, home objects and office machine design, as well as many buildings and interiors.		

Company Name	Facts	Logo	Examples
Alessi	Alessi is a housewares and kitchen utensil company in Italy, producing everyday items from plastic and metal, created by famous designers.		
Apple	Apple Inc. is an American multinational technology company headquartered in Cupertino, California that designs, develops, and sells consumer electronics, computer software, and online services.		
Braun	Braun GmbH formerly Braun AG , is a German consumer products company based in Kronberg. From 1984 until 2007, Braun was a wholly owned subsidiary of The Gillette Company, which had purchased a controlling interest in the company in 1967.		
Dyson	Dyson Ltd. is a British technology company established by James Dyson in 1987. It designs and manufactures household appliances such as vacuum cleaners, hand dryers, bladeless fans, heaters and hair dryers.		
GAP	The Gap, Inc. commonly known as Gap Inc. or Gap , (stylized as GAP) is an American worldwide clothing and accessories retailer.		
Primark	Primark known as Penneys in the Republic of Ireland) is an Irish clothing and accessories company which is a subsidiary of AB Foods, and is headquartered in Dublin.		
Under Armour	Under Armour, Inc. is an American company that manufactures footwear, sports and casual apparel.		
Zara	Zara is a Spanish clothing and accessories retailer based in Arteixo, Galicia. It is the main brand of the Inditex group, the world's largest apparel retailer.		

Specification - A list of criteria that your design needs to meet

What your product will be like and why

Aesthetics – what will make it look good?

Cost – how would it offer value for money?

Client – who will it be for?

Ergonomics – how you make it easy or comfortable to use?

Size – how big does it need to be?

Safety – how will you make it safe to use?

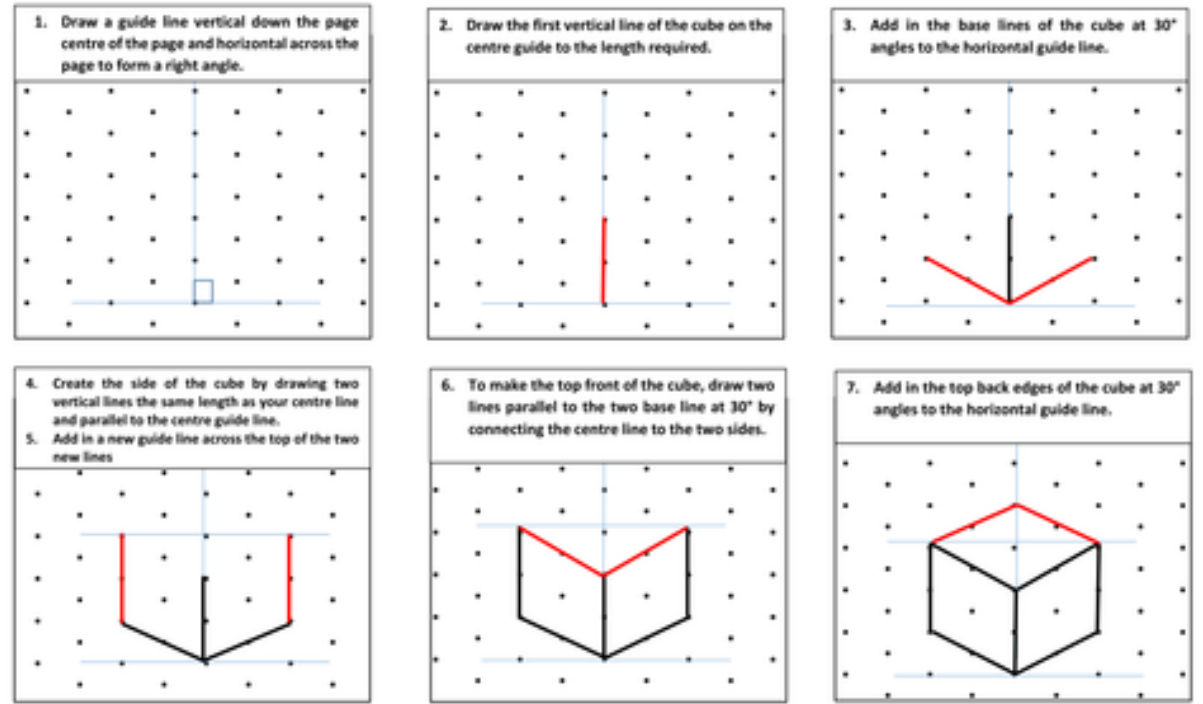
Function – What will it do?

Materials and Manufacture – what will it be made from and how will it be made?

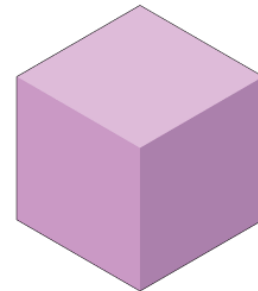
Sustainability – what impact, if any, will there be on the environment

Isometric Projection

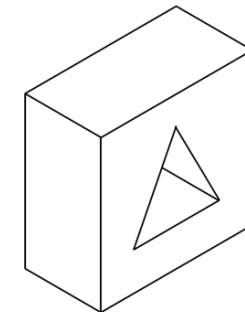
Key words: parallel right angle vertical horizontal diagonal equal isometric edge



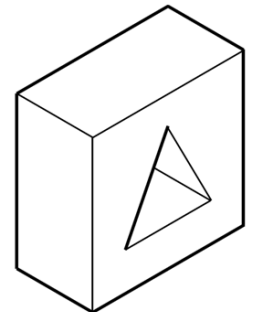
3 Tonal Shading



Thick and thin lines



WITHOUT THICK & THIN LINES



WITH THICK & THIN LINES