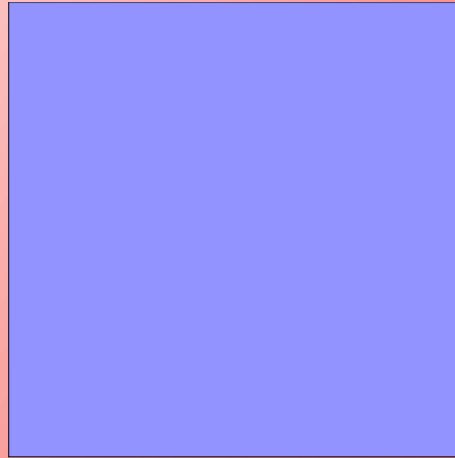


# Graphic skills

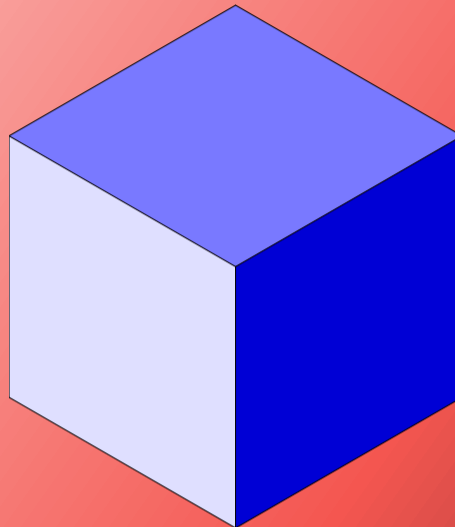
## Rendering – Single tone

This is a type of rendering is where you have a single tone or colour across your drawing that is even and consistent colour. This is usually completed on a flat 2D shape.



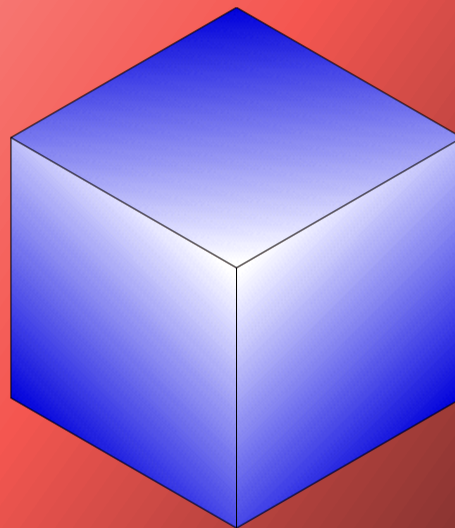
## Rendering – Three tone

This type of rendering is where you have three different tone of the same colour on your drawing. Three tone is completed on a 3D drawing or shape and helps to show light direction on an object. The colours need to be consistent and even across each side of the 3D shape.



## Rendering - Gradient

This type of rendering is where you have one colour fading into white or another colour. This is usually completed on a 3D shape and can show a light direction from an angle rather than just on a surface.



## Papers and Boards

Type	Description	Uses	Advantages	Disadvantages
Copier paper 80 gsm	Thin, lightweight, cheap, bright white paper, with a smooth, bleached, uncoated surface	Writing, printing, drawing	Takes colour well, good surface for pencils, pens and markers, cheap, readily available and in a range of colours	Can be prone to jamming printer feed mechanisms
Cartridge paper 120–150 gsm	Creamy, thick heavyweight paper	General drawing and printing, can be used with watercolour paints without buckling	Accepts most drawing media, opaque	Costs more than copier paper
Tracing paper 60–90 gsm	Thin, smooth and translucent, made by beating to remove air and processing to make a dense, strong paper, usually 60–90 gsm	Art, making copies, envelope windows, overlays on working drawings	Strong, translucent	Can be expensive, limited ink absorption and longer drying time

Type	Description	Uses	Advantages	Disadvantages
Folding boxboard	Stiff layers consisting of: 1 A printable bleached virgin pulp top surface 2 Unbleached yellowish centre layers 3 A bleached inside layer	• Cereal boxes, food and health care packaging, cartons	• Excellent for scoring and bending without splitting • Accepts print well • Inexpensive	• Lower strength than solid white board
Corrugated board	• Two or more layers of fluted paper sandwiched between two paper liners • Available in different thicknesses • Strong and lightweight	• Protective packaging, for example boxes for electrical products and CD sleeves	• Impact resistant, inexpensive, recyclable	• Brown finish does not convey quality • Can deform under pressure • Not water resistant
Solid white board	• Strong, rigid board made from pure, bleached wood pulp • Excellent printing surface	• Book covers, food, cosmetics and medicine packaging	• Strong, rigid, accepts print well	• Can be expensive

## Drawing equipment

**Pencil** – Used to draw out designs in sketch form or formal drawing methods. Pencil drawings need to be light so they can be rubbed out and corrected if necessary.



**Ruler** – Used to draw straight lines in either pen or pencil. Used for formal / technical drawings. Also used in practical work to measure out material prior to cutting and shaping.

**Set square** – Used to draw angles at 45 degrees. Used to construct Oblique drawing methods.



**Colouring pencils** – Used to render up different design to show the colour of a design and indicate what different materials it could use.

**Eraser / Rubber** – Used to remove pencil lines or lighten pencil lines so pieces can still be marked out without the pencil being seen.



**Fine line pens** – These are used to finalise a drawing and make lines more visible on technical drawings. They also help to define edges and make parts of a product stand out.

## Cutting and shaping Papers and Boards

**Scalpel** – Used to cut paper and boards accurately. Can cut on curves and cuts to a point and cuts into corners well.



**Cutting board** – A hard surface which stops the knife cutting into the surface of the table.



**Safety ruler** – Allows the user to cut straight lines safely as fingers fit into groove in ruler.



### Rules when Cutting and shaping materials

- Always cut on a cutting mat
- Use a metal ruler
- Fingers out the way
- Cut away from you
- Carry the knife pointing down



## Evaluation

To test a product you need to come up with a range of tests to test how well your product functions and performs. Things you test against are: It's size, colours used, function, finish, materials used etc.

Another way is to compare it against a specification (list of requirements the design must do).