St Ivo Academy

Design and Technology Department

Tea Light Project

Knowledge Organiser

What is a design movement?

Design movement is a style or prevailing inclination in art or design, that upholds a specific philosophy or ideal and is promoted by a group of artists for a defined period

What is Art Deco?

Art Deco is widely used to describe the architectural and decorative arts style.

Where did it start?

It emerged in France in the 1920s and took its name from the Exposition Internationale des Arts Décoratifs et Industriels Modernes, held in Paris in 1925. It was most popular between the years 1925 - 1939. It was an eclectic style that drew on tradition and the mechanised modern world. It celebrated both hand crafted and machine products, exclusive art and mass produced products in affordable materials.

Features of the Art Deco movement include geometric forms, such as zigzags, geometric fans and sunburst motifs. It also included primitive arts, such as Aztec art and machine age designs through the use of man-made materials (aluminium, glass and stainless steel), symmetry and repetition.

Prominent Materials

Art Deco artist and designers exploit modern materials such as;

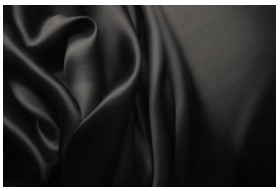
a. Plastic b. Bakelite c. Stainless steel

They often incorporated some exotic materials such as;

Ivory Horn Zebra Skin Ebony Silk







Some Prominent Designers

Émile-Jacques Ruhlmann Eugene Printz Armand-Albert Rateau René-Jules Lalique

Eileen Gray Jean Perzel Edgar Brandt Maurice Dufrêne Paul Dupré-Lafon

Paul T. Frankl Jean Dunand Eyre de Lanux Walter and Greta von Nessen André Groult

Jules Leleu




What are Metals?

Metals are found naturally and are mined from the earth. Metals used in products are extracted from a natural ore using large heat furnaces. They are sold as sheets, bars, rods, tubes and angles. Most metals can be recycled, saving on natural resources. However, they are finite and are not sustainable.

Metals fall into two categories. Ferrous and non-ferrous metals. Some metals are pure and others are mixtures of two or more metals or a metal mixed with one or more elements. Metals that are mixed, are known as alloys and they will have different properties compared to pure metals. All metals are recyclable, but not sustainable.

Ferrous metals are mostly made up of iron. However; because of their iron content they will corrode when exposed to moisture, unless treated. The only exception to this is stainless steel. They are also magnetic. Common ferrous metals are cast iron and steel.

Non ferrous metals don't contain iron, so don't corrode and they are non magnetic. Common non-ferrous metals are aluminium, brass, copper, tin and zinc.

Alloys are a mixture of two or metals. They are combined to change the properties, so they can be used for a variety of different products. Some examples of these alloys are high speed steel, brass and stainless steel.

Tools and Processes

Tools and fixings you will typically use throughout the making phase of your practical (stand: mild steel, dish: aluminium).

Try square: Used for marking and checking 90° angles on pieces of material.

Junior hacksaw: Used primarily for cutting through metal.

Ball pein hammer: Used for many tasks, like striking material and tools, shaping and rounding off metal.

Coping saw: Used primarily for cutting wood and plastic. It is very versatile and can be used to cut a variety of shapes and lines.

Aviation tin snips: Used for cutting straight lines and curved cuts in sheet metal.

File: Used primarily for filing plastic and metal. They are available in different sizes and shapes. A variety of techniques can be used, for example; wasting, cross and draw filing.

Rivets: A rivet is a metal peg that is used for joining pieces of metal together. There are a variety of different rivets that can be used. These can be fixed mechanically by using a pop rivet gun or by manually flattening or shaping it with a hammer. Both of these methods are fast and easy ways to join sheet material.

We will be using a button head solid rivet.