

Y8 DTE

KNOWLEDGE ORGANISER

HT1 –LAMP PROJECT

Investigation and Research

Primary Data

- Interviews
- Focus Groups
- Questionnaires
- Case Studies

Secondary Data

- Articles
- Books
- Magazines
- ONS

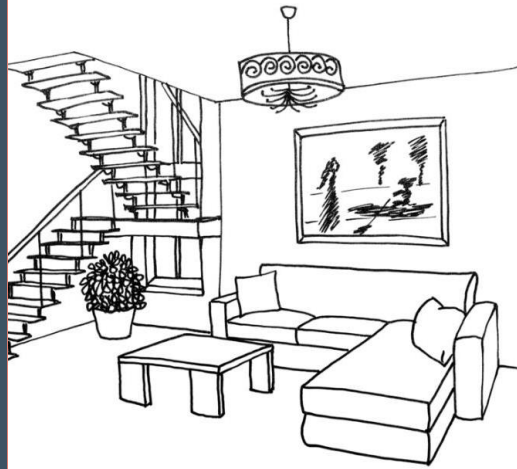


Ergonomics

- The science of how humans interact with objects
- Design for efficiency and comfort in the working environment

Anthropometrics

- Measurement of the physical properties of the human body



THE WORK OF OTHERS

Researching the work of others is a key step in any design process

- Inspires new ideas
- Understand materials
- Look at similar and dissimilar products

DESIGN BRIEF

Summarise your design plan:

- What you are going to design
- Target audience
- Where the product will be used
- What the budget is
- What size it needs to be

2D and 3D sketching

- 2D drawings are good for expressing ideas, dimensions, mechanical and electrical concepts
- 3D drawings are better at representing the look and feel of an object

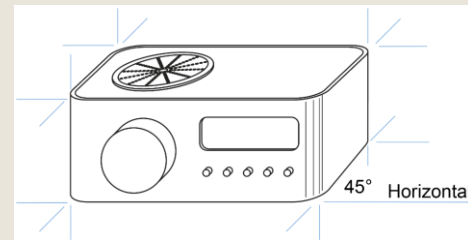
Exploded drawings

An exploded drawing shows how component parts of a product are assembled

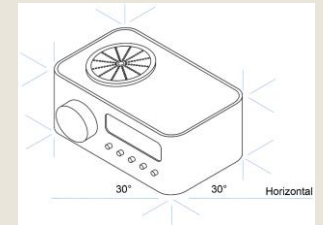
Discuss how these diagrams can be useful



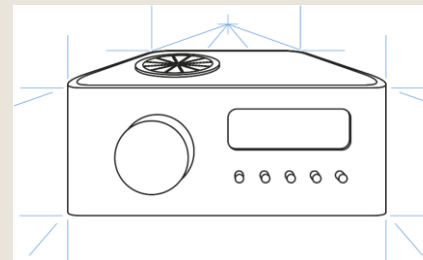
Oblique Projection



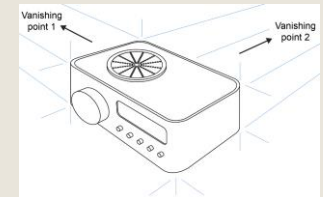
Isometric projection



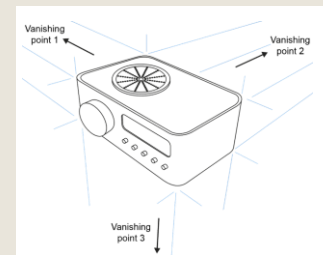
One Point Perspective



Two Point Perspective



Three Point Perspective



Y8 DTE

DESIGNERS & DESIGN COMPANIES

HT1 –LAMP PROJECT

Alessi

Founded by skilled metalsmith, Giovanni Alessi in 1921, producing traditional items for the home. The company combined traditions with forward thinking ideas to create a series of finely crafted design wares.



Apple

In 1976 Steve Jobs, Ronald Wayne and Steve Wozniak founded Apple. Their aim was to help make computing simpler and enjoyable.



UNDER ARMOUR

Founded in the USA, in 1996 by Kevin Plank, then a 23 year old football player. Frustrated by having to regularly change his sweat-soaked cotton T-shirts, he decided to find a more effective material.



DESIGN STRATEGIES

There are a variety of strategies that companies, and individuals can use to complete a design project:

- Collaborative design
- User-centered design
- Systems approach
- Iterative design

Each method has its own positives, and they can be used together.

DYSON

Sir James Dyson is a British inventor and founder of the Dyson company. He sees failure as a vital step to success. It took five years and over 5,000 prototypes before he launched the world's first bagless vacuum cleaner.

DESIGN MOVEMENTS

Styles and fashions change. Artists and designers take the lead in these changes and often form themselves into groups to promote their work.

Recognised art and design movements include:

Arts & Crafts Movement 1853 – 1907: Morris

Art Nouveau 1880 – 1910: Tiffany

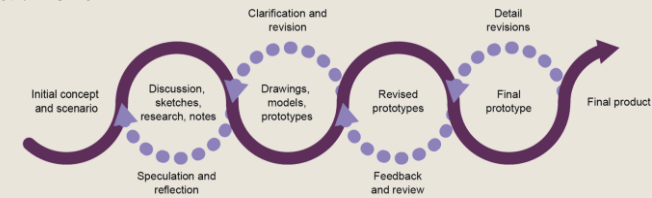
Art Deco 1908 – 1935: Mackintosh

De Stijl 1917 – 1931: Rietveld

Bauhaus 1919 – 1933: Breuer

Post-Modernism 1970 – 1990: Rossi

Memphis 1981 – 1988: Sottsass



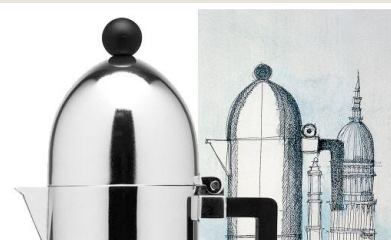
Harry Beck 1902-1974

Best known for redesigning the London Underground map.

- People do NOT need to know the distance between stations
- Recognised as a design template for transport maps around the World

Marcel Breuer 1902-1981

Influential Hungarian designer and architect. As a student of Bauhaus, Breuer produced the first tubular steel furniture. Cesca, a chair made of a single curved piece of steel.



Aldo Rossi 1931-1997

An Italian architect and product designer. Highly regarded for his original and geometric forms, he became an outstanding figure of post modern architecture.

Sir Alec Issigonis 1906-1988

Designer famed for the Morris Minor and Mini. His designs had more impact on Britain's post war motor industry than any other designer. The Morris Minor was the first car to sell over a million units.

