

Year 8 Papers & Boards- Bistro Shop Front Knowledge Organiser

Key Words

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| Aesthetics | An opinion towards a product with regards to their shape, colour, size, content, smell, look or taste |
| Analysis | detailed examination of the elements or structure of something |
| Annotate | add notes to (a text or diagram) giving explanation or comment |
| CAD | Computer Aided Design (CAD) software is used by designers to create drawings or technical illustrations |
| CAM | Computer Aided Manufacture (CAM) CAM is the outcome of the computer aided design process. |
| Design | a plan or drawing produced to show the look and function or workings of a building, garment, or other object before it is made. |
| Evaluate | Reviewing strengths and weaknesses of a final product and design work |
| Function | How does it work? |
| Grey Board | Grey board is normally used for backings, but can be combined with corrugated board and paper liner to make a variety of eye-catching displays. |
| Manufacture | Making the final outcome |
| Photoshop | alter (a photographic image) digitally using Photoshop image-editing software |
| Product | an article or substance that is manufactured or refined for sale |
| Research | Sourcing information and inspiration to help with design work |
| Specification | A list of design criteria |

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.

Lean Manufacturing:

- It aims to manufacture products just before they are required to eliminate areas of waste including:
- Overproduction
 - Waiting
 - Transportation
 - Inappropriate processing
 - Excessive inventory
 - Unnecessary motion
 - Defects

Finite resources

Finite resources are non-renewable and will eventually run out. Metals, plastics and fossil fuels (coal, natural gas and oil) are all examples of finite resources. Finite resources are popular as they are easily accessible due to strong supply chains and often have benefits for manufacturing particular products or for energy supplies. Companies have become more careful in their use of finite resources, and they now consider the ecological footprint caused by using such materials.



Just In Time (JIT):

Items are created as they are demanded. No surplus stock of raw material, component or finished parts are kept.

Advantages of JIT

- No warehousing costs
- Order secured before outlay on parts is required
- Stock does not become obsolete, damaged or deteriorated.

Disadvantages of JIT

- Reliant on high quality supply chain
- Stock is not available immediately off-the-shelf
- Fewer benefits from bulk purchasing

Knowledge

- Know how to analyse and develop ideas from existing designs
- Know how to write an effective specification
- Know how to use research to design effective ideas.
- Know how to evaluate and annotate ideas and the final product
- Know how to use CAD effectively, focusing on 2D design and Photoshop
- A clear knowledge and awareness of safety procedures
- Know how to use equipment safely and accurately with use of tools, machinery and equipment
- A clear knowledge and understanding of new and emerging technologies.
- To know how to use research and exploration, such as the study of different cultures, to identify and understand user needs
- To know how to develop specifications to inform the design of innovative, functional, appealing products that respond to needs in a variety of situations
- Know how to use a variety of approaches, to generate creative ideas and avoid stereotypical responses
- To know how to develop and communicate design ideas using annotated sketches, detailed plans, 3-D modelling, oral and digital presentations and computer-based tools
- To understand developments in design and technology, its impact on individuals, society and the environment, and the responsibilities of designers, engineers and technologists

Skills

- Work effectively as an individual
- Be able to select the correct tools and equipment
- Be safe and accurate in the use of tools and equipment
- Be able to spot hazards
- Have an awareness of safety procedures
- Use CAD effectively, focusing on photoshop effectively to create a shop front.
- Evaluate and annotate their work
- Develop and improve their work
- Be able to investigate new and emerging technologies
- Select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer-aided manufacture
- Use a variety of approaches to generate creative ideas and avoid stereotypical responses

Culture- A combination of ideas, beliefs, customs and social behaviours of a society or group of people.

Fashion and Trends: Designers developing products that are influenced by the 'latest thing'.

Faiths and Beliefs: Designers being responsible for the impact their design choices may have on a community.

Non-finite resources

Non-finite resources are found naturally and can be replaced. Examples include wood, cotton and renewable energy sources such as solar and wind. Where trees are cut down for wood or hibiscus plants harvested for cotton, new ones can be planted in their place.



Compare
Identify similarities and/or
differences.

Which
Select from a range of
possibilities.

