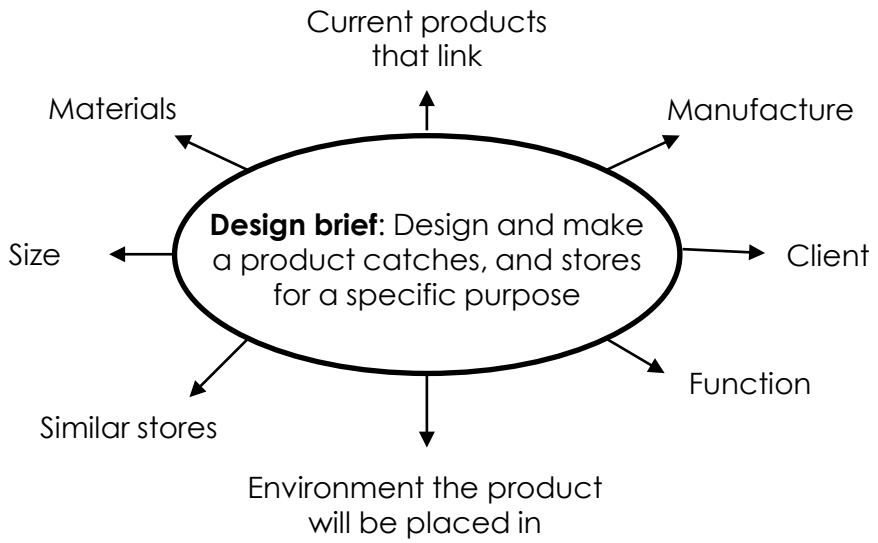
Y8 Block 3- Dystopia and Injustice

Task analysis: Brainstorm all potential links and ideas related to the design brief.



Design Process:

- Task analysis and research plan
- Research and evaluation
- Specification
- Research evaluation
- Initial design ideas
- Design development and prototypes
- Trials of techniques and samples
- Final design concept

Design Strategies

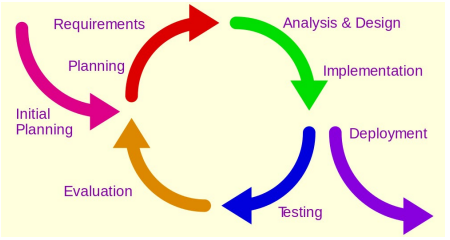
You can use design strategies to produce initial design ideas without getting you on a bad one. Designing is a complex process and there are several different ways of doing it:

- Systems approach: This means breaking down the process into several different strategies and doing each in turn.
- User-Centred design: The wants and needs of the client are prioritised- their thoughts are given a lot of attention at every stage of design and manufacture
- Iterative design: Centred around the design process of evaluation and improvement at each stage of designing.
- When you are designing a product it is easy to get stuck on an idea. This is called design fixation and it can stop you thinking creatively and producing innovative ideas.

Following the design strategy can help you avoid design fixation and encourage you to look at your design in a critical way to make improvements. Other ways to avoid are-

- Collaboration
- Honest feedback
- Focusing on new solutions
- Using fresh approaches

Iterative design process



Sustainability in design **How successful am I?**

Steps to success: In order to be successful during this project, learners must be able to:

- Identify a range of materials/energy sources that are finite and renewable (relating to their materials specialisms)
- Name and describe the 6R's of design and be confident in using these to design a range of products.
- Consider the clients needs for a product and identify how we can create products which have little impact to the environment.
- Describe various examples of designs impact to the environment, and state possible design solutions
- Design a product that fits a design problem and is made from recycled materials

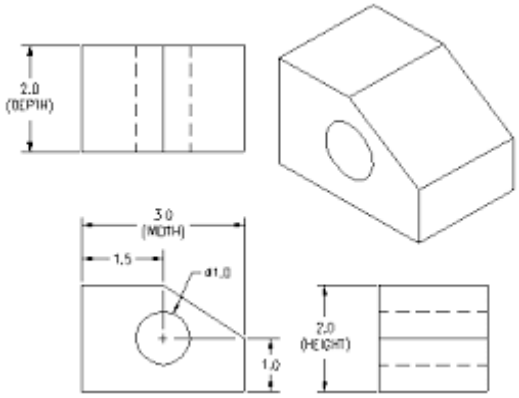
KEY TERMS

MEASURED: carefully marked out (using a ruler/measuring equipment)
ACCURATELY: That is correct (measurements and angles)
PRECISE: Strictly correct (measurements, angles and cutting)
TOLERANCE: Within variation (of measurements)
THEME: What is the topic or item it is based upon
ENVIRONMENTAL IMPACT: How much of a negative impact will the product have on the environmental (either through use or once it is thrown away/recycled)
PRODUCT LIFE CYCLE: A new product progresses through a sequence of stages from introduction to growth, maturity, and decline. This sequence is known as the product life cycle and is associated with changes in the marketing situation, thus impacting the marketing strategy and the marketing mix.
REDUCE: Minimise the amount of materials and energy used throughout the process
REUSE: Using the parts or materials of a product
RECYCLE: reclaim the raw materials
REFUSE: make the choice to not generate waste
RETHINK: consider and question consumption habits
REPAIR: next time consider recycled and green content

Challenge: Within your prototype/product, how will you ensure a high quality of finish whilst ensuring you use recycled or reused materials? What needs to be checked before using the materials?

Technical drawings

A precise and detailed drawing of an object, as employed in architecture or engineering.



During your project you will be given a technical drawing that includes all the information required to manufacture your planter and water catcher.

Often in a technical drawing you will find:

- Diagrams showing all sides of the item you are making.
- Dimensions for each part of the item
- A materials list for you to work from
- An equipment list to ensure you use the correct items
- A set of instructions to follow (including health and safety guidelines)

Designs impact on the environment

Textiles

Plastics

Timber