

DESIGN TECHNOLOGY · Y3–Y6

The Design Process

Knowledge Organiser — Y3–Y6

Key vocabulary

1

Design brief

A clear statement of what the product must do, who it is for, and any constraints (materials, cost, size, time). Written before designing begins.

2

Target user

The specific person or group the product is designed for. Understanding the target user's needs is the foundation of good design.

3

Prototype

An early, often rough version of a product built to test ideas. Cheaper and faster to make than the final version.

4

Iteration

The process of improving a design by making a version, testing it, identifying problems, and making a better version. Most good designs go through many iterations.

5

Evaluation criteria

Specific, measurable standards the final product will be judged against. Should be agreed before making begins.

6

Ergonomics

Designing for the human body — considering comfort, ease of use, and the physical dimensions of the user.

Example: The size of a handle, the height of a work surface



design process

A framework for all DT projects

- 1. RESEARCH: who is this for? What do they need? Look at existing products. Identify the problem.
- 2. BRIEF: write a clear design brief. What must the product do? What constraints are there?
- 3. IDEAS: generate multiple ideas (at least 3). Sketch, annotate, evaluate. Don't go with the first idea.
- 4. DEVELOPMENT: choose the best idea and develop it in detail. Materials, dimensions, methods.
- 5. MAKE: construct the product according to the design. Keep notes on any changes you have to make.
- 6. EVALUATE: test the product against the evaluation criteria. Does it work? Does it meet the brief?
- 7. ITERATE: what would you change? How could it be improved? The best products are never 'finished'.
- KEY PRINCIPLE: design → test → learn → redesign. This cycle is the same process used by professional engineers.

