Your notes

GCSE Design and Technology: revision notes

Prototype development

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What a prototype is

- A **prototype** is a working model of a product, made to test and develop the design before full production.
- It may be made in the final material, or in cheaper modelling materials to test ideas.

Evaluating a prototype

- Does it satisfy the requirements of the brief and specification?
- Does it meet the **client**'s and users' needs? Get feedback from them.
- Is it innovative, and would it be marketable (would people buy it at the planned price)?
- Can it be manufactured efficiently, and is it sustainable?

Modifying and improving

- **Evaluation** leads to changes, such as a new size, material or mechanism.
- Designers record each change and the reason for it, often with photos and annotated sketches.
- Several **prototypes** may be made (iterations) before the design is final.

Key terms

Prototype	A working model made to test a design before production.
Evaluation	Judging how well a product meets the brief and specification.
Marketability	How likely a product is to sell.
Innovation	A new idea or improvement.
Modification	A change made to improve a design.

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Client	The person or organisation the product is designed for.

Your notes

Quick questions

Cover the answers and test yourself: remembering is what makes it stick.

1. What is a prototype?
2. Why do designers make prototypes?
3. What is marketability?
4. What should a prototype be evaluated against?
5. What should a designer record when modifying a design?
6. What is innovation?
7. Who gives the most useful feedback on a prototype?
8. Why might a prototype be made from cheap materials?

Answers

1. A working model used to test a design
2. To test and develop the design before production
3. How likely a product is to sell
4. The brief and specification
5. Each change and the reason for it
6. A new idea or improvement
7. The client and intended users
8. To test ideas quickly without wasting expensive materials

What to do next

Practise 10 questions on this topic

Try 4 exam questions, with mark schemes

Read the lesson, one step at a time

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