

# Design Technology: Prototyping Masterclass with Kit the Fox

*Learning objective: To understand the purpose of prototyping in the design process and how to test, evaluate, and refine products.*

Use these flashcards to test your knowledge of prototyping. Read the term or question on the front, think of the answer, and then check the back to see if you are correct!

## What is a prototype?

A prototype is a preliminary or 'rough' model of a product built to test a concept or process before making the final version.

## Why do we create prototypes?

We create them to identify mistakes, test how well the product works, and see if it is comfortable or easy to use.

## What is an 'iteration' in design?

An iteration is one complete cycle of designing, making, and testing, which helps you improve your project each time.

## True or False: A prototype must always be made of expensive, high-quality materials.

False. Prototypes are often made from low-cost, recycled materials like cardboard, tape, and string to save money and resources.

## What is an 'evaluation'?

An evaluation is when you look back at your prototype and think carefully about what went well and what could be improved.

## How does 'refining' help a designer?

Refining is the process of making small changes or improvements to a design based on the feedback you received during testing.

## If Kit the Fox is designing a new lunchbox, why should he ask a friend to test it?

To see if the product works for the 'user' (the person who will actually use it) rather than just the designer.

## What is the purpose of a 'Design Brief'?

It is a set of instructions that explains what you are going to make, who it is for, and what it needs to do.

## Why is it okay if a prototype 'fails' or breaks during testing?

It is a good thing! It helps you learn what went wrong so you can fix the problem before building the final version.

## What is a 'feature' of a product?

A feature is a specific part or function of a product, such as a handle on a mug or a clasp on a pencil case.

## What should you do after you have tested your prototype?

You should record your findings and decide whether to keep your design, change it, or start again with a new idea.

## Why is it important to consider the cost of materials when prototyping?

Because a good design should be affordable to make. If a prototype costs £50 in materials, it might be too expensive to sell to others.