



Testing Food and Products: How Designers Know What Works

KS4 DESIGN & TECHNOLOGY

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Why Do We Need to Test Products?

Before any food or product reaches the shops, it has to be tested carefully. **Testing** helps designers and companies check that what they've made is actually good quality, safe, and does what it promises. Imagine if a new chocolate bar was released without anyone tasting it first – it might be horrible! Or if a phone was sold without checking if the screen works properly – customers would be furious.

Sensory Testing: How Things Taste and Feel

Sensory testing means using your five senses to check a product. For food, trained **taste testers** (yes, that's a real job!) try products and describe exactly what they taste like. They might notice if something is too sweet, too salty, or has an odd texture. These testers use special vocabulary to be precise – they don't just say "nice" or "yucky".

Think of it like being a detective. You're looking for clues about what makes something good or bad by using your senses.

For other products like clothes, shoes, or toys, testers check how things **feel**. Does the fabric itch? Are the seams comfortable? Is the toy sturdy enough for rough play? Companies also test **appearance** – do the colours look right? Is the design attractive?

Functional Testing: Does It Actually Work?

Functional testing means checking that a product does its job properly. If you design a water bottle, you'd test whether it actually holds water without leaking. If you create a game, you'd play it to make sure the rules make sense and it's fun. Engineers might drop products, bend them, or use them thousands of times to see if they break.

Think of it like testing your bike before you ride it on a big trip – you check the brakes work, the tyres have air, and the chain moves smoothly.

Who Does the Testing?

Large companies have special **quality control teams** and **test laboratories** where scientists check everything. Sometimes they use machines to measure things exactly. Other times, they recruit real customers - people like you and your family - to try products and give honest feedback. This is called **user testing** or **focus groups**.

Making Improvements

When testing finds problems, designers go back and fix them. Maybe the flavour needs adjusting, or the shape needs to be more comfortable. Then they test again. This cycle of testing, learning, and improving happens many times before a product is ready for shops.