What Safety Features Do Products Need to Have?

KS2 DESIGN & TECHNOLOGY Ages 10-14 ⏰ 3 min read

Why Do Products Need Safety Features?

Every toy you play with, every gadget you use, and every piece of furniture in your home has been designed with **safety** in mind. **Safety features** are the special parts or designs that stop products from hurting us. When designers and engineers create something new, they always ask: "Could this harm someone?"

Without safety features, everyday items could be dangerous. A toy might have sharp edges that cut your finger. A bicycle without brakes couldn't stop. A toaster without **electrical insulation** could give you an electric shock. That's why companies spend time thinking about how to make products safer.

Think of it like playing a video game — the developers add walls and barriers so you don't accidentally fall off the edge of the map. Safety features are like those invisible walls in real life.

Common Safety Features You'll Find Everywhere

Sharp edges are a big problem, so designers round them off or cover them. Phone chargers have special **fuses** inside that stop too much electricity flowing through. Climbing frames in playgrounds have thick padding underneath so you don't get badly hurt if you fall. Toys for young children don't have **small parts** that could be swallowed by accident.

Cars have **seatbelts** and **airbags** to protect you in a crash. Electrical cords have **child safety locks** on plugs so little ones can't touch dangerous parts. Medicine bottles have **child-proof caps** that are hard for young children to open. Even the warnings on products — like "Choking hazard" or "May be hot" — are safety features because they help people avoid danger.

Think of it like how your school makes sure stairs have railings and hallways aren't crowded — everyone plans ahead to stop accidents happening.

How Designers Test for Safety

Before a product reaches shops, it must pass **safety tests**. Engineers drop toys from heights, twist them, try to break them, and check for loose parts. They test electronic items thousands of times to make sure they don't overheat or catch fire. Companies follow strict **safety standards** — official rules set by governments to protect customers.

Different products have different rules. **Toys** follow one set of safety rules, **food products** follow another, and **electrical items** follow yet another. All products sold in the **UK** must have a **CE mark** — a special symbol showing they meet European safety standards.

Good design means thinking about who will use the product and what could go wrong. Does it need a warning label? Should parts be glued down? Does it need **non-toxic** paint? Every decision helps keep people safe.