

DESIGN + MANUFACTURE

One of the deepest functions of a living organisms is to look ahead... to produce future.

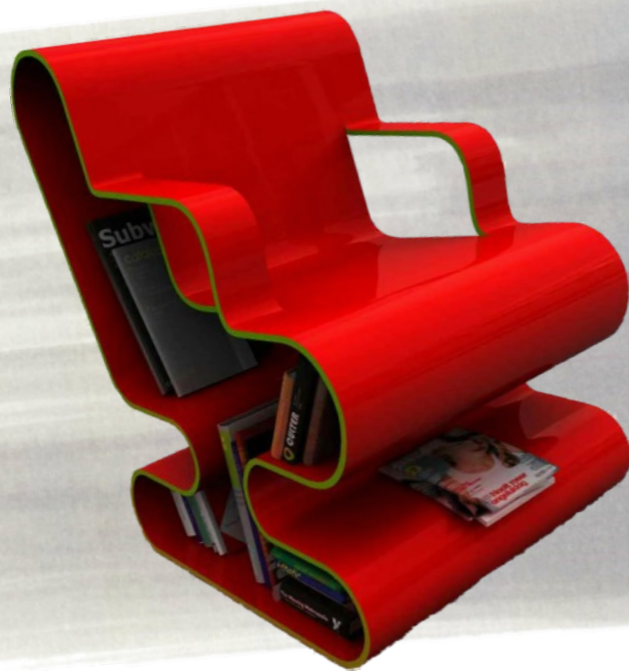
PRIMARY AND SECONDARY FUNCTIONS

All products are designed with a purpose or function however, many products often have alternative uses. It is important to know the difference between a **primary function** and a **secondary function**.

A **primary function** is what a product has been designed to do for example, the primary function of a toothbrush is to clean teeth.

However, toothbrushes also have many secondary functions. **Secondary functions** can sometimes be planned in order to make a product more appealing to the consumer.

For example, a toothbrushes planned secondary function can include tooth polisher, tongue cleaner and gum massager. Secondary functions can also be seen as alternative uses for a product - many people use toothbrushes for cleaning small spaces on cookers, polishing boots and even picking out horse hooves!



A modern chair is shown above.

The chair has primary and secondary functions.

- i) **Explain** the difference between primary and secondary functions. Make reference to the chair above.
- ii) Describe alternative uses for the chair

QUESTION



FIT FOR PURPOSE

Although a product is designed with a main function, it can be considered '**not fit for purpose**' depending on the situation in which it is being used.

The three hairdryers pictured all gave the same primary function - to dry hair. However, each product could be deemed not fit for purpose depending on the required situation.

Travelling

The travel hairdryer is ideal for people on the move and has been specifically designed to fold easily so that it can be packed with ease into hold-all. The salon hairdryer, in this instance, would not be fit for purpose as it is too big and bulky to pack away.

Salon

The freestanding hairdryer has been designed to allow hairdressers to leave peoples hair drying whilst they get on with other clients. A domestic hairdryer would not be fit for purpose as it would require the hairdresser standing over the client for the full duration of time. Likewise, the travel hairdryer functions at a much smaller voltage and would therefore take much longer to dry hair.

1. **Explain** what is meant by 'fit for purpose' in relation to a household kettle, camping kettle and urn
2. **Describe** how a designer may consider function to improve the appeal of their product on the market
3. Developments in technology have led to significant improvements in the function of electrical products
 - (i) **Explain** what advancements in technology have influenced the development of a mobile phone
 - (ii) **Outline** five secondary functions mobile phones have due to advancements in technology.

