

AQA GCSE D&T Electronic Products

In today's world safety of the individual has become an important issue; the ever increasing use of roads by cars, motorcyclists, cyclists and pedestrians is just one area where government is trying to improve levels of safety.

Design Task 1 – Road Safety

Road safety is important for all users including pedestrians. Investigate one aspect of road safety and design and make a prototype which could be used to help prevent accidents.

Keeping property safe from theft has become a top priority in recent years.

Electronic products are used extensively to make property safe and secure. Automated locks, sirens and flashing lights are used to deter and prevent crime.

Design Task 2 – Electronic Alarm System

Design and make an electronic alarm system that is capable of being fitted to a variety of doors, window or properly.

Advertising, promotions, entrepreneurs are words that are associated with the world of selling, shops and shopping; designers have to catch the eye of their customers to make them go into a shop by clever marketing ploys.

Design Task 3 – Promotional display

The manager of a local store has asked you to design a promotional display for the entrance to a store that can be used to promote a product of your choice. The display should attract the customers' attention with movement, light or sound, or a combination of these. The promotional display should operate when someone enters the store or stands in front of the display. You have been asked to design and make a working prototype of the display that can be evaluated in the store.

“Use it or lose it” is a saying which is now frequently used in today's world; people find it useful to count and measure all sorts of activities in order to try and give them a value, or measure their effectiveness.

Design Task 4 – Counting System

Design and make a system which will count and display activities that occur in everyday situations, it could be people entering buildings, cars entering and leaving a car park?; it could even be how quickly an activity takes to happen. You will need to consider how many events you want to count and what type of display you will use.

Designers have a responsibility to design products that address environmental issues. Designing for sustainability, efficient use of energy and reducing the 'carbon footprint' are areas of concern and have a high public profile.

Design Task 8 – Temperature Control

Equally important is a system that can efficiently measure temperatures in different environments where safety considerations are a very important factor.

Design and make a system which will enable temperatures to be taken in different environments; it could be checking the temperature of the bath water before the baby is given a bath, checking the temperature levels of fridges and freezers or even checking temperature levels when sun bathing - there are many other situations where such a system could be used effectively.