

## GCE D&T Product Design – What is the definition of a Graphic Product?

When selecting a design and make task for the A2 course, it is important to understand Edexcel's definition of a Graphic Product.

Edexcel's definition of a Graphic Product differs from the popular perception of stand-alone two dimensional (2D) products such as leaflets and posters, and although such products may form part of the final manufactured outcome, the main thrust is in the design and manufacture of a 3D Graphic Product, accompanied by a linked 2D element. The course requirements are that both the 3D and 2D elements must be designed, developed and manufactured.

For the purposes of the 6GR04 course a Graphic Product is defined as a concept model or prototype that represents a designed product that, by the complexity of its manufacture, scale or cost, could not be made full size by the student designer.

Where the manufacture of a conceptual product would require expensive manufacturing equipment such as that used for plastics moulding, or where costly printing or die-cutting is required, it is expected that products will be modelled in appropriate materials, which may include those defined as 'resistant materials'.

Where smaller-scale products are concerned, such as board games that require few pieces of expensive manufacturing equipment, a prototype product would be expected as an outcome.

Where a product design is part of the 'built environment' pathway, outcomes will inevitably be large-scale, such as buildings and interiors, and as such products cannot be manufactured full-size, the expectation is that they will be represented by architectural models built to scale.

Having established that the outcome of a graphic product is likely to be a model, it is essential to realise that this does not refer to a model of 'any' product. The submission of modelled products such as lighting, desks, chairs, tables and other pieces of furniture that lie firmly within the realms of Resistant Materials Technology are considered inappropriate as graphic products, as they would be manufactured as full size, fully functioning products in the RMT strand of product design. An exception to a modelled outcome in graphic products is a 'point of sale display', where a full-size, functioning product is acceptable and is usually accompanied by a modelled product that the display is designed to promote.

The specification requires students to submit a Graphic Product via one of two pathways; the built environment or conceptual design.

Examples of products within the built environment could include:

- Architecture - modelled examples of buildings or extensions to buildings.
- Interior design - modelled examples of the inside of buildings, sometimes in connection with exterior architectural facades.
- Exhibition design - the modelling of specific exhibits for a given display, or product such as car show stand. Theatre sets - modelled examples of sets that may be used for specific TV shows or theatre productions; modelled fashion catwalks or similar displays.
- Garden designs - modelled dioramas for specialist outdoor spaces, models of animal enclosures for specific purposes such as an enclosure for penguins at a zoo, designed to give maximum access to view the animals whilst providing a natural habitat.

Examples of products within Concept design could include:

- Packaging design - modelling packages for given or designed products such as the design of an electronic product, modelled and packaged appropriately. It is unlikely that product packaging on its own would supply the quality and complexity of evidence needed to match the highest assessment level in 'making', hence packaging is often seen accompanying another product or as evidence to support the 2D element. This said it should be remembered that the packaging element itself has an inherent 3D aspect, in the form and construction of the package. Evidence of the 2D element is often in the form of applied graphics on the package itself.
- Product/Industrial design - here the expectations in the final outcome should be seen in terms of the 'industrial' element of the design title. Products are expected to be items that cannot normally be made by a typical A level student, due to the complex nature of its function/manufacture etc. Typical products might be a personal satellite navigational device, mobile telephone, games console or futuristic blue sky product where the manufacturing technology may not yet be available.
- Point of sale display - It is often not appropriate to model a point of sale display as they are frequently of a size that can be reasonably expected to be produced by A level students using the resources available to them. This said they may well be built as prototype models, as they may not utilise the usual mass/batch production techniques used for the actual items. Prototype products that have also been designed and made by students are often included with the point of sale displays as a supplement to the manufacturing processes or to evidence aspects of the 2D requirement.

- Vehicle Design - it is expected here that students will model a vehicle exterior and/or interior, which may include aspects of part of the interior or exterior, such as the driving console for a vehicle, personalised equestrian transports or a sports team coach interior. Whole vehicle modelling may include obvious examples such as cars, but also more specific vehicles, such as tricycles, motorbikes or caravans.

It is important to note that although a graphics student will model the final product outcome, they are still required to use modelling in the development section of their design work, in the same way an RM student is required to use modelling as part of design and development. This aspect of modelling is expected to be used as a design strategy within the development section, being used to establish a final solution and to explore design changes, rather than being used as a practise piece of end product modelling.

In summary, students need to be guided towards a problem that involves the design, development and manufacture of a product that is too big to make in its final form or too expensive to produce as intended. A product that can be made in its full-size, fully functional final form by an A level student, is unlikely to be appropriate as a graphic product submission, unless it is a point of sale display.