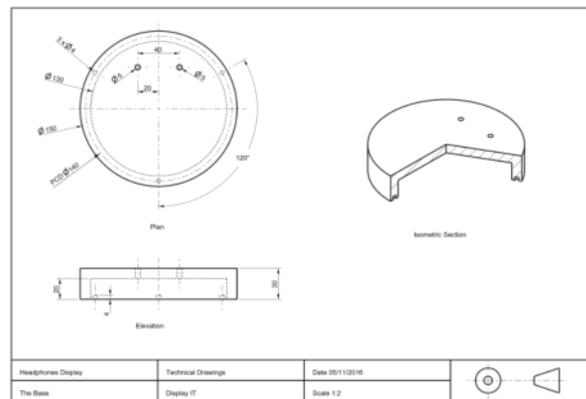




# Higher Graphic Communication



## Course Tasks

- Research & Analysis
- Preliminary Graphics
- Production Graphics
- Promotional Graphics

# Research & Analysis – Gym/Leisure Centre

A new chain of gyms & leisure centres has been proposed for select locations around the country. In order to stand out from its competitors, the centres require a strong and vibrant brand that will help establish a recognised image with a target market.

## You are tasked with:

- Choosing an existing gym style to gather information and graphics on which will help inspire ideas towards the brand image you wish to promote in your folio work,
- Producing research and image boards which showcase the style of the chosen gym and include evaluations of their brand and impact,
- Producing analysed client mood boards which helps to identify the target market,
- Evaluating your chosen gym style to produce an outline specification detailing the desired impact of the gym brand with reference to graphic types.

## In tackling your work, you should:

- Research existing styles of gyms and their target markets,
- Identify your chosen market and present a clear identity of the brand,
- Research should include styles, trends, fonts, colour schemes, fashions etc,
- Present the work as a digital portfolio in a PDF format.

## NOTE:

There is no specific age range given for your target market, but you may wish to include a specific range to help with your client boards. You may choose any gym type to focus your research on, but larger corporate gyms will tend to have more information available online to help support your decisions.

# Explorative Design Sketching – Shaker Bottle

The gym intends to launch its own range of sports accessories in keeping with their brand. The first product they wish to launch is their sports shaker bottle and powder/supplement container.

With the growing number of people going to and making effective use of gyms, the need for sports nutrition and supplements is also growing. The gym wishes to capitalise on this by making their own branded shaker bottles exclusively available to their members.

Before a designer moves onto 3D modelling, they make use of explorative sketching to break down, understand and plan how they will model a product.

## You are tasked with:

- Producing preliminary sketches of a chosen/designed shaker bottle and powder capsule with a minimum of **four** separate and dissimilar component parts,
- Producing 2D and 3D pictorial sketches of the product e.g. orthographic, exploded views, sectional views, assembly information, component and assembled views,
- A rendered pictorial view of the product, indicating colour, material, highlight, tone and texture.

## In tackling your work, you should:

- Refer to the previous task work with regards to the style of the products,
- Generate freehand sketches – no straight edges or drawing equipment should be used,
- Demonstrate your knowledge of 3D CAD modelling techniques and justify why they are suitable for the various features and components, note you should use at least three different CAD modelling techniques in your response,
- Include suggested dimensions for each component, including material thickness and additional requirements, such as decals, in annotation form,
- Work to British Standards and conventions (BS 88 888) at all times.

## NOTE:

You are allowed to use an existing product to base your work on. You are also permitted to design your own style of shaker bottle but it is not essential. The finished idea should be in keeping with the brand of the gym.

# Explorative Design Sketching – Shaker Bottle

Today's shaker bottles are designed to be easy to use, clean and be comfortable to hold.

Most are manufactured from glass/plastic and feature built in compartments for powders and supplements but some still use separate capsules/containers. Most also contain some form of 'ball' to help mix supplements into the users chosen liquid.

Remember your design, either original or based on one of the below products, must contain a minimum of four components, be designed to a suitable size and you should consider at least three different CAD modelling techniques.



## 3D Modelling – Shaker Bottle

The client has requested 3D CAD models of the shaker bottle to get a better idea of the finished product before it is sent for manufacturing. The 3D CAD model is an opportunity for you to develop and demonstrate your CAD ability in the different features of the product.

### You are tasked with:

- Producing a 3D model of the different components for the shaker bottle and powder/supplement container,
- Producing an assembled, fully constrained model of the complete product.

### In tackling your work, you should:

- Refer to the previous task to best plan your modelling strategy and ensure to reference sizes generated in the preliminary stages,
- Demonstrate your knowledge and skill in the application of a range of 3D CAD modelling techniques,
- Make use of the checklist to ensure you have covered a range of 3D CAD techniques whilst taking screenshots to provide evidence of their use.

### **NOTE:**

A range of CAD techniques and features is essential to get the most out of the task in preparation for the final assignment.

## 3D Modelling – Shaker Bottle

To best tackle this task, use the checklist provided to identify the various 3D CAD commands and techniques you are using. This will help to remind you of where you used them and also highlight techniques you haven't included in your modelling strategy.

**Note:**

Not every single modelling technique will be applicable to your components, but you must use at least three different techniques in the 3D model to achieve a pass in this task. Consider each modelling technique carefully and select those that will achieve the fastest, most efficient way of modelling, e.g. a revolve instead of multiple extrusions, a loft instead of a revolve and an extrusion.

Modelling Technique	Where has it been used?
EXTRUDE	
REVOLVE	
LOFT	
SHELL	
HELIX	
LINEAR ARRAY	
BOX ARRAY	
RADIAL ARRAY	
FILLET	
CHAMFER	

It would be worthwhile producing a digital version of a similar table in order to keep records including screenshots of the techniques and where you have used them.

Although your teacher can help, try where possible to refer to 3DMadeEasy or any online tutorial to research any technique or feature you are not familiar with.

# Drawings for Manufacture – Shaker Bottle

The client has also requested CAD drawings of the shaker bottle to send to their manufacturer.. The clarity, layout, precision and level of detail in these drawings needs to be to a high quality and adhere strictly to BSI Standards and conventions. These drawings are intended to give a manufacturer all the necessary information needed to make sure they can make an accurate real life product.

## You are tasked with:

- Producing orthographic production drawings of the shaker bottle, including assembled and separate components,
- Producing technical detail drawings of the products including a title block with all relevant information, appropriate dimensions, indication of scale, and labelled views,
- Working to BS 88 888 at all times,
- Producing an assembled pictorial drawing of the shaker bottle and container,
- Producing an exploded pictorial drawing of the shaker bottle and container

## In tackling your work, you should:

- Create a template drawing page to include your title block
- Ensure all necessary drawings are produced – use a checklist to help you.
- Refer to course text book to make sure all drawings adhere to BSI standards and conventions.
- Ensure all relevant technical detail is included to assist in the manufacture and assembly of the components and final product. This may also be in the form of annotation.

# Drawings for Manufacture – Shaker Bottle

Use the table below to detail the different drawings/views that should be generated. This should act as a checklist to help keep track of the different manufacturing drawings required and what important details to include on them.

Aspect of Model	Drawing Type	Key things to include
Shaker Bottle Assembly		
Shaker Bottle Component 1		
Shaker Bottle Component 2		
Shaker Bottle Component 3		
Other		

Some suggested views include;

- Orthographic views, including sections, detail views and true shape where appropriate
- Exploded pictorials, with parts lists
- Fully assembled 2D and 2.5D views

Some of the details will depend on the features of the chosen/designed shaker bottle.  
The checklist should be created by you to keep you right with all relevant information.

## Drawing Frame and Title Block

Although default title blocks are available in the CAD software, at Higher you are expected to create your own title block which can be saved as a template to be used in all of the manufacturing drawings you produce.

This is to help establish your work from others as well as allow an opportunity to have the style and layout of the drawings suit the client.

# 3D Graphic Environments

Illustrations are often produced from 3D models to help clients visualise the final product and get a better idea of materials and finishes as well as see it in a familiar context.

In this task you are producing graphics of the rendered product in a digital environment. This will act as artist impressions of the shaker bottle and will demonstrate a competence in presenting 3D models and designs in a promotional context.

## You are tasked with:

- Producing a realistic pictorial illustration of the shaker bottle within a relevant context.

## In tackling your work, you should:

- Model a 3D environment (to a relevant scale) which can be used to showcase the shaker bottle and container – a kitchen worktop, the changing room of the gym, dashboard of a car etc,
- Consider the environment of the shaker bottle and any additional models that may need to be created to put it in context – sinks, chairs, appliances, keys, cups etc,
- Apply materials and lighting conditions to create a scene with visual impact.



# Promotional Graphics – Shaker Bottle

The gym is keen to make as strong an impact as possible with its brand and image.

You have been asked to design the packaging for the shaker bottle that is to be in line with the branding and style of the gym itself. This will be based on the market research and brand identity that has been previously researched and established in Task 1 as well as suiting the design of the shaker bottle itself. A full page advert must also be designed to help promote the product and the gym.

## You are tasked with:

- Planning the packaging of the shaker bottle, which must include a cut out tag to allow the packaging to be hung on a display stand
- Producing preliminary layout designs including annotations making reference to design elements and principles and any other DTP features to be used, with all decisions fully justified
- Producing the packaging using DTP software to scale, which must include master page construction and use on at least two of the sides
- Evaluating the final promotional item, including the justification of all approaches taken and decisions made to suit the target market
- Producing preliminary layouts for a full A4 page advert, including annotations making reference to design elements and principles and any other DTP features to be used, with all decisions fully justified
- Producing the full page advertisement, using DTP software, to scale, including all printing marks.

## NOTE:

All electronic files produced should be exported to a PDF format before submitting to your teacher. You will also need to submit a screen shot of your master page construction as evidence.

# Promotional Graphics – Information Sheet

In designing the packaging and associated graphics, consider the clientele that will be using the gym. Think about the image that your chosen gym presents and ensure the packaging of these products reflects that.

Below are some examples of styles of packaging to consider, along with the detailed spec of the 'cut-out' mentioned in the task specification. This should be drawn to a scale of 2:1 using either manual or electronic methods to allow the client to check the sizes are appropriate for the display stand.

