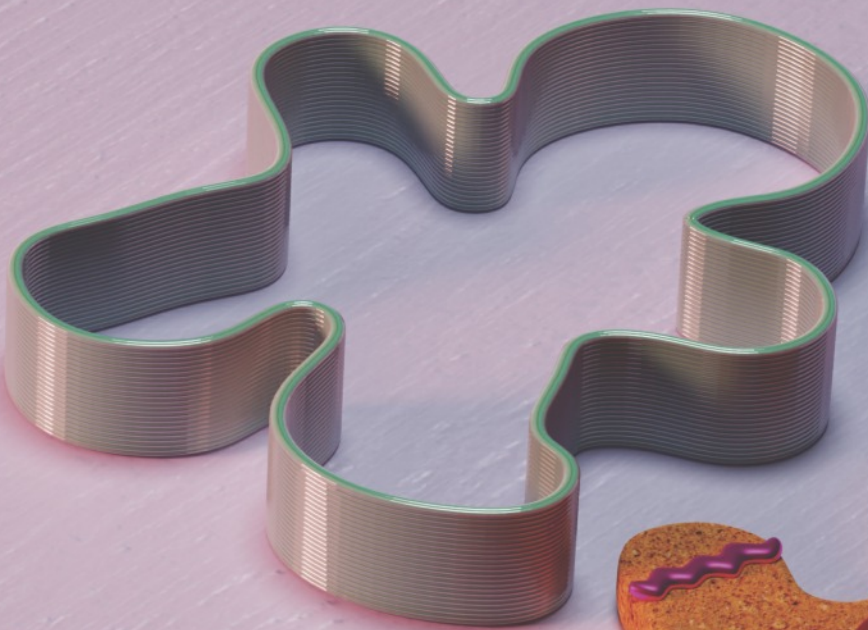# The business of making
COOKIES

STUDENT NAME: [   ] CLASS: [   ]

INTRODUCTION... :)

From the earliest human societies, people have sold and traded items that they make, for items that they want. This is an important part of economics.

Designing and manufacturing can make good business.

There are lots of specific skills in running a business:

- Finding out what people want or need.
- Designing a product to meet those needs or satisfy those wants.

- Manufacturing
- Advertising.
- Selling

Companies will employ teams of people working in different roles to ensure they are successful.

In this project you will learn the basic skills of researching, designing, manufacturing, promoting and selling a product - just like real businesses do.

MARKET RESEARCH

Market research is conducted by businesses and designers to ensure they create products people will actually want to buy. There are two main types of Market Research – Desk Research (secondary) and Field Research (Primary).

PRODUCT COMPARISON

DESK RESEARCH

Desk Research is quick to do as it involves the use of existing material that can be found on the internet or competitors websites. This costs virtually nothing and is quick to do.

Product Comparison (a form of Desk Research) is fairly simple at first; you are comparing similar products that already exist to look for key features, materials or design decisions.

Don't be fooled into thinking copying is the only or best strategy. Consumers like to see companies innovating, and copies can make a business look lazy.

Businesses and designers will often survey groups of people, asking their opinions about a particular product that they are thinking of bringing to the market.

Creating a survey is a lot harder than it sounds; what questions do you ask? What sort of responses do you anticipate? Importantly, who do you ask to be part of the survey; your target market (people that you think will want to buy your product) will determine a lot.

TASK 1

Present a product comparison of similar plastic cookie cutters. Highlight the price, and common features or design decisions.

QUESTION 1

Online retailers often use 'product reviews' by customers.
Describe two potential problems with basing purchasing decisions on using online reviews.

DESIGN IS GOOD BUSINESS...

Good design is critical for a business making products. A well designed product will make consumers happy, confident and trust a brand. A single bad product can devastate a reputation.

Businesses recruit their own designers or hire design companies to develop products. Designers and engineers that can create new products are highly sought after.

Designers and engineers follow a 'design process' for creating new products. There are several steps that ensure good ideas are taken forward and bad designs are left behind. Your teacher will show you some of the basics of idea generation and the design process.

IMAGE TO COME. (EVENTUALLY)

SKETCHING CONCEPTS

Sketching concepts is an important step in the design process. Sketches are used to record design ideas or to share ideas with other designers, with engineers or clients. There are 'rough' sketches, used in the idea generation stage and 'presentation' sketches, used when communicating with others. BOTH ARE IMPORTANT! Don't be embarrassed by Rough Sketches - they are not art, but the birthplace of new ideas.

TASK 2

Create an A4 page of concept sketches for your cookie cutter.
Use **presentation techniques** to communicate ideas to a client and **annotation** to describe details.

QUESTION 2

Describe an 'idea generation technique' designers use.
You may use sketches to support your answer.

3D COMPUTER AIDED DESIGN

3D Computer Aided Design is a tool used by designers and engineers to create models of products. These 3D models can be used for several things; they can be 'rendered' to look photo-realistic; tested for weight and strength; sent to robot (CNC) manufacturing equipment; emailed to clients. 3D CAD makes the process of design vastly quicker and more cost effective.

3D CAD can be a complex tool, however almost every product and modern building will have a 3D computer model made in the design process.

You will learn to used 3D CAD as part of the design process of the cookie cutter. Alternatively, you can visit DesignClass.co.uk for tutorial videos.

3D CAD MODEL
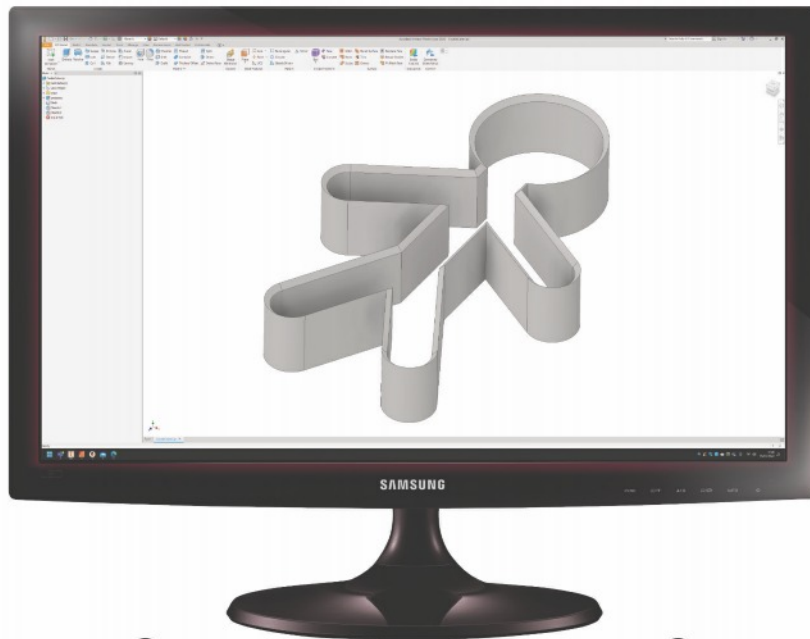
3D Computer Aided Design has made it easier and quicker to design new products. Designers can work anywhere in the world, and collaborate by sharing files online. Businesses can get products to market quicker, and this can increase the profit margin. Products can also be quickly updated or altered to extend their 'product life-cycle'.

TASK 3

Create a 3D CAD model of your cookie cutter design.
Send your teacher your 3D CAD model for 3D printing.

QUESTION 3

3D Computer Aided Design has revolutionised product design.
Describe two advantages of 3D CAD.

THE COST OF MANUFACTURE

Making stuff ain't easy. In the world of business and industry, teams of engineers would be involved in preparing a product to be professionally made.

There are three basic forms of manufacture:

• Job Production:One-offs / bespoke (the most expensive)

• Batch production (middling unit cost)

• Mass or Flow production (lowest unit cost).

In this project, you will be using a 3D printer to create your product. 3D printers are good for prototyping, or bespoke products - they can make almost any design, but printing does take a long time.

In industry, plastic cookie cutters would be injection-moulded. A process that has high setup costs, but is fast and has very low unit-costs.

PROTOTYPING

Prototyping is the name given in the design process when you will physically make a model of your design. You may craft this by hand, or use Computer Aided Manufacturing (CAM). A prototype is an important stage in the design process.

UNIT COST

Unit Cost is the name used when specifying how much each product will individually cost. This is not just material costs; cost to manufacture, transport, and package must be considered.

TASK 4

Create a formatted letter asking a manufacturing company for a quote for your plastic product. Your teacher will provide you body text, or you may download a sample from DesignClass.co.uk

QUESTION 4

Describe two factors a designer or entrepreneur must consider when purchasing material for the cookie cutter.

MARKETING MIX

Creating a great product is only part of the mission. If a product is to be successful, it will need to marketed.

There are many types of 'marketing strategy' to get a product well-known. Two of the most simple include online 'web banners' and the packing the product comes in. Each of these has specific technical requirements, but there is something both will require:

A graphic designer.

Graphic desigenrs work in several industries, but one of the most demanding is marketing.

A graphic designer must create promotional iteams that will attract the target market and help convince them to spend money buying the product.

Graphic designers will also conduct market research and create preliminary sketches and layouts.

WEB BANNER

Web banners are used on websites to advertiese a product. They have several advantages: they can be animated; they have no printing-costs; people clicking on them can be taken directly to an e-commerce store.

Businesses can use 'analytics' to see how successful the marketing is, counting how many people click the link and how many make a purchase. This data can help businesses and designers create better products and more effective marketing strategies.
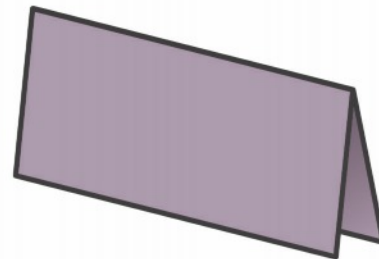
PACKAGING

Packaging serves two primary functions; protect the product and help market the product.

Good packaing can be expensive to design and produce - however, poor packing can be more expensive; poor sales and a high return-rate due to broken products.

Both web-banners and packaging are designed, first by creating concept sketches, and then by DTP and graphic editing software.

TASK 5

Sketch and annotate a thumbnail concept for your promotional layout.
Your teacher may specify if this is for a web banner, or packaging, or both.

QUESTION 4

Many goods are sold online.
Describe the benefits of e-commerce.

GRAPHIC DESIGN

"Graphic Design will save they world, just after rock and roll", so says David Carson, a graphic designer famous in the creative industries.

Good graphic design has the power to motivate, manipulate and manifest. This means in can impact people to think differently and 'buy into' a product or service.

Good graphic design is good business.

Here you will learn some of the basics of graphic design and DeskTop Publishing (DTP). This will include basic *design elements* and *design principles* that make for good design.

You will also learn to create layouts using DTP software. You may also learn to use *photo-editing* and *vector graphic* software.

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(EVENTUALLY)

SAMSUNG

DESKTOP PUBLISHING

There are many different tools that are used to create good graphic design; rendering software; photo-editing apps; and vector graphics software. All the graphics are then combined into DTP software to make the final product. You will learn to use some of these tools to create your own packaging.

TASK 6

Create a DTP layout for the packaging of your Cookie Cutter. Your teacher will provide you with a template, or you can download one from DesignClass.co.uk

QUESTION 6

Describe the difference between a 'raster graphic' and a 'vector graphic'.
State a file format for each type.

COURSE NOTES V 1.0