**Y11 – Exam Preparation for GCSE Graphic Products [AQA ] 2018**

**Ms Hillier and Mr Sammons group**

The examination is 40% of your final grade and you need to revise thoroughly.

The examination is a **two hour paper, worth 120 marks** – **a minute a mark** and there are two sections:

**Section A – 35 marks**

**2018 theme - ‘ FANTASY PAPER TOY CHARACTERS’**

In this pack there are some sheets which need reading through and there are lots of sample questions which need answering.

1. Mind map
2. Lettering / typography
3. Design brief – initial ideas +developed idea drawing task
4. Drawing skills, isometric, orthographic, exploded view.
5. – 2 X Section A - exam papers looking at the title ‘Fantasy Paper Toy Characters’

**Students PLEASE LOOK at the web site ‘technologystudent.com’ then follow the link to GRAPHICS**

**Section B – 85 marks**

**Questions are from all areas of the Specification –**

There is a full list on the next page of the subject theory [Specification] you should know by the end of theory lessons.

**Following the Easter holiday [Monday 16th April – Friday 11th May] all subject theory will be worked through and we will build on the theory you have learnt over the two years.**

**Past Exam papers are on the AQA website for you to look at but there will be 2 X Section B – sample exam papers given to you**

**To support your revision for Graphics you will be given:**

1. **A card folder**
2. **Your exercise book, your mock exam papers from Y10 and Y11**
3. **Section A work pack and 2 x sample questions**
4. **Section B work pack and 2 X sample questions**

**GCSE Graphic Products – Theory overview**

**Materials and Components**

Candidates should understand

* Paper sizes A0-A6
* Units for thickness of paper and board
* Understand working characteristics of paper and board
* Properties and uses of different types of recycled, re-useable and virgin paper and board
* Know what cartridge, layout, bleedproof, tracing, card, corrugated board, mount board, duplex, solid white board and grey board.
* Understand that many paper based boards are laminated to other materials to create different properties
* Understand use of thermo plastics [HIPS/ polyropylene/acetate]
* The use of sheet an block modelling materials foam core board, corrrugated plastic sheet, styrofoam and machining foams, the use of spiral bound tube
* Consider cost, flexibility, finish, rigidity, strength, quality, weight and environemntal issues
* Know how to apply a finish to modelling materials, fillers, acrylic and water based paints
* Know the uses of smart and modern materails [ PMC, corn starch polymers, paperfoam and potatopak, and thermochromatic inks]
* Use a range of adhesives – PVA / epoxy resins, spray glues, glue guns, cements, tape and adhesive plastic film.
* Know hand powered and mechanical equipment [scaples /craft knifes/ scissors/rotary cutters/ compass cutter/fret saw/die cutter/bending bar
* Use ‘bought in’componenets – seal, hang, join, bind

**Design and market influenecs**

Candidates should:

* Recognise the work of designers Harry Beck, Robert Sabuda, Wally Olins, Alberto Alessi, [ Jock Kinnear and Margeret Calvert]
* Be able to commiunicate an idea to a consumer, client or manufacturer
* Know the function of mock ups , prototypes and models and understand there importance within the design process
* How the ‘gap in the market’ – ‘ target marketing ‘works
* Understand 2D + 3D freehand drawings, use crating techniques, grids and underlays
* When sketching, students understand use of colour -contrasting and complimentary , hue and tone; know how to show texture.
* Be aware of colour fusion and seperation and its commercial uses
* Know how to manipulate an idea using ICT, generate and select suitable lettering,
* Be able to draw in one point and two point perspective and in isometric
* Beabe to draw in third angle orthographic drawing, sectional views and exploded views
* Use and understand scale drawings andinterpret room and site maps.
* Understand that 3D containers are made from sheet material and students can draw a net – understand how CAD/CAM can be used to generate a surface development
* Be able to represent data in a graphical form, bar, line, pictogram – understand the language of signage – ideograms and symbols
* Produce flowcharts and feedback loops - sequential illustrations and schematic maps

**Paper and card engineering**

Candidates should:

* Understand a product life cycle [introduction, evolution, growth, maturity, decline, replacement]
* Understand needs and wants of consumers
* Use crtieria to judge a product – meeting a need, fit for purpose, appropriate use of time and materials
* Know how to test and evaluate personally, understand how others evaluate a product
* Know how to evaluate against a specification

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* Recognise that graphical images and products should not offend minority groups
* Consider moral and cultural implications of graphic products
* Consider ergonomics and anthropometric data
* Understand symbols and signs which are essential information for packaging
* Understand the materials and social costs of packaging
* Have an awareness of planned obsolescence
* Consider environmental issues, be aware of the 6 – R’s [ repair, reduce, recycle, re-use, re-think, refuse
* Understand the reasons for and consequences of the increases and reduced use of packaging
* Be aware of the advantages and disadvantages of recycling and reusing
* Identify parts of a CAD/CAM system, uses of CAD software, know benefits of CAD/CAM and ICT, produce virtual reality models using CAD, know that use of email/data allows products to be manufacturer all over the world
* Students should know that using photographs through the manufacturing process shows evidence of manufacture and can be used for promotion
* Be aware of health and safety issues when handling equipment and materials, recognise hazards, recognise information relating to legislation to protect the public, recognise symbols and signs related to quality assurance
* Manage their environment to ensure H&S.

**Processes and Manufacture**

Candidates should:

* Identify input, process, output and feedback in production flowcharts
* Draw up a logical order of work and understand how this changes with the scale of production
* Recognise the quality control marks, symbols, registratipon marks, colour bar and crop marks
* Understand the principles of simple mechanisms [ levers, linkages – programmable ICs]
* Understand scales of production – one-off to mass production
* Understand the impotance of making scle models
* Have an awareness of ‘just in time’ manufacture
* Understand how common graphic products are made and the need for packaging
* [ transportation/display/ storage/ protection]
* Awareness of commercial printing and packaging – Lithography, flexography, gravure, screen printing and digital printing
* Understand print finishes [ varnishing , laminating, embossing and foil]
* Know how multiple nets are produced with die cutting – reducing waste materials
* Identify devices used to form shapes, position features and aid repetition
* Have an understanding of copyright and registered designs