**Key Stage 3 Curriculum Map** Department: D&T

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| **Subject**  **Year** | Design and Technology  Yr8 | *Overview/rationale & statement of importance – what learners can expect to gain from studying this subject this year*  In Year 8, pupils will continue to follow the design process and be introduced to design theory, styles and movements. They will use the iterative concept of design introduced in Yr7, by making models and templates and being able to change these in order to improve their designs. In addition, pupils will also be aware of how design and technology is important in the wider world by introducing pupils to industrial manufacturing methods (vacuum forming), how professional designers communicate their designs to clients and building on knowledge and understanding of mechanical systems. | | | | |
| **No of weeks/lessons** | 15 | 6 | 6 | 5 | 7 |  |
| **Unit Title** | Memphis / Pop Art Clock | Chocolate Wrapper Design | Chocolate Bar Design | Drawing Techniques | Mechanism Project |  |
| **Objective** | Aim is to produce a clock based on the Memphis Design Movement. Pupils are to use their knowledge of materials, making skills and processes used in years seven and eight in order to complete this project. | Aim to introduce pupils to Industry and Enterprise through brand identity and marketing. Covering logos, fairtrade, sustainability and environmental packaging symbols. | To make a chocolate bar mould and to investigate how to apply a commercial manufacturing process to their work. | To introduce isometric and 2-point perspective drawings | To introduce mechanisms, levers and linkages in the form of a project |  |
| **Iterative Links** | Links to photo frame and Alessi project from Yr7, building on knowledge of design and make projects | Pupils build on knowledge from Sweetie Pie project in Yr7. | Adding pupils knowledge of forming and reforming polymers | Pupils to use their chocolate bar moulds to create their presentational drawings | Building on the lazy tongues project from Yr7 |  |
| **Knowledge & Understanding** | Knowledge of materials and how to use the power tools (hegner saws, pillar drills and disc sander)  Health and Safety rules when using equipment | Industry and Enterprise through brand identity and marketing. Covering logos, fairtrade, sustainability and environmental packaging symbols.  Understanding nutritional values | Vacuum forming process  How to make a successful former and mould. | To be able to use the isometric underlay and appropriately develop their drawing skills. | Knowledge of mechanisms and where these are used in everyday products  Types of motion  Types of mechanical systems |  |
| **Skills** | Deigning skills and applying a theme – working from a brief  Making skills and applying h&s rules  Critically evaluate through a Big Write | Designing logos  Applying colour theory  Lettering styles  Communicating a theme to specific audience | Making skills  Selecting appropriate tools and equipment | Presentation drawing skills  Using correct equipment | Applying theoretical mechanical principles to a product  Making skills |  |
| **Literacy** | Big Write, key words and subject terminology | Slogans  Persuasive advertising  Under | Subject terminology to describe the vacuum forming process |  | Key words and terminology |  |
| **Numeracy** | Measurements in mm  Scale – producing a scale drawing  Proportion | Scale for lettering and logos | Measurements to make the former and match the size of the wrapper | Potentially scaled drawings | Calculating equilibrium  Gear ratios |  |
| **Assessment** | Designing Assessment  Making Assessment  Peer assessment on Big Write | Design assessment | Theory:  Vacuum forming process and mould. | Outcome of drawing | Mechanical system assessment test |  |
| **Cross-curricular** | * Maths * English * Science * Citizenship (health and safety) | Business Studies  Social Sciences  Geography  English | Science  Maths  English | Art  Maths | Science  Maths  English  Art |  |