## **S3 GRAPHIC COMMUNICATION**

|                                  | Project Plan   | Resources  | Skills  | K & U  | Homework   | Assessment  | Benchmarks  |  |  |
|----------------------------------|--|--|---|--|--|---|---|--|--|
| CORK PALS (CAD intro)<br>3 weeks | <ul> <li>Introduction to the S3 GC course.<br/>Pupils will use 3D modelling and<br/>sketching skills to design and 3D<br/>print a toy that uses a cork.</li> <li>Lesson 1: discussion on orthogrphics<br/>- sketch and dimension the standard<br/>component.</li> <li>Lesson 2: Design the animal around<br/>the cork. Use the mood board<br/>provided.</li> <li>Lesson 3: Create the cork pal on<br/>inventor.</li> <li>Lesson 4: Create a drawing of the<br/>components, assembly and create an<br/>exploded view.</li> </ul>  | <ul> <li>Exemplar cork pals</li> <li>Exemplar work: demos<br/>done in class <ul> <li>Modelling plan</li> </ul> </li> <li>Step by step for opening<br/>inventor files</li> <li>Step by step on how to<br/>create a drawing</li> </ul>   | <ul> <li>Orthographic sketching <ul> <li>Dimensioning preliminary sketches</li> <li>Rendering in 2D (Markers)</li> </ul> </li> <li>3D modelling from a drawing/ modelling plan</li> <li>Creating dimensioned CAD drawings.</li> <li>Creating orthographic, pictorial and exploded drawings</li> </ul>                 | <ul> <li>Line types: construction v outlines</li> <li>3<sup>rd</sup> angle projection</li> <li>Dimensions: length, diameter, radius.</li> <li>How light impacts an object - where to apply shadows and highlights.</li> <li>CAD features: extrude, extrude subtract, taper extrude subtract, taper extrude, plane creation, fillets, chamfer.</li> <li>Drawing types: orthographic, isometric, exploded view, section view.</li> </ul> | <ul> <li>Identifying ortho views</li> <li>Modelling plan/ question</li> </ul>                                    | Hand in via assignments<br>Self assessment  | BGE:<br>TCH 4.11a Represent<br>concepts using graphic<br>media.<br>ENG 4.28a Describing<br>events/ opinions<br>MNU 4.11 measurement |  |  |
| PLUG & PLAY<br>6 weeks           | <ul> <li>Pupils will use creativity, ortho<br/>sketching and 3D modelling skills to<br/>create a range of modular toys based<br/>on a theme and a joining/ plugging<br/>method.</li> <li>Lesson 1: brief analysis, create a<br/>mind map exploring possible items.</li> <li>Create a mood board using images<br/>from the Internet relating to the<br/>association words.</li> <li>Lesson 2: Ideation using orthographic<br/>views working towards a modelling<br/>plan. Explore modular components.</li> <li>Lesson 3: Create and assemble<br/>components using Inventor.</li> <li>Lesson 4: Create an assembled and<br/>exploded view of the final model.</li> <li>Lesson 5: Create drafts and final<br/>promor graphic for the 3D model.<br/>Include a title and extended text</li> </ul> | <ul> <li>Brief</li> <li>exemplar project</li> <li>skill builders/ resources<br/>to support orthographic<br/>drawing, modelling plans<br/>and 3D modelling.</li> <li>Step by step setting up a<br/>drawing page/ saving a<br/>template.</li> <li>Step by step on creating<br/>an exploded view.</li> <li>Step by step on saving<br/>as an STL.</li> </ul> | <ul> <li>Orthographic sketching<br/>and dimensioning</li> <li>Creativity in the use of<br/>mood boards/ mind<br/>maps to generate ideas</li> <li>Problem solving using<br/>modelling skills and a<br/>joining method to find a<br/>solution to a brief</li> <li>3D modelling from a<br/>dimensioned sketch</li> </ul> | <ul> <li>BSI dimensions <ul> <li>CAD/ CAM</li> </ul> </li> <li>File types: ipt, ipg, stl</li> <li>Orthographic views and their relation to each other</li> </ul> <li>3D modelling techniques an how they are used to create physical products <ul> <li>The advantages and disadvantages of 3D modelling/ 3D printing.</li> </ul></li>  | <ul> <li>3D modelling - basic<br/>forms.</li> <li>Identifying orthographic<br/>views and dimensioning</li> </ul> | <ul> <li>Final model drawings<br/>and renders submitted<br/>via assignments.</li> <li>Written assessment that<br/>covers: <ul> <li>3D Modelling</li> <li>Orthographic views</li> <li>Measuring and<br/>dimensioning</li> <li>The advantages/<br/>disadvantages of 3D<br/>modelling/ Printing</li> </ul> </li> </ul> | BGE:<br>TCH 4.11a Represent<br>concepts using graphic<br>media.<br>ENG 4.28a Describing<br>events/ opinions<br>MNU 4.11 measurement |  |  |

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| MINIMAL MOVIE POSTER<br>(Intro)<br>4 weeks | Pupils will use their knowledge of<br>hierarchy, colour theory and basic<br>principles to create minimal movie<br>posters. Assets will be provided.<br>Lesson 1<br>Brief Analysis<br>Colour Theory<br>Choose a background colour for the<br>graphic.<br>Lesson 2<br>Font Types<br>Choose a font/ typeface for the title<br>Bring in assets<br>Lesson 3<br>How hierarchy can be created in a<br>graphic.<br>Use hierarchy to layout graphic<br>elements<br>Lesson 4-6<br>Developing a graphic through textures<br>and principles | Movie Briefs<br>Assets for each movie<br>Textures<br>K & U PP on colour theory,<br>fonts and hierarchy<br>Example graphics to<br>analyse based on the K & U | line, transparency, add/<br>subtract/ intersect/ exclude,<br>text size, text colour.<br>Creativity:<br>Word association and<br>connotations to influence an<br>aesthetic.<br>Graphic analysis:<br>Identify/ explain/ justify how   | DTP Commands:<br>transparency, add/ subtract/<br>intersect/ exclude, resize/<br>change fonts, nodes,<br>shadow tool, square crop.<br>Colour theory:<br>warm/ cold, receding/<br>advancing, contrasting/<br>harmonising, primary/<br>secondary/ tertiary, colour<br>connotations<br>Typefaces and connotations<br>Elements & Principles:<br>hierarchy, dominance,<br>contrast/ harmony, unity | Homework 1:<br>Colour Theory - complete in<br>jotter<br>Homework 2:<br>Typeface and elements &<br>principles | su |
| BRANDING<br>6 weeks                        | <ul> <li>Pupils will use their own and existing elements to create a logo and brand identity for a given brief.</li> <li>Lesson 1: Brief analysis - identify the client needs and represent these using a mood board that identifies the customer and an aesthetic.</li> <li>Lesson 2: logo design and development.</li> <li>Lesson 3: digitise logo and experiment in context.</li> <li>Lesson 4: Apply a related aesthetic across a variety of services that communicate the brand in different ways.</li> </ul>              | <ul> <li>Exemplars of each stage</li> <li>Powerpoint/ brief</li> <li>Texture assets</li> <li>Font assets</li> <li>Product assets</li> </ul>                 | <ul> <li>Preliminary sketching<br/>using geometry and<br/>negative space to create<br/>logos.</li> <li>Preliminary sketches to<br/>plan out</li> <li>Using DTP software<br/>including manipulating<br/>shapes ,colours,<br/>shadows, pen tool and<br/>transparency.</li> </ul> | <ul> <li>Elements and principles         <ul> <li>hierarchy, alignment,<br/>unity, depth, contrast/<br/>harmony, dominance,<br/>pattern.</li> <li>Colour theory -<br/>relationship to products/<br/>companies</li> <li>DTP edits:<br/>transparency, square<br/>crop, full crop, shadow,<br/>colour fill, colour line,<br/>pen tool</li> </ul> </li> </ul>                                    | Identify the DTP edit that<br>has impacted an element  | Id |

| Assessment  | Benchmarks  |
|---|---|
| Graphic analysis -<br>annotated final graphic<br>bmitted via assignments.   | BGE:<br>TCH 4.11a Represent<br>concepts using graphic<br>media.<br>ENG 4.28a Describing<br>events/ opinions |
| entify the impact of DTP<br>edits on a graphic<br>ligital hand in via Teams | BGE:<br>TCH 4.11a Represent<br>concepts using graphic<br>media.   |

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| THE ARCHITECT<br>6 weeks | From a given brief pupils will<br>develop and range of drawing<br>skills and knowledge based on<br>the theme of architecture. Pupils<br>will produce a design proposal<br>from preliminary to promotional<br>drawings of a house extension<br>for a given client. The task will<br>be a mixture of independent and<br>group work.   | <ul> <li>Drawing Boards &amp; equipment</li> <li>Isometric/ orthographic drawings</li> <li>Tracing/ marker paper</li> <li>Home styler</li> </ul>                 | <ul> <li>Orthographic/ pictorial sketching</li> <li>Orthographic/ pictorial drawing</li> <li>Using DTP software to crate a graphic with visual impact</li> <li>Idea generation - mood board</li> </ul> | The role of the architect<br>Drawing types- orthographic/<br>isometric<br>Drawing symbols/ icons<br>Dimensioning<br>DTP edits<br>Elements and principles:<br>hierarchy                                | Orthographic sketching<br>Drawing symbols and<br>conventions   | Written assessment - DTP<br>edits, drawing conventions,<br>orthographic/ pictorial types.<br>Drawing types.<br>Assignment hand in via<br>Teams | BGE:<br>TCH 4.11a Represent<br>concepts using graphic<br>media.<br>ENG 4.28a Describing<br>events/ opinions<br>MNU 4.11 measurement              |
| INFO GRAPHICS<br>4 weeks | <ul> <li>Pupils will identify an opportunity to create a series of infographics that convey a variety of information.</li> <li>Lesson 1: Graph types and where we may see info graphics.</li> <li>Lesson 2: identify an opportunity for a info graphic.</li> <li>Lesson 3: thumbnail sketches and planning.</li> <li>Lesson 4-7: create information graphics - poster, TV, Instagram post etc.</li> </ul> | <ul> <li>A3 paper, pens, pencils, rulers.</li> <li>DTP software</li> <li>Powerpoint for K &amp; U that covers the types of graphs.</li> <li>Exemplars</li> </ul> | <ul> <li>Information sketching -<br/>ideas for digital and print.</li> <li>DTP</li> <li>Elements and principles:<br/>hierarchy, dominance,<br/>contrast/ harmony.</li> </ul>                           | <ul> <li>Advantages/<br/>disadvantages of<br/>thumbnails</li> <li>Graph types</li> <li>The role of infographics<br/>in the world of work</li> <li>Typeface/ fonts - san<br/>serif v serif.</li> </ul> | <ul> <li>Identifying and reading graphs.</li> <li>Graph hunt: find and photograph/ write down where and when you see a graph.</li> </ul> | End of year assessment<br>Assignment hand in via<br>teams.   | BGE:<br>TCH 4.11a Represent<br>concepts using graphic<br>media.<br>ENG 4.28a Describing<br>events/ opinions<br>MNU 4.20 Analysing graphi<br>data |