## **Design Technology Year 10**

| We will be learning about  |   |                                      |    |               |             |                    |                    |                     |  |
|--|---|--------------------------------------|----|---------------|-------------|--------------------|--------------------|---------------------|--|
| During this unit you will be learning about where designers find gaps in the market for products and |   |                                      |    |               |             |                    |                    |                     |  |
| how we can address opportunities forward design. Students will learn how to understand the           |   |                                      |    |               |             |                    |                    |                     |  |
| context and research appropriate information to directly steer a project to success. Students will   |   |                                      |    |               |             |                    |                    |                     |  |
| learn a variety of communication techniques to convey their design ideas and choices through         |   |                                      |    |               |             |                    |                    |                     |  |
| written annotation, graphic design and physical modelling.   |   |                                      |    |               |             |                    |                    |                     |  |
| Key Vocabulary   |   |                                      |    |               |             |                    |                    |                     |  |
| Stakeh   | takeholde Inclusivi Renderi Conventio Ergonomi Anthropometri  |                                      |    |               |             |                    |                    | Orthographic        |  |
| rs   |   | ty                                   | ng | ns            | CS CS       |                    |                    |                     |  |
| Wee  | Key   | work                                 |    |               |             |                    |                    |                     |  |
| k  | <b>,</b>  |                                      |    |               |             |                    |                    |                     |  |
| 1  | Stakeholders who are they?  |                                      |    |               |             |                    |                    | Seneca              |  |
|  | • Design briefs.  |                                      |    |               |             |                    |                    | learning and        |  |
|  | People specifications   |                                      |    |               |             |                    |                    | worksheet from      |  |
|  | Inclusivity   |                                      |    |               |             |                    |                    | presentation        |  |
| 2  | Exploring potential design ideas     Information on   |                                      |    |               |             |                    |                    |                     |  |
|  | <ul> <li>Investigating the current market what solutions are available.</li> <li>Designed to solve a specific problem.</li> </ul> |                                      |    |               |             |                    |                    | existing user for a |  |
|  | •   | chosen problem                       |    |               |             |                    |                    |                     |  |
|  | market research and data presentation   |                                      |    |               |             |                    |                    |                     |  |
|  | primary and secondary data and how it can be used.  |                                      |    |               |             |                    |                    |                     |  |
| 3  | Initial ideas sketching   |                                      |    |               |             |                    |                    | Printed worksheet   |  |
|  | Crating   |                                      |    |               |             |                    |                    | to practice skills  |  |
|  | Application of colour, shade, and tone  |                                      |    |               |             |                    |                    |                     |  |
|  | rendering for depth and texture   |                                      |    |               |             |                    |                    |                     |  |
|  | effective annotation to communicate design ideas and     choices  |                                      |    |               |             |                    |                    |                     |  |
| 4  | choices.     Single point perspective     Research imagery  |                                      |    |               |             |                    |                    |                     |  |
| 4  | Two-point perspective   |                                      |    |               |             | and shop lettering |                    |                     |  |
|  |   | <ul> <li>Oblique drawings</li> </ul> |    |               |             |                    | and shop lettering |                     |  |
| 5  |   |                                      |    |               |             |                    |                    | Isometric drawing   |  |
|  | accurately.   |                                      |    |               |             |                    |                    | of a product at     |  |
|  | <ul> <li>Creating a page setup which facilitates third angle of the</li> </ul>  |                                      |    |               |             |                    |                    | home to show        |  |
|  | graphic, use of set squares to produce accurate three plane variation.  |                                      |    |               |             |                    |                    |                     |  |
|  | drawings.   |                                      |    |               |             |                    |                    |                     |  |
|  | Combination of conventions to produce own design idea   |                                      |    |               |             |                    |                    |                     |  |
| 6  | <ul> <li>Presentation of and linking of all core topic</li> <li>Extended writing construction of people and problem</li> </ul>    |                                      |    |               |             |                    |                    | Research for        |  |
|  |   |                                      |    |               |             |                    |                    | individual project, |  |
|  | Developments in design cycles   |                                      |    |               |             |                    |                    | focus on materials  |  |
| -  |   |                                      |    |               |             |                    |                    | and finishes        |  |
| 7  | Health and safety and workshop  |                                      |    |               |             |                    |                    | Seneca learning for |  |
|  | Safe use of modelling tools and equipment     Madelling using cord  |                                      |    |               |             |                    |                    | ergonomics and      |  |
|  | <ul><li>Modelling using card.</li><li>Developing design ideas using blue foam</li></ul>   |                                      |    |               |             |                    | anthropometrics    |                     |  |
|  | <ul> <li>Developing design deas using blue roam</li> <li>Using modelling clay to develop ergonomics.</li> </ul>                   |                                      |    |               |             |                    |                    |                     |  |
| L  | •   | USING II                             |    | ay to develop | ergonomics. |                    |                    |                     |  |

## **Enrichment opportunities:**

Students do have the option to attend catch up sessions if needed during lunchtimes or after school if they feel they need more time and support on their practical product.

## How can you help?

Parents can support their child in DT by talking to them about the project they are undergoing and encourage them to do their best. It is also helpful if students are provided with a quiet place to do their homework tasks. Excellent links can be found on the internet such as

www.technologystudent.com

www.senecalearning.com

www.bbc.co.uk/bitesize/subjects then selecting Design Technology.

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