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**Knowledge Rich Curriculum Plan**

GCSE Design Core

Specialist Technical Principles - 3.1 Investigation, primary and secondary data



| **GCSE Design Core** | **Specialist Technical Principles  3.1 Investigation, primary and secondary data** |  |  |  |
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| **Lesson/Learning Sequence** | **Intended Knowledge:**  *Students will know that…* | **Tiered Vocabulary** | **Prior Knowledge:**  *In order to know this students, need to already know that…* | **Assessment** |
| **Lesson:**  **Primary and secondary research** | * Students will know the term Primary data * Students will know that Primary data refers to information gathered by yourself * Students will know the term Secondary data * Students will know the term Secondary data refers to information gathered by others * Students will know how research is used in Design and Technology | Research: the systematic investigation into and study of materials and sources in order to establish facts and reach new conclusions.  Primary: Data that has been generated by the researcher himself/herself, surveys, interviews, experiments, specially designed for understanding and solving the research problem at hand.  Secondary: research data that has previously been gathered and can be accessed by researchers. | * ***Students will already know that research is an important part of DT*** * ***Students will already know how to gather information*** * ***Students will already know methods of gathering different information*** | How can the use of primary and secondary data help inform a designer’s decisions?  Compare the two different types of research, how are they different? |
| **Lesson:**  **Ergonomics** | * Students will know the term ergonomics * Students will know that ergonomics defines how designers design products to best suit the client * Students will know examples of how ergonomics is used. * Students will examine products which have clear ergonomics in their design * Students will experience ergonomics by designing themselves | Client: A customer is someone who buys products or services from a company, while a client refers to a certain type of customer who purchases professional services from a business.  Ergonomics: the study of people's efficiency in their working environment. | * ***Students will already know how to design*** * ***Students will already know that products are curved and shaped for comfort*** * ***Students will already know that products are comfortable and not comfortable*** | What are the benefits of designing a product around ergonomics?  Can the use of ergonomics help develop a product? |
| **Lesson:**  **Anthropometrics** | * Students will know the term anthropometrics * Students will know that anthropometrics refers to a set of measurements used to determine the size and shape of a products * Students will know examples of anthropometrics * Students will know examples of anthropometrics are foot size, hand size, height, and width etc * Students will experience how anthropometric data is collected and applied | Anthropometrics: anthropometry, especially as it relates to the design of furniture and machinery. | * ***Students will already know products such as clothing comes in various size*** * ***Students will know different products are available in different sizes*** * ***Students will already know that designers measure aspects of the human body*** | Compare anthropometrics and ergonomics. How do designers use these terms?  How important is the data used for anthropometrics? |