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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? |