Long Term Plan Subject: Product Design Year: 10

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| **Term** | **Topic (s)** | **Assessed Work** | **Additional details** |
| Term 1 a(\_weeks) | History of DesignInvestigation into different design styles and noted designers.Product EvolutionTech push – Market pullPaper & Card as materials – Stock sizes | Design & Make project:Acrylic Bangle in the style of…..Use design influencesCAD design – plastic moulding | Use exam questions to check learning and develop skillsEncourage visit to WM gallery |
| Term 1 b(\_weeks) | Packaging design – Purpose of – types of.Printing methodsDie cuttingClassic design – design classicsRetro design | D&M project continues.D&M task to make packaging for bangle. | Drawing techniques- 2d and 3dUse of CADCollect example images |
| Term 2 a(\_weeks) | Consumer issues – quality – standardsBranding and AdvertisingSafety & Risk assessmentMaterials – Wood / Metal / Plastic. Types and properties | D&M Project: MP3 amplifier / speaker.Design through modellingConstruct an electronic circuit | Collecting examples.Product analysis.Investigate use of materials outside the classroom. |
| Term 2 b(\_weeks) | Human factors – Ergonomics and Anthropometrics.Smart & New MaterialsSustainability – Green Design – The six R’s. Carbon footprint. Product life cycleProduct maintenance. | Continue with D&M taskFinishing techniques.Using the vinyl cutter.Spray paint. | Product analysis of electronics products. |
| Term 3 a(\_weeks) | Commercial production. Scales of production – Batch and mass production.Standard componentsQC & QAICT in manufacturing – JIT & CIM | Practice exam questionsDevelop understanding of design theme and question 1 for exam. | Research into exam theme – collect material |
| Term 3 b(\_weeks) | Investigation and planning of CA task.Prep for Y10 examsTarget market planning | Develop styles of folderDevelop understanding of project mark scheme | Modelling of ideas to show TM. |