

Design and Technology – Concept Map

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|  | Early Years | Year 1&2 | Year 3&4 | Year 5&6 |
| Critical Evaluation  Test/evaluate  Improve | * Looking at products * Who is it for? * What is it? * What is similar to it? * Is it a good idea?   All | * To investigate current products in a practical way. * To learn about famous inventors and the products they invented and why.   and | * Investigate current products from primary and secondary sources. Make suggestions for improvement. * To relate experiences to products. * Who are the inventors of specific products? * Comparing products and evaluating what good features are.   Including | * To identify and learn about a range of significant designers of vehicles/food/architecture etc. * To evaluate current products and suggest viable improvements * To consider why products change over time due to –money, safety, opp   Food |
| Purpose/Audience and Design | * Use CP to develop * What have you made? * Who is it for? * What is it made from? * Can you tell anyone about it? | * Develop a clear idea of purpose and audience * Design a product using simple sketches and explanations * To present ideas to others using sketches and discussions | * Develop clear plans of designs and use sketches to communicate these * Make suggestions of different materials that could be used * To present ideas to others using a range of media | * Use design to make a product fit for purpose and for a specific audience * Use annotated sketches and diagrams to communicate ideas * Present ideas and designs to others using a range of media |
| Making/Technical Knowledge  Cultural Understanding | * Selecting tools and materials appropriate for tasks. * Explain choices made to construct a product based on characteristics * Make product stronger, stiffer and more complex * Safety and accuracy | * Selecting tools and materials appropriate for tasks. * Explain choices made to construct a product based on characteristics * Make product stronger, stiffer and more complex * Safety and accuracy | * Selecting tools and materials appropriate for tasks. * Explain choices made to construct a product based on characteristics * Make product stronger, stiffer and more complex * Safety and accuracy | * Selecting tools and materials appropriate for tasks. * Explain choices made to construct a product based on characteristics * Make product stronger, stiffer and more complex * Safety and accuracy * Incorporate electrical systems into designs - bulbs |
| Vocabulary | Technology  Purpose and uses  colour, design, texture, form and function  simple models and drawings  Build structures, joining  components  healthy diet  cooking measuring weighing mix stir  scissors hole pinches  hinges, wheels and axles.  saw or hammer. | Assemble, measure, mark out, cut and shape – evaluate, purpose and audience  sawing, joining, shaping, finishing  Observation, drawing and modelling  levers, cogs, wheels, sliders and axels.  *scissors hole punch*  sewing  food handling, hygienic practices and personal hygiene | purpose and the user/s, research  labelled drawings  planning and Proto-types  To explore, develop and communicate design proposals and evaluate  measure, mark out, cut, score  assemble components  accuracy, tape, pin, cut join  pulleys, wheels, axels and levers.  Fabric  sew - different stitches  weave and knit  food hygiene | generate ideas, identify a purpose  research appearance and function. planning  labelled drawings, cross sections and exploded diagrams  design proposals - proto-types, ICT mock ups.  measure and mark out accurately  assemble components  pulleys, wheels, axels and levers.  Bulbs, series circuits, switches, buzzers and motors  pin, sew and stitch |