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|  | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
| YEAR 1 | **Generating Ideas**   * Think of own ideas for design. * Use pictures and words to plan. * Design a product for myself, following design criteria. | | | | | |
| **Making**   * Explain what is being made and why. * Select appropriate tools and equipment for the purpose. | | | | | |
| **Evaluating**   * Talk about pre-existing products, saying what is good or bad about them. * Say whether their product does what it is meant to (fits the design brief) and how it could be improved. | | | | | |
| **Construction/mechanisms**   * Know about movement of simple mechanisms such as levers, sliders, wheels and axels. * Use sheet materials and construction tools with appropriate supervision – various junk modelling equipment, scissors and glue/tape. | | **Textiles**   * Cut, then join textiles using glue. * Decorate using a range of items (buttons, sequins, beads, ribbons etc), using glue. | | **Food technology**   * Know how to peel, cut, grate, mix and mould foods (with close supervision). | |
| YEAR 2 | **Generating Ideas**   * Think of own ideas and pan what to do next. * Describe designs using pictures, diagrams, models, mock-ups, words and ICT. * Design a product for myself and others, following design criteria. | | | | | |
| **Making**   * Explain what is being made and why the audience will like it. * Choose appropriate tools and equipment, describing and explaining why they ate being used. | | | | | |
| **Evaluating**   * Describe how their own and pre-existing products work, evaluating what went well and what could be done differently. * Suggest what went well and what would be done differently when evaluating their own product. | | | | | |
| **Construction/mechanisms**   * Know about movement of simple mechanisms such as levers, sliders, wheels and axels. * Use sheet materials and construction tools with appropriate supervision - cardboard, scissors and glue/tape. | | **Food Technology**   * Know how to peel, cut, grate, mix and mould foods (with supervision). | | **Textiles**   * Cut, then join textiles using a simple running stitch or over sewing. * Decorate using a range of items (buttons, sequins, beads, ribbons etc). | |
| YEAR 3 | **Generating Ideas**   * Create a design that meets a range of requirements. * Consider the equipment and tools needed when planning * Describe a design using an accurately labelled diagram, and in words. | | | | | |
| **Making**   * Use a range of tools and equipment accurately. * Measure, mark out, assemble and join materials and components with accuracy. | | | | | |
| **Evaluating**   * Evaluate own and pre-existing products. * Suggest what could be changed to improve a design, beginning to link this to the design brief. | | | | | |
| **Food Technology**   * Know how to peel, cut, grate, mix, mould and begin to cook foods (using toasters and microwaves with supervision). | | **Construction/mechanisms**   * Know about movement of simple mechanisms such as levers and linkages. * Use sheet materials and construction tools with appropriate supervision – wood, saws, glue/tape. | | **Textiles**   * Cut, then join textiles using a running stitch, over sewing, back stitch or fastenings. * Understand seam allowances. | |
| YEAR 4 | **Generating Ideas**   * Generate more than one idea for how to create a product. * Gather information to help design a successful product (e.g. asking others’ views). * Produce a detailed plan with labelled diagrams, a written explanation and a step-by-step guide. * Suggest improvements to develop and refine a planned idea. | | | | | |
| **Making**   * Use a range of tools and equipment with accuracy. * Measure, mark out, join, assemble materials and components with accuracy. | | | | | |
| **Evaluating**   * Evaluate the appearance and usability of own and pre-existing products. * Explain how the original design could be improved, considering the appearance and usability and linking this to the design brief. | | | | | |
| **Food Technology**   * Know how to peel, cut, grate, mix, mould and begin to cook foods (using toasters and microwaves with supervision). | | **Textiles**   * Cut, then join textiles using a running stitch, over sewing, back stitch or fastenings. * Understand seam allowances, create simple patterns and appropriate decoration techniques (e.g. applique). | | **Construction/mechanisms**   * Know about movement of simple mechanisms such as levers and linkages. * Use sheet materials and construction tools with appropriate supervision – wood, saws, glue (inc glue guns with support)/tape. | |
| YEAR 5 | **Generating Ideas**   * Generate a range of ideas after collating relevant information * Produce a detailed plan with step-by-step instructions, cross sectional diagrams and prototypes. * Suggest alternative plans, considering the positive aspects and drawbacks of each. | | | | | |
| **Making**   * Use a range of tools and equipment expertly. * Consider the aesthetic qualities and functionality of my work when making. | | | | | |
| **Evaluating**   * Evaluate the appearance and function of a product (own and pre-existing) against the original criteria, saying whether it is fit for purpose. * Suggest improvements that could be made, considering materials and methods that have been used. | | | | | |
| **Textiles**   * Pin and tack fabrics, use patterns and seam allowances and join fabrics to make products. | | **Construction/mechanisms**   * Understand how mechanical system such as cams, pulleys or gears create movement. * Use sheet materials and construction tools with appropriate supervision – wood, saws, nails, hammers. | | **Food Technology**   * Cut, mix, mould and use hobs to heat food, with appropriate supervision. | |
| YEAR 6 | **Generating Ideas**   * Use a range of information to inform design (e.g. market research using surveys, interviews, questionnaires or web-based resources). * Produce a detailed plan, with cross-sectional diagrams and computer generated designs. * Work within constraints, refining and justifying plans as necessary. | | | | | |
| **Making**   * Use a range of tools and equipment precisely. * Consider the aesthetic qualities and functionality of my product as making it, refining details as necessary. | | | | | |
| **Evaluating**   * Evaluate the appearance and test the function of a product (own and pre-existing) against the original criteria, saying whether it is fit for purpose. * Suggest improvements that could be made, considering materials, methods, sustainability of the product and how much a product costs to make. | | | | | |
| **Textiles**   * Pin and tack fabrics, use patterns and seam allowances and join fabrics to make quality products. | | **Construction/mechanisms**   * Understand how mechanical system such as cams, pulleys or gears create movement. * Use sheet materials and construction tools with appropriate supervision – wood, saws, hammers, drills, nails and screws. | | **Food Technology**   * Cut, mix, mould and use hobs to heat food, developing independence with this as appropriate. | |