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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.

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| **Making*** Explain what is being made and why.
* Select appropriate tools and equipment for the purpose.

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| **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.
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| **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).
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| 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.

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| **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.
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| **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.
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| **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).
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| 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.

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| **Making*** Use a range of tools and equipment accurately.
* Measure, mark out, assemble and join materials and components with accuracy.
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| **Evaluating** * Evaluate own and pre-existing products.
* Suggest what could be changed to improve a design, beginning to link this to the design brief.
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| **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.
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| 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.

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| **Making*** Use a range of tools and equipment with accuracy.
* Measure, mark out, join, assemble materials and components with accuracy.
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| **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.
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| **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.
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| 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.
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| **Making*** Use a range of tools and equipment expertly.
* Consider the aesthetic qualities and functionality of my work when making.
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| **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.
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| **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.
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| 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.

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| **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.
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| **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.
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| **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.
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