Development of DT at George Spicer

| Year Group | Generating ideas | Making | Evaluating | Food and nutrition | Construction | Textiles | Mechanisms |
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| 6 | Use a range of information to inform a design (i.e. 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. | Use a range of tools and equipment precisely. Consider the aesthetic qualities and functionality of my product as making it, refining details as necessary. | Evaluate the appearance and test the function of a product (own and preexisting) 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. | Cut, mix, mould and use hobs to heat food, developing independence with this as appropriate. | Use sheet and construction materials appropriately. | Pin and tack fabrics, use patterns and seam allowances and join fabrics to make quality products. |  |
| 5 | Generate a range of ideas after collating relevant information (i.e. users' views). Produce a detailed plan, with step-bystep instructions, crosssectional diagrams and prototypes. Suggest alternative plans, considering the positive aspects and drawbacks of each. | Use a range of tools and equipment expertly. Consider the aesthetic qualities and functionality of my work when making. | 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 | Cut, mix, mould and begin to use hobs to heat food with appropriate supervision. | Use sheet and construction and materials appropriately. |  | Understand how mechanical systems such as cams, pulleys or gears create movement. |
| 4 | Generate more than one idea for how to create a product. Gather information to help design a successful product (i.e. by asking others' views). Produce a detailed plan with labelled diagrams, a written explanation | Use a range of tools and equipment with accuracy. Measure, mark out, join, assemble materials and components with accuracy. |  | Know how to peel, cut, grate, mix, mould and begin to cook foods (using toasters and microwaves with supervision). | Use sheet materials and construction tools with appropriate supervision. | Cut, then join textiles using a running stitch, over sewing, back stitch or fastenings. Understand seam allowances, create simple patterns and appropriate decoration |  |


|  | and step-by-step guide. Suggest improvements to develop and refine a planned idea. |  |  |  |  | techniques (e.g. applique). |  |
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| 3 | 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. | Use a range of tools and equipment accurately. Measure, mark out, assemble and join materials and components with some accuracy. | Evaluate own and preexisting products. Suggest what could be changed to improve a design, beginning to link this to the design brief. | Know how to peel, cut, grate, mix, mould and begin to cook foods (using toasters and microwaves with supervision). | Use sheet materials and construction tools with appropriate supervision |  | Know about movement of simple mechanisms such as levers and linkages. |
| 2 | Think of own ideas and plan 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. Work confidently in a range of contexts (imaginary, home, school, wider community, storybased etc). | Explain what is being made and why the audience will like it. Choose appropriate tools and equipment, describing and explaining why they are being used. | 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. | Know how to peel, cut, grate, mix and mould foods (with supervision). Use sheet materials and construction tools with appropriate supervision. | Cut, then join textiles using a running stitch, over sewing or glue. Decorate using a range of items (buttons, sequins, beads, ribbons etc). |  |
| 1 | Think of own ideas for design. Use pictures and words to plan. Design a product for myself, following design criteria. Work in a range of contexts (imaginary, home, school, wider community, storybased). | Explain what is being made and why. Select appropriate tools and equipment for the purpose. Know how to peel, cut, grate, mix and mould foods (with close supervision). | Talk about own and 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. | Know how to peel, cut, grate, mix and mould foods (with close supervision). | Use sheet materials and construction tools with appropriate supervision. |  | Know about movement of simple mechanisms such as levers, sliders, wheels and axels |
| R | Think of own ideas/ offer children options | Explain what is being made and why. | Talk about own and pre-existing products, | Cut, mix, peel and mould a range of | During continuous provison, children can | Begin to experiment and explore textiles | Exploring the concept of levers, gears, |



