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| Design and Technology enquiry | Programme of study  | Knowledge  | Vocabulary  |
| * Use research and criteria to develop products which are fit for purpose **(National Curriculum Objective)**
* Use annotated sketches and prototypes to explain ideas **(National Curriculum Objective)**
* Evaluate existing products and improve own work **(National Curriculum Objective)**
* Use mechanical systems in own work **(National Curriculum Objective)**
* Understand seasonality; prepare and cook mainly savoury dishes **(National Curriculum Objective)**
 | Design* Can they come up with a range of ideas after they have collected information?
* Do they take a user’s view into account when designing?
* Can they produce a detailed step-by-step plan?
* Can they suggest some alternative plans and say what the good points and drawbacks are about each?
 | Cooking* Can they describe what they do to be both hygienic and safe?
* How have they presented their product well?

  | Purposeful, functional, product, design, idea, model, generate, communicate, tools, materials, evaluate. Build, improve, food, stronger, stiffer, stable, mechanisms, levers, sliders, wheels, axels, make, cooking, textiles, construction, plan, choose, diagram, components, prototypes, purpose, annotated, mechanical, seasonality, prepare, savoury, criteria, quality, conscience, expertise, collected, views/ viewpoint, step-by-step, drawbacks, audience, expertly, persevere, process, evaluate, function Explain, pictures, cut, safely, hygiene, surfaces, decorate, gluing, feeling of texture, movement, scissors, structure, drawing, ingredients, measure, join, cut, Add design, product, folding, joining, stronger, incorporate.Requirements, equipment, labelled sketch, realistic, attractive product, appearance, qualities, electrical components, techniques, present, strong, template, circuits, altered, confident, awareness of audience. Switch, incorporate, refine, testing, precise, hydraulics, pneumatics, motivated |
| Make* Can they explain why their finished product is going to be of good quality?
* Can they explain how their product will appeal to the audience?
* Can they use a range of tools and equipment expertly?
* Do they persevere through different stages of the making process?
 | Textiles * Do they think what the user would want when choosing textiles?
* How have they made their product attractive and strong?
* Can they make up a prototype first?
* Can they use a range of joining techniques?
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| Evaluate* Do they keep checking that their design is the best it can be?
* Do they check whether anything could be improved?
* Can they evaluate appearance and function against the original criteria?
 | Electrical and mechanical * Can they incorporate a switch into their product?
* Can they refine their product after testing it?
* Can they incorporate hydraulics and pneumatics?
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| Materials- flexible and rigid* Are their measurements accurate enough to ensure that everything is precise?
* How have they ensured that their product is strong and fit for purpose?
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| Materials- mouldable* Are they motivated enough to refine and further improve their product using mouldable materials?
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| Extensions |
| Technical knowledge | Cooking and nutrition |  | Cultural Capital  |
| * apply their understanding of how to strengthen, stiffen and reinforce more complex structures
* understand and use mechanical systems in their products, (for example as gears, pulleys, cams, levers and linkages)
* understand and use electrical systems in their products, (for example series circuits incorporating switches, bulbs, buzzers and motors)
* apply their understanding of computing to programme, monitor and control their products.
 | * understand and apply the principles of a healthy and varied diet
* prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques
* understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.
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