|  |  |  |  |
| --- | --- | --- | --- |
| 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 at least one idea about how to create their product?
* Do they take account of the ideas of others when designing?
* Can they produce a plan and explain it to others?
* Can they suggest some improvements and say what was good and not so good about their original design?
 | Cooking* Do they know what to do to be hygienic and safe?
* Have they thought what they can do to present their product in an interesting way?
 | 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, 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. |
| Make* Can they tell if their finished product is going to be good quality?
* Are they conscience of the need to produce something that will be liked by others?
* Can they show a good level of expertise when using a range of tools and equipment?
* Do they work at their product even though their original idea might not have worked?
 | Textiles * Do they think what the user would want when choosing textiles?
* Have they thought about how to make their product strong?
* Can they devise a template?
* Can they explain how to join things in a different way?
 |
| Evaluate* Have they thought of how they will check if their design is successful?
* Can they begin to explain how they can improve their original design?
* Can they evaluate their product, thinking of both appearance and the way it works?
* Do they take time to consider how they could have made their idea better?
 | Electrical and mechanical * Can they add things to their circuits?
* How have they altered their product after checking it?
* Are they confident about trying out new and different ideas?
 |
| Materials- flexible and rigid* Can they measure carefully so as to make sure they have not made mistakes?
* How have they attempted to make their product strong?
 |
| Materials- mouldable* Can they use a range of advanced techniques to shape and mould?
* Do they use finishing techniques, showing an awareness of audience?
 |
| 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.
 |  |  |