|  |  |  |  |
| --- | --- | --- | --- |
| 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 use a range of information to inform their design?
* Can they use market research to inform plans?
* Can they work within constraints?
* Can they follow and refine their plan if necessary?
* Can they justify their plan to someone else?
* Do they consider culture and society in their designs?
 | Cooking* Can they explain how their product should be stored with reasons?
* Can they set out to grow their own products with a view to making a salad, taking account of time required to grow different foods?
 | 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 , market research, constraints, justify, justification, culture and society, precise, gears, pulleys, cams, levers.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, storage, specific, accurate, justify to audience, seasonality. |
| Make* Can they use tools and materials precisely?
* Do they change the way they are working if needed?
 | Textiles * Have they thought about how their product could be sold?
* Have they given considered thought about what would improve their product even more?
 |
| Evaluate* How well do they test and evaluate their final product?
* Is it fit for purpose?
* What would improve it?
* Would different resources have improved their product?
* Would they need more or different information to make it even better?
* Does their product meet all design criteria?
* Did they consider the use of the product when selecting materials?
 | Electrical and mechanical * Can they use different kinds of circuit in their product?
* Can they think of ways in which adding a circuit would improve their product?
 |
| Materials- flexible and rigid* Can they justify why they selected specific materials?
* How have they ensured that their work is precise and accurate?
* Can they hide joints so as to improve the look of their product?
 |
| Materials- mouldable* Can they justify why the chosen material was the best for the task?
* Can they justify design in relation to the 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.
 |  |  |