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| Design and Technology Knowledge Organiser | Year 6 |

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| Range of Tools  | Main Processes  | Food Technology Assessment of skills By the end of the year children will be able to:  |
| Slow cooker  |  | 1.Investigate, observe and record Discuss and explain \*how well existing products have been made \*why certain materials have been used\*what construction methods have been used \*how well product meets needs of user\*the sustainability of product\*the impract on the environment | 2. Generate IdeasShare and clarify ideas through wider discussion Use exploded diagrams to explore ideasUse CAD if availableGenerate realistic ideas for end user. Make design decisions that take into consideration the environmental impact.Carry out research using surveys and interviews. Produce lists of equipment and resources needed.  | Understand the seasonality of food available To understand how food is processed into ingredients (wheat into flour)Prepare and cook a savoury dish that may need a heat source .Understand that a recipe can be adapted for appearance and taste.Peel into ribbons (carrots/courgettes)Measure accurately using scales Grate using greater control (lemon for zest/nutmeg for flavour)Thread firmer foods onto skewers (onions) Cut firm ingredients using a range of grips for safetyTo know there are a vast range of ingredients used around the worldLemon grass, papaya , bean spouts, lentils, coconut, spices |
| Ribbon Peeler |  |
| Cams and gears  |  | 3. DesignWork confidently within a range of contexts Explain how different parts of the product workIdentify the design features that appeal to wider audienceDevelop design briefExplain choices/practical features of materials | 4. Make Select and explain choice of tools and materialsCreate and follow step by step plans Follow all health and safety rules Use a wider range of components Measure, mark out, cut and shape materials accurately Use techniques that involve a number of steps Demonstrate resourcefulness when confronted by problems Show accuracy within all processes. | Technical Knowledge Assessment of Skills**By the end of the year children will be able to:** |
| Exploded diagram |  | Research inventors, designers, chefs and manufacturers who have developed ground breaking products. Discuss and investigate how to use learning from science and maths to help design products that work. (Measuring and forces) IInvestigate the functional and aesthetic qualities of products Investigate cams, pulleys and gears and how they can be used within a productTo understand how the components in a complex electrical system work and how they can be used in products Form a 3D textile product from a combination of fabric shapes Use precise technical vocabulary. Temperature, slow cooker, broilBackstitch, press stud, seam allowanceWire strippers, screws, nails, screw driver, dowel, Crocodile clip, file, pulley,  |
| Press stud  |  | 5. Evaluate Identify strengths and areas for development Consider the views of others including the end user to improve work. Critically evaluate quality of design and the fitness of purpose. Evaluate against original design plan. |
| Crocodile clip |  |