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| **Design and Technology**  ***(Knowledge)*** | **Nursery** | **Reception** |  | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Year 6** |
| **EYFS ELG:** Fine Motor Skills; Creating with Materials | -Select activities and resources, with help when needed |  | **Cooking** |  |  |  |  |  |  |
| **Personal, Social and Emotional**  **Development** |
| **Physical Development** | -Choose the right resources to carry out their own plan. | -Progress towards a more fluent style of moving, with developing control and grace.  -Develop their small motor skills so that they can use a range of tools competently, safely and confidently. | **Nutrition** | - Say where some food comes from and give examples of food that is grown | - Understand the need for a variety of food in a diet  - Understand that all food has to be farmed, grown or caught | - Talk about the different food groups and name food from each group  - Understand that food has to be grown, farmed or caught in Europe and the wider world | - Understand what makes a healthy and balanced diet, and that different foods and drinks provide different substances the body needs to be healthy and active  - Understand seasonality and the advantages of eating seasonal and locally produced food | - Understand the main food groups and the different nutrients that are important for health  - Understand how a variety of ingredients are grown, reared, caught and processed to make them safe and palatable / tasty to eat | - Confidently plan a series of healthy meals based on the principles of a healthy and varied diet  - Use information on food labels to inform choices |
| **Understanding the World** | -Explore how things work. |  | **Design and Communication** | - Use pictures and words to describe what he/she wants to do | - Generate, develop, model and communicate his/her ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology |  | - Create designs using exploded diagrams |  | - Generate, develop, model and communicate his/her ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design |
| **Expressive Arts and Design** | -Explore different materials freely, in order to develop their ideas about how to use them and what to make.  -Develop their own ideas and then decide which materials to use to express them. | -Explore, use and refine a variety of artistic effects to express their ideas and feelings.  -Return to and build on their previous learning, refining ideas and developing their ability to represent them.  -Safely explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.  -Share their creations, explaining the process they have used. | **Using Tools and Materials** |  |  | - Make suitable choices from a wider range of tools and unfamiliar materials and plan out the main stages of using them | - Use his/her knowledge of techniques and the functional and aesthetic qualities of a wide range of materials to plan how to use them | - Make careful and precise measurements so that joins, holes and openings are in exactly the right place | - Apply his/her knowledge of materials and techniques to refine and rework his/her product to improve its functional properties and aesthetic qualities |
|  |  |  | **Evaluating** | - Ask simple questions about existing products and those that he/she has made | - Evaluate and assess existing products and those that he/she has made using a design criteria | - Investigate and analyse existing products and those he/she has made, considering a wide range of factors | - Consider how existing products and his/her own finished products might be improved and how well they meet the needs of the intended user | - Make detailed evaluations about existing products and his/her own considering the views of others to improve his/her work | - Use his/her knowledge of famous designs to further explain the effectiveness of existing products and products he/she have made |
|  |  |  | **Mechanics and Engineering** |  |  | -Understand how mechanical systems such as levers and linkages or pneumatic systems create movement |  |  |  |
|  |  |  | **Electronics** |  |  |  | - Understand and use electrical systems in products | - Understand how to use more complex mechanical and electrical systems | - Apply his/her understanding of computing to program, monitor and control his/her product |