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| **Science & Technology**  *Design Technology* | EYFS | KS1  Year 1 Year 2 | LKS2  Year 3 Year 4 | UKS2  Year 5 Year 6 |
| Design  • to use research to design purposeful, functional,  appealing, innovative products for themselves, others and particular audiences based on design criteria  • to generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups, annotated sketches, cross sectional and exploded  diagrams, prototypes and, where appropriate,  information and communication technology  Make  • to select from and use a wide range of tools and  equipment to perform practical tasks accurately  • to select from and use a wide range of materials and  components, including construction materials, textiles and ingredients, according to their characteristics,  functional properties and aesthetic qualities  • to build structures, exploring how they can be made stronger, stiffer and more stable  • to apply their understanding of how to strengthen, stiffen and reinforce more complex structures  • to explore and use mechanisms [for example, levers, sliders, wheels and axles] in their products  • to understand and use mechanical systems in their  products [for example, gears, pulleys, cams, levers and linkages]  • to understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs,  buzzers and motors]  • to apply their understanding of computing to program,  monitor and control their products  Evaluate  • to explore, evaluate, investigate and analyse a range of existing products  • to evaluate their ideas and products against their own  design criteria and consider the views of others to  improve their work  • to understand how key events and individuals in design and technology have helped shape the world  Cooking  • to use and apply the basic principles of a healthy and  varied diet to prepare dishes  • to understand where food comes from  • to prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques  • to understand seasonality, and know where and how a  variety of ingredients are grown, reared, caught and processed. | **EAD (Exploring and using media…)**  **40-60 months**  • I can manipulate materials to achieve a planned effect  • I construct with a purpose in mind, using a variety of resources  • I can use simple tools and techniques competently and appropriately  • I can select appropriate resources and adapt my work where necessary  • I can select tools and techniques needed to shape, assemble and join materials I  am using  • I understand that different media can be combined to create new effects  Early Learning Goal  • I can safely use and explore a variety of materials, tools and techniques  Exceeding statements  • I develop my own ideas through selecting and using materials and working on processes that interest me  • Through my explorations, I find out and make decisions about how media and  materials can be combined and changed EAD (Being Imaginative)  Early Learning Goal  • I use what I have learnt about media and materials in original ways, thinking about their uses and purposes  • I represent my own idea, thoughts and feelings through design and technology  Exceeding statements  • I talk about the ideas and processes which have led me to make designs and  products  • I can talk about the features of my own and others’ work, recognising the  differences between them and the strengths of others  **UW (Technologies)**  Early Learning Goal  • I recognise that a range of technology is  used in places such as homes and schools  • I select and use technology for particular purposes  Exceeding statements  • I find out about and use a range of everyday technology  • I select appropriate applications that support an identified need  **PD (Moving and handling)**  40-60 months  • I use simple tools to effect changes to materials  • I handle tools, objects, construction and malleable materials safely and with  increasing control  • I show a preference for a dominant hand  **Early Learning Goal**  • I handle equipment and tools effectively | **Design**  • I use my knowledge of materials and components to design products  • I can design products for myself  • I base my designs on simple design criteria  • I present my ideas using words, pictures and models.  • I use ICT to communicate my ideas  **Make**  • I select the appropriate tools and equipment from a limited range  • I can describe properties of the materials that I use  • I can make a product which does the job it was made for  • I can make a product that uses movement  • I combine materials so that the joins are strong  •I select from and use a wide range of materials and components in my products • I build simple structures, exploring how they can be made stronger  • I make accurate measurements  • I cut materials with some accuracy  • I use my art skills to add detail to my products  Evaluate  • I can evaluate a range of existing products  • I can describe what I have done well  • I suggest things I could do in the future.  **Cooking**  • I prepare food safely and hygienically  • I can describe where different foods come from  • I use my knowledge of food to plan a healthy meal | Design  • I use research to help me design products  • I can design products for myself and another identified audience  • I base my designs on a range of design criteria  • I make realistic plans to achieve my aims.  • I think ahead about my work and plan ahead  • I present my ideas using annotated sketches and models  Make  • I select from a range of tools and equipment  • I select materials according to their functional properties  • I apply my knowledge to strengthen complex structures  •I can use basic sewing techniques  • I can make a product that uses a mechanism (wheels, levers, sliders)  • I measure accurately using a range of equipment (mm, cm, g, Kg)  • I select the most appropriate techniques to make my product.  • I can make a product that uses mechanisms (wheels, levers, sliders)  • I work in a safe and hygienic way.  • I use sharp scissors accurately to cut materials  • My designs evolve as work proceeds  • I use my art skills to apply texture or design to my product.  • I can apply my knowledge to strengthen and reinforce complex structures  • I have made a product that uses electrical components.  • My product has a good finish so that a user will find it both useful and attractive.  •I can suggest improvements to my techniques  Evaluate  • I can investigate and analyse a range of  products  • I can identify where my evaluations have  led to improvements  **Cooking**  • I can use a selection of ingredients to meet an identified need  • I can choose a selection of ingredients to meet an identified need | Design  • I use research to design purposeful, functional and appealing products  • I can design products for a wide audience  • I take the views of users’ into account when designing my products.  • I produce clear step-by-step plans  • I present my ideas using exploded diagrams  Make  • I select from a wide range of tools and equipment  • I measure accurately from a range of scales  • I select materials according to their aesthetic qualities  • I can make a product that uses complex mechanisms (pulleys, cams, gears)  • I can use different sewing techniques.  • My work incorporates the views of intended users’  • I apply a high quality finish to my products  • I have chosen components that can be controlled by switches or by ICT equipment.  • I can improve after testing.  • My methods of working are precise so that products have a high quality finish.  I can design a product using my knowledge of different sewing techniques.  Evaluate  • I evaluate my designs based on the original design criteria  • I can evaluate and suggest improvements based on the original design  **Cooking**  • I can use a range of cooking techniques to prepare and cook food  • I can describe the ‘journey’ of individual foods  • My food is well presented and packaged using other DT skills. |