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| **Science & Technology***Design Technology* | EYFS | KS1Year 1 Year 2 | LKS2Year 3 Year 4 | UKS2Year 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 explodeddiagrams, prototypes and, where appropriate,information and communication technologyMake• to select from and use a wide range of tools andequipment to perform practical tasks accurately• to select from and use a wide range of materials andcomponents, 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 theirproducts [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 productsEvaluate• to explore, evaluate, investigate and analyse a range of existing products• to evaluate their ideas and products against their owndesign criteria and consider the views of others toimprove their work• to understand how key events and individuals in design and technology have helped shape the worldCooking• to use and apply the basic principles of a healthy andvaried 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 avariety 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 Iam using• I understand that different media can be combined to create new effectsEarly Learning Goal• I can safely use and explore a variety of materials, tools and techniquesExceeding 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 andmaterials 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 technologyExceeding statements• I talk about the ideas and processes which have led me to make designs andproducts• I can talk about the features of my own and others’ work, recognising thedifferences between them and the strengths of others**UW (Technologies)**Early Learning Goal• I recognise that a range of technology isused in places such as homes and schools• I select and use technology for particular purposesExceeding 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 withincreasing 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 productsEvaluate• 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 modelsMake• 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 techniquesEvaluate• I can investigate and analyse a range ofproducts• I can identify where my evaluations haveled 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 diagramsMake• 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. |