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| **Design and Technology EYFS** | **Nursery**  Children will know how to use scissors to make snips in paper.  Children will know how to use hammers to hit a large headed nail. | | | | | |
| **Reception**  Children will know how to use a knife and fork  Children will know how to use two-hole scissors to make snips in paper.  Children will have a go at weaving and threading activities.  Children will know how to use two-hole scissors to cut along lines.  Use a range of small tools, including scissors, paint brushes and cutlery | | | | | |
| **Design and Technology** | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Year 6** |
| **Cooking and Nutrition** | -Begin to understand where food comes from  -Prepare simple dishes using knowledge of healthy food | -Understand where food comes from  -Use basic principle of a healthy and varied diet to prepare dishes | -Apply principles of a healthy, varied diet when preparing variety of savoury dishes  -Apply understanding of seasonality and its link to ingredients | -Know where and how a variety of ingredients are grown, reared, caught and processed | -Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques | -Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques  -Know where and how a variety of ingredients are grown, reared, caught and processed and its impact on meal design  -Develop crucial life skill of feeding themselves and others affordably well |

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| **Design and Technology** | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Year 6** |
| **Technical Knowledge** | -Start to build structures, exploring ways to stiffen, stable and strengthen  -Explore simple mechanisms e.g. levers and sliders | -Build structures exploring ways to stiffen, stabilise and strengthen  -Explore and use mechanisms e.g. levers, wheels and axles | -Apply understanding of how to strengthen, stiffen and reinforce structures  -Identify range of mechanical systems and how they work (gears, pulleys, cams, levers) | -Apply understanding of how to strengthen, stiffen and reinforce more complex structures  -Use computing program, monitor and control products  -Identify wider range of mechanical systems and how they work (gears, pulleys, cams levers)  -Use understanding of electrical systems (series, circuits, switches, bulbs, motors) | -Construct more complex structures by applying range of strategies in order to solves real/relevant problems  -Drawing on disciplines and making connections to wider subject areas, apply understanding of computing to program monitor and control products  -Making connections, apply understanding wider range of mechanical systems and how they work (gears, pulleys, cams levers) | -Construct more complex structures by applying range of strategies in order to solves real/relevant problems  -Drawing on disciplines and making connections to wider subject areas, apply understanding of computing to program monitor and control products  -Making connections and understanding of electrical systems (series, circuits, switches, bulbs, motors) |

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| **Design and Technology** | **Year 1** | **Year 2** | **Year 3** | **Year 4** | **Year 5** | **Year 6** |
| **Design** | -Design simple products that work and look appealing based on a design criteria  -Generate, develop, model and discuss their ideas through talking and drawing. | -Design products for others and themselves that are purposeful, functional and appealing based on a design criteria  -Generate, develop, model and communicate ideas through talking, drawing, templates, mock ups, and ICT | -Communicate ideas using different strategies .e.g. discussion, sketch  -Use research to inform design  -Take risks to become innovative and resourceful | - Communicate ideas using different strategies e.g. prototypes, pattern pieces  -Use research to inform design and develop design criteria  -Take risks to become innovative and resourceful | -Communicate, generate, develop and model ideas using a range of strategies e.g. computer aided design, cross-sectional and exploded diagrams  -Communicate, generate, develop ideas, drawing on other disciplines e.g. Science, maths, computing  -Use research to inform design and generate own design criteria that are fit for purpose and aimed at particular individuals.  -Confidently take calculated risks to become innovative, resourceful and enterprising | -Communicate, generate and develop ideas through discussion, annotated sketches, cross sectional and exploded diagrams, prototypes, pattern pieces and computer aided design, through science, maths and computing.  -Use research to inform innovative design and generate own design criteria that are fit for purpose and aimed at particular individuals.  -Confidently take calculated risks to become innovative, resourceful and enterprising |
| **Make** | -Use a range of materials and components  -Use a range of tools and equipment to perform practical tasks e.g. cut, shape, join and finish | -Select from and use a wide range of materials e.g. construction, textiles and ingredients.  -Select from and use a range of tools and equipment to perform practical tasks e.g. cut, shape, join and finish | -Select from and use a range of tools, equipment, materials and components including construction materials, textiles and ingredients. | -Select from and use a range of tools, equipment, materials and components construction materials, textiles and ingredients. | -According to their functional properties and aesthetic qualities, select from and use a range of tools, equipment, materials and components accurately to make high quality prototypes | -According to their functional properties and aesthetic qualities, select from and use a range of tools, equipment, materials and components accurately to make high quality prototypes |
| **Evaluate** | -Explore existing products e.g. home, school  -Discuss own ideas and designs | -Explore and evaluate a range of existing products e.g. home, school  -Evaluate own ideas and designs against a given criteria | -Investigate a range of existing products that address real/relevant problems, in a range of relevant contexts e.g. home, school leisure  -Evaluate own ideas and designs against given design criteria and consider the views of others to improve their work | -Investigate a range of existing products in a range of relevant contexts e.g. culture, industry  -Evaluate own ideas and designs against given design criteria and consider the views of others to improve their work | -Investigate and analyse a range of existing products that address real relevant problems, in a range of relevant contexts  -Generate own design criteria and evaluate ideas and products against these  -Understand how key events and individuals in DT helped to shape the world | -Generate own design criteria and evaluate ideas and products against these  -Understand how key events and individuals in DT helped to shape the world |

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| **Long Term Planning** | **Autumn 1** | **Autumn 2** | **Spring 1** | **Spring 2** | **Summer 1** | **Summer 2** |
| **Year 1** | DT Toys  (Link with Science)  Make a toy using simple mechanisms *See Technical Knowledge DT plan* |  |  | DT Making Puppets a  The Tiger who came to Tea  (Link with English) | DT Cooking  Handa’s Surprise Smoothie  (Link with English)  Make a fruit smoothie  *See Cooking and Nutrition plan* |  |
| **Year 2** | DT Great Fire of London  (Link with History)  Build a Tudor House  *See Technical Knowledge DT plan* |  | DT – Cooking  Healthy eating  (Link with Science)  To create a dish for a balanced diet  *See Cooking and Nutrition plan* |  |  | DT Art  To build a Joan Miro inspired sculpture  (Link with Science*)*  *See Technical Knowledge DT plan- stiffen, stabilise and strengthen* |
| **Year 3** | DT – Romans  (Link with Science)  How to make a Roman catapult  (See Technical Knowledge DT plan) |  |  | DT – Cooking  A balanced diet  (Link with RHE)  To create a dish for a balanced diet |  | DT Egyptians  (Link with History)  Design, make and build an Egyptian pyramid |
| **Year 4** |  | DT Electrical circuits (Link with Science)  *See Technical Knowledge DT plan*  Design and make a light up Christmas card |  | DT- Cross stitch  (Link with Art)  To create a collage in art using cross stitch  *Use DT and Art plan* | DT- Cooking  Bread flavours  Compare and make different types of bread using seasonal ingredients  *See Cooking and Nutrition plan* |  |
| **Year 5** | DT- Cooking  Make a delicious pasta sauce  *See Cooking and Nutrition plan* |  | DT – WW2 sewing  ‘Make Do and Mend’  (Link with History)  Plan, design and make an item of clothing |  | DT – Mechanical systems  To make a mechanical structure  (Link with Science)  *See Technical Knowledge plan* |  |
| **Year 6** |  | DT- Cooking  (Link with History)  Make Mayan Tortillas  *See Cooking and Nutrition plan* | DT – Packaging design  (Link with History)  Plan, design and make the packaging for Mayan Tortillas |  | DT – Electrical systems  (Link with Science)  *See Technical Knowledge plan*  Design, make and evaluate a functional boat for the Bridgewater Canal |  |