

Design and Technology Coverage Overview 2019-2020

| <u>Year Group</u> | <u>Autumn</u> | <u>Spring</u> | <u>Summer</u> | <u>Enrichment</u> |
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| Year 1 | <u>Structures: Christmas ornaments</u> Create a free standing structure – angels. | <u>Food: Fruit and vegetables</u> Children learn how to identify fruits and vegetables and then design and make a smoothie. | <u>Mechanisms: Moving story books</u> Children explore levers and sliders to make a moving story book. | Farm to fork visit |
| Year 2 | <u>Food: A balanced diet</u> Explore what makes a balanced diet and taste test different food groups before designing and making a wrap. | <u>Mechanisms: Fire engine</u> Create a fire engine using wheels and axles. | <u>Textiles: Pouches</u> Children design and make their own wallet or purse, learning to use a running stitch to join two pieces of fabric together. | Fire engine visit |
| Year 3 | <u>Food: Eating Seasonally</u> Learn about seasonality and how the climate a food is grown in can alter the way it tastes. Make a crumble using seasonal ingredients. | <u>Mechanisms: Pneumatic/ Hydraulic systems</u> Examine pneumatic and hydraulic systems. Apply their understanding of this to create their own hydraulic heads. *Computer aided design | <u>Textiles: Cushions</u> Children sew cross stitch and appliqué and then apply this to the design and creation of a cushion. *Pattern pieces Key Individuals –The Pretty Green Team | - Steph O'Donnell (pneumatic/ hydraulic systems) |
| Year 4 | <u>Structures: Pavilions</u> Explore pavilion structures, learning about what they are used for and investigating how to create strong and stable structures. Children will create their own pavilion including cladding. *Prototypes | <u>Electrical Systems: Torches</u> Children are introduced to electricity and electrical safety before making a simple electric circuit to create a functioning torch. Children will use computing to program, monitor and control. *Cross-sectional diagrams | <u>Food: Biscuits</u> Children adapt a simple biscuit recipe, to create the tastiest biscuit. They will ensure that their creation comes within the given budget of overheads and costs of ingredients. Key Individuals – Nadiya Hussain (Great British Bake Off) | - Steph O'Donnell (torches) |
| Year 5 | <u>Food: What could be healthier?</u> Children research and modify a traditional bolognese sauce recipe to make it healthier. They will then cook their new and improved versions. Key Individuals – Jamie Oliver (chef) | <u>Mechanisms: Pop-up books</u> Children use a range of construction techniques and mechanisms including: structures, levers, sliders, layers and spacers to create a pop-up story book for younger children. *Prototypes | <u>Textiles: Stuffed toys</u> Children learn blanket stitch and then design and make 3D stuffed toys. *Pattern pieces | - School chef - Frank Driessen (Books) |
| Year 6 | <u>Electronical Systems: Alarm</u> | <u>Food: Come dine with me</u> Research and prepare a three course meal that will be taste tested and scored. | <u>Mechanisms: Automata toys</u> | Visit to secondary |

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| | <p>Children to make an alarm system for their house. They will use 'Little Bits' to program, monitor and control their product.</p> <p>*Cross-sectional diagrams</p> <p>Key Individuals - Alan Turing (pioneer of computer science)</p> | | <p>Children develop their woodworking skills and explore cams to design and make mechanical window displays.</p> <p>*Computer aided design</p> | <p>school – food technology</p> |
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