



# Howden C of E Infant and Junior School

## Sequence of Learning: D & T



Design and technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They acquire a broad range of subject knowledge and draw on disciplines such as mathematics, science, engineering, computing and art. Pupils learn how to take risks, becoming resourceful, innovative, enterprising and capable citizens. Through the evaluation of past and present design and technology, they develop a critical understanding of its impact on daily life and the wider world. High-quality design and technology education makes an essential contribution to the creativity, culture, wealth and well-being of the nation.

### Design and Technology: Age Related Statutory Coverage

| Development Matters Children age 3 - 4                                                                                                                                                                                                                                                                                                                                                                                                          | Early Learning Goal                                                                                                                                                                                                                                                                                      | Key Stage One                                                                                                                                                                                                                                                                                                                                                              | Key Stage Two                                                                                                                                                                                                                                                                                                                                                                   |
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| <u>Expressive Arts and Design</u><br>Create closed shapes with continuous lines and begin to use these shapes to represent objects. Draw with increasing complexity and detail, such as representing a face with a circle and including details.<br>Use drawing to represent ideas like movement or loud noises. Show different emotions in their drawings and paintings, like happiness, sadness, fear, etc. Explore colour and colour mixing. | <u>Expressive Arts and Design: Creating Materials</u><br>Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.<br>Share their creations, explaining the process they have used.<br><u>Physical Development: Fine Motor</u> | When designing and make, pupils should be taught to:<br><u>Design</u><br>Design purposeful, functional, appealing products for themselves and other users based on design criteria.<br>Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology.<br><u>Make</u> | When designing and making, pupils should be taught to:<br><u>Design</u><br>Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups.<br>Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and |

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| <p>Show different emotions in their drawings - happiness, sadness, fear, etc</p> <p><u>Physical Development</u></p> <p>Use one-handed tools and equipment, for example, making snips in paper with scissors.</p> | <p>Use a range of small tools including scissors and paint brushes.</p> <p>Begin to show accuracy and care when drawing.</p> | <p>Select from and use a range of tools and equipment to perform practical tasks (e.g. cutting, shaping, joining and finishing).</p> <p>Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics.</p> <p><u>Evaluate</u></p> <p>Explore and evaluate a range of existing products.</p> <p>Evaluate their ideas and products against design criteria.</p> <p><u>Technical knowledge</u></p> <p>Build structures, exploring how they can be made stronger, stiffer and more stable.</p> <p>Explore and use mechanisms (e.g. levers, sliders, wheels and axles) in their products.</p> | <p>exploded diagrams, prototypes, pattern pieces and computer-aided design.</p> <p><u>Make</u></p> <p>Select from and use a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing), accurately.</p> <p>Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.</p> <p><u>Evaluate</u></p> <p>Investigate and analyse a range of existing products.</p> <p>Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work.</p> <p>Understand how key events and individuals in design and technology have helped shape the world.</p> |
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|  |  |  | <p><u>Technical knowledge</u></p> <p>Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.</p> <p>Understand and use mechanical systems in their products (for example, gears, pulleys, cams, levers and linkages).</p> <p>Understand and use electrical systems in their products (for example, series circuits incorporating switches, bulbs, buzzers and motors).</p> <p>Apply their understanding of computing to program, monitor and control their products.</p> |
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| STRUCTURES             |                  | Skills                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                    | Knowledge                                                                                                                                                                                                                     |                                                                                                                                                        |
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|                        |                  | Design                                                                                                                                                                                                                 | Make                                                                                                                                                                                                                                                                                        | Evaluate                                                                                                                                                                                                                                                                                                                                                                                                                           | Technical                                                                                                                                                                                                                     | Additional                                                                                                                                             |
| EYFS<br>(Reception)    | Boats            | <ul style="list-style-type: none"> <li>• Designing a junk model boat.</li> <li>• Using knowledge from exploration to inform design.</li> </ul>                                                                         | <ul style="list-style-type: none"> <li>• Making a boat that floats and is waterproof, considering material choices.</li> </ul>                                                                                                                                                              | <ul style="list-style-type: none"> <li>• Making predictions about, and evaluating different materials to see if they are waterproof.</li> <li>• Making predictions about, and evaluating existing boats to see which floats best.</li> <li>• Testing their design and reflecting on what could have been done differently.</li> <li>• Investigating the how the shapes and structure of a boat affect the way it moves.</li> </ul> | <ul style="list-style-type: none"> <li>• To know that 'waterproof' materials are those which do not absorb water.</li> </ul>                                                                                                  | <ul style="list-style-type: none"> <li>• To know that some objects float and others sink.</li> <li>• To know the different parts of a boat.</li> </ul> |
| Year 1<br>(Mechanisms) | Wheels and Axles | <ul style="list-style-type: none"> <li>• Designing a vehicle that includes wheels, axles and axle holders, that when combined, will allow the wheels to move.</li> <li>• Creating clearly labelled drawings</li> </ul> | <ul style="list-style-type: none"> <li>• Adapting mechanisms, when:               <ul style="list-style-type: none"> <li>• they do not work as they should.</li> <li>• to fit their vehicle design.</li> <li>• to improve how they work after testing their vehicle.</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>• Testing wheel and axle mechanisms, identifying what stops the wheels from turning, and recognising that a wheel needs an axle in order to move.</li> </ul>                                                                                                                                                                                                                                | <ul style="list-style-type: none"> <li>• To know that wheels need to be round to rotate and move.</li> <li>• To understand that for a wheel to move it must be attached to a rotating axle. • To know that an axle</li> </ul> | <ul style="list-style-type: none"> <li>• To know some real-life items that use wheels such as wheelbarrows, hamster wheels and vehicles</li> </ul>     |

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|               |                  | that illustrate movement.                                                                                             |                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                 | <p>moves within an axle holder which is fixed to the vehicle or toy.</p> <ul style="list-style-type: none"> <li>• To know that the frame of a vehicle (chassis) needs to be balanced.</li> </ul>                                                                                                                                                                                                                                                                                                                  |                                                                                                        |
| <b>Year 2</b> | <b>Baby bear</b> | <ul style="list-style-type: none"> <li>• Generating and communicating ideas using sketching and modelling.</li> </ul> | <ul style="list-style-type: none"> <li>• Making a structure according to design criteria.</li> <li>• Creating joints and structures from paper/card and tape.</li> <li>• Building a strong and stiff structure by folding paper.</li> </ul> | <ul style="list-style-type: none"> <li>• Testing the strength of own structure.</li> <li>• Identifying the weakest part of a structure.</li> <li>• Evaluating the strength, stiffness and stability of own structure</li> </ul> | <ul style="list-style-type: none"> <li>• To know that materials can be manipulated to improve strength and stiffness.</li> <li>• To know that a structure is something which has been formed or made from parts.</li> <li>• To know that a 'stable' structure is one which is firmly fixed and unlikely to change or move.</li> <li>• To know that a 'strong' structure is one which does not break easily.</li> <li>• To know that a 'stiff' structure or material is one which does not bend easily.</li> </ul> |                                                                                                        |
| <b>Year 3</b> | <b>Castles</b>   | <ul style="list-style-type: none"> <li>• Designing a castle with key features to appeal to a</li> </ul>               | <ul style="list-style-type: none"> <li>• Constructing a range of 3D</li> </ul>                                                                                                                                                              | <ul style="list-style-type: none"> <li>• Evaluating own work and the work of others based on the aesthetic</li> </ul>                                                                                                           | <ul style="list-style-type: none"> <li>• To understand that wide and flat</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                              | <ul style="list-style-type: none"> <li>• To know the following features of a castle: flags,</li> </ul> |

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|               |                  | <p>specific person/purpose.</p> <ul style="list-style-type: none"> <li>• Drawing and labelling a castle design using 2D shapes, labelling: - the 3D shapes that will create the features - materials needed and colours.</li> <li>• Designing and/or decorating a castle tower on CAD software.</li> </ul> | <p>geometric shapes using nets.</p> <ul style="list-style-type: none"> <li>• Creating special features for individual designs.</li> <li>• Making facades from a range of recycled materials.</li> </ul>                                                     | <p>of the finished product and in comparison, to the original design.</p> <ul style="list-style-type: none"> <li>• Suggesting points for modification of the individual designs.</li> </ul>                                                                | <p>based objects are more stable.</p> <ul style="list-style-type: none"> <li>• To understand the importance of strength and stiffness in structures.</li> </ul>                     | <p>towers, battlements, turrets, curtain walls, moat, drawbridge and gatehouse - and their purpose.</p> <ul style="list-style-type: none"> <li>• To know that a façade is the front of a structure.</li> <li>• To understand that a castle needed to be strong and stable to withstand enemy attack.</li> <li>• To know that a paper net is a flat 2D shape that can become a 3D shape once assembled.</li> <li>• To know that a design specification is a list of success criteria for a product.</li> </ul> |
| <b>Year 4</b> | <b>Pavilions</b> | <ul style="list-style-type: none"> <li>• Designing a stable pavilion structure that is aesthetically pleasing and selecting materials to create a desired effect.</li> <li>• Building frame structures</li> </ul>                                                                                          | <ul style="list-style-type: none"> <li>• Creating a range of different shaped frame structures.</li> <li>• Making a variety of free-standing frame structures of different shapes and sizes.</li> <li>• Selecting appropriate materials to build</li> </ul> | <ul style="list-style-type: none"> <li>• Evaluating structures made by the class.</li> <li>• Describing what characteristics of a design and construction made it the most effective.</li> <li>• Considering effective and ineffective designs.</li> </ul> | <ul style="list-style-type: none"> <li>• To understand what a frame structure is.</li> <li>• To know that a 'free-standing' structure is one which can stand on its own.</li> </ul> | <ul style="list-style-type: none"> <li>• To know that a pavilion is a decorative building or structure for leisure activities.</li> <li>• To know that cladding can be applied to structures for different effects.</li> </ul>                                                                                                                                                                                                                                                                                |

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|               |                | designed to support weight.                                                                                                                                                          | <p>a strong structure and cladding.</p> <ul style="list-style-type: none"> <li>• Reinforcing corners to strengthen a structure.</li> <li>• Creating a design in accordance with a plan.</li> <li>• Learning to create different textural effects with materials.</li> </ul>                                                                                                                      |                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                          | <ul style="list-style-type: none"> <li>• To know that aesthetics are how a product looks.</li> <li>• To know that a product's function means its purpose.</li> <li>• To understand that the target audience means the person or group of people a product is designed for.</li> <li>• To know that architects consider light, shadow and patterns when designing.</li> </ul> |
| <b>Year 5</b> | <b>Bridges</b> | <ul style="list-style-type: none"> <li>• Designing a stable structure that is able to support weight.</li> <li>• Creating a frame structure with a focus on triangulation</li> </ul> | <ul style="list-style-type: none"> <li>• Making a range of different shaped beam bridges.</li> <li>• Using triangles to create truss bridges that span a given distance and support a load.</li> <li>• Building a wooden bridge structure.</li> <li>• Independently measuring and marking wood accurately.</li> <li>• Selecting appropriate tools and equipment for particular tasks.</li> </ul> | <ul style="list-style-type: none"> <li>• Adapting and improving own bridge structure by identifying points of weakness and reinforcing them as necessary.</li> <li>• Suggesting points for improvements for own bridges and those designed by others.</li> </ul> | <ul style="list-style-type: none"> <li>• To understand some different ways to reinforce structures.</li> <li>• To understand how triangles can be used to reinforce bridges.</li> <li>• To know that properties are words that describe the form and function of materials.</li> <li>• To understand why material selection is important based on properties.</li> </ul> | <ul style="list-style-type: none"> <li>• To understand the difference between arch, beam, truss and suspension bridges.</li> <li>• To understand how to carry and use a saw safely.</li> </ul>                                                                                                                                                                               |

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|        |             |                                                                                                                                                                                                                     | <ul style="list-style-type: none"> <li>• Using the correct techniques to saws safely.</li> <li>• Identifying where a structure needs reinforcement and using card corners for support.</li> <li>• Explaining why selecting appropriating materials is an important part of the design process.</li> <li>• Understanding basic wood functional properties.</li> </ul> |                                                                                                                                                                                                                                            | <ul style="list-style-type: none"> <li>• To understand the material (functional and aesthetic) properties of wood</li> </ul>          |                                                                                                                                                                                                                                                                                    |
| Year 6 | Playgrounds | <ul style="list-style-type: none"> <li>• Designing a playground featuring a variety of different structures, considering how the structures will be used, considering effective and ineffective designs.</li> </ul> | <ul style="list-style-type: none"> <li>• Building a range of play apparatus structures drawing upon new and prior knowledge of structures.</li> <li>• Measuring, marking and cutting wood to create a range of structures.</li> <li>• Using a range of materials to reinforce and add decoration to structures.</li> </ul>                                           | <ul style="list-style-type: none"> <li>• Improving a design plan based on peer evaluation.</li> <li>• Testing and adapting a design to improve it as it is developed.</li> <li>• Identifying what makes a successful structure.</li> </ul> | <ul style="list-style-type: none"> <li>• To know that structures can be strengthened by manipulating materials and shapes.</li> </ul> | <ul style="list-style-type: none"> <li>• To understand what a 'footprint plan' is.</li> <li>• To understand that in the real world, design, can impact users in positive and negative ways.</li> <li>• To know that a prototype is a cheap model to test a design idea.</li> </ul> |

| FOOD                |                 | Skills                                                                                                              |                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                    | Knowledge                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
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|                     |                 | Design                                                                                                              | Make                                                                                                                                                                                                                                    | Evaluate                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| EYFS<br>(Reception) | Food soup       | <ul style="list-style-type: none"> <li>• Designing a fruit or vegetable soup and suitable packaging.</li> </ul>     | <ul style="list-style-type: none"> <li>• Chopping fruit and vegetables safely to make a soup.</li> <li>• Identifying if a food is a fruit or a vegetable.</li> <li>• Exploring the differences between fruit and vegetables.</li> </ul> | <ul style="list-style-type: none"> <li>• Tasting and evaluating different food combinations.</li> <li>• Describing appearance, smell and taste.</li> <li>• Explore the inside and outside of a pumpkin and use 5 senses to describe it.</li> </ul> | <ul style="list-style-type: none"> <li>• Understanding the difference between fruits and vegetables.</li> <li>• To understand that some foods typically known as vegetables are actually fruits (e.g. cucumber).</li> <li>• To know that a blender is a machine which mixes ingredients together into a smooth liquid.</li> <li>• To know how to use a knife safely.</li> <li>• To know the different types of packaging available and why this might be beneficial e.g. recyclable, lightweight.</li> </ul>                                                                                                                                                                   |
| Year 1              | Fruit and Veg   | <ul style="list-style-type: none"> <li>• Designing smoothie carton packaging by-hand or on ICT software.</li> </ul> | <ul style="list-style-type: none"> <li>• Chopping fruit and vegetables safely to make a smoothie.</li> <li>• Identifying if a food is a fruit or a vegetable.</li> <li>• Learning where and how fruits and vegetables grow.</li> </ul>  | <ul style="list-style-type: none"> <li>• Tasting and evaluating different food combinations.</li> <li>• Describing appearance, smell and taste.</li> <li>• Suggesting information to be included on packaging</li> </ul>                           | <ul style="list-style-type: none"> <li>• Understanding the difference between fruits and vegetables.</li> <li>• To understand that some foods typically known as vegetables are actually fruits (e.g. cucumber).</li> <li>• To know that a blender is a machine which mixes ingredients together into a smooth liquid.</li> <li>• To know that a fruit has seeds and a vegetable does not.</li> <li>• To know that fruits grow on trees or vines.</li> <li>• To know that vegetables can grow either above or below ground.</li> <li>• To know that vegetables can come from different parts of the plant (e.g. roots: potatoes, leaves: lettuce, fruit: cucumber).</li> </ul> |
| Year 2              | A balanced diet | <ul style="list-style-type: none"> <li>• Designing a healthy wrap based on a food</li> </ul>                        | <ul style="list-style-type: none"> <li>• Slicing food safely using the bridge or claw grip.</li> </ul>                                                                                                                                  | <ul style="list-style-type: none"> <li>• Describing the taste, texture and smell of fruit and vegetables.</li> </ul>                                                                                                                               | <ul style="list-style-type: none"> <li>• To know that 'diet' means the food and drink that a person or animal usually eats.</li> <li>• To understand what makes a balanced diet.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

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|        |                   | combination which works well together                                                                                                                                                                        | <ul style="list-style-type: none"> <li>• Constructing a wrap that meets a design brief.</li> </ul>                                                                                                                                     | <ul style="list-style-type: none"> <li>• Taste testing food combinations and final products.</li> <li>• Describing the information that should be included on a label.</li> <li>• Evaluating which grip was most effective.</li> </ul>                                                                       | <ul style="list-style-type: none"> <li>• To know where to find the nutritional information on packaging.</li> <li>• To know that the five main food groups are: Carbohydrates, fruits and vegetables, protein, dairy and foods high in fat and sugar.</li> <li>• To understand that I should eat a range of different foods from each food group, and roughly how much of each food group.</li> <li>• To know that nutrients are substances in food that all living things need to make energy, grow and develop.</li> <li>• To know that 'ingredients' means the items in a mixture or recipe.</li> <li>• To know that I should only have a maximum of five teaspoons of sugar a day to stay healthy.</li> <li>• To know that many foods and drinks we do not expect to contain sugar do; we call these 'hidden sugars.'</li> </ul>                                                                                                                                                                                                                                |
| Year 3 | Eating seasonally | <ul style="list-style-type: none"> <li>• Creating a healthy and nutritious recipe for a savoury tart using seasonal ingredients, considering the taste, texture, smell and appearance of the dish</li> </ul> | <ul style="list-style-type: none"> <li>• Knowing how to prepare themselves and a work space to cook safely in, learning the basic rules to avoid food contamination.</li> <li>• Following the instructions within a recipe.</li> </ul> | <ul style="list-style-type: none"> <li>• Establishing and using design criteria to help test and review dishes.</li> <li>• Describing the benefits of seasonal fruits and vegetables and the impact on the environment.</li> <li>• Suggesting points for improvement when making a seasonal tart.</li> </ul> | <ul style="list-style-type: none"> <li>• To know that not all fruits and vegetables can be grown in the UK.</li> <li>• To know that climate affects food growth.</li> <li>• To know that vegetables and fruit grow in certain seasons.</li> <li>• To know that cooking instructions are known as a 'recipe'.</li> <li>• To know that imported food is food which has been brought into the country.</li> <li>• To know that exported food is food which has been sent to another country.</li> <li>• To understand that imported foods travel from far away and this can negatively impact the environment.</li> <li>• To know that each fruit and vegetable gives us nutritional benefits because they contain vitamins, minerals and fibre.</li> <li>• To understand that vitamins, minerals and fibre are important for energy, growth and maintaining health.</li> <li>• To know safety rules for using, storing and cleaning a knife safely.</li> <li>• To know that similar coloured fruits and vegetables often have similar nutritional benefits</li> </ul> |

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| Year 4 | Adapting a recipe        | <ul style="list-style-type: none"> <li>• Designing a biscuit within a given budget, drawing upon previous taste testing judgements.</li> </ul>                                                                                        | <ul style="list-style-type: none"> <li>• Following a baking recipe, from start to finish, including the preparation of ingredients.</li> <li>• Cooking safely, following basic hygiene rules.</li> <li>• Adapting a recipe to improve it or change it to meet new criteria (e.g. from savoury to sweet).</li> </ul> | <ul style="list-style-type: none"> <li>• Evaluating a recipe, considering: taste, smell, texture and appearance.</li> <li>• Describing the impact of the budget on the selection of ingredients.</li> <li>• Evaluating and comparing a range of food products.</li> <li>• Suggesting modifications to a recipe (e.g. This biscuit has too many raisins, and it is falling apart, so next time I will use less raisins).</li> </ul> | <ul style="list-style-type: none"> <li>• To know that the amount of an ingredient in a recipe is known as the 'quantity.'</li> <li>• To know that it is important to use oven gloves when removing hot food from an oven.</li> <li>• To know the following cooking techniques: sieving, creaming, rubbing method, cooling.</li> <li>• To understand the importance of budgeting while planning ingredients for biscuits.</li> </ul>                                                                                                                                                        |
| Year 5 | What could be healthier? | <ul style="list-style-type: none"> <li>• Adapting a traditional recipe, understanding that the nutritional value of a recipe alters if you remove, substitute or add additional ingredients.</li> <li>• Writing an amended</li> </ul> | <ul style="list-style-type: none"> <li>• Cutting and preparing vegetables safely.</li> <li>• Using equipment safely, including knives, hot pans and hobs.</li> <li>• Knowing how to avoid cross-contamination.</li> <li>• Following a step by step</li> </ul>                                                       | <ul style="list-style-type: none"> <li>• Identifying the nutritional differences between different products and recipes.</li> <li>• Identifying and describing healthy benefits of food groups.</li> </ul>                                                                                                                                                                                                                         | <ul style="list-style-type: none"> <li>• To understand where meat comes from - learning that beef is from cattle and how beef is reared and processed, including key welfare issues.</li> <li>• To know that I can adapt a recipe to make it healthier by substituting ingredients.</li> <li>• To know that I can use a nutritional calculator to see how healthy a food option is.</li> <li>• To understand that 'cross-contamination' means bacteria and germs have been passed onto ready-to-eat foods and it happens when these foods mix with raw meat or unclean objects.</li> </ul> |

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|        |                   | <p>method for a recipe to incorporate the relevant changes to ingredients.</p> <ul style="list-style-type: none"> <li>• Designing appealing packaging to reflect a recipe.</li> </ul>    | <p>method carefully to make a recipe</p>                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Year 6 | Come Dine with Me | <ul style="list-style-type: none"> <li>• Writing a recipe, explaining the key steps, method and ingredients.</li> <li>• Including facts and drawings from research undertaken</li> </ul> | <ul style="list-style-type: none"> <li>• Following a recipe, including using the correct quantities of each ingredient.</li> <li>• Adapting a recipe based on research.</li> <li>• Working to a given timescale.</li> <li>• Working safely and hygienically with independence.</li> </ul> | <ul style="list-style-type: none"> <li>• Evaluating a recipe, considering: taste, smell, texture and origin of the food group.</li> <li>• Taste testing and scoring final products.</li> <li>• Suggesting and writing up points of improvements when scoring others' dishes, and when evaluating their own throughout the planning, preparation and cooking process.</li> <li>• Evaluating health and safety in production to minimise cross contamination.</li> </ul> | <ul style="list-style-type: none"> <li>• To know that 'flavour' is how a food or drink tastes.</li> <li>• To know that many countries have 'national dishes' which are recipes associated with that country.</li> <li>• To know that 'processed food' means food that has been put through multiple changes in a factory.</li> <li>• To understand that it is important to wash fruit and vegetables before eating to remove any dirt and insecticides.</li> <li>• To understand what happens to a certain food before it appears on the supermarket shelf (Farm to Fork).</li> </ul> |

| TEXTILES            |           | Skills                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                       |                                                                                                                      | Knowledge                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---------------------|-----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                     |           | Design                                                                                                                                                                                                                    | Make                                                                                                                                                                                                                                                                                  | Evaluate                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| EYFS<br>(Reception) | Bookmarks | <ul style="list-style-type: none"> <li>• Discussing what a good design needs.</li> <li>• Designing a simple pattern with paper.</li> <li>• Designing a bookmark.</li> <li>• Choosing from available materials.</li> </ul> | <ul style="list-style-type: none"> <li>• Developing fine motor/cutting skills with scissors.</li> <li>• Exploring fine motor/threading and weaving (under, over technique) with a variety of materials.</li> <li>• Using a prepared needle and wool to practise threading.</li> </ul> | <ul style="list-style-type: none"> <li>• Reflecting on a finished product and comparing to their design.</li> </ul>  | <ul style="list-style-type: none"> <li>• To know that a design is a way of planning our idea before we start.</li> <li>• To know that threading is putting one material through an object.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                  |
| Year 1              | Puppets   | <ul style="list-style-type: none"> <li>• Using a template to create a design for a puppet.</li> </ul>                                                                                                                     | <ul style="list-style-type: none"> <li>• Cutting fabric neatly with scissors.</li> <li>• Using joining methods to decorate a puppet.</li> <li>• Sequencing steps for construction.</li> </ul>                                                                                         | <ul style="list-style-type: none"> <li>• Reflecting on a finished product, explaining likes and dislikes.</li> </ul> | <ul style="list-style-type: none"> <li>• To know that 'joining technique' means connecting two pieces of material together.</li> <li>• To know that there are various temporary methods of joining fabric by using staples, glue or pins.</li> <li>• To understand that different techniques for joining materials can be used for different purposes.</li> <li>• To understand that a template (or fabric pattern) is used to cut out the same shape multiple times.</li> <li>• To know that drawing a design idea is useful to see how an idea will look.</li> </ul> |
| Year 2              | Pouches   | <ul style="list-style-type: none"> <li>• Designing a pouch.</li> </ul>                                                                                                                                                    | <ul style="list-style-type: none"> <li>• Selecting and cutting fabrics for sewing.</li> </ul>                                                                                                                                                                                         | <ul style="list-style-type: none"> <li>• Troubleshooting scenarios posed by teacher.</li> </ul>                      | <ul style="list-style-type: none"> <li>• To know that sewing is a method of joining fabric.</li> <li>• To know that different stitches can be used when sewing.</li> <li>• To understand the importance of tying a knot after sewing the final stitch.</li> </ul>                                                                                                                                                                                                                                                                                                      |

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|--------|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|        |                                  |                                                                                                                                                      | <ul style="list-style-type: none"> <li>• Decorating a pouch using fabric glue or running stitch.</li> <li>• Threading a needle.</li> <li>• Sewing running stitch, with evenly spaced, neat, even stitches to join fabric.</li> <li>• Neatly pinning and cutting fabric using a template.</li> </ul>                                                                            | <ul style="list-style-type: none"> <li>• Evaluating the quality of the stitching on others' work.</li> <li>• Discussing as a class, the success of their stitching against the success criteria.</li> <li>• Identifying aspects of their peers' work that they particularly like and why.</li> </ul> | <ul style="list-style-type: none"> <li>• To know that a thimble can be used to protect my fingers when sewing.</li> </ul>                                                                                                                                                                                                                                                                                                                                                  |
| Year 3 | Cross stitch applique - Cushions | <ul style="list-style-type: none"> <li>• Designing and making a template from an existing cushion and applying individual design criteria</li> </ul> | <ul style="list-style-type: none"> <li>• Following design criteria to create a cushion or Egyptian collar.</li> <li>• Selecting and cutting fabrics with ease using fabric scissors.</li> <li>• Threading needles with greater independence.</li> <li>• Tying knots with greater independence.</li> <li>• Sewing cross stitch to join fabric.</li> <li>• Decorating</li> </ul> | <ul style="list-style-type: none"> <li>• Evaluating an end product and thinking of other ways in which to create similar items.</li> </ul>                                                                                                                                                           | <ul style="list-style-type: none"> <li>• To know that applique is a way of mending or decorating a textile by applying smaller pieces of fabric to larger pieces.</li> <li>• To know that when two edges of fabric have been joined together it is called a seam.</li> <li>• To know that it is important to leave space on the fabric for the seam.</li> <li>• To understand that some products are turned inside out after sewing so the stitching is hidden.</li> </ul> |

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|        |            |                                                                                                                  | fabric using appliqué.<br>• Completing design ideas with stuffing and sewing the edges (Cushions)                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                |
| Year 4 | Fastenings | • Writing design criteria for a product, articulating decisions made.<br>• Designing a personalised book sleeve. | • Making and testing a paper template with accuracy and in keeping with the design criteria.<br>• Measuring, marking and cutting fabric using a paper template.<br>• Selecting a stitch style to join fabric, working neatly by sewing small, straight stitches.<br>• Incorporating fastening to a design | • Testing and evaluating an end product against the original design criteria.<br>• Deciding how many of the criteria should be met for the product to be considered successful.<br>• Suggesting modifications for improvement.<br>• Articulating the advantages and disadvantages of different fastening types. | • To know that a fastening is something which holds two pieces of material together for example a zipper, toggle, button, press stud and velcro.<br>• To know that different fastening types are useful for different purposes.<br>• To know that creating a mock up (prototype) of their design is useful for checking ideas and proportions. |
| Year 5 | N/A        |                                                                                                                  |                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                |
| Year 6 | N/A        |                                                                                                                  |                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                |