

DT Whole School Curriculum Map – 2021/2022

Year group	Autumn	Spring	Summer
Reception	<p>ALL ABOUT ME – painted face. – developing the skills of using a paint brush and how to hold correctly. Being able to paint what they can see.</p> <p>Different ways for chn to communicate their ideas?</p> <p>Looked at a variety of materials/tools and how to use these safely - weekly lessons of how to use and apply creative skills such as; cutting, sticking and joining materials.</p> <p>Exploring colour mixing – children to develop the skills in how colours are created.</p> <p>Making Christmas cards using different materials. – Children will develop the skills to create for a purpose.</p>	<p>Retelling the story of Chinese New Year using masks. Using media and materials to create the different animals.</p> <p>Making a Chinese dragon – using tools, constructing with a purpose in mind Different textures Can children select their own tools for the design?</p> <p>Make a puppet = finger puppet of a Julia Donaldson character Can chn make their puppet better? – evaluate and improve a product?</p> <p>Exploring music – making a shaker</p> <p>Easter nests cakes = melting chocolate, using a recipe, food hygiene</p> <p>Mother's day and Easter cards – careful drawing, choosing colours for a purpose, selecting appropriate resources etc.</p>	<p>Creating artwork from seeds.</p> <p>Retelling a story using movement, dance and instruments together as a group.</p> <p>Creating art work based on a countries climate using paint – exploring colour mixing.</p> <p>Building boats – floating and sinking, linking to maths. Can chn communicate their findings – verbal or written in some way?</p> <p>Music – make music with instruments.</p> <p>Look at changing media and materials – melting, freezing, and mixing sand and paint.</p> <p>Developing imaginative play through the role-play area.</p> <p>Healthy smoothies.</p>
Year 1	<p>Design purposeful, functional & appealing products.</p> <p>Generate, model & communicate ideas.</p> <p>Select and use range of tools & materials to complete practical tasks.</p>	<p>Design purposeful, functional & appealing products.</p> <p>Generate, model & communicate ideas.</p>	<p>Design purposeful, functional & appealing products.</p> <p>Generate, model & communicate ideas.</p> <p>Use range of tools & materials to complete practical tasks.</p>

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	<p>Can children select their own tools? Within a given selection. Evaluate existing products and own ideas.</p> <p>Build and improve structure and mechanisms.</p> <p>Understand where food comes from through cooking opportunities.</p> <p><u>Key Skills</u> (Topic) Think of some ideas of their own. They use pictures and words to plan. They talk about their own work and things that other people have done. They explain what they are making.</p> <p>Cut food safely. Wash their hands and make sure that surfaces are clean. Think of interesting ways of decorating food they have made, eg, cakes. Describe the materials using different words. Cut materials using scissors. Make a structure/model using different materials. Make their model stronger if it needs to be. Make simple plans before making objects, e.g. drawings, arranging pieces of construction before building.</p>	<p>Use range of tools & materials to complete practical tasks (creating animal habitats).</p> <p>Evaluate existing products and own ideas.</p> <p>Build and improve structure and mechanisms (Katie Morag take home project).</p> <p>Understand where food comes from through cooking opportunities (shortbread biscuits).</p> <p><u>Key Skills</u> Talk with others about how they want to construct their product. Select appropriate resources and tools for their building projects. Describe how different textiles feel. Make a product from textiles by gluing. Explain what they want to do. Explain which tools they are using.</p> <p>Specific activities?</p> <ul style="list-style-type: none"> • Shabbat bread making. • Katie Morag- shortbread making. • Katie Morag- take home project. • Design a farm. • Mother’s Day cards • Easter cards 	<p>Evaluate existing products and own ideas.</p> <p>Build and improve structure and mechanisms.</p> <p>Understand where food comes from through cooking opportunities (healthy ice lollies and 5 bean salsa).</p> <p><u>Key Skills</u> Talk with others about how they want to construct their product. Select appropriate resources and tools for their building projects. They say why they have chosen moving parts. Make a product which moves. Explain what they want to do. Explain which tools they are using. Describe how something works.</p> <p>Specific activities?</p> <ul style="list-style-type: none"> • Punch and Judy puppet show • Puppets with moving arms and legs <p>Things to consider: Y1 – make more specific links as in what activities are you going to do to achieve these</p>
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	<p>Specific activities?</p> <ul style="list-style-type: none"> • Creating a house for the three little pigs that will withstand a 'huff and a puff'. Design- Make- Evaluate. • Christmas cakes. • Apple tasting- washing and cutting. • Christmas cards 		<p>skills throughout the school year?</p> <p>Design criteria (whole school form – NP to sort)</p>
<p>Year 2</p>	<p>London Landmarks - Joining materials in different ways Diva Lamps – R.E link - Developing own ideas from initial starting points Can children design products based on design criteria? Pizza making – Fractions/Maths link - Food safety and hygiene focus</p>	<p>Boomerangs - Plan and analyse the best materials to make an item. - Joining things in different ways Can children select from a range of tools? - Evaluate and explain what went well around the project and what they would change next time. Stir fry/fried rice - Discuss and plan principles of a healthy diet - Prepare and cook a variety of savoury dishes using a range of cooking techniques. Make link to where does food come from?</p>	<p>Litter pickers-levers and pulleys. - Describe their design by using pictures, diagrams, models and words. - Make sensible choices as to which material to use for their constructions. - Develop their own ideas from initial starting points. - Incorporate some type of movement into models. - Consider how to improve their construction. Can children access a range of materials? Vehicles using axles. - Join materials together as part of a moving product. - Add some kind of design to their product.</p> <p>Things to consider: Y2: Use technical language to evaluate designs Design criteria (whole school format- NP to sort)</p>

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			<p>Do chn understand the different steps when designing, making, testing and evaluating products?</p>
<p>Year 3/4</p>	<p><u>Cycle A:</u> Create a Roman coin purse Developing, Planning and Communicating Ideas:</p> <ul style="list-style-type: none"> Research and evaluate an existing product to identify a design criteria. Design to meet a range of requirements and explain to others. Step-by-step plan Use accurately labelled sketches. Suggest improvements. <p>Working with tools, equipment, materials and components to make quality products:</p> <ul style="list-style-type: none"> Select and use appropriate tools. Use equipment and tools accurately. Good level of expertise. <p>Evaluation processes and products:</p> <ul style="list-style-type: none"> Explain what they have changed in their design to make it better. Evaluate their product both in appearance and the way it works. <p>Stiff and flexible sheet materials:</p> <ul style="list-style-type: none"> Use appropriate materials Measure carefully Work accurately to make cuts and holes. Join materials. <p>Textiles</p> <ul style="list-style-type: none"> Think what the user would want when choosing textiles. Make the product strong. Devise a template. <p>Explain how to join things in a different way.</p> <p>Buzz Wire game Developing, planning and Communicating ideas:</p> <ul style="list-style-type: none"> Research and evaluate existing products to identify a design criteria. Use computer aided design to create an accurately labelled sketch. <p>Working with tools, equipment, materials and components to make quality products:</p> <ul style="list-style-type: none"> choose and use appropriate tools and equipment accurately. <p>Electrical and mechanical components</p>	<p><u>Cycle A:</u> African one pot cooking (Ingredients) African drums Developing, Planning and Communicating Ideas:</p> <ul style="list-style-type: none"> Research and evaluate an existing product to identify a design criteria. Design to meet a range of requirements and explain to others. Step-by-step plan Use accurately labelled sketches. Begin to use computer aided design (CAD) Suggest improvements. <p>Working with tools, equipment, materials and components to make quality products:</p> <ul style="list-style-type: none"> Select and use appropriate tools. Use equipment and tools accurately. Good level of expertise. <p>Evaluation processes and products:</p> <ul style="list-style-type: none"> Explain what they have changed in their design to make it better. Evaluate their product both in appearance and the way it works. <p>Cooking and nutrition</p> <ul style="list-style-type: none"> Choose the right ingredients Use equipment safely. Describe how they combine ingredients. <p>Mouldable materials</p> <ul style="list-style-type: none"> Use a range of advanced techniques to shape and mould. <p>Use finishing techniques, showing an awareness of audience</p> <p><u>Cycle B:</u> Planter Boxes Can children evaluate existing products? Now included for each item.</p> <p>Developing, planning and communicating ideas:</p> <ul style="list-style-type: none"> Research and evaluate an existing product to identify a design criteria. 	<p><u>Cycle A:</u> Rainforest Moving animal toys shortbread shapes Developing, planning and communicating ideas:</p> <ul style="list-style-type: none"> Research and evaluate an existing product to identify a design criteria. Take account of the ideas of others when designing Produce a plan and explain it to others Put together a step-by-step plan which shows the order and also what equipment and tools they need. Describe their design using an accurately labelled sketch and words How realistic is the plan <p>Working with tools, equipment, materials and components to make quality products:</p> <ul style="list-style-type: none"> Select and use appropriate tools. Show a good level of expertise when using a range of tools and equipment Good level of expertise. <p>Evaluating processes and product</p> <ul style="list-style-type: none"> Alter the product after checking it Try out new and different ideas <p>Electrical and mechanical components</p> <ul style="list-style-type: none"> Explain what has been changed which made their design even better. Alter their product after checking it. Try out new and different ideas <p><u>Cycle B:</u> Make a Stone age outfit Developing, planning and communicating ideas:</p> <ul style="list-style-type: none"> Research and evaluate an existing product to identify a design criteria. Design to meet a range of requirements and explain to others. Step-by-step plan Use accurately labelled sketches. Suggest improvements. <p>Working with tools, equipment, materials and components to make quality products:</p>

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	<ul style="list-style-type: none"> • Use a simple circuit. • Alter their product after checking it. • Try out new and different ideas. • Use electrical components. <p>Are children using research before designing their own product? Now included for each item.</p> <p><u>Cycle B:</u> Isambard Kingdom Brunel – Create a bridges</p> <p>Developing, planning and communicating ideas</p> <ul style="list-style-type: none"> • Research and evaluate an existing product to identify a design criteria. • Come up with at least one idea about how to create their product. • Take account of the ideas of others when designing. • Produce a plan and explain it to others. • Suggest some improvements and say what was good and not so good about their original design. <p>Working with tools, equipment, materials and components to make quality products:</p> <ul style="list-style-type: none"> • Identify if their finished product is going to be good quality. • Be conscience of the need to produce something that will be liked by others. • Show a good level of expertise when using a range of tools and equipment. • Work on their product even though their original idea might not have worked. <p>Evaluating processes and products</p> <ul style="list-style-type: none"> • Evaluate a product, thinking of both appearance and the way it works. • Take time to consider how they could have made their idea better. <p>Stiff and flexible sheet materials</p> <ul style="list-style-type: none"> • Measure carefully so as to make sure they have not made mistakes. <p>Attempt to make the product strong.</p> <p>Chn to consider the views of others to improve their work. Now included for each item.</p>	<ul style="list-style-type: none"> • Show that their design meets a range of requirements • Put together a step-by-step plan which shows the order and also what equipment and tools they need • Describe their design using an accurately labelled sketch and words • Choose textiles both for their appearance and also qualities • Think about what the user would want when choosing textiles • Consider how to make their product strong • Devise a template • Explain how to join things in a different way <p>Stiff and flexible sheet materials:</p> <ul style="list-style-type: none"> • Measure carefully • Attempt to make their product strong <p>Do chn have the opportunity to select from a wide range of tools and explain why they have selected particular tools? Now included</p>	<ul style="list-style-type: none"> • Identify if their finished product is going to be good quality. • Select and use appropriate tools. • Be conscience of the need to produce something that will be liked by others. • Show a good level of expertise when using a range of tools and equipment. <p>Evaluating processes and products</p> <ul style="list-style-type: none"> • Evaluate a product, thinking of both appearance and the way it works. • Take time to consider how they could have made their idea better. <p>Textiles</p> <ul style="list-style-type: none"> • Join textiles of different types in different ways. • Choose textiles both for their appearance and also qualities. • Think what the user would want when choosing textiles. • Make the product strong. • Devise a template. <p>Explain how to join things in a different way.</p> <p>Things to consider: Year 3 and 4: Design criteria (whole school – NP to sort) Evaluating – compare own work to others Look more at key events and individuals Electrical systems - included in Cycle A – Buzz Wire game (cross-curricular with science) Apply their understanding of computing to program, monitor and control their products. Can we have some suggestions of how to do this please? – I will have a look for you! NP</p>
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	<p>Can children generate their ideas for this using computer aided design? Included in Spring term, Cycle A</p>		<p>Keypad, remote control, joystick Spreadsheets – link to maths...how many products could they sell/profit/loss etc?</p>
<p>Year 5/6</p>	<p><u>Cycle A:</u></p> <p>Research and make your own Anderson shelter</p> <p>Do they keep checking that their design is the best it can be? Chn to consider the views of others to improve their work.</p> <p>Do they check whether anything could be improved?</p> <p>Can they evaluate appearance and function against the original criteria?</p> <p>Can they use a range of information to inform their design? Can they use market research to inform plans?</p> <p>Can they work within constraints?</p> <p>Can they follow and refine their plan if necessary?</p> <p>Can they justify their plan to someone else?</p>	<p><u>Cycle A:</u></p> <p>Design own Oscar Can they design, make and evaluate their Oscar? Can they make improvements to their Oscar?</p> <p><u>Cycle B:</u></p> <p>Cooking-local delicacies (Black Country Fruit Biscuits – for Mother's Day)</p> <p>Can they describe what they do to be both hygienic and safe?</p> <p>How have they presented their product well?</p> <p>Gift packaging for Mother's Day biscuits</p> <p>Undertake research and come up with a range of ideas</p> <p>Evaluate existing products</p> <p>Evaluate appearance and function against criteria.</p>	<p><u>Cycle A:</u></p> <p>Design and make a bag for an explorer Link to key events and individuals</p> <p><u>Cycle B:</u></p> <p>Marble Maze</p> <p>Can they explain why their finished product is going to be of good quality? Can they explain how their product will appeal to the audience?</p> <p>Can they use a range of tools and equipment expertly?</p> <p>Do they persevere through different stages of the making process?</p> <p>Cooking in the curriculum – seasonality (Summer Pudding/Fruit Kebabs)</p> <p>Things to consider: 5/6:</p>

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	<p>Do they consider culture and society in their designs?</p> <p>Cooking – war time recipes using rations Top Trumps</p> <p><u>Cycle B:</u></p> <p>Masks – done also in 3/4, are skills being progressed/developed? Can they come up with a range of ideas after they have collected information?</p> <p>Do they take a user's view into account when designing?</p> <p>Can they produce a detailed step-by-step plan?</p>	<p>Explain how their product will appeal to the audience</p> <p>Choose from a range of materials and tools available</p> <p>Work within constraints</p>	<p>Design criteria (whole school format – NP to sort)</p>
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