

DT Long Term Plan

DT – KEY AREAS OF LEARNING	DESIGN	MAKE	EVALUATE	TECHNICAL KNOWLEDGE
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KEY STAGE 1 GOLDEN THREADS

COOKING AND NUTRITION	TEXTILES	MECHANISMS	USE OF MATERIALS	CONSTRUCTION
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KEY STAGE 2 GOLDEN THREADS

COOKING AND NUTRITION	TEXTILES	ELECTRICAL AND MECHANICAL COMPONENTS	STIFF AND FLEXIBLE SHEET MATERIALS	MOULDABLE MATERIALS
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	<u>Objectives used throughout the year</u>	<u>AUTUMN TERM</u>	<u>SPRING TERM</u>	<u>SUMMER TERM</u>
EYFS Expressive Arts and Design (EAD)	<p>Development Matters objectives</p> <p>– Fine Motor Skills</p> <ul style="list-style-type: none"> Use a range of small tools, including scissors, paintbrushes and cutlery. <p>EXPRESSIVE ARTS AND DESIGN – Creating with Materials</p> <ul style="list-style-type: none"> Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. <p>Share their creations, explaining the process they have used.</p> <p><u>DT – Core skills taught through CIL and DT projects</u></p> <ul style="list-style-type: none"> BLOCK PLAY - To be able to make a stable model CUTTING - : To be able to cut accurately using scissors GLUE - : To be able to select and use the most appropriate type of glue JOINING - : To be able to use a range of joining techniques 	<p><u>Topic – Design, Make, Evaluate and Technical Knowledge</u></p> <p><u>For example, ‘Junk Modelling’, ‘Christmas Decorations’</u> (topics adapted to meet the needs and interests of the cohort)</p> <ul style="list-style-type: none"> Can they use scissors, paintbrushes, sellotape, masking tape, glue to construct a house? Can they use a variety of materials to create a decoration that hangs on a tree? Can they orally design then cut, join and assemble using tools such as scissors, knives, various sticking tapes, glue and textiles? 	<p><u>Topic – Design, Make, Evaluate and Technical Knowledge</u></p> <p><u>For example, ‘Fruit Skewers, ‘Superhero accessories’</u> (topics adapted to meet the needs and interests of the cohort)</p> <ul style="list-style-type: none"> Can they create a healthy fruit skewer? Can they talk about and select the fruits for their skewers? Can they make a fruit skewer by cutting the fruit and assembling the fruit on the skewer? Can they talk about their final fruit skewers? Can they create an accessory for a superhero? Can they discuss what accessories are needed for a superhero? Can they select from and use a range of materials including textiles? Can they use equipment for cutting, shaping, joining and finishing. Can they discuss their final product? 	<p><u>Topic – Design, Make, Evaluate and Technical Knowledge</u></p> <p><u>For example, ‘Castles’, ‘Survival Jungle’</u> (topics adapted to meet the needs and interests of the cohort)</p> <ul style="list-style-type: none"> Can they use joining materials such as split pins, treasury tags, paper clips, and construction materials such as lego, duplo, wooden blocks? Can they create a jungle where animals can survive? Can they carefully select resources (indoors and outdoors)? Can they draw a labelled diagram? Can they build a strong and stable structure? How can they make it stronger and stable?

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<p><u>Yr 1</u></p>	<p>Key areas – Design, Make, Evaluate, Technical knowledge</p> <ul style="list-style-type: none"> • Can they think of some ideas of their own? • Can they explain what they want to do? • Can they use pictures and words to plan? • Can they explain what they are making? • Can they explain which tools are they using? • Can they describe how something works? • Can they talk about their own work and things that other people have done? 	<p><u>DESIGN A BUILDING FOR A TOWN</u> CONSTRUCTION AND USE OF MATERIALS</p> <ul style="list-style-type: none"> • Can they make a structure/model using different materials? • Is their work tidy? • Can they make their work stronger if needs be? • Can they make simple plans before making objects, e.g. drawings, arranging pieces of construction before building? • Can they talk with others about how they want to construct their product? • Can they select appropriate resources and tools for their building projects? 	<p><u>MAKE A SOCK PUPPET</u> TEXTILES</p> <ul style="list-style-type: none"> • Can they describe how different textiles feel? • Can they make a product from textiles by gluing? <p><u>MAKE A POP UP TOY</u> MECHANISMS</p> <ul style="list-style-type: none"> • Can they make a product which moves? • Can they cut materials using scissors? • Can they describe the materials using different words? • Can they say why they have chosen moving parts? 	<p><u>DESIGN A HEALTHY FRUIT SALAD AND MAKE AND DECORATE A FAIRY CAKE</u> COOKING AND NUTRITION</p> <ul style="list-style-type: none"> • Can they cut food safely? • Can they describe the texture of foods? • Do they wash their hands and make sure that surfaces are clean? • Can they think of interesting ways of decorating food they have made, eg, cakes?
<p><u>Yr 2</u></p>	<p>Key areas – Design, Make, Evaluate, Technical knowledge</p> <ul style="list-style-type: none"> • Can they think of ideas and plan what to do next? • Can they choose the best tools and materials? • Can they give a reason why these are best? • Can they describe their design by using pictures, diagrams, models and words? • Can they explain what went well with their work? • If they did it again, can they explain what they would improve? 	<p><u>DESIGN AND MAKE A FRUIT/VEGETABLE MONSTER</u> COOKING AND NUTRITION</p> <ul style="list-style-type: none"> • Can they describe the properties of the ingredients they are using? • Can they explain what it means to be hygienic? • Are they hygienic in the kitchen? 	<p><u>DESIGN AND MAKE AN EMERGENCY VEHICLE</u> CONSTRUCTION, USE OF MATERIALS AND MECHANISMS</p> <ul style="list-style-type: none"> • Can they make sensible choices as to which material they can use for their constructions? • Can they develop their own ideas from initial starting points? • Can they incorporate some type of movement into models? • Can they consider how to improve their construction? • Can they measure materials to use in a model or structure? • Can they join material in different ways? • Can they use joining folding or rolling to make it stronger? 	<p><u>DESIGN AND MAKE A PICNIC BLANKET FOR A TRIP TO THE SEASIDE</u> TEXTILES</p> <ul style="list-style-type: none"> • Can they measure textile? • Can they join textiles together to make something? • Can they cut textiles? • Can they explain why they chose a certain textile? • Can they join things (materials/ components) together in different ways?

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			<ul style="list-style-type: none"> • Can they join materials together as part of a moving product? • Can they add some kind of design to their product? 	
Yr 3	<p><u>Key areas</u> – Design, Make, Evaluate, Technical knowledge</p> <ul style="list-style-type: none"> • Can they show that their design meets a range of requirements? • Can they put together a step-by-step plan which shows the order and also what equipment and tools they need? • Can they describe their design using an accurately labelled sketch and words? • How realistic is their plan? • Can they use equipment and tools accurately? • Can they explain what they changed which made their design even better? 	<p>STONE AGE JEWELLERY MOULDABLE MATERIALS</p> <ul style="list-style-type: none"> • Do they select the most appropriate materials? • Can they use a range of techniques to shape and mould? • Do they use finishing techniques? 	<p>ANGLO SAXON HOUSES/ CLASS VILLAGE STIFF AND FLEXIBLE SHEET MATERIALS</p> <ul style="list-style-type: none"> • Do they use the most appropriate materials? • Can they work accurately to make cuts and holes? • Can they join materials? 	<p>BUNTING FLAGS TEXTILES</p> <ul style="list-style-type: none"> • Can they join textiles of different types in different ways? • Can they choose textiles both for their appearance and also qualities? <p>AFTERNOON TEA COOKING AND NUTRITION</p> <ul style="list-style-type: none"> • Can they choose the right ingredients for a product? • Can they use equipment safely? • Can they make sure that their product looks attractive? • Can they describe how their combined ingredients come together? • Can they set out to grow plants such as cress and herbs from seed with the intention of using them for their food product?
Yr 4	<p><u>Key areas</u> – Design, Make, Evaluate, Technical knowledge</p> <ul style="list-style-type: none"> • Can they come up with at least one idea about how to create their product? • Do they take account of the ideas of others when designing? • Can they produce a plan and explain it to others? 	<p>MAKING TORCHES (AUTUMN 1) ELECTRICAL AND MECHANICAL COMPONENTS</p> <ul style="list-style-type: none"> • Can they add things to their circuits? 	<p>MAKING BUNTING (SPRING 2) TEXTILES</p> <ul style="list-style-type: none"> • Do they select colours/design with the user in mind? • Can they explain how to join things in a different way to 	<p>MAKING A MODEL STADIUM (PANATHENAIC STADIUM) (SUMMER 2) STIFF AND FLEXIBLE SHEET MATERIALS</p> <ul style="list-style-type: none"> • Can they measure carefully so as to make sure they have not made mistakes?

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	<ul style="list-style-type: none"> • Can they suggest some improvements and say what was good and not so good about their original design? • Can they tell if their finished product is going to be good quality? • Are they conscience of the need to produce something that will be liked by others? • Can they show a good level of expertise when using a range of tools and equipment? • Do they work at their product even though their original idea might not have worked? • Have they thought of how they will check if their design is successful? • Can they begin to explain how they can improve their original design? • Can they evaluate their product, thinking of both appearance and the way it works? • Do they take time to consider how they could have made their idea better? 	<ul style="list-style-type: none"> • How have they altered their product after checking it? • Are they confident about trying out new and different ideas? 	<p>improve the overall appearance?</p>	<ul style="list-style-type: none"> • How have they attempted to make their product strong? <p>MAKING A FOOD PRODUCT COOKING AND NUTRITION</p> <ul style="list-style-type: none"> • Do they know what to do to be hygienic and safe? • Have they thought what they can do to present their product in an interesting way?
<p>Yr 5</p>	<p>Key areas – Design, Make, Evaluate, Technical knowledge</p> <ul style="list-style-type: none"> • Can they come up with a range of ideas after they have collected information? • Do they take a user's view into account when designing? • Can they produce a detailed step-by-step plan? • Can they suggest some alternative plans and say what the good points and drawbacks are about each? • 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? • Can they use a range of tools and equipment expertly? • Do they persevere through different stages of the making process? • Do they keep checking that their design is the best it can be? • Do they check whether anything could be improved? • Can they evaluate appearance and function against the original criteria? 	<p>VIKING BREAD (AUTUMN 1) COOKING AND NUTRITION</p> <ul style="list-style-type: none"> • Can they describe what they do to be both hygienic and safe? • How have they presented their product well? 	<p>SCARAB BEETLES (SPRING 1) (Covered in Art)</p> <p>MOULDABLE MATERIALS</p> <p>Art Project</p> <ul style="list-style-type: none"> • Are they motivated enough to refine and further improve their product using mouldable materials? <p>SOUTH AMERICAN BAG (SPRING 2) TEXTILES</p> <ul style="list-style-type: none"> • Do they think what the user would want when choosing textiles? • How have they made their product attractive and strong? • Can they make up a prototype first? • Can they use a range of joining techniques? 	<p>MAKE A HYDRAULIC BRIDGE (SUMMER 2)</p> <p>ELECTRICAL AND MECHANICAL COMPONENTS AND STIFF AND FLEXIBLE MATERIALS</p> <ul style="list-style-type: none"> • Can they incorporate a switch into their product? • Can they refine their product after testing it? • Can they incorporate hydraulics and pneumatics? • Are their measurements accurate enough to ensure that everything is precise? • How have they ensured that their product is strong and fit for purpose?

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<p><u>Yr 6</u></p>	<p>Key areas – Design, Make, Evaluate, Technical knowledge</p> <ul style="list-style-type: none">• Can they use a range of information to inform their design?• Can they use market research to inform plans?• Can they work within constraints?• Can they follow and refine their plan if necessary?• Can they justify their plan to someone else?• Do they consider culture and society in their designs?• Can they use tools and materials precisely?• Do they change the way they are working if needed?• How well do they test and evaluate their final product?• Is it fit for purpose?• What would improve it?• Would different resources have improved their product?• Would they need more or different information to make it even better?• Does their product meet all design criteria?• Did they consider the use of the product when selecting materials?	<p><u>ANDERSON SHELTERS (AUTUMN 1)</u> STIFF AND FLEXIBLE SHEET MATERIALS AND ELECTRICAL AND MECHANICAL COMPONENTS</p> <ul style="list-style-type: none">• Can they justify why they selected specific materials?• How have they ensured that their work is precise and accurate?• Can they hide joints so as to improve the look of their product?• Can they use different kinds of circuit in their product?• Can they think of ways in which adding a circuit would improve their product?	<p><u>POP UP BOOKS (SPRING 2)</u> STIFF AND FLEXIBLE SHEET MATERIALS</p> <ul style="list-style-type: none">• Can they justify why they selected specific materials?• How have they ensured that their work is precise and accurate?• Can they hide joints so as to improve the look of their product?	<p><u>MAYAN POTTERY (SUMMER 2)</u> MOULDBLE MATERIALS</p> <ul style="list-style-type: none">• Can they justify why the chosen material was the best for the task?• Can they justify design in relation to the audience? <p><u>MAKING HOMEMADE PIZZA – ENTERPRISE WEEK PROJECT or TRANSITION DAY PROJECT AT LOCAL SECONDARY SCHOOL</u> COOKING AND NUTRITION</p>
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