

DT Curriculum 2023/24 – Years 3 & 4

	Autumn 1	Autumn 2
Topic	<u>No Focus</u>	<p><u>Structures – Wooden Photo frames</u></p> <p>Children will design and make a photograph frame which has a rectangular wooden structure and will consider how to add decoration to make it appeal to their intended recipient – this item will be a Christmas gift! They will learn how to safely use a variety of woodworking tools and equipment.</p>
Knowledge		<ul style="list-style-type: none"> • Know about different types of photograph frames and investigate how they are made, different materials used, their sturdiness, strength and stability • Know how to strengthen materials such as using card to make reinforced corners • Know the names of different tools and how to safely use these (eg hammer, hack saw, vice, sandpaper, glue gun) • Know how to use design criteria for their finished photo frame • Know how to create a 'mock up frame' using art straws or card/paper to ensure their measurements are accurate • Know how to make their own photograph frame from wood using their mock up model as a guide • Know how to evaluate their photograph frame as a Christmas gift, comparing their end product to their initial design
Vocab		<p>Strength, reinforced, material, wood, cardboard corners, stability, hammer, hacksaw, vice, sandpaper, bench hook, glue gun, mock up, measure, mark out, cut, design, make, evaluate</p>



DT Curriculum 2023/24 – Years 3 & 4

	Spring 1	Spring 2
Topic	<u>No Focus</u>	<p><u>Electrical Systems – Torches</u></p> <p>Children will investigate how torches work and be able to build an electrical system incorporating a switch which will fit inside a casing to create a torch. They will explore the properties of different materials to discover the best ones to create the outer casings. They will evaluate how well their torches work using a dark space!</p>
Knowledge		<ul style="list-style-type: none"> • Know about different types of torch - what they are made of, how they work and their uses e.g wrist torch, miner’s head lamp, battery powered torch, LED torch, solar powered garden torch. • Know how to create a simple circuit which will enable a torch to light, including incorporating a switch. • Know about different design criteria and produce a torch to address this (e.g a rock climber who needs a hands free torch, a secret agent who needs a tiny concealed torch, a nocturnal wildlife expert who needs a torch with a very dim glow e.g Northern Cyprus sea turtle conservation – see cyprusturtles.org) • Know how to produce a design for their torch • Know how to describe the purpose of their product, explain how it works and identify some of the ways their torch will appeal to intended users • Know how to select an appropriate casing (plastic or cardboard) and say why they have chosen this. Consider whether they can use recyclable materials within their design. • Know about different ways to secure their circuits inside the torch casing • Know how to evaluate their end product
Vocab		Materials, conductor, insulator, circuit, switch, battery, symbols (for electrical vocabulary) design, design criteria, purpose, safety, casings, attachments



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	Summer 1	Summer 2
Topic	<p><u>Food Technology – Savoury Crumble</u></p> <p>Children will prepare and cook a savoury crumble in groups. Children will taste ingredients to then prepare a savoury crumble. They will take portions home for their families to try and give feedback! They will find out about the seasonality of vegetables and which vegetables are 'home grown' and why. They will research recipes and use appropriate utensils to perform practical tasks correctly. They will evaluate the taste of their final product and suggest ways it could be improved.</p>	<u>No Focus</u>
Knowledge	<ul style="list-style-type: none"> • Know about and name a variety of vegetables • Know which vegetables are grown in this country or have to be imported • Know about the seasonality of common UK vegetables • Know how to evaluate food by tasting • Know how to create a recipe for their crumble • Know about sections of a recipe – e.g 'ingredients' and 'method' • Know how to peel, chop or grate vegetables • Know how a basic 'crumble' topping is created (this will be pre-prepared) • Know how to evaluate the taste and appearance of food • Know how to work collaboratively with others to create a recipe 	
Vocab	<p>Vegetable, seasonal, flavour, aesthetic appeal, ingredient, recipe, method, utensils, chop, peel, grate, bake, crumble topping, taste, evaluate</p>	



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Topic	<u>No Focus</u>	<p>Food Technology</p> <p>Children will prepare and cook a pizza. This will be served to family/friends in a 'pizza café' in school, to provide real life context for the topic. Children will cook a savoury dish by baking and they will explore seasonality of vegetable growth. They will research design criteria to inform their own designs and they will select from a wider range of tools and equipment to perform practical tasks accurately. Children will be involved in researching and analysing a range of existing products and they will evaluate their own product whilst considering the views of others to improve their work.</p>
Knowledge		<ul style="list-style-type: none"> • Know about some famous chefs including Italian ones e.g Antonio Carluccio, Gino de Campo • Know how to research different recipes by using recipe books, online recipe websites, YouTube videos • Know about sections of a recipe such as 'ingredients' and 'method' • Know how to evaluate food by tasting • Know the seasonality of some common UK vegetables • Know how to identify the ingredients contained in different foods (pizza) • Know how to create a recipe (for their pizza) • Know how to make a dough and knead/ stretch into a pizza base • Know how to make and bake a pizza (timings for cooking etc) • Know how to evaluate the taste and appearance of food • Know how to work collaboratively with others to create a recipe idea
Vocab		chef, flavour, aesthetic appeal, recipe, ingredients, method, dough, knead, stretch, roll, bake, Fahrenheit, Centigrade, utensils, taste



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	Spring 1	Spring 2
Topic	<u>No Focus</u>	<p><u>Electrical Systems – linked to Extreme Weather Unit</u></p> <p>Children will use the Lego WeDo Kits to build Milo the Science Rover (Getting Started project) and complete the 'Prevent Flooding' task (intermediate task). Children will design purposeful and functional products for others based on design criteria and they will select from and use a wide range of materials and components according to their characteristics. They will apply their understanding of computing to program, monitor and control their products.</p>
Knowledge		<ul style="list-style-type: none"> Know about different ways scientists and engineers reach remote places Know how to build a LEGO robot Know how to program a LEGO robot using an app so it can complete tasks Know about various ways that precipitation can change over seasons and how water can cause damage if it is not controlled. Know how to create and program a floodgate to control the water level of a river.
Vocab		floodgate, engineering-based design, program, sequence, axis, motor, motion sensor, tilt sensor, sound sensor, sensor-control



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	Summer 1	Summer 2
Topic	<u>No Focus</u>	<p>Textiles – Pencil cases (linked to local Shoddy industry)</p> <p>Children will use recycled materials to make their own pencil case. They will design purposeful, functional, appealing products for themselves and other users based on design criteria. They will generate and develop their ideas through talking, drawing and mock-ups and they will develop sewing skills to join textiles. Children will explore and evaluate a range of materials and they will evaluate their own ideas and products against design criteria.</p>
Knowledge		<ul style="list-style-type: none"> • Know about different ways a pencil case can be made • Know how to research different fabrics and which would work best and why • Know about recycling of materials and why this is important • Know about different fasteners on different pencil cases and how they work - button and loop/ Velcro/press stud • Know how to use different hand sewing stitches - running stitch and blanket stitch • Know how and when to add embellishments to pencil cases • Know about creating an aesthetically pleasing product • Know how to create a design within given criteria and to identify the resources that design will require • Know how to sew a pencil case • Know how to evaluate and suggest improvements to a finished product
Vocab		<p>fabric types eg felt canvas cotton denim, fastener, zip, buttons, running stitch, blanket stitch, needle, thread, eye, embellishment, decoration, design, recycled, re-used, assemble, attach, seam, hem, join</p>

