John Mayne Church of England Primary School- Subject Progression Plan

Subject	Design and Technology	Subject leader	Liz Deverell

EYFS requirements

- **Children safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.**
- **Children handle equipment and tools effectively, including pencils for writing.**
- **Children use what they have learnt about media and materials in original ways, thinking about uses and purposes. They represent their own ideas, thoughts and feelings through design and technology.**

KS1 and KS2 NC requirements

The national curriculum for design and technology aims to ensure that all pupils:

- **develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world**
- **build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users**
- **critique, evaluate and test their ideas and products and the work of others**
- **understand and apply the principles of nutrition and learn how to cook**

The John Mayne CE Primary School Vision for Design and Technology

Our vision for our pupils in the subject of Design and Technology, is that they will leave John Mayne Primary School with the knowledge and skills which gives them the confidence to design a product to solve a need or a problem and also to have the ability to cook a nutritious and healthy meal. The aptitude to think creatively in design and technology as an adult, adds greatly to the culture, wealth and well-being of the nation.

Area of learning/Year group	YR	Y1	Y2	Y3	Y4	Y5	Y6
1. Designing and communicating ideas.	-Constructs with a purpose in mind. -Talks about what they are going to make. - Models ideas using different materials.	-Draw on their own experience to help generate ideas. -Suggest ideas and explain what they are going to do -Model their ideas in card and paper -Develop their design ideas applying findings from their earlier research	Generate ideas by drawing on their own and other people's experiences -Develop their design ideas through discussion, observation , drawing and modelling -Identify a purpose for what they intend to design and make -Make simple drawings and label parts	-Generate ideas for an item, considering its purpose and the user/s -Identify a purpose and establish criteria for a successful product. -Plan the order of their work before starting -Make drawings with labels when designing	-Generate ideas, considering the purposes for which they are designing -Make labelled drawings from different views showing specific features -Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail	-Generate ideas through brainstorming and identify a purpose for their product -Draw up a specification for their design -Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making if the first attempts fail	-Communicate their ideas through detailed labelled drawings -Develop a design specification -Explore, develop and communicate aspects of their design proposals by modelling their ideas -Plan the order of their work, choosing appropriate materials, tools and techniques
Vocabulary	Plan, draw, ideas, design	Plan, prepare, design, materials, ideas, use, model, development, market research, survey, template		Plan, organize, prototype, initial ideas, criteria, diagrams, labels, annotate, brief product, consumer, customer, target audience, purpose, application, constraints, client			

2. Making products (including food) with tools, and materials.	- Manipulate materials to achieve a planned effect. - Use simple tools and techniques competently and appropriately. - Join materials with different tools and techniques. -Use tools safely.	-Make their design using appropriate techniques -Use tools eg scissors and a hole punch safely -Assemble, join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape -Select and use appropriate fruit and vegetables, processes and tools -Use basic food handling, hygienic practices and personal hygiene -Use simple finishing techniques to improve the appearance of their product	-Begin to select tools and materials; use vocab' to name and describe them -Measure, cut and score with some accuracy -Use hand tools safely and appropriately -Assemble, join and combine materials in order to make a product -Follow safe procedures for food safety and hygiene -Choose and use appropriate finishing techniques	-Select tools and techniques for making their product -Measure, mark out, cut, score and assemble components with more accuracy -Work safely and accurately with a range of simple tools -Think about their ideas as they make progress and be willing to change things if this helps them improve their work -Demonstrate hygienic food preparation and storage -Use finishing techniques strengthen and improve the appearance of their product using a range of equipment including ICT	-Select appropriate tools and techniques for making their product -Measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques -Join and combine materials and components accurately in temporary and permanent ways -Use simple graphical communication techniques	-Select appropriate materials, tools and techniques -Measure and mark out accurately -Use skills in using different tools and equipment safely and accurately -Apply the rules for basic food hygiene and other safe practices -Cut and join with accuracy to ensure a good-quality finish to the product	-Select appropriate tools, materials, components and techniques -Assemble components make working models -Use tools safely and accurately -Construct products using a range of joining techniques -Make modifications as they go along -Achieve a quality product
Vocabulary	Make, build, combine, join, shape,	Fast, slow, faster, slower, up, down, turn, wind up, design, draw, sketch tools, fix, glue, attach, features, brick, wood, stone, cloth, metal,		Materials, mould, liquid, solid, form, shape, adhesive, lattice, mass-produce, hand-made, packaging, presentation, machine made, dimensions, durable, healthy, unhealthy, balanced,			

	tools, complete, product, final	foam, felt, paper, tissue, newspaper, cardboard, string, wool, clay, scissors, glue, tape, cut, stick, decorate, healthy, unhealthy, source, fruit, vegetables, clean, safe, dirty, unsafe, amount, ingredients, recipe, weight, nutrients, vegetarian, dietary requirements		vitamins, disease, nutrition, healthy eating, hygiene, diet, cross contamination, grams, storage, presentation, taste, texture, flavour, disinfect, bacteria			
3. Evaluating processes and products	- Adapts work where necessary during making process. - Talks about objects and how they work, and their design	-Evaluate their product by discussing how well it works in relation to the purpose -Evaluate their products as they are developed, identifying strengths and possible changes they might make -Evaluate their product by asking questions about what they have made and how they have gone about it	-Evaluate against their design criteria -Evaluate their products as they are developed, identifying strengths and possible changes they might make -Talk about their ideas, saying what they like and dislike about them	-Evaluate their product against original design criteria e.g. how well it meets its intended purpose	-Evaluate their work both during and at the end of the assignment -Evaluate their products carrying out appropriate tests	-Evaluate a product against the original design specification -Evaluate it personally and seek evaluation from others	-Evaluate their products, identifying strengths and areas for development, and carrying out appropriate tests -Record their evaluations using drawings with labels -Evaluate against their original criteria and suggest ways that their product could be improved
Vocabulary	Change, like, dislike, next time, better, worse, different, instead	Change, improve, prefer, useful, unsuccessful, future, progress, modify, alter, adapt, original, finished article, evaluate, graphics		Assess, edit, improve, alter, outcome, develop, test, analyse, effective, fit for purpose, design criteria, alternatives, models, quality, function, functionality			

These plans should be read in conjunction with each classes' curriculum map

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