



Holy Family Catholic Primary School – DT Progression Document



The document below has been designed to show how we will cover all of the relevant Design & Technology knowledge and skills across Holy Family. The context in which these are taught is left to the discretion of teachers.

Design & Technology Progression in EYFS

The EYFS framework is structured very differently to the national curriculum as it is organised across seven areas of learning rather than subject areas. The aim of this document is to help subject leaders to understand how the skills taught across EYFS feed into national curriculum subjects.

This document demonstrates which statements from the 2020 Development Matters are prerequisite skills for DT within the national curriculum. The table below outlines the most relevant statements taken from the Early Learning Goals in the EYFS statutory framework and the Development Matters age ranges for Three and Four-Year-Olds and Reception to match the programme of study for DT.

The most relevant statements for DT are taken from the following areas of learning:

- Physical Development
- Expressive Arts and Design

Design & Technology Progression		
Three and Four-Year-Olds	Personal, Social and Emotional Development	<ul style="list-style-type: none">• Select and use activities and resources, with help when needed. This helps them to achieve a goal they have chosen or one which is suggested to them.
	Physical Development	<ul style="list-style-type: none">• Use large-muscle movements to wave flags and streamers, paint and make marks.• Choose the right resources to carry out their own plan.• Use one-handed tools and equipment, for example, making snips in paper with scissors.
	Understanding the World	<ul style="list-style-type: none">• Explore how things work.
	Expressive Arts and Design	<ul style="list-style-type: none">• Make imaginative and complex 'small worlds' with blocks and construction kits, such as a city with different buildings and a park.• Explore different materials freely, in order to develop their ideas about how to use them and what to make.• Develop their own ideas and then decide which materials to use to express them.• Create closed shapes with continuous lines, and begin to use these shapes to represent objects.



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Reception	Physical Development		<ul style="list-style-type: none">• Progress towards a more fluent style of moving, with developing control and grace.• Develop their small motor skills so that they can use a range of tools competently, safely and confidently.• Use their core muscle strength to achieve a good posture when sitting at a table or sitting on the floor.
	Expressive Arts and Design		<ul style="list-style-type: none">• Explore, use and refine a variety of artistic effects to express their ideas and feelings.• Return to and build on their previous learning, refining ideas and developing their ability to represent them.• Create collaboratively, sharing ideas, resources and skills.
ELG	Physical Development	Fine Motor Skills	<ul style="list-style-type: none">• Use a range of small tools, including scissors, paintbrushes and cutlery.
	Expressive Arts and Design	Creating with Materials	<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.• Share their creations, explaining the process they have used.



Design & Technology Progression in Key stage 1 and Key Stage 2

In Key Stage 1 and Key Stage 2 we follow a 2 year Cycle with DT taught half termly ensuring 3 topics of DT are taught annually. In line with the National Curriculum, all of the relevant POS will be taught by the end of the key stage.

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	Key Stage 1		Lower Key Stage 2		Upper Key Stage 2	
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Area of Study Cycle A	Eat More Fruit and Vegetables: Cooking & Nutrition Playgrounds: Structures Moving Pictures: Mechanisms & Mechanical Systems		Egyptian Masks: Structures Battery Operated Lights: Electrical Systems The Great Bread Bake Off: Cooking & Nutrition		Fairgrounds: Mechanisms & Mechanical /Electrical Systems Global Food: Cooing & Nutrition Felt Phone Cases: Textiles	
Cycle B	Perfect Pizzas: Cookery & Nutrition Puppets: Textiles Vehicles: Mechanisms & Mechanical Systems		Seasonal Stockings: Textiles Making Monsters: Mechanisms & Mechanical Systems Edible Garden: Cooking & Nutrition		Super Seasonal Cooking: Cooking & Nutrition Ancient Greeks: Structures Programming Adventures: Programming and Electronics	



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Design & Technology Progression			
Design	KS1	LKS2	UKS2
	<p>KS1 DT National Curriculum Pupils should design purposeful, functional, appealing products for themselves and other users based on design criteria Pupils should generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology</p>	<p>KS2 DT National Curriculum Pupils should 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 Pupils should generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design</p>	
	<p>Understanding contexts, users and purposes:</p> <ul style="list-style-type: none"> Work in a range of relevant contexts, for example imaginary, story-based, home, school and the wider environment. Understand and follow simple design criteria Design products that have a purpose and are aimed at an intended user 	<p>Understanding contexts, users and purposes:</p> <ul style="list-style-type: none"> Work in a wide range of relevant contexts, for example entertainment, the home, school, leisure, food industry and the wider environment. Develop and follow simple design criteria Design innovative and appealing products that have a clear purpose and are aimed at a specific user Begin to identify the design features of their products that will appeal to intended customers 	<p>Understanding contexts, users and purposes:</p> <ul style="list-style-type: none"> Work in a wider range of relevant contexts, for example conservation, the home, school, leisure, culture, enterprise, industry and the wider environment. Use research to inform and develop detailed design criteria Design innovative, functional and appealing products that are fit for purpose and aimed at a target market. Identify the design features of their products that will appeal to the intended user
	<p>Generating, developing, modelling and communicating ideas:</p> <ul style="list-style-type: none"> Use their knowledge of existing products and their own experiences to help generate their ideas Begin to explain how their products will look and work through talking and simple annotated drawings Where appropriate, design models using simple computing software Plan and test ideas using templates and mock-ups 	<p>Generating, developing, modelling and communicating ideas:</p> <ul style="list-style-type: none"> Use their knowledge of a range of existing products to help generate their ideas Explain how particular parts of their products work Use annotated sketches and cross-sectional drawings to develop and communicate their ideas When designing, explore different initial ideas before coming up with a final design When planning, start to explain their choice of materials and components including function and aesthetics Test ideas out through using prototypes Where appropriate, use computer-aided design to develop and communicate their ideas 	<p>Generating, developing, modelling and communicating ideas:</p> <ul style="list-style-type: none"> Use their knowledge of a broad range of existing products to help generate their ideas Give detailed explanations of how particular parts of their products work Use annotated sketches, cross-sectional drawings and exploded diagrams (possibly including computer-aided design) to develop and communicate their ideas; Generate a range of design ideas and clearly communicate final designs; Consider the availability and costings of resources when planning out designs Test ideas out through using prototypes
	<p>Understanding contexts, users and purposes:</p> <ul style="list-style-type: none"> Work in a range of relevant contexts, for example imaginary, story-based, home, school and the wider environment. Understand and follow simple design criteria Design products that have a purpose and are aimed at an intended user 	<p>Understanding contexts, users and purposes:</p> <ul style="list-style-type: none"> Work in a wide range of relevant contexts, for example entertainment, the home, school, leisure, food industry and the wider environment. Develop and follow simple design criteria Design innovative and appealing products that have a clear purpose and are aimed at a specific user Begin to identify the design features of their products that will appeal to intended customers 	<p>Understanding contexts, users and purposes:</p> <ul style="list-style-type: none"> Work in a wider range of relevant contexts, for example conservation, the home, school, leisure, culture, enterprise, industry and the wider environment. Use research to inform and develop detailed design criteria Design innovative, functional and appealing products that are fit for purpose and aimed at a target market. Identify the design features of their products that will appeal to the intended user



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Design & Technology Progression

Make	Design & Technology Progression		
	KS1 DT National Curriculum	KS2 DT National Curriculum	
	KS1	LKS2	UKS2
	<p>Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</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 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>Planning:</p> <ul style="list-style-type: none"> With support, follow a simple plan or recipe Begin to select hand tools and equipment, such as scissors, graters, zesters, safe knives, juicer Select materials, textiles and components according to their characteristics 	<p>Planning :</p> <ul style="list-style-type: none"> Place the main stages of making in a systematic order With growing confidence, select from a range of tools and equipment, explaining their choices Select from a range of materials and components according to their functional properties and aesthetic qualities 	<p>Planning:</p> <ul style="list-style-type: none"> Independently plan by suggesting what to do next Create step-by-step plans as a guide to making Confidently and carefully select from a wide range of tools and equipment, explaining their choices Select from a wide range of materials and components according to their functional properties and aesthetic qualities
	<p>Practical skills and techniques:</p> <ul style="list-style-type: none"> Learn to use some hand tools and kitchen equipment safely and appropriately and learn to follow hygiene procedures Use some materials and components, including textiles and food ingredients With help, measure and mark out Cut, shape and score materials with help Assemble, join and combine materials, components or ingredients Demonstrate how to cut, shape and join fabric to make a simple product Manipulate fabrics in simple ways to create the desired effect Use a basic running stitch Cut, peel and grate ingredients, including measuring and weighing ingredients using measuring cups Begin to use simple finishing techniques to improve the appearance of their product, such as adding simple decorations 	<p>Practical skills and techniques:</p> <ul style="list-style-type: none"> Learn to use a range tools and equipment safely, appropriately and accurately and learn to follow hygiene procedures Use a range of materials and components, including construction materials and kits, textiles and mechanical and electrical components With growing independence, measure and mark out to the nearest cm and millimetre Cut, shape and score materials with some degree of accuracy Assemble, join and combine material and components with some degree of accuracy Demonstrate how to measure, cut, shape and join fabric with some accuracy to make a simple product Join textiles with an appropriate sewing technique Begin to select and use different and appropriate finishing techniques to improve the appearance of a product such as hemming, tie-dye, fabric paints and digital graphics 	<p>Practical skills and techniques:</p> <ul style="list-style-type: none"> Learn to use a wider range of tools and equipment safely and appropriately and learn to follow hygiene procedures Independently take exact measurements and mark out, to within 1 millimetre Use a full range of materials and components, including construction materials and kits, textiles, and mechanical components Cut a range of materials with precision and accuracy Shape and score materials with precision and accuracy Assemble, join and combine materials and components with accuracy Demonstrate how to measure, make a seam allowance, tape, pin, cut, shape and join fabric with precision to make a more complex product Join textiles using a greater variety of stitches, such as backstitch, whip stitch, blanket stitch; Refine the finish using techniques to improve the appearance of their product, such as sanding or a more precise scissor cut after roughly cutting out a shape



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Design & Technology Progression

Evaluate	KS1 DT National Curriculum Explore and evaluate a range of existing products Evaluate their ideas and products against design criteria		KS2 DT National Curriculum Investigate and analyse a range of existing products Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work Understand how key events and individuals in design and technology have helped shape the world			
	KS1		LKS2			
	Evaluating – Existing products: <ul style="list-style-type: none"> Explore what products are and who or what they are for Explore how products work and how or where they might be used. Explore what materials products are made from Explore what they like and dislike about products 		Evaluating – Existing products: <ul style="list-style-type: none"> Investigate and analyse how well products have been designed and made Investigate and analyse why materials have been chosen and begin to suggest reasons for this Investigate and analyse the methods of construction used and begin to suggest reasons for this Investigate and analyse how well products work to achieve their purposes 		Evaluating – Existing products: <ul style="list-style-type: none"> Investigate and analyse how well products have been designed and made Investigate and analyse why materials have been chosen and give reasons for this Investigate and analyse the methods of construction used and give reasons for this Investigate and analyse how well products meet user needs and wants Investigate and analyse how innovative products are 	
	Evaluating – Own ideas and products: <ul style="list-style-type: none"> Talk about their design ideas and what they are making Make simple judgements about their products and ideas against design criteria Suggest how their products could be improved 		Evaluating – Own ideas and products: <ul style="list-style-type: none"> Identify the strengths and areas for development in their ideas and products Consider the views of others, including intended users, to improve their work Refer to their design criteria as they design and make Use their design criteria to evaluate their completed products 		Evaluating – Own ideas and products: <ul style="list-style-type: none"> Identify the strengths and areas for development in their ideas and products Consider the views of others, including intended users, to improve their work Critically evaluate the quality of the design, manufacture and fitness for purpose of their products as they design and make Evaluate their ideas and products against their original design specification 	
			Evaluating – Key events and individuals: <ul style="list-style-type: none"> Know about the key events, including technological developments, and designs of individuals in design and technology that have helped shape the world. 		Evaluating – Key events and individuals: <ul style="list-style-type: none"> Know about and evaluate key events, including technological developments, and designs of individuals in design and technology that have helped shape the world. 	



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Technical Knowledge	KS1 DT National Curriculum Build structures, exploring how they can be made stronger, stiffer and more stable Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products		KS2 DT National Curriculum Apply their understanding of how to strengthen, stiffen and reinforce more complex structures Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] Apply their understanding of computing to program, monitor and control their products			
	KS1		LKS2		UKS2	
	<ul style="list-style-type: none"> • Talk about and begin to understand the simple working characteristics of materials and components • Build simple structures, exploring how they can be made stronger, stiffer and more stable • Explore and create products using simple mechanisms, such as levers, sliders and wheels. • Understand that 3-D textiles products can be assembled from two identical fabric shapes • Explore food ingredients and begin to understand that ingredients should be combined according to their sensory characteristics • Begin to use the correct technical vocabulary for the projects they are undertaking 		<ul style="list-style-type: none"> • Understand that materials have both functional properties and aesthetic qualities • Apply their understanding of how to strengthen, stiffen and reinforce more complex structures in order to create more useful characteristics of products • Explain how mechanical systems such as levers and linkages create movement and use mechanical systems in their products. • Understand and demonstrate how mechanical and electrical systems have an input and output process • Make and represent simple electrical circuits, such as a series and parallel, and components to create functional products • Understand that a single fabric shape can be used to make a 3D textiles product • Use the correct technical vocabulary for the projects they are undertaking 		<ul style="list-style-type: none"> • Understand that materials have both functional properties and aesthetic qualities • Apply their understanding of how to strengthen, stiffen and reinforce more complex structures in order to create more useful characteristics of products • Explain how mechanical systems, such as cams, create movement and use mechanical systems in their products; • Understand and demonstrate that mechanical and electrical systems have an input, process and output; • Understand how more complex electrical circuits and components can be used to create functional products • Understand that a 3D textiles product can be made from a combination of fabric shapes • Apply their understanding of computing to program, monitor and control a product • Confidently use the correct technical vocabulary for the projects they are undertaking 	
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Cooking & Nutrition	KS1 DT National Curriculum Use the basic principles of a healthy and varied diet to prepare dishes Understand where food comes from		KS2 DT National Curriculum Understand and apply the principles of a healthy and varied diet Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed			
	KS1		LKS2			
	Where food comes from: <ul style="list-style-type: none"> Understand that all food comes from plants or animals Understand that food has to be farmed, grown elsewhere (e.g. home) or caught 		Where food comes from: <ul style="list-style-type: none"> Understand that food ingredients can be fresh, pre-cooked and processed Start to know when, where and how food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world Start to understand seasonality and know where and how a variety of ingredients are grown 		Where food comes from: <ul style="list-style-type: none"> Understand that food is processed into ingredients that can be eaten or used in cooking Know, explain and give examples of food that is grown (such as pears, wheat and potatoes), reared (such as poultry and cattle) and caught (such as fish) in the UK, Europe and the wider world Understand about seasonality, how this may affect the food availability and plan recipes according to seasonality 	
	Food preparation, cooking and nutrition: <ul style="list-style-type: none"> Name and sort foods into the five groups in the Eatwell Guide Understand that everyone should eat at least five portions of fruit and vegetables every day and start to explain why Use what they know about the Eatwell Guide to design and prepare dishes Follow a simple recipe with support Prepare simple dishes safely and hygienically Use simple cooking techniques such as cutting, peeling and grating 		Food preparation, cooking and nutrition: <ul style="list-style-type: none"> Explain that a healthy diet is made up of a variety and balance of different food and drink, as represented in the Eatwell Guide and be able to apply these principles when planning and cooking dishes Understand to be active and healthy, food and drink are needed to provide energy for the body Start to independently follow a recipe Prepare and cook a variety of predominantly savoury dishes safely and hygienically Use a heat source to cook ingredients with support, showing awareness of the need to control the temperature of the hob and/or oven Measure and weighing ingredients to the nearest gram and millilitre Use a range of cooking techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking 		Food preparation, cooking and nutrition: <ul style="list-style-type: none"> Explain that foods contain different substances, such as protein, that are needed for health and be able to apply these principles when planning and preparing dishes Accurately and independently follow each step of a recipe Demonstrate how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source; Alter methods, cooking times and/or temperatures as necessary Understanding the importance of storing, handling and heating food correctly Measure accurately and calculate ratios of ingredients to scale up or down from a recipe Use a wider range of cooking techniques such as demonstrate how to use a range of cooking techniques, such as dicing, shredding griddling, grilling, frying and boiling 	



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Vocabulary	Cycle A: Key Stage 1		Lower Key Stage 2		Upper Key Stage 2	
	Eat More Fruit & Vegetables	balanced diet, healthy, farmed, ingredients, portions, vitamins, minerals, safety, hygiene, fruit, vegetable	Egyptian Masks	mask, structure, shell structure, material, plaster cast, component, construction, join	Fairgrounds	motor, motion, mechanical, electrical, circuit, axle, rotate, belt and pulley system, framework
	Playgrounds	structure, material, component, join, strengthen	Battery Operated Lights	STEM, electricity, electrical system, mains electricity, battery electricity, circuit, series circuit, parallel circuit, insulator, conductor, operated	Global Food	global, climate, sensory, seasonality, nutrition, staple, ingredients, equipment, technique, measure, scale
	Moving Pictures	Mechanism, slider, lever, pivot, washer, wheel	The Great Bread Bake Off	Pioneer, product, brand, market research, knead, dough, yeast	Felt Phone Cases	material, textile, fabric, sew, template, join, product, user, aesthetics, functional, design criteria, innovative, prototype, fastenings, decoration



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Vocabulary	Cycle B: Key Stage 1		Lower Key Stage 2		Upper Key Stage 2	
	Perfect Pizzas	balanced diet, Eatwell Guide, carbohydrates, protein, vitamins, minerals, fibre, calcium, energy, safety, hygiene	Seasonal Stockings	Christmas stocking, function, visual appeal, product, user, material, textile, fabric, template, sew, join, decorate, texture, applique, embroidery	Super Seasonal Cooking	seasonality, imported, ripe, sustainable, reared, caught, processed, raw, texture, protein, nutrient
	Puppets	puppet, material, textile, fabric, template, join	Making Monsters	Mechanical, mechanism, system, pneumatic system, compressed, valve model	Ancient Greeks	Parthenon, structure, shell structure, framework, column, pillar, Doric, architect, sculptor, sculpture, material, component, construction, join
	Vehicles	mechanism, wheel, axel, washer, chassis	Edible Garden	herb, seasonality, polytunnel, greenhouse, glasshouse, sow, seedling, irrigation, ripe, pollinate, pestle, mortar	Programing Adventures	robot, Bee-Bot. computer, output , signal, data, programme, programming, route, background, obstacles, m aterial, properties, join
Disciplinary Vocabulary	design, design criteria, product, purpose, user, consumer, specification, market research, functional, drawing, sketch, label, plan, diagram, annotate, imagination, innovative, original, aesthetic, appearance, decorate, appealing, refine, revise, texture, flavour, taste, smell, make, material, component, property, quality, finish, construct, structure, assemble, join, measure, mark out, shape, reinforce, strengthen, stiffen, framework, template, prototype, model, evaluate, safety, hygiene, strength, weakness, improve, refine, revise, monitor, inventor, designer, engineer, chef, manufacturer, names of different materials & textiles, names of different tools, names of different food ingredients					