



Bagthorpe Primary School

Curriculum Progression Plan

Design & Technology

	Year R	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Design	Explore existing products and discuss what they like and dislike Test the effectiveness of a range of materials and resources Know that a product can be made from a plan	Explore set questions about the suitability of products, using learnt scientific vocabulary to describe them Know that a plan/design draws together ideas to make a product	Design purposeful, functional, appealing products for themselves and other users based on design criteria Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology	Undertake simple research with support, by critiquing and evaluating existing products and ideas Design products using more specific criteria and communicate their ideas through discussion and annotated sketches	Undertake more independent research, by critiquing and evaluating existing products and ideas Generate, develop, model and communicate their ideas through discussion, annotated sketches, and mock-ups	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 Generate, develop, model and communicate their ideas through prototypes	Generate, develop, model and communicate their ideas through cross-sectional and exploded diagrams Generate, develop, model and communicate their ideas through prototypes, pattern pieces and computer-aided design
Make	Know primarily through their own experiences that tools and materials can be safely used to make things Cooking implements (knives, spoons, measuring jugs) Scissors, split pins, glue, masking/ sellotape	Know that there is a range of different tools and materials which can be used to create a product and select from these choices. Cooking implements (knives, spoons, measuring jugs) Scissors, rulers, split pins, glue, masking/sellotape	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	Know that the characteristics of tools and materials informs their use in the making process. Select from a wider range of tools and equipment Select from and use a wider range of materials and components, including ingredients, according to their functional properties	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 according to their functional properties	Know that a prototype is an experimental process and that preliminary versions can inform the final product. Purposefully select from a wide range of tools, reflecting on their repertoire of used tools and exploring new ones select from and use a wider range of materials and components, including ingredients, according to their functional properties and aesthetic qualities	Select from and use a wider range of materials and components, including construction materials, according to their functional properties and aesthetic qualities Select from and use a wider range of materials and components, including textiles according to their functional properties and aesthetic qualities

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Evaluate	Explore existing products and discuss what they like and dislike. Test the effectiveness of a range of materials and resources Know that an evaluation is a judgement	Explore set questions about their suitability of products, using learnt scientific vocabulary to describe them Know that a simple evaluation can be used to improve a product	Explore and evaluate a range of existing products -discuss their appealing and practical features Evaluate their ideas and products against design criteria	Undertake simple research with support, by critiquing and evaluating existing products and ideas Evaluate their ideas and products against their own design criteria and consider future improvements	Undertake more independent research, by critiquing and evaluating existing products and make predictions Evaluate their ideas and products against their own design criteria and work with others to gain ideas to improve their work	Undertake rigorous, research, using more than one source, by critiquing and evaluating existing products and ideas Test and critique their ideas Evaluate their ideas and products against their own design criteria and ask questions in order to consider the about the views of others to improve their work	Investigate and analyse a range of existing products Undertake rigorous, research, using more than one source, including surveys, by critiquing and evaluating existing products and ideas Plan, perform and evaluate their own tests Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
People				Understand how key events and individuals in design and technology have helped shape the world – focus on textile inventors	Understand how key events and individuals in design and technology have helped shape the world - focus on architects	Understand how key events and individuals in design and technology have helped shape the world – focus on motor engineers	Understand how key events and individuals in design and technology have helped shape the world – focus on costume design and structural engineers
Technical Knowledge	Build structures that have some level of stability Explore and identify moving parts and mechanisms in products.	Build structures, and with some support, explore how they can be made stronger, stiffer and more stable Explore and use mechanisms e.g. levers, sliders and spinners in their products	build structures, exploring how they can be made stronger, stiffer and more stable Explore and use mechanisms e.g. levers, sliders, wheels and axles in their products	Begin to independently apply their understanding of how to strengthen, stiffen and reinforce structures Understand and use mechanisms in their products e.g. hinges Apply their understanding of computing to begin programming, monitoring and	Begin to independently apply their understanding of how to strengthen, stiffen and reinforce more complex structures Explore the use of electrical systems in their products Apply their understanding of computing to program, monitor and control simple products	Apply their understanding of how to strengthen, stiffen and reinforce more complex structures Understand and use mechanical systems in their products e.g. linkages, levers, pulleys and gears Apply their understanding of computing to program,	Independently apply their understanding of how to strengthen, stiffen and reinforce more complex structures Understand and use mechanical systems in their products e.g. gears, pulleys, cams, levers and linkages Understand and use electrical systems in their products e.g.

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				controlling simple products		monitor and control more complex products	series circuits incorporating switches, bulbs, buzzers and motors Independently apply their understanding of computing to program, monitor and control more complex products
Cooking & Nutrition	Know that there are healthy and unhealthy foods Know that there are lots of different foods	Identify some healthy and some healthy foods Know that some foods are from plants and some are from animals	Use the basic principles of a healthy and varied diet to prepare dishes Understand where food comes from	When working with food, follow hygiene procedures carefully Apply their knowledge of a healthy, varied diet to design their own simple meals Safely use a range of knives, peelers, spoons and a colander to carry out a range of tasks: peeling, chopping, slicing, rinsing and mixing.		Apply their knowledge of a healthy, varied diet to design their own healthy, balanced meals, and explain what each food provides When working with food, follow and explain hygiene procedures carefully Accurately and safely choose and use appropriate tools to carry out cutting, mixing, shaping, peeling, slicing and grating tasks. Measure ingredients, using spoons and scales, with a good level of accuracy Know that it can be a challenge to apply knowledge of a healthy diet where for a number of factors, food or a range of food is limited	

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						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.	