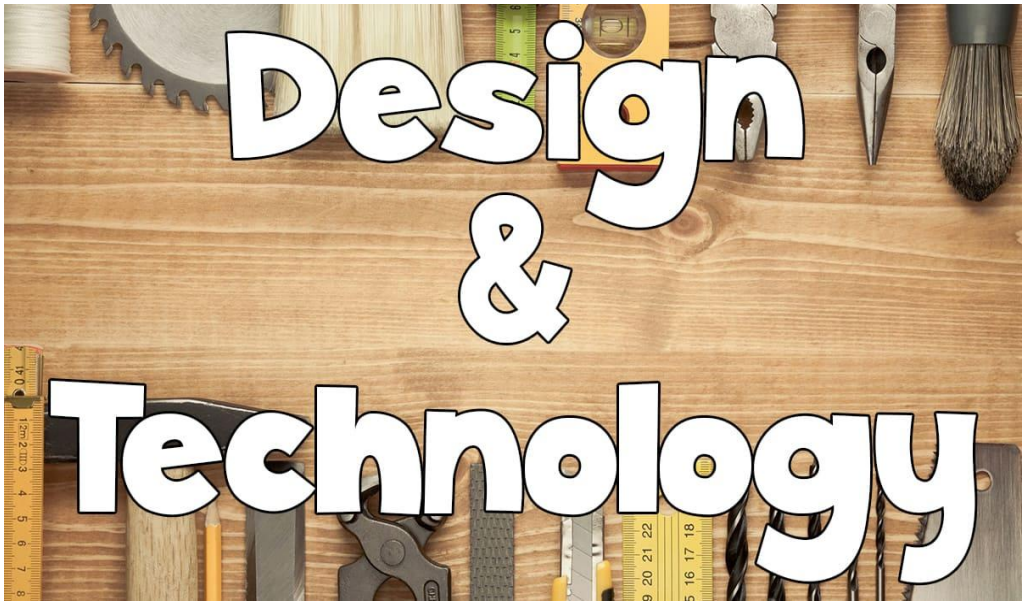
Northgate Primary School
DT Curriculum



Design and Technology Overview 2026 - 2027

	Autumn Term		Spring Term		Summer Term	
	Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
Nursery	Independent Exploration 	Independent Exploration 	Independent Exploration 	Independent Exploration 	Independent Exploration 	Independent Exploration 
FS	Continuous targeted provision 	Continuous targeted provision 	Continuous targeted provision 	Continuous targeted provision 	Continuous targeted provision 	Continuous targeted provision 
Year 1	**Structure** Carnival cart building 		**Textiles** Under the sea puppets 		**Nutrition** Zoo animal dinners 	
Year 2		**Textiles** Fairytale accessories 	**Food and nutrition** Healthy snack wraps 			**Structure** Minibeast Habitats 

Year 3		**Food and nutrition** Healthy picnics 		**Structure** Robot mazes 		**Textiles** Cushions 
Year 4	**Textiles** Fastenings 		**Structure** Bridge building 		**Food and nutrition** Biscuits 	
Year 5		**Food and nutrition** Pizza making (dough) 		**Product** Solar Systems 		**Mechanisms** Toy mechanisms 
Year 6	**Food and nutrition** Come Dine with Me 		**Textiles** Carnival headdresses 		**Product** Steady hand games 	

Progression Document

EYFS	Key Stage 1	Lower Key Stage 2	Upper Key Stage 2
Creating with Materials Children at the expected level of development will: 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; Make use of props and materials when role playing characters in narratives and stories. **Managing Self** Children at the expected level of development will: Be confident to try new activities and show independence, resilience and perseverance in the face of challenge; Manage their own basic hygiene and personal needs, including understanding the	**National Curriculum-End of Key Stage Expectations** **Design:** • 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. **Make:** • 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. **Evaluate:** • Explore and evaluate a range of existing products. • Evaluate their ideas and products against design criteria. **Technical Knowledge:** • Build structures, exploring how they can be made stronger, stiffer and more stable.	**National Curriculum-End of Key Stage Expectations** **Design:** • 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 discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design. **Make:** • Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing]. • 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. **Evaluate:** • 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. **Technical Knowledge:** • 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].	

importance of healthy food choices.	- Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.	• 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.

Developing, Planning and Communicating Ideas

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Explain what they are making and which materials they are using. Select materials from a limited range that will meet a simple design criteria. (e.g., shiny, soft etc.) Select and name appropriate tools. (e.g., scissors for paper) Explore ideas by experimenting with materials. Describe simple models or drawings of ideas and intentions. Discuss their work as it progresses.	Begin to understand the development of existing products, explaining what they are used for and the materials that have been used to construct them. Start to suggest design ideas and explain how to construct them. Understand the purpose of a design criteria and begin to be able to work against one. Begin to develop their ideas through talk and simple drawings. Make templates and mock-ups of their ideas in card and paper. Communicate with others about how they want to construct their product.	Start to generate ideas by drawing on their own experiences. Begin to develop their design ideas through discussion, observation, drawing and modelling. Develop their own ideas from given starting points. Identify a purpose for what they intend to design and make. Design and make a product aimed at a target audience. Develop their ideas through talk and drawings and label parts. Make templates and mock-ups of their ideas in card and paper or ICT. Begin to be able to choose relevant materials for their	Generate ideas for an item, considering its purpose and the user(s) (STEM opportunity) Start to order the main stages of making a product. Identify a purpose and begin to establish their own design criteria for a successful product. Understand how well products have been designed, made, what materials have been used and the construction technique. Make drawings with labels when designing. Explain their choice of materials and components including function and aesthetics when designing.	Generate ideas for an item, considering the purposes for which they are designing (STEM opportunity) Confidently make labelled drawings of their designs from different views showing specific features. Develop a clear plan for construction, including materials, equipment and processes. Be able to explain their plan to others. Suggest alternative methods of making, if the first attempts fail. Identify the strengths and areas for development in their own ideas and products.	Generate, develop, model and communicate their ideas through discussion, annotated sketches and prototypes. (STEM opportunity) Begin to use research and develop design criteria to inform their own design. Use results of research, both first and second-hand when developing design ideas. Produce a detailed step-by step plan for their product. Suggest some alternative plans and describe their advantages and drawbacks are. Design a product for according to a specification for a target audience. Ensure their product is	Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross sectional and exploded diagrams, prototypes, pattern pieces and CAD. (STEM opportunity) Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose. Use results of investigations and information sources when developing design ideas. Produce a range of ideas after collecting first and second-hand research. Produce a detailed step-by step plan

	Explain how they intend to fix simple materials.	products based on their properties. Start to understand whether products can be recycled or reused.	Put together their own step-by-step plan which shows the order of construction as well as equipment and tools they need. Learn about inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products.	Explain their choice of materials and components according to function and aesthetic, when designing. Take account of the ideas and opinions of others when designing. Consider how to present their final product in an interesting way. Learn about inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products.	functional, appealing and are fit for purpose. Apply a range of finishing techniques. Draw up a specification for their design. (STEM opportunity) Produce a range of ideas after collecting initial research. Confidently select appropriate materials, tools and techniques for their product. Begin to understand how much products cost to make, how sustainable and innovative they are.	for their product with written notes where appropriate. Draw up a clear specification for their design. (STEM opportunity) Suggest some alternative plans and describe their advantages and drawbacks. Confidently select appropriate materials, tools and techniques and explain why they are appropriate for the job. Accurately apply a range of finishing techniques. Explain how their product will appeal to the target audience.

Working with Tools, Equipment, Materials and Components to Make Quality Products

EYFS	Key Stage 1	Lower Key Stage 1	Lower Key Stage 2
Explore using/ holding basic tools such as a saw or hammer. Begin to create their design using basic techniques. Start to build structures, joining components together using adhesives. Look at simple hinges, wheels and axles. Use simple technical vocabulary. Begin to use scissors to cut straight and curved edges and hole punches to punch holes.	Use hand tools safely and appropriately Select appropriate resources and tools for building projects. Begin to make designs using appropriate techniques. Begin to build structures, exploring how they can be made stronger. Measure and cut materials, including fabric, with some accuracy. Start to assemble, join and combine materials. Begin to explore and use mechanisms, in their products. Make a product which moves. Basic sewing techniques and join fabric using a running stitch. Start to choose and use appropriate finishing techniques.	Start to work safely and accurately with a range of simple tools. Select the most appropriate tools and techniques to use for a given task. Measure materials carefully and with accuracy. Start to join and combine materials and combine materials accurately in both temporary and permanent ways. Attempt to make a finished product look attractive. Make choices of material both for its appearance and qualities. Sew using a range of different stitches. Experiment with knit or weave. Understand how more complex electrical circuits and components can be used to create functional products. Use pulleys, levels and linkages in my products.	Use a range of tools and equipment safely. Confidently select appropriate tools, materials, components and techniques. Understand how mechanical systems such as cams or pulleys or gears create movement. Cut and join with accuracy to ensure a good-quality finish. Accurately measure and cut to ensure that everything is precise. Make any necessary modifications during the creation of a product. Create and follow a simple pattern for textile work. Use finishing techniques to strengthen and improve the appearance of my product. Create a prototype before making a product. Understand how electrical circuits and components can be used to create functional products. Use a glue gun with close supervision.

Evaluating Processes and Products

EYFS	Key Stage 1	Lower Key Stage 2	Upper Key Stage 2
Say what they like and dislike about items they have made and begin to explain why. Begin to talk about their designs as they develop and identify good and bad points. Start to talk about changes made during the making process.	Explain what they like and dislike about existing products and why. Describe what they like and dislike about their own work. Start to evaluate their product by comparing it to a design criteria. Begin to evaluate their products as they are being developed, identifying strengths. Begin to evaluate their own products, identifying what went well and possible changes they might make next time.	Appropriately test their final product. Evaluate their product against the original design specification and by carrying out appropriate tests. Identify strengths and areas for developments during their evaluations and use this to make suggestions for improvement. Evaluate appearance and function against original design criteria. Evaluate choice of materials for their final product. Begin to seek evaluation from others. Explore how the key designs of individuals in design and technology have helped shape the world.	Appropriately test their final product. Evaluate their product against the original design specification and by carrying out appropriate tests. Identify strengths and areas for developments during my evaluations and use this to make suggestions for improvement. Evaluate appearance and function against original design criteria. Evaluate my choice of materials for my final product. Begin to seek evaluation from others. Identify advantages and disadvantages within their own finished products. Discuss how the key designs of individuals in design and technology have helped shape the world.

Food and Nutrition

EYFS	Key Stage 1	Lower Key Stage 2	Upper Key Stage 2
Begin to work with food safely and hygienically. Begin to develop a food vocabulary using taste, smell, texture and feel. Explore familiar food products (e.g., fruit and vegetables). Stir, spread, knead and shape a range of food and ingredients. Start to think about the need for a variety of foods in a diet. Measure and weigh food items in non-statutory measures (e.g., spoons, cups).	Know how to prepare simple dishes safely and hygienically, without a heat source. Explore common food sources (e.g., from plants or animals). Start to understand how to name and sort foods into the five groups using the 'Eat Well' plate. Know that everyone should eat at least five portions of fruit and vegetables every day. Know how to use techniques such as cutting, peeling and grating. Measure and weigh food items using non-standard measures.	Demonstrate how to prepare simple dishes safely and hygienically, including use of a heat source. Measure and weigh ingredients appropriately. Start to know that food is grown, reared and caught in the UK, Europe and the wider world. Understand how to prepare and cook a variety of dishes. Understand how to use a range of techniques introducing slicing, mixing, spreading, kneading and baking. Explain what a healthy diet is and why it is important. Begin to know that to be active and healthy, food and drink are needed to provide energy for the body (and begin to distinguish healthy high energy foods). Be able to identify foods which come from the UK and other countries in the world.	Describe what to do to be hygienic and safe when working with food. Use appropriate tools and equipment, weighing and measuring with scales. Know how to prepare and cook a variety of predominantly savoury dishes including the use of a heat source. Demonstrate increasing confidence in how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking. Explain where a variety of ingredients come from and begin to describe the process it goes through in order to become an ingredient. Begin to understand that seasons may affect the food available. Explain what times of year particular foods are eaten in. Evaluate a meal and consider if they contribute towards a balanced diet. Plan a healthy and affordable diet.