

Gomer Infant School

DT - Progression of skills and knowledge



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School

This document outlines the progression of skills for Design and Technology from Year R to Year 2. By progress, we mean that children know more, remember more and are able to do more of what was intended in the curriculum, this approach logically sequences the learning for children and allows them to build, recall and apply their knowledge and skills. The knowledge and skills framework offers clear learning progression in a subject, with incremental steps leading to well-defined endpoints.

Our subject leaders talk confidently about implementation, endpoints, opportunities for recall and how we support children to 'know, remember and understand' the knowledge and skills within our curriculum.

Design & Technology

EYFS		
Checkpoint	Creating with materials	Being imaginative and expressive
Autumn Term	<ul style="list-style-type: none"> • Talk about what they like or could improve about what they have created. • Adapt their construction to achieve a desired outcome. 	<ul style="list-style-type: none"> • Participate in collaborative, creative activities.
Spring Term	<ul style="list-style-type: none"> • Produce more detailed representations (drawings, paintings, models) and discuss the features they have included. • Return to and extend their creative learning. • Choose materials to achieve a goal. • Explain how they created something to their peer. 	<ul style="list-style-type: none"> • Organise themselves into collaborative creative opportunities (role play, performance, artwork).
Summer Term	<ul style="list-style-type: none"> • Safely use a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. (ELG) • Share their creations, explaining the process they have used. (ELG) 	
Greater Depth	<ul style="list-style-type: none"> • Make considered/purposeful decisions on how media and materials can be used, combined and matched to a purpose • Draw inspiration from the work of others as starting points to improve their own work. 	<ul style="list-style-type: none"> • Talk about the ideas/processed that led them to produce their artwork/performance. Reflect on their work, reviewing it and recognising strengths and areas of improvement.

	Year 1	Year 2
Technical knowledge	<p>Structures:</p> <ul style="list-style-type: none"> • Building structures exploring how they can be made stronger, stiffer and more stable. • Use technical vocabulary <p>Wheels and Axles:</p> <ul style="list-style-type: none"> • Explore and use wheels, axles and axle holders • Distinguish between fixed and freely moving axles • Use technical vocabulary <p>Cooking and Nutrition:</p> <ul style="list-style-type: none"> • Begin to understand that all food comes from plants or animals • Begin to understand that food has to be farmed, grown or caught • Begin to understand how to name and sort food into groups (The Eatwell Plate) • Begin to understand healthy, unhealthy foods and moderation • Begin to understand everyone should eat at least 5 pieces of fruit and vegetables every day • Use technical vocabulary 	<p>Levers and Sliders:</p> <ul style="list-style-type: none"> • Explore and use levers and sliders to make things move in a 2D plane • Understand that different mechanisms produce different types of movement • Use technical vocabulary <p>Textiles:</p> <ul style="list-style-type: none"> • Understand how to join fabrics using different techniques e.g. running stitch, glue, over stich, stapling, double sided tape • Understand how to cut, shape and join fabric to make a product. Use templates to create identical shapes • Select from and use textiles according to their characteristics • Explore different finishing techniques e.g. sequins, fabric pens, buttons, ribbons, dyeing and block printing • Use technical vocabulary <p>Cooking and Nutrition:</p> <ul style="list-style-type: none"> • Explain where food comes from either plants or animals • Explain what foods have to be farmed, grown or caught • Understand how to name and sort food into groups (The Eatwell Plate) • Explain how to keep a healthy lifestyle. Explain why moderation of unhealthy foods is important and its impact • Explain the importance of eating 5 pieces of fruit and vegetables every day • Use technical vocabulary
Investigate and evaluate	<ul style="list-style-type: none"> • Explore a range of existing freestanding structures in the school and local environment e.g. everyday products and buildings • Explore and evaluate a range of products with wheels and axles • Investigate different techniques for stiffening materials • Test different methods of enabling structures to remain stable • Taste and evaluate a range of fruit and vegetables to determine preferences 	<ul style="list-style-type: none"> • Explore and evaluate a range of existing products that use simple sliders and levers, saying what is good or bad about them • Conduct research and evaluate pre-existing products exploring its characteristics e.g. what it is?, who it is for?, how does it work?, how it is used?, what materials it is made from? • Taste and evaluate a range of fruit and vegetables to determine preferences
Design	<ul style="list-style-type: none"> • Draw on their own experience to help generate and suggest ideas 	<ul style="list-style-type: none"> • Generate ideas by drawing on their own and other people's experiences

	<ul style="list-style-type: none"> • Develop ideas through talking, simple drawings / plans, pictures and labels • Follow set design criteria • Make mock ups and models in card and paper • Generate ideas and design criteria through investigating a variety of fruit and vegetables • Design a product for a chosen user through simple drawings and labels, based on simple design criteria 	<ul style="list-style-type: none"> • Design a functional product for a chosen user and purpose based on creating a design criteria • Develop design ideas through discussion, observation, drawing and modelling. Use drawings to record ideas as they are developed. Add notes to help explanations. • Propose more than one design idea • Create a design criteria • Make mock ups using different ideas and materials • Generate ideas and design criteria through investigating a variety of fruit and vegetables • Design a product for a chosen user through simple drawings and labels, based on simple design criteria
Make	<ul style="list-style-type: none"> • Assemble, join and combine materials and components together, explaining why they are being used • Select and use tools, skills and techniques suitable for the task, explaining their choices • Plan by suggesting what to do next • Select new and reclaimed materials and construction kits to build their structures • Begin to use templates • Use simple finishing techniques suitable for the structure they are creating • Safely use simple utensils and equipment • Understand the importance of working hygienically • Select from a range of fruit and vegetables according to their characteristics e.g. colour, texture and taste to create a product 	<ul style="list-style-type: none"> • Assemble, join and combine materials, chosen based on their characteristics, in order to make a moving product • Assemble, join and combine materials in order to make a product • Select and use hand tools safely and appropriately to perform tasks such as cutting and joining to allow movement and finishing • Select and use hand tools safely and appropriately. Explain why they are being used and the effect the tools will have. • With accuracy, measure, cut and score. • Use templates independently • Explain what is being made and why the chosen user will like it • Explain the importance of working safely • Safely use simple utensils and equipment • Understand the importance of working hygienically • Select from a range of fruit and vegetables according to their characteristics e.g. colour, texture and taste to create a product
Evaluate	<ul style="list-style-type: none"> • Evaluate their product by discussing how well it works in relation to the purpose, the design criteria and how it could be improved 	<ul style="list-style-type: none"> • Evaluate their products as they are developed, identifying strengths and possible changes they might make • Evaluate their product by discussing how well it works in relation to the purpose, using design criteria and how it could be improved • Evaluate what would be done differently e.g. processes to improve final product