



# **Fernwood Primary and Nursery School**

## **Subject Implementation Overview**



F2		
Autumn 1	Spring 1	Summer 1
<p><b>EAD:</b> To safely use and explore a variety of material, tools and techniques, experimenting with colour, design, texture, form and function  To design and make an Autumn crown using natural found objects (DT)</p> <p><b>UTW (TNW)</b> To explore the natural world around them, making observations and drawing pictures of animals and plants.  To explore and taste some autumn vegetables (spinach, carrot, bell peppers). (Science) To cut and taste vegetables (DT)</p> <p><b>EAD, CWM:</b> To make use of props and materials when role playing characters in narratives and stories  To make a prop for my chosen job (DT)</p>		<p><b>PSED (MS)</b> Manage their own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices.  To understand why different foods and drinks are important to keep my body healthy.</p>
Autumn 2	Spring 2	Summer 2
		<p><b>GD (FM)</b> To use a range of small tools, including scissors, paint brushes and cutlery.  To know how to scissors, paintbrushes and other tools.</p>



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Y1		
Autumn 1	Spring 1	Summer 1
	<p><b>Structures – Park for Barnaby Bear</b></p> <p><u>Designing</u>            To draw on own experience to help generate ideas.            To design (talk about, draw and list my ideas) with a purpose/audience in mind.            To model ideas in card and paper.</p> <p><u>Making</u>            To assemble, join and combine materials/components together using a variety of temporary methods (including different glues, taping and split pins).</p> <p><u>Evaluating</u>            To say what I like about my product and make suggestions for improvement.            To evaluate products as they are developed, identifying strengths and possible changes.            To explain what went well and what I can improve</p>	<p><b>Food – Funny face salad (linked to Jamie Oliver's Vegetables)</b></p> <p><u>Designing</u>            To design (talk about, draw and list my ideas) with a purpose/audience in mind.            To suggest ideas/explain what they are going to do.</p> <p><u>Making</u>            To select from and use a wide range of materials and components, including ingredients, according to their characteristics.            To use basic food handling and hygiene routines.            To use simple finishing techniques to improve the appearance of product.            To construct my salad based on my designs</p> <p><u>Evaluating</u>            To say what I like about my product and make suggestions for improvement.</p>
Autumn 2	Spring 2	Summer 2
<p><b>Mechanisms – Moving picture</b></p> <p><u>Designing</u>            To design (talk about, draw and list my ideas) with a purpose/audience in mind.</p> <p><u>Making</u>            To measure, mark out, cut (accurately) and shape a range of materials with support            To use tools e.g. scissors and a hole punch safely.            To assemble, join and combine materials/components together using a variety of temporary methods (including different glues, taping and split pins).</p> <p><u>Evaluating</u>            To evaluate a product by discussing how well it works.</p>		

Y2		
Autumn 1	Spring 1	Summer 1



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<p><u>Mechanisms - toy space buggy for a lego passenger (NASA engineers)</u></p> <p><u>Designing</u></p> <p>To explore and evaluate a range of existing products.</p> <p>To design purposeful, functional, appealing products for themselves and other users</p> <p>To generate, develop, model and communicate their ideas through talking, drawing and mock ups.</p> <p>To identify a purpose for product.</p> <p>To identify simple design criteria.</p> <p>To design a space buggy</p> <p><u>Making</u></p> <p>To make simple drawings and label parts.</p> <p>To select from and use accurately a range of tools to join, cut, shape and finish.</p> <p>To measure and cut with some accuracy.</p> <p>To use hand tools safely and appropriately.</p> <p>To assemble, join and combine materials in order to make product.</p> <p>To use mechanisms in models.</p> <p>To construct and make my space buggy</p> <p><u>Evaluating</u></p> <p>To evaluate against design criteria.</p> <p>To evaluate products as they are developed, identifying strengths and possible changes they might make.</p> <p>To evaluate my strengths and changes against my criteria</p>		
Autumn 2	Spring 2	Summer 2
	<p><u>Food – Fruit salad</u></p> <p><u>Designing</u></p> <p>To explore and evaluate a range of existing products.</p> <p>To design purposeful, functional, appealing products for themselves and other users.</p> <p>To generate, develop, model and communicate their ideas through talking, drawing and mock ups.</p> <p>To identify a purpose for product.</p> <p>To design a fruit salad.</p> <p>To communicate my ideas by presenting my design</p> <p><u>Making</u></p> <p>To follow safe procedures for food safety and hygiene.</p> <p>To choose and use appropriate finishing techniques.</p> <p>To make my fruit salad based on my designs</p> <p><u>Evaluating</u></p>	<p><u>Textiles – Sew a purse</u></p> <p><u>Designing</u></p> <p>To explore and evaluate a range of existing products.</p> <p>To design purposeful, functional, appealing products for themselves and other users</p> <p>To make simple drawings and label parts.</p> <p>To identify simple design criteria.</p> <p>To make purposeful designs of a purse and identify criteria</p> <p><u>Making</u></p> <p>To assemble, join and combine materials in order to make product.</p> <p>To measure and cut with some accuracy.</p> <p>To use basic sewing techniques.</p> <p>To choose and use appropriate finishing techniques.</p>



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	<p>To talk about their ideas, saying what they like and dislike.</p>	<p>To cut, sew and join materials to make a purse</p> <p><u>Evaluating</u> To evaluate against design criteria.</p>
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# Fernwood Primary and Nursery School

## Subject Implementation Overview



Y3		
Autumn 1	Spring 1	Summer 1
<p><u>Food – Healthy sandwich</u></p> <p><u>Designing</u></p> <p>To research, investigate and analyse a range of existing products.</p> <p>To establish criteria for a successful product.</p> <p>To design (talk about, draw and list my ideas) with a purpose/audience in mind.</p> <p>To make drawings with labels when designing.</p> <p><u>Making</u></p> <p>To plan the order of their work before starting.</p> <p>To select from and use a wide range of tools, techniques, materials and ingredients, according to their characteristics.</p> <p>Demonstrate hygienic food preparation and storage.</p> <p>To safely prepare and make a healthy sandwich</p> <p><u>Evaluating</u></p> <p>To evaluate ideas and products against own design criteria and make suggestions for improvement.</p>		
Autumn 2	Spring 2	Summer 2
	<p><u>Structures – Keep-sake box</u></p> <p><u>Designing</u></p> <p>To use research, investigate and analyse a range of existing products.</p> <p>To design (talk about, draw and list my ideas) with a purpose/audience in mind.</p> <p>To make drawings with labels when designing.</p> <p>To establish criteria for a successful product.</p> <p>To make labelled drawings of my design with success criteria identified</p> <p><u>Making</u></p> <p>To explore, develop and communicate design proposals by modelling ideas</p> <p>To communicate my design ideas by explaining key concepts</p>	<p><u>Mechanisms – Pop up book (Voitech Kubasta)</u></p> <p><u>Designing</u></p> <p>To explore, develop and communicate design proposals by modelling ideas.</p> <p>To design (talk about, draw and list my ideas) with a purpose/audience in mind.</p> <p><u>Making</u></p> <p>To begin to understand and use mechanical systems.</p> <p>Measure, mark out, cut, score and assemble components with some accuracy</p>



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	<p>To make models/products with increasing independence and accuracy. Measure, mark out, cut, score and assemble components with some accuracy. Use finishing techniques to strengthen and improve the appearance of their product using a range of equipment, including ICT. <a href="#">To construct my keepsake box</a></p> <p><u>Evaluating</u> <a href="#">To evaluate ideas and products against own design criteria and make suggestions for improvement.</a></p> <p>To be willing to change things if this helps improve work. <a href="#">To make changes to improve my keepsake box</a></p>	<p>To select from and use a wide range of tools, techniques, materials and components, including ingredients, according to their characteristics. Use finishing techniques to strengthen and improve the appearance of their product using a range of equipment, including ICT. <a href="#">To use design ideas to construct a pop up book</a></p> <p><u>Evaluating</u> <a href="#">To evaluate ideas and products against own design criteria and make suggestions for improvement.</a></p>
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## Subject Implementation Overview



Y4		
Autumn 1	Spring 1	Summer 1
<p><u>Mechanisms - Catapults</u>  <u>Designing</u>            To understand how key events in design and technology have helped shape the world.</p> <p>To investigate and analyse a range of existing products.            To consider purposes for which they are designing.            To make labelled drawings from different views showing specific features.            To use my analysis to make labelled designs for a catapult</p> <p>To develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making.</p> <p><u>Making</u>            To apply understanding of how to strengthen, stiffen and reinforce more complex structures.            To understand and use mechanical systems in product.            To select appropriate tools and techniques.            To measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques.            To join and combine materials and components accurately in temporary and permanent ways.            To construct a catapult using appropriate tools and techniques</p> <p><u>Evaluating</u>            To evaluate ideas and products against design criteria.            To evaluate work both during and at the end of the assignment.            To evaluate products carrying out appropriate tests.            To carry out tests in order to evaluate the success of my catapult against a set criteria</p>		<p><u>Food – Healthy layered salad</u>  <u>Designing</u>            To investigate and analyse a range of existing products</p> <p>To consider purposes for which they are designing.            To make labelled drawings from different views showing specific features.            To make clear designs of a layered salad from my research</p> <p>To develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making.            To make a detailed plan of all the steps involved in the process</p> <p><u>Making</u>            To prepare a salad demonstrating safe chopping and cutting.            To select appropriate tools and techniques.            To prepare and make a layered salad</p> <p><u>Evaluating</u>            To evaluate ideas and products against design criteria.</p>
Autumn 2	Spring 2	Summer 2
	<p><u>Electrical Systems – Torches (Thomas Edison and David Misell)</u>  <u>Designing</u></p>	



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## Subject Implementation Overview



To understand how key events in design and technology have helped shape the world.

To investigate and analyse a range of existing products.

To consider purposes for which they are designing.  
To make labelled drawings from different views showing specific features.  
To develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making.  
To make careful plans for my design, including labelled diagrams from different view points

Making  
To understand and use electrical systems in products (series circuits incorporating switches, bulbs).

To select appropriate tools and techniques.  
To measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques.  
To join and combine materials and components accurately in temporary and permanent ways.  
To construct my torch following my plans and designs

Evaluating  
To evaluate ideas and products against design criteria.  
To evaluate work both during and at the end of the assignment.  
To evaluate products carrying out appropriate tests.  
To test my torch in different environments to see how successful it is





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## Subject Implementation Overview



Y5		
Autumn 1	Spring 1	Summer 1
Autumn 2	Spring 2	Summer 2
<p><u>Structures – Bird boxes (Charles Waterton)</u></p> <p><u>Designing</u></p> <p>To research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose.</p> <p>To investigate and analyse a range of existing products.</p> <p>To research bird boxes and create criteria for a successful design</p> <p>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.</p> <p>Use results of investigations, information sources, including ICT when developing design ideas.</p> <p>To use my research to plan and draw my initial designs</p> <p>To generate, develop, model (with prototypes) and communicate their ideas through discussion and annotated sketches.</p> <p>To make modelled prototypes of my designs and adapt designs as needed</p> <p><u>Making</u></p> <p>Select appropriate materials, tools and techniques and use safely.</p> <p>Cut and join wood with accuracy to ensure a good quality finish.</p> <p>To use appropriate tools and techniques to make my bird box.</p> <p><u>Evaluating</u></p> <p>To evaluate ideas and products against design criteria and consider the views of others to improve own work.</p> <p>Evaluate product against the original design specification.</p> <p>Evaluate personally and seek evaluation from others.</p> <p>To give constructive criticism about mine and other's products, suggesting strengths and ideas for improvement</p>	<p><u>Mechanisms – Cam toy</u></p> <p><u>Designing</u></p> <p>To investigate and analyse a range of existing products.</p> <p>To research and develop design criteria to inform their designs that are fit for purpose.</p> <p>To research and investigate cams toys</p> <p>To generate, develop, model (with prototypes) and communicate their ideas through discussion and annotated sketches.</p> <p>To make model prototypes.</p> <p>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.</p> <p>To begin to generate innovative ideas drawing on research.</p> <p><u>Making</u></p> <p>To understand and use mechanical systems in products.</p> <p>Select appropriate materials, tools and techniques and use safely.</p> <p>Cut and join wood with accuracy to ensure a good quality finish.</p> <p>To make a cam toy based on my designs and prototypes</p> <p><u>Evaluating</u></p> <p>To evaluate ideas and products against design criteria and consider the views of others to improve own work.</p> <p>Evaluate product against the original design specification.</p> <p>Evaluate personally and seek evaluation from others.</p> <p>To suggest enhancements that I could make to my cam toy and others'</p>	<p><u>Food – Chilli</u></p> <p><u>Designing</u></p> <p>To investigate and analyse a range of existing products.</p> <p>To research and develop design criteria to inform their designs that are fit for purpose.</p> <p>To test products and ingredients prior to designing</p> <p>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.</p> <p>Use results of investigations, information sources, including ICT when developing design ideas.</p> <p>To begin to generate innovative ideas drawing on research.</p> <p><u>Making</u></p> <p>To continue to develop the principles behind a healthy and varied diet.</p> <p>To prepare and cook a savoury dish using different cooking techniques.</p> <p>Select appropriate materials, tools and techniques and use safely.</p> <p>Weigh and measure accurately (time, dry ingredients, liquids).</p> <p>Apply the rules for basic food hygiene and other safe practices e.g. hazards relating to the use of ovens.</p> <p>To prepare and cook a vegetarian chilli following food hygiene rules</p> <p><u>Evaluating</u></p> <p>To evaluate ideas and products against design criteria and consider the views of others to improve own work.</p> <p>Evaluate product against the original design specification.</p> <p>Evaluate personally and seek evaluation from others.</p> <p>To taste my chilli and identify strengths and suggest improvements</p>



# Fernwood Primary and Nursery School

## Subject Implementation Overview



Y6		
Autumn 1	Spring 1	Summer 1
<p><u>Electrical Systems – Fairground rides (Goose Fair)</u></p> <p><u>Designing</u></p> <p>To understand how key events and individuals in D&amp;T have helped shape the world.</p> <p>To research and develop design criteria to inform the design of an innovative, functional, appealing products.</p> <p>To research model fairground rides and identify what makes them appealing to others</p> <p>To develop, model and communicate ideas through discussion, annotated sketches, cross-sectional and exploded diagrams and prototypes (including CAD).</p> <p>Plan the order of own work, choosing appropriate materials, tools and techniques</p> <p><u>Making</u></p> <p>To select the correct tools (use accurately and safely) and materials (according to functional properties and aesthetic qualities), components and techniques to make a successful product.</p> <p>To apply their understanding of computing to program, monitor and control their products (link to Year 5 computing unit on Crumble).</p> <p>Assemble components make working models.</p> <p>Construct products using permanent joining techniques.</p> <p>To construct my own fairground toy using appropriate tools and techniques</p> <p><u>Evaluating</u></p> <p>To evaluate ideas and products against own design criteria and consider the views of others to improve work.</p> <p>Evaluate products identifying strengths and areas for development, and carrying out appropriate tests.</p> <p>Record evaluations using drawings with labels.</p> <p>To carry out tests on my fairground toy and evaluate against the criteria</p>	<p><u>Textiles – Bags (Walter H Deubner – reinforced paper bag)</u></p> <p><u>Designing</u></p> <p>To understand how key events and individuals in D&amp;T have helped shape the world.</p> <p>To research and develop design criteria to inform the design of an innovative, functional, appealing products.</p> <p>To research and identify the best bags based on their purpose</p> <p>To develop, model and communicate ideas through discussion, annotated sketches, cross-sectional and exploded diagrams and prototypes (including CAD).</p> <p>Plan the order of own work, choosing appropriate materials, tools and techniques.</p> <p>To plan, design and choose tools and material to make a bag</p> <p><u>Making</u></p> <p>To select the correct tools (use accurately and safely) and materials (according to functional properties and aesthetic qualities), components and techniques to make a successful product.</p> <p>Construct products using permanent joining techniques.</p> <p>Pin, sew and stitch materials together.</p> <p>To use learned techniques to make a bag</p> <p><u>Evaluating</u></p> <p>To evaluate ideas and products against own design criteria and consider the views of others to improve work.</p> <p>Evaluate products identifying strengths and areas for development, and carrying out appropriate tests.</p> <p>Record evaluations using drawings with labels.</p> <p>To use my evaluations to design an enhanced bag, making note of any improvements suggested</p>	<p><u>Food – Cupcakes Bake off (Nadiya Hussain)</u></p> <p><u>Designing</u></p> <p>To understand how key events and individuals in D&amp;T have helped shape the world.</p> <p>To research and develop design criteria to inform the design of an innovative, functional, appealing products.</p> <p>To taste a range of products and conduct research prior to designing cupcakes</p> <p>To develop, model and communicate ideas through discussion, annotated sketches, cross-sectional and exploded diagrams.</p> <p>Plan the order of own work, choosing appropriate materials, tools and techniques.</p> <p>To make detailed designs of cupcakes based on quality research</p> <p><u>Making</u></p> <p>To select the correct tools (use accurately and safely) and materials (according to functional properties and aesthetic qualities), components and techniques to make a successful product.</p> <p><u>Evaluating</u></p> <p>To evaluate ideas and products against own design criteria and consider the views of others to improve work.</p> <p>Evaluate products identifying strengths and areas for development, and carrying out appropriate tests.</p> <p>Record evaluations using drawings with labels.</p> <p>To evaluate my cupcakes and make labelled drawings of improvements made</p>
Autumn 2	Spring 2	Summer 2



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