A blue and yellow shield with a cross

AI-generated content may be incorrect.

Design and Technology

Planning Overview

Cycle A (Y1,3 & 5) & Cycle B (Y2,4 & 6)

Kirkby C of E Primary School

Building on a tradition of achievement and values in a caring environment

|  |  |  |  |
| --- | --- | --- | --- |
|  | Autumn Term | Spring Term | Summer Term |
| Nursery | **EYFS Framework Coverage:** Expressive Arts and Design, Physical Development, Understanding the World, Mathematics, Personal Social and Emotional Development, Communication and Language. | **EYFS Framework Coverage:** Expressive Arts and Design, Physical Development, Understanding the World, Mathematics, Personal Social and Emotional Development, Communication and Language. | **EYFS Framework Coverage:** Expressive Arts and Design, Physical Development, Understanding the World, Mathematics, Personal Social and Emotional Development, Communication and Language. |
| Reception | **Topics:** Ourselves- Marvellous Me  Animals  Underground  Let’s Celebrate – Christmas | **Topics**: Around the World  Superheroes  Easter  Comparing Places | **Topics**: Growth  Dinosaurs  Underwater  Travel and Transport |
| Year 1 | **Curriculum Coverage: Structure**  Design, make and evaluate a  Picture Frame  NC: Design purposeful products for themselves and other users. Build structures, exploring how they can be made stronger, stiffer and more stable.  **Curriculum Coverage: Cooking and Nutrition**  Healthy Soup Making  NC: Use the basic principles of a healthy and varied diet to prepare dishes. | **Curriculum Coverage: Mechanism**  Design, make and evaluate an animal enclosure with a hinged door  NC: Select from and use a wide range of materials and components, select and use a range of tools and equipment.  Explore and use mechanisms. | **Curriculum Coverage: Designing, Structure and Purpose of Product**  Design, make and evaluate a Plant Pot  NC: Generate, develop, model and communicate their ideas through talking, drawing and ICT. |
| Year 2 | **Curriculum Coverage: Structure, Product for Purpose and materials.**  Design, make and evaluate a  Kite  NC: Design purposeful products for themselves and other users. Explore and evaluate a range of existing products. Build structures, exploring how they can be made stronger, stiffer and more stable. | **Curriculum Coverage: Mechanism**  Design, make and evaluate an Easter Card with a moving component.  NC: Select from and use a wide range of materials and components, select and use a range of tools and equipment.  Explore and use mechanisms (levers and sliders). | **Curriculum Coverage: Sewing and Purpose of Product**  Design, make and evaluate a  festival accessory  (lanyard, bunting, head wear).    NC: Design purposeful, functional and appealing products for themselves and other users. Develop ideas through drawing, templates and mock-ups. |
| Year 3 | **Curriculum Coverage: Cooking and Nutrition**  Sandwich Snacks  NC: Prepare a variety of savoury dishes using a range of cooking techniques. Understand and apply the principles of a healthy and varied diet.  **Curriculum Coverage: Mechanism**  Design and make a pop-up  Christmas Card  NC: Investigate and analyse a range of existing products. Use research to inform the design of appealing products that are aimed at a particular individual or group. | **Curriculum Coverage: Structure**  Design, make and evaluate a football stadium.  NC: Apply their understanding of how to strengthen, stiffen and reinforce more complex structures. Understand how key events and individuals in design and technology have helped shape the world. | **Curriculum Coverage: Sewing and Purpose of Product**  Design, create and evaluate an Anglo Saxon broach.  NC: Select from and use a wider range of tools and equipment to perform practical tasks (cutting, shaping, joining and finishing). Design functional and appealing products that are fit for purpose and aimed at a particular group. |
| Year 4 | **Curriculum Coverage: Electrical Systems and Designing**  Light up Christmas Box (Nativity)  NC: Technical knowledge – understand and use electrical systems in their products (circuits, switches, bulbs and buzzers | **Curriculum Coverage: Cooking and Nutrition, Designing**  Healthy Fruit Smoothies  Food Packaging Design  NC: Understand and apply the principles of a healthy and varied diet. Prepare and cook dishes. Select from and use a wide range of materials and components (construction materials and ingredients) according to their functional properties and aesthetic qualities. | **Curriculum Coverage: Sewing and Purpose of Product**  Design, sew and evaluate a  small bag.  NC: Select from and use a wider range of tools and equipment to perform practical tasks (cutting, shaping, joining and finishing). Design functional and appealing products that are fit for purpose and aimed at a particular group. Develop ideas through annotated sketches and pattern pieces. |
| Year 5 | **Curriculum Coverage: Structure and 3D Construction**  Design, make and evaluate a  Marble-ous Game/Toy  NC: Communicate ideas through annotated sketches, prototypes and Computer-Aided Design. Apply their understanding of how to strengthen, stiffen and reinforce more complex structures  **Curriculum Coverage: Mechanism**  Design and make a pop-up  Christmas Card  NC: Investigate and analyse a range of existing products. Use research to inform the design of appealing products that are aimed at a particular individual or group. | **Curriculum Coverage: Cooking and Nutrition**  Global Food  NC: Understand seasonality, know how a variety of ingredients are grown, reared, caught or processed. Prepare a variety of savoury dishes using a range of cooking techniques. | **Curriculum Coverage: Sewing and Purpose of Product**  Design, make and evaluate a fabric phone case.  NC: Select from and use a wider range of tools and equipment to perform practical tasks (cutting, shaping, joining and finishing). Design functional and appealing products that are fit for purpose and aimed at a particular group. Develop ideas through annotated sketches and pattern pieces. |
| Year 6 | **Curriculum Coverage: Designing**  Exploded Diagrams and Cross-Sectional Diagrams  NC: Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams. Understand how key individuals in design and technology have helped shape the world. | **Curriculum Coverage: Cooking and Nutrition**  Seasonality Cooking – Omelettes  NC: Prepare and cook a savoury dish using a range of cooking techniques. Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught or processed.  **Curriculum Coverage: Designing and Purpose of Product**  Personal Logo Designing  NC: Investigate and analyse a range of existing products. Evaluate their ideas against their design criteria and consider the views of others to improve their work. Develop and communicate ideas through Computer-Aided Design. | **Curriculum Coverage: Mechanical Systems**  Animal moving picture –  Cams and Levers)  NC: Understand and use mechanical systems in their products (gears, pulleys, cams, levers and linkages)  **Curriculum Coverage: Electrical Systems and Designing**  Programming Adventures - Torch  NC: Technical knowledge – understand and use electrical systems in their products (circuits, switches, bulbs, buzzers and motors). Use a wider range of materials and components according to their functional properties. |