

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

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|  | 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 MeAnimalsUnderground Let’s Celebrate – Christmas  | **Topics**: Around the World Superheroes EasterComparing Places  | **Topics**: Growth Dinosaurs UnderwaterTravel and Transport  |
| Year 1 | **Curriculum Coverage: Structure**Design, make and evaluate aPicture FrameNC: 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 MakingNC: 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 doorNC: 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 PotNC: 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 aKiteNC: 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 afestival 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 SnacksNC: 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-upChristmas CardNC: 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 SmoothiesFood Packaging DesignNC: 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/ToyNC: 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-upChristmas CardNC: 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 FoodNC: 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 DiagramsNC: 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 – OmelettesNC: 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 DesigningNC: 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 - TorchNC: 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. |