The Fairfield Designer YR-Y6: Subject Leader Overview

Design
Technical Knowledge
Make
Evaluate
Cooking & Nutrition

Year Group	Standardised Objectives
Year R	 ELG Managing Self Be confident to try new activities and show independence, resilience and perseverance in the face of challenge ELG Self Regulation Set and work towards simple goals, being able to wait for what they want and control their immediate impulses when appropriate; ELG Creating with Materials Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function ELG Fine Motor Hold a pencil effectively in preparation for fluent writing – using the tripod grip in almost all cases Use a range of small toys, including scissors, paint brushes and cutlery Begin to show accuracy and care when drawing ELG Creating with Materials Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function ELG Speaking Offer explanations for why things might happen, making use of recently introduced vocabulary ELG Creating with Materials Share their creations, explaining the process they have used
Year 1	 Design simple products that work and look appealing Discuss and draw ideas and use ICT to communicate Start to build structures, exploring ways to stiffen, stabilise and strengthen Explore simple mechanisms Use a range of materials and components Use a range of tools and equipment to perform practical tasks Explore existing products eg in school, at home Discuss own ideas and designs Begin to understand where food comes from Prepare simple dishes using knowledge of healthy food

Year 2	 Design products for themselves and others that are purposeful, functional and appealing Generate, develop, model and communicate ideas through talking, drawing, templates and ICT Build structures, exploring ways to stiffen, stabilise and strengthen Explore and use mechanisms Select from and use a wide range of materials and components according to their characteristics Select from and use a wide range of tools and equipment to perform practical tasks Explore and evaluate a range of existing products eg home, school Evaluate own ideas and designs against given design criteria Use basic principles of a healthy and varied diet to prepare dishes Understand where food comes from
Year 3	 Take risks to become innovative and resourceful Communicate ideas using different strategies eg discussion, sketching Use research to inform design Apply understanding of how to strengthen, stiffen and stabilise structures Identify a range of mechanical systems and how they work Select from and use a wide range of tools, equipment, materials and components accurately Evaluate own ideas and designs against given design criteria and consider the views of others to improve their work Investigate a range of existing products that address real/relevant problems in a range of relevant contexts eg home, leisure, school Apply principles of a healthy, varied diet when preparing a variety of savoury dishes Apply understanding of seasonality and its links to ingredients
Year 4	 Take risks to become innovative and resourceful Communicate, generate and develop ideas using a range of strategies eg prototypes, pattern pieces Use research to inform design and develop design criteria Apply understanding of how to strengthen and stiffen to reinforce more complex structures Identify wider range of mechanical systems and how they work Use understanding of electrical systems Use computing to program, monitor and control products Select from and use a wider range of tools, equipment, materials and components accurately to make prototypes Evaluate own and others' work suggesting improvements and considering the views of others to help improve their work Investigate a range of existing products in a range of relevant contexts eg culture, industry Know where and how a variety of ingredients is grown, reared, caught and processed

Year 5	 Communicate, generate, develop and model ideas using a range of strategies eg CAD, exploded and cross- sectional diagrams Use research to inform design and generate own design criteria Communicate, generate and develop ideas drawing on other disciplines eg science, maths, computing Confidently take calculated risks to become innovative, resourceful and enterprising Construct more complex structures by applying a range of strategies to solve real/relevant problems Making connections to real and relevant problems, apply understanding of a wider range of mechanical systems Making connections to real and relevant problems, apply understanding of electrical systems Drawing on disciplines and making connections to wider subject areas, apply understanding of computing to program, monitor and control products According to their functional properties and aesthetic qualities, select from and use a wide range of tools, equipment, materials and components accurately to make high-quality prototypes Generate own design criteria and evaluate ideas and products against these Investigate and analyse a range of existing products that address real and relevant problems in a range of contexts Understand how key events and individuals in D&T helped to shape the world Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques
Year 6	 Use research to inform innovative design and generate own design criteria Communicate, generate and develop ideas drawing on other disciplines eg science, maths, computing Confidently take calculated risks to become innovative, resourceful and enterprising Construct more complex structures by applying a range of strategies to solve real/relevant problems Making connections to real and relevant problems, apply understanding of a wider range of mechanical systems Making connections to real and relevant problems, apply understanding of electrical systems Drawing on disciplines and making connections to wider subject areas, apply understanding of computing to program, monitor and control products According to their functional properties and aesthetic qualities, select from and use a wide range of tools, equipment, materials and components accurately to make high-quality prototypes Generate own design criteria and critique ideas and products against these Explain and understand how key events and individuals in D&T helped to shape the world Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques Know where and how a variety of ingredients is grown, reared, caught and processed Develop crucial life skill of feeding themselves and others affordably and well

