Fairfields Primary School - DT Yearly Overview

Term	Year Group	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Autumn		Stable Structures  (Structures)	Making Fire Engines  (Mechanisms)	Seasonal Food  (Cooking and Nutrition)	Light-Up Signs  (Electrical)	Funky Furnishings  (Textiles)	Shelters  (Structures)
Spring		Moving Minibeasts  (Mechanisms)	Perfect Pizzas  (Cooking and Nutrition)	Moving Monsters  (Mechanisms)	Storybooks  (Mechanisms)	Moving Toys  (Mechanisms)	Programming Pioneers  (Programming)
Summer		Teddy Bear's Picnic  (Cooking and Nutrition)	Puppets  (Textiles)	Making Mini-Greenhouses  (Structures)	Pencil Cases  (Textiles)	Great British Dishes  (Cooking and Nutrition)	Electric Cars  (Electrical)

Year 1

Autumn - Stable Structures (Structures)

In this unit, the class will be making stable structures and developing their DT skills. They will have the opportunity to create their own structure as they follow plans, adapt plans and think about the purpose of their product.

Spring - Moving Minibeasts (Mechanisms)

In this unit, the class will learn how to make three different mechanisms to create moving minibeast pictures! They will explore how to construct a sliding mechanism, a lever and pivot mechanism, and finally a wheel mechanism, before applying their knowledge and understanding to design and make a moving minibeast picture for an author who is writing a book about minibeasts!

Summer - Teddy Bear's Picnic (Cooking and Nutrition)

In this unit, join Mr Bear and make a range of delicious picnic foods. Mr Bear will ask the children to help him out with a variety of picnic problems! The class will learn about different types of foods and have the chance to explore a variety of picnic foods. They will design, create and evaluate their own picnic snacks from rainbow omelette cakes to delicious and nutritious kebabs!

Year 2

Autumn - Making Fire Engines (Mechanisms)

In this unit, the children will get excited about fire engines. The class will explore modern fire engines and their features, before exploring, designing, creating and evaluating their own model fire engine using wheels, axles and chassis. They will also look at 17th century fire engines too linked to the 'Great Fire of London'.

Spring - Perfect Pizzas (Cooking and Nutrition)

In this unit, the class will get excited about healthy eating as they explore pizzas, discovering what a variety of toppings and bases look like, taste like and feel like. They will then have the challenge of designing and making their pizza to meet a design brief and evaluate it based on the criteria.

Summer - Puppets (Textiles)

In this unit, the class will find out how to work with fabric to create their own puppets. Starting off by looking at simple finger puppets, they will then develop and refine their sewing skills before designing, creating and evaluating their own fabric glove puppets. Welcome to the world of puppets!

Year 3

Autumn - Seasonal Food (Cooking and Nutrition)

In this unit, the class will learn about seasonal food and seasonal cooking. Why are certain foods in season at different times of year? Why is it good to eat seasonal food? How can we include seasonal food in a healthy, varied diet? The children will think about these questions and more, then cook using one of the recipes. This recipe could be linked to seasonal fruit, vegetables, meat, poultry, proteins, fish or seafood.

Spring - Moving Monsters (Mechanisms)

In this unit, the class will have the chance to get to grips with pneumatic systems before designing, making and evaluating their own monster with moving parts. This will be fun, fascinating and sometimes frightening as the children watch their moving monsters take shape!

Summer - Making Mini-Greenhouses (Structures)

In this unit, the children will turn into aspiring engineers and architects! The children will find out the purpose of a greenhouse and how it works, before moving on to exploring how structures like these can be made stable, and what materials would be the most appropriate to use. Children then apply this knowledge and understanding when designing, making and evaluating their very own mini greenhouse!

Year 4

Autumn - Light-Up Signs (Electrical)

In this unit, the children will use woodworking DT tools and materials, card and paper or even scrap materials to make a decorative light box with illuminated words or letters. They will be constructing light boxes and fitting them with either bulbs and batteries or with small LEDs instead. Having designed, made and evaluated a light box of their own, the children can begin to learn how lights inside electronic products may be programmed and controlled.

Spring - Storybooks (Mechanisms)

In this unit, the children will have the chance to explore moving parts in a variety of storybooks and learn how to recreate some of these moving parts using a variety of tools and techniques before investigating different types of fonts and graphics. And finally, putting their new-found skills to the test, they will design, create and evaluate their very own moving storybooks. They will bring stories to life with this fun and imaginative module as they create storybooks with moving mechanisms.

Summer - Pencil Cases (Textiles)

In this unit, the class will make their very own pencil cases! They will think about different materials used to make pencil cases and the different ways they are opened and closed. They will learn how to use a variety of stitches including running stitch, whip stitch and back stitch, as well as how to decorate their pencil case creations! The children will get excited about working with textiles and will be left with a beautiful and handy product at the end of it all!

Year 5

Autumn - Funky Furnishings (Textiles)

In this unit, the children will turn your children into aspiring interior designers! They will research, analyse, design, make and evaluate a 'funky' cushion cover, using their developing knowledge of and skills in a variety of sewing techniques for joining and decorating fabric.

Spring - Moving Toys (Mechanisms)

In this unit, the class will turn the classroom into a toy workshop as they will investigate cam mechanisms and toys that contain them. They will discover how different shaped cams can alter the movement of the follower and how to create a sturdy structure using a variety of tools and techniques. The toymakers will then have the chance to design, make and evaluate their own moving toy with a cam mechanism.

Summer - Great British Dishes (Cooking and Nutrition)

In this unit, the children will learn all about great British food. They will explore some sweet and savoury national dishes of England, Scotland and Wales, before moving on to developing an understanding of how cuisines from other countries have influenced what is eaten in Britain today. Finally, they will practise the important life skill of how to plan and shop for a meal!

Year 6

Autumn - Shelters (Structures)

In this unit, the class will explore different kinds of shelters, their materials, uses and components. They will be given the opportunity to develop their skills in a variety of areas. They will be challenged to use different materials to create stable free-standing objects, looking specifically at how to reinforce structures. They will undertake an investigation to study which materials would be most suitable for a shelter, and finally put their skills to the test as they design, make and evaluate their own shelters.

Spring - Programming Pioneers (Programming)

In this unit, the children will focus on designing, developing, testing and prototyping computer-controlled electronic systems for rooms such as motion-sensor activated alarms, door buzzer entry systems or even 'smart home' automatic lights! Have you ever wondered how the electrical products all around us work? They will consider this and many other questions about computer-controlled products as they discover how simple computer systems may be constructed and programmed to make products work. As well as working with electronic components and computer programming software, your children will learn all about influential computer scientists through history who have shaped the world around us. Not only that, but there are opportunities to make prototype models using DT materials OR 3-D CAD software to help develop ideas or to give inspirational product demonstrations!

Summer - Motorised Cars (Electrical)

In this unit, the children will get the chance to examine a variety of motorised vehicles before designing and making their own motorised car using an electrical motor. There are lots of hands-on activities and design challenges in this 'wheely' great unit!