Design and Technology Overview – Composite Knowledge

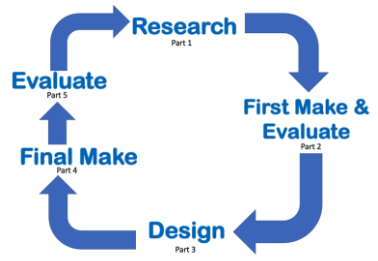
Galliard Primary School

EYFS

- **Can we explore and use a range of materials, tools (including scissors, hammer and saws) and techniques safely?**
- **Can we experiment with colour, design, texture, form and function?**
- **Why is it important to make healthy food choices? Where do vegetables come from?**

Key Stage 1

	Autumn 2	Spring 2	Summer 2
Y1	**Mechanisms** Sliders and levers • What is a slider? • What is a lever? • Which part of the mechanism is a pivot? Toys	**Structures** Freestanding structures • What is a freestanding structure? • How can we stop a freestanding structure from falling over? • How can we make a structure stronger, stiffer and more stable? Whose home?	**Food** Preparing fruit and vegetables (including cooking and nutrition requirements for KS1) • How many different types of fruit are available? • What vocab can you use to describe the smell, taste and texture of different fruit? • Why do we need fruit and veg to have a balanced diet? • How do we prepare food in a safe way? Fantastic Fruit
Y2	**Mechanisms** Wheels and axles • What is an axle? • What is a chassis? • How do wheels and axles work together to help things move? Let's look at vehicles Wheels	**Food** Preparing fruit and vegetables (including cooking and nutrition requirements for KS1) • What is a balanced diet? • Why is it good to eat a balanced diet? • What do we need to do before we can eat fruit and veg? Perfect Pizza!	**Textiles** Templates and joining techniques • What is a template? • What is a joining technique? Puppets Fancy a bag

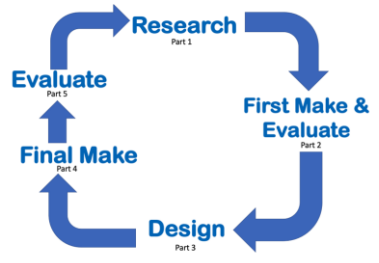


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Lower Key Stage 2

	Autumn 2	Spring 2	Summer 2
Y3	**Mechanical Systems** Levers and linkages • What is a shell structure? • How can we join our shell structure? • What is triangulation and how does it help? Pop-up story book	**Structures** Shell structures (including computer-aided design) • How can we construct strong, stiff shell structures? • How can we use a net to effectively make a 3D shape? Photo frames Making mini green houses	**Food** Healthy and varied diet (including cooking and nutrition requirements for KS2) • What equipment and resources do we need to use to combine and prepare food? • How can we prepare food hygienically? • Why do we follow instructions when cooking? • How can we prepare food safely? Sandwich Snacks
Y4	**Textiles** • How can we securely join two pieces of fabric together? • How can we strengthen, stiffen and reinforce existing fabrics? Aprons	**Food** Healthy and varied diet (including cooking and nutrition requirements for KS2) • What are culture and seasonality? • What different techniques can we use? • How can we understand the nutritional value of a product? • What functions do different utensils have? • Super Salads	**Electrical Systems** Simple circuits and switches (including programming and control) • What is a program? • How can we create a simple program? • How can we create a program with a control aspect? Developing handmade switches



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Upper Key Stage 2

	Autumn 2	Spring 2	Summer 2
Y5	**Food** Celebrating culture and seasonality (including cooking and nutrition requirements for KS2) • What are culture and seasonality? • What different techniques can we use? • How can we understand the nutritional value of a product? • What functions do different utensils have? Making Bread	**Structures** Frame structures • What is a frame structure? • How can we join our frame structure? • What is triangulation and how does it help? Bridges Skyscrapers	**Mechanical Systems** Pulleys or gears • How do gears help to change the speed or direction of movement of an object? • What are the inputs, processes and outputs for a particular object? Gears & Pulleys
Y6	**Textiles** Combining different fabric shapes (including computer-aided design) • How can we combine different fabric shapes? • What impact have different designers had on fabrics and products? • How can we strengthen/stiffen a product? Designer bags "Make do and mend!"	**Electrical Systems** Monitoring and control • Why do we use computer control programs to operate products? • What are the advantages of using computer control? Crumble (computing link)	**Food** Celebrating culture and seasonality (including cooking and nutrition requirements for KS2) • What variety of fruits do we have and where do they come from? How do they influence food and drink from that country? • Why do we need a healthy diet and how does fruit contribute to this? • What combinations of fruit make a drink with pleasing results? • Which safety and hygiene rules must be followed when carrying out practical tasks in food technology? Caribbean Fruit Cocktails

