

## Design and Technology Curriculum Map

Year 1	Autumn Half Term	Spring Half Term	Summer Half Term
	<b>Making Shelters</b>	<b>Vehicles</b>	<b>Fruit Salads</b>
Fundamental Knowledge	<p>Explore and evaluate a wide range of existing products.</p> <p>Design purposeful, functional, appealing products based on design criteria.</p> <p>Generate, develop, model and communicate ideas.</p> <p>Select from and use a range of equipment.</p> <p>Select from a use a wide range of materials and components.</p> <p>Evaluate their ideas and products against a design criteria.</p> <p>Build structures, exploring how they can be made stronger, stiffer and more stable.</p>	<p>Explore and evaluate a wide range of existing products.</p> <p>Design purposeful, functional, appealing products based on design criteria.</p> <p>Generate, develop, model and communicate ideas.</p> <p>Select from and use a range of equipment.</p> <p>Select from a use a wide range of materials and components.</p> <p>Evaluate their ideas and products against a design criteria.</p>	<p>Explore and evaluate a wide range of existing products (fruit tasting)</p> <p>Design purposeful, functional, appealing products based on design criteria.</p> <p>Generate, develop, model and communicate ideas.</p> <p>Select from and use a wide range of equipment.</p> <p>Select from and use a wide range of materials and components.</p> <p>Evaluate their ideas and products against a design criteria.</p>
End of unit task	<b>Design, make and evaluate a shelter.</b>	<b>Design, make and evaluate a vehicle.</b>	<b>Design, make and evaluate a seasonal fruit salad.</b>
Interleaved links	<p>Reception - plan before make, make structures strong and stable, select appropriate materials/tools</p> <p>Science - materials (yr1)</p>	<p>Reception - plan before make, select appropriate materials/tools, change and modify</p> <p>Science - materials (yr1)</p> <p>DT - DT lesson cycle (design, make, evaluate)</p>	<p>Reception - plan before make, select appropriate materials/tools, change and modify</p> <p>DT - lesson cycle (design, make, evaluate)</p>

Year 2	Autumn Half Term	Spring Half Term	Summer Half Term
	<b>Joining Fabrics</b>	<b>Levers and sliders</b>	<b>Healthy School Meals</b>
Fundamental knowledge	<p>Design purposeful, functional, appealing products based on design criteria.</p> <p>Generate, develop, model and communicate ideas.</p> <p>Select from and use a range of tools and equipment.</p> <p>Select from and use a wide range of materials and components.</p> <p>Explore and evaluate a range of existing products.</p> <p>Evaluate their ideas and products against design criteria.</p>	<p>Design purposeful, functional, appealing products based on design criteria.</p> <p>Generate, develop, model and communicate ideas.</p> <p>Select from and use a range of tools and equipment.</p> <p>Select from and use a wide range of materials and components.</p> <p>Explore and evaluate a range of existing products.</p> <p>Evaluate their ideas and products against design criteria.</p> <p>Build structures, exploring how they can be made stronger, stiffer and more stable.</p> <p>Explore mechanisms in products.</p>	<p>Design purposeful, functional, appealing products based on design criteria.</p> <p>Generate, develop, model and communicate ideas.</p> <p>Select from and use a range of tools and equipment.</p> <p>Select from and use a wide range of materials and components.</p> <p>Evaluate their ideas and products against design criteria.</p>
End of unit task	<b>Design, make and evaluate bunting.</b>	<b>Design, make and evaluate a moving Easter card.</b>	<b>Design, make and evaluate a healthy school meal.</b>
Interleaved links	<p>Reception - joining materials, plan before make, change and modify, choose appropriate materials and tools</p> <p>DT - lesson cycle (design, make, evaluate)</p>	<p>Reception - plan before make, change and modify, choose appropriate materials and tools, make structures strong and stable</p> <p>DT - lesson cycle (design, make, evaluate)</p>	<p>Reception - plan before make, change and modify, choose appropriate materials and tools</p> <p>DT - lesson cycle (design, make evaluate), fruit salads (yr 1)</p>

Year 3	Autumn Half Term	Spring Half Term	Summer Half Term
	<b>Strong Kites</b>	<b>Juggling balls</b>	<b>Seasonal Eating</b>
Fundamental knowledge	<p>Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose aimed at particular groups or individuals.</p> <p>Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross sectional designs.</p> <p>Communicate ideas through discussion, diagrams, prototypes and computer aided designs.</p> <p>Choose and use appropriate construction materials, explaining functional and aesthetic qualities.</p> <p>Choose and use appropriate tools safely to cut, shape, join and finish products accurately.</p> <p>Investigate and analyse a range of existing products.</p> <p>Evaluate final products based on the original criteria.</p> <p>Build structures with an understanding of strength, stiffness and stability.</p>	<p>Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose aimed at particular groups or individuals.</p> <p>Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross sectional designs.</p> <p>Choose and use appropriate construction materials, explaining functional and aesthetic qualities.</p> <p>Choose and use appropriate tools safely to cut, shape, join and finish products accurately.</p> <p>Investigate and analyse a range of existing products.</p> <p>Evaluate final products based on the original criteria.</p>	<p>Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose aimed at particular groups or individuals.</p> <p>Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross sectional designs.</p> <p>Choose and use appropriate tools safely to cut, shape, join and finish products accurately.</p> <p>Investigate and analyse a range of existing products.</p> <p>Evaluate final products based on the original criteria.</p> <p>Understand the use of seasonal food when preparing dishes.</p>
End of unit task	<b>Design, make and evaluate a kite.</b>	<b>Design, make and evaluate juggling balls.</b>	<b>Design, make and evaluate a simple seasonal dish.</b>
Interleaved links	DT - Building shelters (yr1), lesson sequence (design, make, evaluate)	DT - Joining Fabrics (yr 1), lesson sequence (design, make, evaluate)	DT - fruit salads (yr 1), healthy school meals (yr 2), lesson sequence (design, make, evaluate)

Year 4	Autumn Half Term	Spring Half Term	Summer Half Term
	<b>Greek Architecture</b>	<b>Electrical Systems</b>	<b>Good Food, Fresh Food</b>
Fundamental Knowledge	<p>Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross sectional and exploded diagrams, prototypes, and computer aided design.</p> <p>Communicate ideas through discussion, diagrams, prototypes and computer aided designs.</p> <p>Choose and use appropriate construction materials, explaining functional and aesthetic qualities.</p> <p>Choose and use appropriate tools safely to cut, shape, join and finish products accurately.</p> <p>Evaluate final products based on the original criteria.</p> <p>Understand how key events/individuals in design and technology have shaped the world.</p> <p>Build structures with an understanding of strength, stiffness and stability.</p>	<p>Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross sectional and exploded diagrams and prototypes.</p> <p>Communicate ideas through discussion, diagrams and prototypes.</p> <p>Choose and use appropriate construction materials, explaining functional and aesthetic qualities.</p> <p>Choose and use appropriate tools safely to cut, shape, join and finish products accurately.</p> <p>Evaluate final products based on the original criteria.</p> <p>Design a purposeful and functional product using electrical circuits.</p>	<p>Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose aimed at particular groups or individuals.</p> <p>Communicate ideas through discussion, diagrams, prototypes and computer aided designs.</p> <p>Choose and use appropriate tools safely to cut, shape, join and finish products accurately.</p> <p>Investigate and analyse a range of existing products.</p> <p>Evaluate final products based on the original criteria.</p> <p>Understand the use of seasonal food when preparing dishes.</p>
End of unit task	<b>Design, build and evaluate a Greek inspired building.</b>	<b>Design, build and evaluate a battery-operated lighthouse</b>	<b>Design, make and evaluate a healthy packaged snack.</b>
Interleaved links	History - Greeks (yr 4) DT - Building shelters (yr 1), Strong Kites (yr 3), lesson sequence (design, make, evaluate)	Science - Electricity (yr 4), DT - lesson sequence (design, make, evaluate)	DT - fruit salads (yr 1), healthy school meals (yr 2), seasonal eating (yr 3), lesson sequence (design, make, evaluate)

Year 5	Autumn Half Term	Spring Half Term	Summer Half Term
	<b>Automata Animals</b>	<b>Tasty Tacos!</b>	<b>BBC Micro:bit</b>
Fundamental Knowledge	<p>Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose aimed at particular groups or individuals.</p> <p>Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross sectional and exploded diagrams and prototypes.</p> <p>Choose and use appropriate construction materials, explaining functional and aesthetic qualities.</p> <p>Choose and use appropriate tools safely to cut, shape, join and finish products accurately.</p> <p>Investigate and analyse a range of existing products.</p> <p>Evaluate final products based on the original criteria.</p> <p>Choose and use gears, pulleys, cams, levers and linkages appropriately.</p>	<p>Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose aimed at particular groups or individuals.</p> <p>Communicate ideas through discussion and diagrams.</p> <p>Choose and use appropriate tools safely to cut, shape, join and finish products accurately.</p> <p>Investigate and analyse a range of existing products.</p> <p>Evaluate final products based on the original criteria.</p> <p>Understand how key events/individuals in design and technology have shaped the world.</p> <p>Understand the use of seasonal food when preparing dishes.</p>	<p>Apply understanding of computing to program, monitor and control products.</p>
Interleaved links	DT - Levers and sliders (yr 2), lesson sequence (design, make, evaluate)	DT - fruit salads (yr 1), healthy school meals (yr 2), seasonal eating (yr 3), good food, fresh food (yr 4) lesson sequence (design, make, evaluate)	Computing - programming (yr 3,4,5)
Composite knowledge	<b>Design, make and evaluate an automata model.</b>	<b>Design, make and evaluate a taco filling.</b>	<b>Design, make and evaluate a range of BBC micro:bit products.</b>
Enrichment Opportunities			

Year 6	Autumn Half Term	Spring Half Term	Summer Half Term
Year 6	<b>Bridge Engineers</b>	<b>Food for life</b>	<b>Make Do and Mend</b>
Fundamental Knowledge	<p>Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose aimed at particular groups or individuals.</p> <p>Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross sectional and exploded diagrams, and prototypes.</p> <p>Choose and use appropriate construction materials, explaining functional and aesthetic qualities.</p> <p>Choose and use appropriate tools safely to cut, shape, join and finish products accurately.</p> <p>Investigate and analyse a range of existing products.</p> <p>Evaluate final products based on the original criteria.</p> <p>Understand how key events/individuals in design and technology have shaped the world.</p> <p>Build structures with an understanding of strength, stiffness and stability.</p>	<p>Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose aimed at particular groups or individuals.</p> <p>Communicate ideas through discussion, diagrams, prototypes and computer aided designs.</p> <p>Choose and use appropriate tools safely to cut, shape, join and finish products accurately.</p> <p>Investigate and analyse a range of existing products.</p> <p>Evaluate final products based on the original criteria.</p> <p>Understand the use of seasonal food when preparing dishes.</p>	<p>Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose aimed at particular groups or individuals.</p> <p>Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross sectional and exploded diagrams, prototypes and pattern pieces.</p> <p>Choose and use appropriate construction materials, explaining functional and aesthetic qualities.</p> <p>Choose and use appropriate tools safely to cut, shape, join and finish products accurately.</p> <p>Investigate and analyse a range of existing products.</p> <p>Evaluate final products based on the original criteria.</p> <p>Understand how key events/individuals in design and technology have shaped the world.</p>
Composite Knowledge	<b>Design, make and evaluate a bridge to meet a specific design criteria.</b>	<b>Design, make and evaluate a healthy loaf of bread.</b>	<b>Design, make and evaluate a stitched product to meet a design criteria.</b>
Interleaved links	<p>DT - Building shelters (yr 1), Strong Kites (yr 3), Greek architecture (yr 4) lesson sequence (design, make, evaluate)</p> <p>Art - Famous buildings (yr 4)</p>	<p>DT - fruit salads (yr 1), healthy school meals (yr 2), seasonal eating (yr 3), good food, fresh food (yr 4), tasty tacos (yr5), lesson sequence (design, make, evaluate)</p>	<p>History - World War 2 (yr 6)</p> <p>DT - Joining Fabrics (yr 1), Juggling Balls (yr 3), lesson sequence (design, make, evaluate)</p>