Design and Technology Curriculum Map

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

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

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

Year 5	Autumn Half Term	Spring Half Term	Summer Half Term
	Automata Animals	Tasty Tacos!	BBC Micro:bit
Fundamental Knowledge	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. Generate, develop, model and communicate their ideas through discussion, annotated sketches, cross sectional and exploded diagrams and prototypes. Choose and use appropriate construction materials, explaining functional and aesthetic qualities. Choose and use appropriate tools safely to cut, shape, join and finish products accurately. Investigate and analyse a range of existing products. Evaluate final products based on the original criteria. Choose and use gears, pulleys, cams, levers and linkages appropriately.	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. Communicate ideas through discussion and diagrams. Choose and use appropriate tools safely to cut, shape, join and finish products accurately. Investigate and analyse a range of existing products. Evaluate final products based on the original criteria. Understand how key events/individuals in design and technology have shaped the world. Understand the use of seasonal food when preparing dishes.	Apply understanding of computing to program, monitor and control products.
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	Design, make and evaluate an automata model.	Design, make and evaluate a taco filling.	Design, make and evaluate a range of BBC micro:bit products.
Enrichment Opportunities			

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