

Year Group	1	Unit Title	Teddy Bears picnic (Food)
Builds on	uilds on EYFS Food Tech Prepares fo		or Dips and Dippers year 2
Key Skills Covered			Main Knowledge Gained
- how to m		tusing a boot	that all food comes from plants or animals
 how to prepare simple dishes safely and hygienically, without using a heat source 			that food has to be farmed, grown elsewhere (e.g. home) or caught
 how to use techniques such as cutting, peeling and grating 			that everyone should eat at least five portions of fruit and vegetables every day
Key Vocabulary: plant, fruit, vegetable, grain, animal, meat, protein, grown, farmed, re			eared, caught, wash, cut, peel, grate, slice, chop
Year Group 1 Unit Title		Linit Titlo	Rag dolls (Textiles)
		Office fittle	rag dolls (Textiles)
Builds on EYFS joining materials Prepares for		Prepares fo	or Sustainable Fashion Year 6 Art Year 2
Key Skills Covere	rd		Main Knowledge Gained
	an by suggesting what to do next, select from a rar		about the simple working characteristics of materials and components
equipment, explaining their choices and select from a range of materials and components according to their characteristics			that a 3-D textiles product can be assembled from two identical fabric shapes.
 Cut and j 	oin fabrics		shapes
Key Vocabul	ary: plan, design, select, template, cut, join, glue, se	ew. attach. textile.	fabric 3d 2d adjectives for textures

Unit Title

Vehicles for a given purpose (Mechanisms)

Year Group



Builds on	Junk modelling EYFS	Prepares for	Moving Pictures Year 2

Key Skills Covered	Main Knowledge Gained
 Select from and use a range of tools and equipment to perform a range of practical tasks e.g. cutting, shaping, joining and finishing. Use wheels and axles in a product. Build structures exploring how they can be made stronger, stiffer and more stable. 	about the movement of simple mechanisms such as levers, sliders, wheels and axles

Year Group 2 Unit Title Moving Pictures (Mechanisms)
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Builds on	Vehicles for purpose Year 1	Prepares for	Pneumatic monsters Year 3
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Key Skills Covered	Main Knowledge Gained		
 model ideas by exploring materials, components and construction kits and by making templates and mockups 	 about the movement of simple mechanisms such as levers, sliders, wheels and axles 		
measure, mark out, cut and shape materials and components	how freestanding structures can be made stronger, stiffer and more stable		
assemble, join and combine materials and components			
 use finishing techniques, including those from art and design 			
Key Vocabulary: lever, slider, pivot, flexibility, stability, evaluate, assemble, template, mockup, draft, prototype, components, longevity			

Year Group	2	Unit Title	Dips and Dippers (Food)



Builds on	Teddy bears picnic Year1	Prepares fo	or	Stir Fry Year 3		
Key Skills Covered			Main Knowledge Gained			
 how to prepare simple dishes safely and hygienically, without using a heat source 			•	that food ingredients should be combined according to their sensory characteristics		
how to use techniques such as cutting, peeling and grating			•	how to name and sort foods into the five groups in the eat well plate		
			•	that everyone should eat at least five portions of fruit and vegetables every day		
Key Vocabulary: hygienic, safety, cut, peel, shred, slice, battens, cudetets, complime			t, flavou	r, strength, texture, eat well plate		
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Year Group	2	Unit Title		A Chair for Baby Bear		
Builds on Construction sets EYFS Prepares			or	Travel Tablet Holder Year 3		
Key Skills Covered	and the trade of the control of the			Knowledge Gained		
 Choose appropriate tools, equipment and materials. (NC) Investigate different materials for stiffening a variety of materials for 			•	Design purposeful, functional appealing products based on a design criteria.		
the structu	re to remain stable.		Generate, develop, model and communicate ideas through draw			
To mark out and cut materials.				and templates and mock-ups.		
Key Vocabulary: Stru	Key Vocabulary: Structure, stability, support, strength, weight distribution, stiffen, base, function, user, prototype					
Year Group	3	Unit Title		Pneumatic Monsters (Mechanisms)		
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Builds on	Moving Pictures Year 2	Prepares fo	or	Electric Greeting Cards (Year 5)		



Key Skills Covered	Main Knowledge Gained
 Safely measure, mark out, cut and shape materials and components using a range of tools explain how particular parts of their products work make design decisions that take account of the availability of resources use annotated sketches, cross-sectional drawings and exploded diagrams to develop and communicate their ideas make mechanical systems such as levers and linkages or pneumatic systems create movement 	 Investigate and analyse existing products and those they have made considering a wide range of factors. Use knowledge of existing products to design their own. Make suitable choices from a wider range of tools and unfamiliar materials and plan out the main stages of using them. Develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose aimed at individuals or groups Understand who Archimedes was.
Key Vocabulary: mechanical system, pneumatics, hydrolics, cross section, exploded of	diagram, levers, pivot, analyse, design criteria, innovative, Archimedes engineer

Year Group	Unit Title			Stir Fry (Food)
Builds on	Dips and Dippers Year 2	Prepares f	or	seasonal soup (Year 4)
Key Skills Covered			Main	Knowledge Gained
how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source			•	that a healthy diet is made up from a variety and balance of different food and drink, as depicted in The eatwell plate



how to use a range of techniques such as peeling, chopping, slicing, grating, mixing.
 that food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world
 Key Vocabulary: peel, slice, julienne, shred, el dente, texture, sauce, marinade, savoury, wok, stir fry, noodles, asian

Year Group	3	Unit Title	Travel Tablet Holder (Structures)	
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Builds on	Moving Pictures Year 2	Prepares for	Food Carriers Year 4	

Key Skills Covered	Main Knowledge Gained
identify the strengths and areas for development in their ideas and products	how to make strong, stiff shell structures
consider the views of others, including intended users, to improve their work	that materials have both functional properties and aesthetic qualities
measure, mark out, cut and shape materials and components with some accuracy	 that materials can be combined and mixed to create more useful characteristics
assemble, join and combine materials and components with some accuracy	
Key Vocabulary: research, analysis, functionality, user, evaluate, assemble, shell struc	cture, components, prototype, aesthetic, combine.

Year Group	4	Unit Title	Seasonal Soup (Food)
Builds on	Stir Fry Year 3	Prepares for	Tabbouleh Year 4 Term 6



 Read and follow recipes which involve several processes, skills and techniques. Prepare and cook a variety of predominately savoury dishes using a 	 Understand what makes a healthy and balanced diet. Different foods and drinks provide different substances that they body needs
range of cooking techniques	 to be healthy and active. Understand seasonality and the advantages of eating seasonal and locally produced food. Use knowledge of existing products to appeal to a particular audience. Understand and apply the principles of a healthy and varied diet Understand seasonality Know that ingredients are grown, reared, caught and processed. Understand the work of Hugh Fearnley Whittingstall and his contribution to healthy, sustainable, seasonal food.

Year Group	4	Unit Title	Food Carriers or Packaging (2D CAD)
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Builds on	Tablet holder Year 3	Prepares for	Luggage Label (3D CAD)
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Key Skills Covered	Main Knowledge Gained
 identify the strengths and areas for development in their ideas and products explain their choice of materials and components according to functional properties and aesthetic qualities Create exploded diagrams. 	 that materials can be combined and mixed to create more useful characteristics Use own knowledge of techniques and the functional and aesthetic qualities of a wide range of materials to plan how to use them.



 Use techniques which require more accuracy to cut, shape, join and finish work. E.g. cutting external shapes, slots in frameworks. Use 2D CAD 	 Consider how existing products and finished products might be improved and how well they meet the needs of the intended user. Use research to develop design criteria for innovative, functional appealing products that are fit for purpose aimed at particular groups/individual Generate, develop, model and communicate ideas trough discussion annotated sketches exploded diagrams 	
Key Vocabulary: computer aided design, components, functionality, aesthetic appeal, user, accuracy, characteristics, evaluate, exploded diagrams, annotated sketches.		

Year Group	4	Unit Title	e Electricl Alarms (Mechanisms Electrical)
Builds on	Science circuits Year 3	Prepares fo	s for Electric greeting cards year 5
Key Skills Cover	ed		Main Knowledge Gained
 indicate the design features of their products that will appeal to intended users 		appeal to intended	 how simple electrical circuits and components can be used to create functional products
explain how particular parts of their products work			 how to use learning from science to help design and make products that work

Year Group	4 Unit Title		Seasonal Tabbouleh (Food)	
Builds on	Soup Year 4	Prepares for	South American Food Year 5	



Key Skills Covered	Main Knowledge Gained
 Read and follow recipes which involve several processes, skills and techniques. Prepare and cook a variety of predominately savoury dishes using a range of cooking techniques (NC) 	 Understand what makes a healthy and balanced diet. Different foods and drinks provide different substances that they body needs to be healthy and active. Understand seasonality and the advantages of eating seasonal and locally produced food. Use knowledge of existing products to appeal to a particular audience. (NC) Understand and apply the principles of a healthy and varied diet (NC) Understand seasonality (NC) Know that ingredients are grown, reared, caught and processed. (NC) Understand the work of Hugh Fearnley Whittingstall and his contribution to healthy, sustainable, seasonal food.
Key Vocabulary: Tabbouleh, grains, pulses, lentils, staples, flavour enhancers, carboh	ydrate, energy, audience, seasonality, sustainability, economical, traditional

Year Group	5	Unit Title	e Bridges
Builds on	Y4 T4 Food carriers	Prepares f	s for Secondary DT
Key Skills Cover	red		Main Knowledge Gained
Build more complex 3D structures and apply knowledge of			 Produce step by step plans to guide his/her making. Demonstrating
strengthening techniques to make them stronger or more stable		nger or more stable	he/she can apply knowledge of different materials, tools and
			techniques.



- Produce step by step plans to guide his/her making. Demonstrating he/she can apply knowledge of different materials, tools and techniques.
- Make careful and precise measurements so that joins, holes and openings are in exactly in the right place.
- To create prototypes to show ideas.

- Use research to develop design criteria for innovative, functional appealing products that are fit for purpose aimed at particular groups/individual
- Generate, develop, model and communicate ideas trough discussion annotated sketches exploded diagrams
- Make detailed evaluations about existing projects and own considering the views of others to improve own work.
- Use his/ her research into existing products and his/her market research to inform the design of his/ her own innovative project
- To understand how key events and individuals in design technology have helped shaped the world.
- Understand the work of Isamard kingdom Brunel.

Key Vocabulary: suspension, cabel, arch, reinforce, weight bearing, cantilever, beam, girder, supports, innovate

Year Group	5	Unit Title		Food Tech South American Food
Builds on	Y4 Food Tech Seasonal Food	Prepares fo	or	Y6 Food Tech
Key Skills Covered			Main	Knowledge Gained
 Select appropriate ingredients and use a wide range of techniques to combine them. Prepare and cook a variety of predominately savoury dishes using a range of cooking techniques 		•	Understand how a variety of ingredients are grown, reared, caught and processed to make them safe and palatable / tasty to eat. Understand the main food groups and the different nutrients that are important for health. Use knowledge of existing products to appeal to a particular audience.	



	 Understand and apply the principles of a healthy and varied diet Understand seasonality Know that ingredients are grown, reared, caught and processed. 	
Key Vocabulary: savoury, healthy, audience, processes, nutrients, varied diet, traditional, cultural, climate		

Year Group	Y5	Unit Title	Electrical Greetings Card
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Builds on	Alarms Year 4	Prepares for	KS2 Electricity science topic

he/she can apply knowledge of different materials, tools and techniques. Make careful and precise measurements so that joins, holes and openings are in exactly in the right place. To create prototypes to show ideas. Apply their understanding of computing to program, monitor and control their products. syst Dise	research to develop design criteria for innovative, functional aling products that are fit for purpose aimed at particular
loca Key Vocabulary: prototype, sketch, plan, mock up, circle, conductive, target market, sustainability, fu	os/individual his/her research into existing products and his/her market his/ her research into existing products and his/her market his/ her own innovative project erstand how to use electrical systems in their products (Series into incorporating switches, bulbs, buzzers and motors) erstand the link between this and the electrical cars produced by.





Year Group 6		Unit Title		Ration Packs/ Welcome Packs (Food)
Builds on So	uth American food Year 5	Prepares fo	or	Secondary DT
Key Skills Covered			Main	Knowledge Gained
 how to prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source how to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking how to carry out research, using surveys, interviews, questionnaires and web-based resources identify the needs, wants, preferences and values of particular individuals and groups 		•	how food is processed into ingredients that can be eaten or used in cooking that a recipe can be adapted by adding or substituting one or more ingredients that different food and drink contain different substances – nutrients, water and fibre – that are needed for health	

Year Group	6	Unit Title	Sustainable Fashion (Textiles)



l Builds on	I Rag Dolls Year 2	I Prepares for	I Secondary DT
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Key Skills Covered	Main Knowledge Gained
 critically evaluate the quality of the design, manufacture and fitness for purpose of their products as they design and make 	 how sustainable the materials in products are what impact products have beyond their intended purpose
 to explain their choice of materials and components according to functional properties and aesthetic qualities 	 that materials have both functional properties and aesthetic qualities that materials can be combined and mixed to create more useful characteristics

Key Vocabulary: Sustainability, carbon foot print, ethical, manufacturing, industry, mass market, disposable fashion, synthetic fibres, impact, functionality, aesthetics, components.

Year Group	Y6	Unit Title	Luggage Label (3D CAD)
Builds on	Food Carriers / Packaging	Prepares for	Secondary

Key Skills Covered	Main Knowledge Gained	
 use computer-aided design to develop and communicate their ideas make design decisions, taking account of constraints such as time, resources and cost 	 how to use learning from mathematics to help design and make products that work how much products cost to make 	



Key Vocabulary: CAD, printer filament, design, economically viable, preference plus to	erms used in tinkercad