

## <u>Design Technology</u>

		D&T – Year 1
Block 1	Block 2	Block 3 Textiles- Sock Puppet (Toys) Subject/Conceptual knowledge/skills:
		<ul> <li>LEAPS:</li> <li>Understanding contexts, users and purposes <ul> <li>I can say how my products will work in simple terms.</li> <li>I can say how my products will help the user.</li> <li>I can use a simple design criterion to</li> </ul> </li> </ul>
		develop my ideas. Generating, developing, modelling and communicating ideas I can begin to draw on my own experiences to help generate ideas. I can begin to develop my ideas through talk and drawing.
		<ul> <li>Planning         <ul> <li>I can select materials from a limited range that will meet a simple design criteria.</li> </ul> </li> </ul>
		<ul><li>Practical skills and techniques</li><li>I can begin to work safely and hygienically.</li></ul>

		<ul> <li>With help, I can measure, mark out, cut and shape a range of materials.</li> <li>I can begin to assemble, join and combine materials and components together e.g. glues or masking tape.</li> <li>I can begin to use simple finishing techniques to improve the appearance of my product.</li> </ul>
		<ul> <li>Own ideas and products <ul> <li>I can begin to talk about my designs as I develop and identify good and bad points.</li> <li>I can begin to talk about my products' strengths and possible changes I might make.</li> </ul> </li> </ul>
		<ul> <li>Existing products</li> <li>I know what products are.</li> <li>I can discuss how products work, how and where they are used and who they can be used by.</li> <li>I can select materials which products are made from.</li> </ul>
		<ul> <li>Making products work <ul> <li>I can assemble two fabric shapes.</li> </ul> </li> <li>Vocabulary: <ul> <li>Product, material, measure, cut, shape assemble, join, like, dislike, fabric, combine</li> </ul> </li> </ul>
Block 4 Mechanisms (STEM Week) Subject/Conceptual knowledge/skills: LEAPS:	Block 5 Where food comes from Subject/Conceptual knowledge/skills: LEAPS:	Block 6 Food Preparation Subject/Conceptual knowledge/skills: LEAPS:

<ul> <li>Understanding contexts, users and purposes <ul> <li>I can describe what my products will be used for through talk.</li> </ul> </li> <li>Planning <ul> <li>I can select and name the tools needed to perform a practical task e.g. use scissors for cutting and glue to joining.</li> </ul> </li> <li>Practical skills and techniques <ul> <li>With help, I can measure, mark out, cut and shape a range of materials.</li> <li>I can begin to assemble, join and combine materials and components together e.g. glues or masking tape.</li> <li>I can begin to use simple finishing techniques to improve the appearance of my product.</li> </ul> </li> </ul>	<ul> <li>Where food comes from <ul> <li>I can begin to understand that all food comes from plants or animals.</li> <li>I can start to understand that food has to be farmed, grown elsewhere (home) or caught.</li> </ul> </li> <li>Food preparation, cooking and nutrition <ul> <li>I am starting to name and sort foods into the 5 groups in The Eat Well Plate (SCARF).</li> <li>I am beginning to understand that everyone should eat at least 5 portions of fruit and vegetables every day (SCARF).</li> </ul> </li> <li>Vocabulary: <ul> <li>Fruit, vegetables, cereals, grains, dairy, meat, fish, fats, sugars, portion, safely, hygiene</li> </ul> </li> </ul>	<ul> <li>Food preparation, cooking and nutrition <ul> <li>I know how to prepare dishes safely and hygienically without using a heat source.</li> <li>I know how to use techniques such as cutting, peeling and grating.</li> </ul> </li> <li>Making products work <ul> <li>I can combine food ingredients according to their characteristics.</li> </ul> </li> <li>Understanding contexts, users and purposes <ul> <li>I can begin to communicate what I am making and who it is for.</li> </ul> </li> <li>Planning <ul> <li>I can begin to discuss the steps I will take to make a product.</li> </ul> </li> </ul>
<ul> <li>Own ideas and products</li> <li>I can begin to talk about my designs as I develop and identify good and bad points.</li> <li>I can begin to talk about my products' strengths and possible changes I might make.</li> </ul>		<ul> <li>Practical skills and techniques <ul> <li>I can begin to work safely and hygienically.</li> </ul> </li> <li>Own ideas and products <ul> <li>I can begin to evaluate my products (final dish) and explain what I like and dislike.</li> </ul> </li> </ul>
<ul> <li>Existing products</li> <li>I can discuss how products work, how and where they are used and who they can be used by.</li> <li>I can say what I like and dislike about products.</li> </ul>		Vocabulary: safely, hygiene, cutting, peeling, grating
<ul> <li>Making products work</li> <li>I can begin to understand the simple working characteristics of materials and components</li> </ul>		

<ul> <li>I can look at simple hinges, wheels and axels.</li> <li>I can start to build structure, building components together</li> <li>I can use technical vocabulary where appropriate</li> </ul>	
Vocabulary:	

D&T – Year 2		
Block 1	Block 2	
	Subject/Conceptual knowledge/skills: Designing,	
	making, evaluating, cooking and nutrition,	
	LEADS.	
	LEAPS:	
	<ul> <li>I can explain which products I am making and designing</li> </ul>	
	designing.	
	<ul> <li>I can discuss whether my products are for myself or company also</li> </ul>	
	myself or someone else.	
	<ul> <li>I can use simple design criteria to help develop</li> </ul>	
	my ideas.	
	<ul> <li>I can use knowledge of existing products to form ideas.</li> </ul>	
	<ul> <li>I can develop and communicate ideas by</li> </ul>	
	talking and drawing.	
	<ul> <li>I can follow procedures for safety and</li> </ul>	
	hygiene.	
	<ul> <li>I can talk about my design ideas and what I am</li> </ul>	
	making.	
	<ul> <li>I can make simple judgements about my</li> </ul>	
	products and ideas against design criteria.	
	<ul> <li>I can communicate what I like and dislike</li> </ul>	
	about products.	
	<ul> <li>I know that all food comes from plants or</li> </ul>	
	animals.	
	<ul> <li>I know that food has to be farmed, grown</li> </ul>	
	elsewhere (home) or caught.	
	<ul> <li>I can name and sort foods into the 5 groups in</li> </ul>	
	The Eat Well Plate.	
	<ul> <li>I know that everyone should eat at least 5</li> </ul>	
	portions of fruit and vegetables every day.	
	<ul> <li>I can prepare simple dishes safely and</li> </ul>	
	hygienically, without using a heat source.	
	I can demonstrate how to use techniques such	
	as cutting, peeling and grating.	

	<ul> <li>I know that food ingredients should be combined according to their sensory characterises e.g. appearance, taste, texture and smell.</li> <li>Vocabulary: Design, product, design, criteria, user, like, dislike, hygiene, safety, chopping board, ingredients, method, measure, mix, cut, spread, weigh, recipe</li> </ul>	
Block 4		Block 6
Subject/Conceptual knowledge/skills: Designing,		Subject/Conceptual
making, evaluating		knowledge/skills: Designing, making, evaluating
LEAPS:		LEAPS:
<ul> <li>I can explain which products I am making and designing.</li> <li>I can discuss whether my products are for myself or someone else.</li> <li>I can say how my products will work.</li> <li>I can say how I will make my products suitable for their intended users.</li> <li>I can use simple design criteria to help develop my ideas.</li> <li>I can use knowledge of existing products to form ideas.</li> <li>I can develop and communicate ideas by talking and drawing.</li> <li>I can plan by suggesting the steps I will take next.</li> <li>I can measure, mark out, cut and shape materials and components.</li> </ul>		<ul> <li>I can explain which products I am making and designing.</li> <li>I can discuss whether my products are for myself or someone else.</li> <li>I can say how my products will work.</li> <li>I can say how I will make my products suitable for their intended users.</li> <li>I can use simple design criteria to help develop my ideas.</li> <li>I can use knowledge of existing products to form ideas.</li> <li>I can develop and communicate ideas by talking and drawing.</li> <li>I can select from a range of tools and equipment, explaining my choices.</li> <li>I can assemble, join and combine materials and components.</li> </ul>

<ul> <li>I can assemble, join and combine materials and components.</li> <li>I can talk about my design ideas and what I am making.</li> <li>I can make simple judgements about my products and ideas against design criteria.</li> <li>I can discuss what works well and how my products could be improved.</li> <li>I know and can describe what products are.</li> <li>I know who products are for, how and where they might work and be used.</li> <li>I can communicate what I like and dislike about products.</li> <li>I can use ICT to develop and communicate my ideas (Tinker CAD)</li> <li>I understand that there are simple mechanisms that can create movement such as levers, sliders, wheels and axles.</li> </ul>	<ul> <li>I can talk about my design ideas and what I am making.</li> <li>I can make simple judgements about my products and ideas against design criteria.</li> <li>I can discuss what works well and how my products could be improved.</li> <li>I can discuss how freestanding structures can be made stronger, stiffer and more stable.</li> <li>Vocabulary: Purpose, design, component, product, user, mock-up, material, measure, mark out, assemble, join, combine, structure, stiffer, stable</li></ul>
Vocabulary: Purpose, design, component, product, user, mock-up, material, measure, mark out, assemble, join, combine, wheel, axle, stable	

D.T. – Year 3		
Block 1	Block 2	Block 3
Subject/Conceptual knowledge/skills:	Subject/Conceptual knowledge/skills:	Subject/Conceptual knowledge/skills:
LEAPS: Vocabulary:		LEAPS: Vocabulary:
Block 4 Subject/Conceptual knowledge/skills:	Block 5 Subject/Conceptual knowledge/skills:	Block 6 Subject/Conceptual knowledge/skills:
STEM Week - Structures - tree house		Cook and Nutrition (food preparation for making smoothies)
LEAPS:		
• I can consider a product's purpose and the user/s with growing confidence.	LEAPS:	LEAPS:
<ul> <li>I can consider the views of others, including intended users.</li> <li>I can identify a purpose and establish criteria for a successful product.</li> <li>I can use a range of tools, materials, components and equipment.</li> <li>I can measure, mark out, cut and shape materials and components with some accuracy.</li> <li>I can start to join and combine materials and components with some accuracy.</li> <li>I can use a design criteria as I design and make.</li> <li>I can start to evaluate my product against original design criteria.</li> </ul>	Vocabulary:	<ul> <li>I can demonstrate techniques safely and hygienically.</li> <li>I understand that some food is grown (vegetables, grains, grain and crops).</li> <li>I understand that some food is reared (pigs, chickens).</li> <li>I understand that some food is caught (fish) in the UK, Europe and the wider world.</li> <li>I am starting to understand that a healthy diet is made up from a variety and balance of different food and drink (The Eat Well Plate).</li> <li>I am starting to understand that to be active and healthy, food and drink are needed to provide energy for the body.</li> </ul>

<ul> <li>I can identify the strengths and areas of development in my products</li> <li>Vocabulary:         <ul> <li>Product</li> <li>Purpose</li> <li>User</li> <li>Criteria</li> <li>Prototype</li> <li>Model</li> <li>Material</li> </ul> </li> </ul>	<ul> <li>I can prepare and cook a variety of predominantly savoury dishes safely and hygienically including, where appropriate, the use of a heat source (supported by an adult).</li> <li>I am beginning to use a range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking.</li> </ul>
Tools	Vocabulary:
Component	Energy
Function	Hygienically
Textiles	Savoury
Combine	Peeling
Accuracy	Chopping
Accuracy	Slicing
	Grating
	Mixing
	Spreading
	Kneading
	Baking

DT – Year 4		
Block 1	Block 2	Block 3
Subject/Conceptual knowledge/skills:		Subject/Conceptual knowledge/skills:
LEAPS:		
		LEAPS:
Vocabulary:		
		Vocabulary:

Block 4 -	Block 5 -	Block 6 -
Subject/Conceptual knowledge/skills:	Subject/Conceptual knowledge/skills:	Subject/Conceptual knowledge/skills:
Structures	LEAPS:	Textiles – Sustainable/Eco fashion
LEAPS:		
I can develop my own design criteria and use		LEAPS:
these to inform my ideas		I can select a range of tools, materials,
I can select a range of tools, materials,		components and equipment suitable for the task.
components and equipment suitable for the task.		I can explain my choice of materials and
I can order the main stages of making.		components according to function and aesthetics,
I know how to measure, mark out, cut and shape		using a range of technical vocabulary.
a range of materials, using appropriate tools,		I can order the main stages of making
equipment and techniques.		I know about inventors, designers, engineers,
I can assemble, join and combine materials and		chefs and manufacturers who have developed
components with increasing accuracy.		ground-breaking products.
I can confidently use my design criteria as I design		I can start to consider the purposes for which I am
and make.		designing. I can gather information about the
I can use my design criteria to evaluate my		needs and wants of particular individuals and
completed products. I can identify the strengths		groups
and areas for development in my ideas and		I can confidently use my design criteria as I design
products.		and make.
		I can use my design criteria to evaluate my
Vocabulary:		completed products. I can identify the strengths
Understanding contexts, users and purposes,		and areas for development in my ideas and
planning, practical skills and techniques, own		products.
ideas and products		I know that a single fabric shape can be used to
		make a 3D textiles product
		I can make design decisions that take account of
		the availability of resources.
Subject/Conceptual knowledge/skills:		I can use my design criteria to evaluate my
Cooking and Nutrition		completed products. I can identify the strengths
		and areas for development in my ideas and
LEAPS:		products.
I can select a range of tools, materials,		
components and equipment suitable for the task.		Vocabulary:
		Stitches, fabric, types of stitch, running stich,
		patches, materials, water proof, reusable

I can explain my choice of materials and	
components according to function and aesthetics,	
using a range of technical vocabulary.	
I understand and can identify which food is grown	
(vegetables, grains, grain and crops) reared (pigs,	
chickens) and caught (fish) in the UK, Europe and	
the wider world.	
I understand that a healthy diet is made up from a	
variety and balance of different food and drink	
(The Eat Well Plate).	
I can prepare and cook a variety of predominantly	
savoury dishes safely and hygienically including,	
where appropriate, the use of a heat source	
(supported by an adult).	
I can use a range of techniques such as peeling,	
chopping, slicing, grating, mixing, spreading,	
kneading and baking.	
I know about inventors, designers, engineers,	
chefs and manufacturers who have developed	
ground-breaking products.	
I can demonstrate and follow procedures for	
safety and hygiene purposes.	
I can use my design criteria to evaluate my	
completed products. I can identify the strengths	
and areas for development in my ideas and	
products.	
Vocabulary:	
Food preparation cooking and nutrition, key	
events and individuals, practical skills and	
techniques, meat, fish, carbohydrates, savoury,	
sweet	

DT – Year 5		
Block 1	Block 2	Block 3
Subject/Conceptual knowledge/skills:	Subject/Conceptual knowledge/skills: Space – mechanisms, research, design, make, evaluate	Subject/Conceptual knowledge/skills:
LEAPS: Vocabulary:	<ul> <li>LEAPS:</li> <li>I can discuss and explain the purpose of my products.</li> <li>I can generate, develop, model and communicate my ideas.</li> <li>I can produce appropriate lists of tools, equipment and materials I need.</li> <li>I understand and can follow procedures for safety and hygiene.</li> <li>I can accurately measure, mark out, cut and shape materials and components.</li> <li>I can evaluate my work during its process.</li> <li>I can investigate how well products work and how well products achieve their purposes.</li> <li>I can evaluate inventors, designers, engineers, chefs and manufacturers'</li> </ul>	LEAPS: Vocabulary:
	products who have helped shape the world. Vocabulary: Environment, Purpose, Product, Develop, Design criteria, Innovative, Functional, Appealing, Fit for purpose, Prototype, CAD, Materials, Components, Technique, Evaluate, Manufacture, Analyse	
	Purpose, Inventor, Designer, Engineer,	
	Manufacturer	
Block 4	Block 5	Block 6
	Subject/Conceptual knowledge/skills:	

<b>Subject/Conceptual knowledge/skills:</b> Adventure to Australia - STEM week textiles, researching, designing, making and evaluating		<b>Subject/Conceptual knowledge/skills:</b> The Mayan Civilisation - Food technology, researching, designing, making and evaluating
	LEAPS:	
LEAPS:		LEAPS:
<ul> <li>I can generate, develop, model and communicate my ideas.</li> <li>With growing confidence, I can select appropriate materials, tools, components, equipment and techniques.</li> <li>I can produce appropriate lists of tools, equipment and materials I need.</li> <li>I understand and can follow procedures for safety and hygiene.</li> <li>I can accurately assemble, join and combine materials and components.</li> <li>I can evaluate the quality of the design, manufacture and suitability of my products.</li> <li>I can investigate how well products have been designed and made.</li> <li>I can begin to use, research from investigations and a range of information sources to develop a design criteria that will inform the design of innovative, functional and appealing products that are fit for purpose.</li> <li>I can investigate how well products meet user needs and wants.</li> </ul>	Vocabulary:	<ul> <li>I can produce appropriate lists of tools, equipment and materials I need.</li> <li>I can demonstrate resourcefulness when tackling practical problems.</li> <li>I can suggest ways my product could be improved.</li> <li>I am beginning to understand that recipes can be adapted to change the appearance, taste, texture and aroma.</li> <li>I can evaluate original design criteria and suggest ways it can be improved.</li> <li>I understand that seasons may affect the availability of food that is grown, reared or caught.</li> <li>I can begin to explain how food is processed into ingredients that can be eaten or used in cooking.</li> <li>I am beginning to understand that different food and drink contain different substances that are needed for health.</li> <li>I can use tools such as round-ended knives, vegetable peelers, apple corers and graters to make products.</li> </ul>
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Technique		

Purpose, Product, Develop, Design criteria,
Innovative, Functional, Appealing, Fit for purpose,
Materials, Components, Technique

DT – Year 6		
Block 1	Block 2	Block 3
Subject/Conceptual knowledge/skills:	Subject/Conceptual knowledge/skills:	Subject/Conceptual knowledge/skills:
	Where food comes from; Food preparation,	Planning; Practical skills and techniques
LEAPS:	cooking and nutrition	
I know that different food and drink contain		LEAPS:
different substances – nutrients, water and fibre –	LEAPS:	I can develop a simple design specification to
that are needed for health. (Science unit)	I can confidently explain how seasons may affect	guide my thinking.
	the availability of food that is grown, reared or	I can generate innovative ideas through
	caught.	discussion, drawing on research.
	I understand and can confidently explain how	I can confidently select a range of tools,
	food is processed into ingredients that can be	components, materials and equipment suitable
	eaten or used in cooking.	for the task.
	I can prepare and cook a variety of predominantly	I can accurately measure, mark out, cut and
	savoury dishes safely and hygienically including,	shape materials and components, using
	where appropriate, the use of a heat source	appropriate tools, equipment and techniques.
	(supported by an adult).	I can accurately assemble, join and combine
	I can use mixing to combine ingredients, rubbing-	materials and components to make working
	in to mix fat and flour and kneading when working	models.
	with bread dough to design and make a range of	I can demonstrate resourcefulness when making
	savoury, baked products.	modifications as I go along
	I know and can follow the procedures for safety	I can investigate and analyse how well products
	and hygiene.	have been designed and made. I can investigate
	Veebuleru	and analyse why materials have been chosen.
	Vocabulary:	I confidently can evaluate original design criteria
	Texture, Aroma, Processed, Peeling, Chopping,	and suggest ways it can be improved
	Slicing, Grating, Mixing, Spreading, Kneading,	Vocabulary:
	Baking	shelter, structure, purpose, product, design,
		specification, Tools, Components, Materials,
		Technique, Modification, analyse
		lechnique, Mounication, analyse

Block 4: STEM week: textiles	Block 5	Block 6
Subject/Conceptual knowledge/skills:	Subject/Conceptual knowledge/skills:	Subject/Conceptual knowledge/skills:
Understanding contexts, users and purposes;		
Generating, developing, modelling and	LEAPS:	
communicating		
ideas; Key events and individuals; Existing		LEAPS:
products; Own ideas and products	Vocabulary:	
		Vocabulary:
LEAPS:		
I can confidently explain the purpose of a		
product by modelling ideas in a variety of ways.		
I can carry out research, using surveys,		
interviews, questionnaires and web-based		
resources.		
I can identify the needs, wants, preferences and		
values of particular individuals and groups.		
I can develop a simple design specification to		
guide my thinking.		
I can generate innovative ideas through		
discussion, drawing on research.		
I can use annotated sketches, cross-sectional		
drawings and exploded diagrams to develop and		
communicate my ideas.		
I can confidently select a range of tools,		
components, materials and equipment suitable		
for the task.		
I can confidently explain my choice of tools and		
equipment using technical vocabulary.		
I can confidently produce an appropriate lists of		
tools, equipment and materials I need.		
I can accurately measure, mark out, cut and		
shape materials and components, using		
appropriate tools, equipment and techniques.		
I can formulate step-by-step plans as a guide to		
making.		

I can critically evaluate the quality of the design,	
manufacture and suitability of my products as I	
design and make.	
I can evaluate my work both during and at the	
end.	
I can investigate and analyse how well products	
have been designed and made.	
I can investigate and analyse why materials have	
been chosen	
I can investigate and analyse how well products	
meet user needs and wants.	
I confidently can evaluate original design criteria	
and suggest ways it can be improved.	
I can evaluate the key designs of individuals in	
design and technology who have helped shape	
the world.	
Vocabulary:	
Purpose, Product, Interview, Questionnaire,	
Survey, Design specification, Pattern pieces	
Annotate, Exploded diagram	