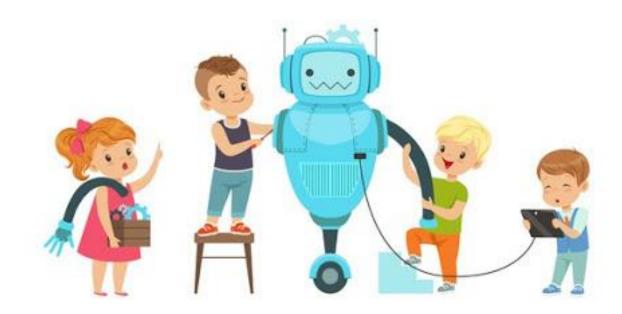


# Progression in D&T

EYFS to Year 6



www.teaguesbridgeprimary.org

# National Statuary Coverage

	ELG	Design	Make	Evaluate	Technical Knowledge	Cooking and Nutrition
EYFS	Understands that media can be combined to create new effects.     Constructs with a purpose in mind, using a variety of resources.     Uses simple tools and techniques competently and appropriately.     Selects appropriate resources and adapts work where necessary.     Selects tools and techniques needed to shape, assemble and join materials they are using.     Children safely use and explore a variety of materials, tools and techniques, experimenting with design, form and function.     Create simple representations of objects.     Children use what they have learnt about media and materials in original ways, thinking about uses and purposes.	DESIGN AND DEVELOP  • Talk about what they want to make	MAKING  Use a variety of tools and materials to make models.	PRODUCT AND EVALUATION  Be excited about what they have made		
Key Stage I		Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and ICT and, where appropriate, information and communication technology	Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] • Select from and use a wide range of materials and components, including construction materials, textiles, ingredients according to their characteristics	Explore and evaluate a range of existing products     Evaluate ideas and products against design criteria	Build structures, exploring how they can be made stronger, stiffer and more stable     Explore and use mechanisms [ for example, levers, sliders, wheels and axles], in their products.	use the basic principles of a healthy and varied diet to prepare dishes     understand where food comes from
Key Stage 2		Use research and develop criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups Generate, develop, model and communicate ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design	Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities	Investigate and analyse a range of existing products Evaluate ideas and products against their own design criteria and consider the views of others to improve their work Understand how key events and individuals have helped shape the world	Apply their understanding of how to strengthen, stiffen and reinforce more complex structures Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] Apply their understanding of computing to program, monitor and control products	understand and apply the principles of a healthy and varied diet prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed.

# Design and Technology Topics

	Autumn I	Autumn 2	Spring I	Spring 2	Summer 1	Summer
Base I						
Base 2		Mechanisms Sliders and leavers Focus: sliders		**Food Preparing fruit and veg — Veg kebab Focus: smells, textures and utensil skills		Structures Shell structures — green house Focus: using lego and blocks and plastic
Base 3		Textles Templates and joining techniques Focus: template and simple running stitch (stocking)	**Food Preparing fruit and veg — fruit smoothie Focus: food hugiene and utensil skills			Mechanisms Wheels and axles Focus: fairground wheels
Base 4		**Textiles Templates and joining techniques — gloves Focus: different fabrics and joining techniques	Mechanisms Wheels and axles Focus: axles and wheels			Food Preparing fruit and veg — salads (fruit or veg) Focus: healthy plate and utensil skills
Base 5	**Food  Healthy and varied diet — pitta pockets Focus: basic cooking skills (toasting) and basic food hygiene		Structures Shell structures Focus: stiffening and strengthening			Textiles 2D shape to 3D product — purse Focus: Stitches and zips and velcro
Base 6		Structures Shell structures — different homes Focus: nets		Textiles Bags 2D shape to 3D product — bag Focus: Stitches and decorative techniques		Food Healthy and varied diet — snack bar Focus: ??????
Base 7	Electrical systems Simple circuits and switches — Torches Focus: switches and bulbs		**Food Healthy and varied diet — snack bar Focus: simple cooking techniques (oven) and healthy diet choices		Structures Frame — tents Focus: straws, card and joining.	
Base 8		Structures (frames) Homes — Focus:?????		**Food Celebrating culture and seasonality - pizza Focus: measuring out and mixing ingredients.	Textiles Combining different fabric shapes — travel waste bag. Focus: attaching wading	
Base 9	••Food Celebrating culture and seasonality — ?????? Focus: ??????	Textiles Combining different fabric shapes — evacuate bag Focus: making templates 8 CAD				**Electrical Systems Switches and circuits — Robots. Focus: switches and movement

#### \*\*Topic hooks

# Vocabulary Progression

	DESIGN TECHNOLOGY: VOCABULARY MAP						
	Design and Develop	Making Product Evaluation	Making Product Evaluation	Making Product Evaluation			
EYFS	<ul><li>Plan</li><li>Draw</li><li>Ideas</li><li>Design</li></ul>	<ul><li>Make</li><li>Build</li><li>Combine</li><li>Join</li><li>Shape</li><li>Tools</li></ul>	Complete     Product     Final	<ul> <li>Change</li> <li>Like</li> <li>Dislike</li> <li>Next time</li> <li>Better</li> <li>Worse</li> <li>Different</li> <li>Instead</li> </ul>			
		DESIGN TECHNOLOGY: VOC	ABULARY MAP				
	Design	Technical Knowledge & Making	Cooking and Nutrition	Evaluate			
KSI	<ul> <li>Plan</li> <li>Design</li> <li>Materials</li> <li>Ideas</li> <li>Use</li> <li>Model</li> <li>Development</li> <li>Market Research</li> <li>Survey</li> <li>Template</li> </ul>	<ul> <li>Fast • Slow • Faster</li> <li>• Slower • Up • Down</li> <li>• Turn • Wind up • Design</li> <li>• Draw • Sketch • Tools</li> <li>• Fix • Glue • Attach</li> <li>• Features • Brick • Wood</li> <li>• Stone • Cloth • Metal</li> <li>• Foam • Felt • Paper • Tissue</li> <li>• Newspaper • Cardboard</li> <li>• String • Wool • Clay</li> <li>• Scissors • Glue • Tape</li> <li>• Cut • Stick • Decorate</li> </ul>	Healthy • Unhealthy • Source • Fruit • Vegetables • Clean     Safe • Dirty • Unsafe     Amount • Ingredients     Recipe • Weight • Nutrients     Vegetarian     Dietary requirements	Change • Improve • Prefer Useful • Unsuccessful Future • Progress • modify Alter • Adapt • Original Finished article • Evaluate Graphics			
KS2	<ul> <li>Plan • Organise • Prototype</li> <li>Initial ideas • Criteria • Diagrams •</li> <li>Labels • Annotate</li> <li>Brief • Product • Consumer</li> <li>Customer • Target audience</li> <li>Purpose • Application</li> <li>• Constraints • Client</li> </ul>	<ul> <li>Materials • Mould • Liquid</li> <li>Solid • Form • Shape</li> <li>Adhesive • Lattice</li> <li>Mass-produce • Hand-made</li> <li>Packaging • Presentation</li> <li>Machine made • Dimensions • Durable</li> </ul>	<ul> <li>Healthy • Unhealthy</li> <li>Balanced • Vitamins • Disease • Nutrition</li> <li>Healthy eating</li> <li>Hygiene • Diet</li> <li>Cross contamination • Grams • Storage</li> <li>Presentation</li> <li>Taste • Texture • Flavour</li> <li>Disinfect • Bacteria</li> </ul>	<ul> <li>Assess • Edit • Improve</li> <li>Alter • Outcome • Develop</li> <li>Test • Analyse</li> <li>Effective • Fit for purpose</li> <li>Design criteria • Alternatives • Models • Quality • Function</li> <li>Functionality</li> </ul>			

# Progression through EYFS to KSI

	EYFS	Year I	Year 2	End of Key Stage expectations
Designing	*Select appropriate resources  *Use gestures, talking and arrangements of materials and components to show design  * Use contexts set by the teacher and myself  *Use language of designing and making (join, build, shape, longer, shorter, heavier etc.)	* have own ideas  * explain what I want to do  *explain what my product is  for, and how it will work  * use pictures and words to  plan, begin to use models  * design a product for myself  following design criteria  *research similar existing  products	* have own ideas and plan what to do next  * explain what I want to do and describe how I may do it  * explain purpose of product, how it will work and how it will be suitable for the user  * describe design using pictures, words, models, diagrams, begin to use ICT  * design products for myself and others following design criteria  * choose best tools and materials, and explain choices  * use knowledge of existing products to produce ideas	*Design purposeful, functional, appealing products for themselves and other users based on design criteria *Generate, develop, model and communicate their ideas through talking, drawing, templates, mockups and, where appropriate, information and communication technology
Making	*Construct with a purpose, using a variety of resources  *Use simple tools and techniques  *Build / construct with a wide range of objects  *Select tools & techniques to shape, assemble and join  *Replicate structures with materials / components  *Discuss how to make an activity safe and hygienic  *Record experiences by drawing, writing, voice recording  *Understand different media can be combined for a purpose	*explain what I'm making and why *consider what I need to do next *select tools/equipment to cut, shape, join, finish and explain choices *measure, mark out, cut and shape, with support *choose suitable materials and explain choices *try to use finishing techniques to make product look good *work in a safe and hygienic manner	*explain what I am making and why it fits the purpose *make suggestions as to what I need to do next. *join materials/components together in different ways *measure, mark out, cut and shape materials and components, with support. *describe which tools I'm using and why *choose suitable materials and explain choices depending on characteristics. *use finishing techniques to make product look good *work safely and hygienically	*Select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] *Select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics

Evaluate	*Adapt work if necessary	*talk about my work, linking it to	* describe what went well, thinking	*Explore and evaluate a range of
	*Dismantle, examine, talk about	what I was asked to do	about design criteria	existing products
	existing objects/structures	* talk about existing products	* talk about existing products	*Evaluate their ideas and products
	*Consider and manage some risks	considering: use, materials, how they	considering: use, materials, how they	against design criteria
	*Practise some appropriate safety	work, audience, where they might be	work, audience, where they might be	
	measures independently	used	used; express personal opinion	
	*Talk about how things work	*talk about existing products, and	*evaluate how good existing products	
	*Look at similarities and differences	say what is and isn't good	are	
	between existing objects / materials /	* talk about things that other people	*talk about what I would do	
	tools	have made	differently if I were to do it again	
	*Show an interest in technological	*begin to talk about what could	and why	
	toys	make product better		
	*Describe textures			

Technical knowledge	EYFS	Year I	Year 2	End of Key Stage
				expectations
Materials /structures		*begin to measure and join materials, with some support *describe differences in materials *suggest ways to make material/product stronger	*measure materials *describe some different characteristics of materials *join materials in different ways *use joining, rolling or folding to make it stronger *use own ideas to try to make product stronger	*Build structures, exploring how they can be made stronger, stiffer and more stable
Mechanisms		*begin to use levers or slides	*use levers or slides *begin to understand how to use wheels and axles	*Explore and use mechanisms [for example, levers, sliders, wheels and axles], in their products.
Textiles		*measure, cut and join textiles to make a product, with some support *choose suitable textiles	*measure textiles  *join textiles together to make a product, and explain how I did it  *carefully cut textiles to produce accurate pieces  *explain choices of textile  *understand that a 3D textile structure can be made from two identical fabric shapes.	

Food and nutrition	*Begin to understand some food	*describe textures	*explain hygiene and keep a hygienic	*Use the basic principles of a
	preparation tools, techniques and	*wash hands & clean surfaces	kitchen	healthy and varied diet to prepare
	processes	*think of interesting ways to	*describe properties of ingredients	dishes
	*Practise stirring, mixing, pouring,	decorate food	and importance of varied diet	*Understand where food comes
	blending	*say where some foods come from,	*say where food comes from	from.
	*Discuss how to make an activity	(i.e. plant or animal)	(animal, underground etc.)	
	safe and hygienic	*describe differences between some	*describe how food is farmed,	
	*Discuss use of senses	food groups (i.e. sweet, vegetable	home-grown, caught	
	*Understand need for variety in	etc.)	*draw eat well plate; explain there	
	food	*discuss how fruit and vegetables	are groups of food	
	*Begin to understand that eating	are healthy	*describe "five a day"	
	well contributes to good health	*cut, peel and grate safely, with	*cut, peel and grate with increasing	
		support	confidence	
Electrical systems				

# Progression through KS2

	Year 3	Year 4	Year 5	Year 6	End of Key Stage
					expectations
Designing	*begin to research others' needs  * show design meets a range of requirements  * describe purpose of product  * follow a given design criteria  * have at least one idea about how to create product  * create a plan which shows order, equipment and tools *describe design using an accurately labelled sketch and words  * make design decisions  *explain how product will work  * make a prototype  * begin to use computers to show design	* use research for design ideas * show design meets a range of requirements and is fit for purpose * begin to create own design criteria * have at least one idea about how to create product and suggest improvements for design. * produce a plan and explain it to others * say how realistic plan is. * include an annotated sketch * make and explain design decisions considering availability of resources * explain how product will work * make a prototype * begin to use computers to show design.	*use internet and questionnaires for research and design ideas *take a user's view into account when designing * begin to consider needs/wants of individuals/groups when designing and ensure product is fit for purpose *create own design criteria * have a range of ideas *produce a logical, realistic plan and explain it to others. *use cross-sectional planning and annotated sketches * make design decisions considering time and resources. *clearly explain how parts of product will work. *model and refine design ideas by making prototypes and using pattern pieces. *use computer-aided designs	* draw on market research to inform design  * use research of user's individual needs, wants, requirements for design  * identify features of design that will appeal to the intended user  * create own design criteria and specification  * come up with innovative design ideas  * follow and refine a logical plan.  * use annotated sketches, crosssectional planning and exploded diagrams  * make design decisions, considering, resources and cost  * clearly explain how parts of design will work, and how they are fit for purpose * independently model and refine design ideas by making prototypes and using pattern pieces  * use computer-aided designs	*Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups *Generate, develop, model and communicate their ideas through discussion, annotated sketches, crosssectional and exploded diagrams, prototypes, pattern pieces and computeraided design
Making	*select suitable tools/equipment, explain choices; begin to use them accurately	* select suitable tools and equipment, explain choices in relation to required techniques and use accurately	<ul> <li>use selected tools/equipment</li> <li>with good level of precision</li> <li>produce suitable lists of tools,</li> <li>equipment/materials needed</li> </ul>	* use selected tools and equipment precisely *produce suitable lists of tools, equipment, materials	*Select from and use a wider range of tools and equipment to perform practical tasks [for

	* select appropriate materials, fit for purpose.  * work through plan in order *consider how good product will be  * begin to measure, mark out, cut and shape materials/components with some accuracy  * begin to assemble, join and combine materials and components with some accuracy  * begin to apply a range of finishing techniques with some accuracy	*select appropriate materials, fit for purpose; explain choices * work through plan in order. * realise if product is going to be good quality * measure, mark out, cut and shape materials/components with some accuracy *assemble, join and combine materials and components with some accuracy *apply a range of finishing techniques with some accuracy	*select appropriate materials, fit for purpose; explain choices, considering functionality * create and follow detailed step by-step plan * explain how product will appeal to an audience * mainly accurately measure, mark out, cut and shape materials/components *mainly accurately assemble, join and combine materials/components * mainly accurately apply a range of finishing techniques * use techniques that involve a small number of steps * begin to be resourceful with practical problems	needed, considering constraints * select appropriate materials, fit for purpose; explain choices, considering functionality and aesthetics * create, follow, and adapt detailed step-by-step plans *explain how product will appeal to audience; make changes to improve quality * accurately measure, mark out, cut and shape materials/components * accurately assemble, join and combine materials/components * accurately apply a range of finishing techniques * use techniques that involve a number of steps * be resourceful with practical problems	example, cutting, shaping, joining and finishing], accurately *Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities
Evaluate	* look at design criteria while designing and making *use design criteria to evaluate finished product * say what I would change to make design better *begin to evaluate existing products, considering: how well they have been made, materials, whether they work, how they have been made, fit for purpose * begin to understand by whom, when and where	*refer to design criteria while designing and making *use criteria to evaluate product * begin to explain how I could improve original design *evaluate existing products, considering: how well they've been made, materials, whether they work, how they have been made, fit for purpose * discuss by whom, when and where products were designed	*evaluate quality of design while designing and making *evaluate ideas and finished product against specification, considering purpose and appearance. *test and evaluate final product * evaluate and discuss existing products, considering: how well they've been made, materials, whether they work, how they have been made, fit for purpose	*evaluate quality of design while designing and making; is it fit for purpose?  * keep checking design is best it can be.  *evaluate ideas and finished product against specification, stating if it's fit for purpose  *test and evaluate final product; explain what would improve it and the effect different resources may have had	*Investigate and analyse a range of existing products. *Evaluate their ideas and products against their own design criteria and consider the views of others to improve their work. *Understand how key events and individuals in design and technology have helped shape the world

products were designed learn about some inventors/designers/ engineers/chefs/ manufacturers of groundbreaking produ	can be recycled or reused  * know about some inventors/designers/ engineers/chefs/manufacturers	* begin to evaluate how much products cost to make and how innovative they are *research how sustainable materials are *talk about some key inventors/designers/engineers/chefs/manufacturers	*do thorough evaluations of existing products considering: how well they've been made, materials, whether they work, how they've been made, fit for purpose *evaluate how much
		of ground breaking products	products cost to make and how innovative they are *research and discuss how sustainable materials are *consider the impact of products beyond their intended purpose *discuss some key inventors/designers/ engineers/ chefs/manufacturers of groundbreaking products

Technical	Year 3	Year 4	Year 5	Year 6	End of Key Stage
knowledge					expectations
Materials /structures	*use appropriate materials  *work accurately to make cuts and holes  * join materials  *begin to make strong structures	*measure carefully to avoid mistakes *attempt to make product strong *continue working on product even if original didn't work *make a strong, stiff structure	*select materials carefully, considering intended use of product and appearance *explain how product meets design criteria *measure accurately enough to ensure precision *ensure product is strong and fit for purpose *begin to reinforce and strengthen a 3D frame	*select materials carefully, considering intended use of the product, the aesthetics and functionality.  *explain how product meets design criteria  * reinforce and strengthen a 3D frame	*Apply their understanding of how to strengthen, stiffen and reinforce more complex structures
Mechanisms	*select appropriate tools / techniques	*select most appropriate tools / techniques	*refine product after testing *grow in confidence about trying new / different ideas	*refine product after testing, considering aesthetics, functionality and purpose	*Understand and use mechanical systems in their products [for example, gears,

	*alter product after checking, to make it better *begin to try new/different ideas *use simple lever and linkages to create movement	*explain alterations to product after checking it *grow in confidence about trying new / different ideas. *use levers and linkages to create movement *use pneumatics to create movement	*begin to use cams, pulleys or gears to create movement	*incorporate hydraulics and pneumatics *be confident to try new / different ideas *use cams, pulleys and gears to create movement	pulleys, cams, levers and linkages]
Textiles	*join different textiles in different ways *choose textiles considering appearance and functionality *begin to understand that a simple fabric shape can be used to make a 3D textiles project	*think about user when choosing textiles *think about how to make product strong * begin to devise a template *explain how to join things in a different way *understand that a simple fabric shape can be used to make a 3D textiles project	*think about user and aesthetics when choosing textiles *use own template *think about how to make product strong and look better *think of a range of ways to join things *begin to understand that a single 3D textiles project can be made from a combination of fabric shapes.	*think about user's wants/needs and aesthetics when choosing textiles *make product attractive and strong *make a prototype *use a range of joining techniques *think about how product might be sold *think carefully about what would improve product *understand that a single 3D textiles project can be made from a combination of fabric shapes	
Food and nutrition	*carefully select ingredients *use equipment safely *make product look attractive *think about how to grow plants to use in cooking *begin to understand food comes from UK and wider world *describe how healthy diet= variety/balance of food/drinks	*explain how to be safe/hygienic *think about presenting product in interesting/ attractive ways *understand ingredients can be fresh, pre-cooked or processed *begin to understand about food being grown, reared or caught in the UK or wider world	*explain how to be safe / hygienic and follow own guidelines *present product well - interesting, attractive, fit for purpose *begin to understand seasonality of foods *understand food can be grown, reared or caught in the UK and the wider world *describe how recipes can be adapted to change	*understand a recipe can be adapted by adding / substituting ingredients *explain seasonality of foods *learn about food processing methods *name some types of food that are grown, reared or caught in the UK or wider world *adapt recipes to change appearance, taste, texture or aroma.	*Understand and apply the principles of a healthy and varied diet  *Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques  *Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

	*explain how food and drink are needed for active/healthy bodies.  *prepare and cook some dishes safely and hygienically *grow in confidence using some of the following techniques: peeling, chopping, slicing, grating, mixing, spreading, kneading and baking	*describe eat well plate and how a healthy diet=variety / balance of food and drinks *explain importance of food and drink for active, healthy bodies *prepare and cook some dishes safely and hygienically *use some of the following techniques: peeling, chopping, slicing, grating, mixing, spreading, kneading and baking	appearance, taste, texture, aroma  *explain how there are different substances in food / drink needed for health  *prepare and cook some savoury dishes safely and hygienically including, where appropriate, use of heat source  * use range of techniques such as peeling, chopping, slicing, grating, mixing, spreading, kneading and	*describe some of the different substances in food and drink, and how they can affect health *prepare and cook a variety of savoury dishes safely and hygienically including, where appropriate, the use of heat source. *use a range of techniques confidently such as peeling, chopping, slicing, grating, mixing, spreading, kneading and baking	
Electrical systems	*use simple circuit in product *learn about how to program a computer to control product.	*use number of components in circuit *program a computer to control product	baking.  *incorporate switch into product  *confidently use number of components in circuit  *begin to be able to program a computer to monitor changes in environment and control product	*use different types of circuit in product  * think of ways in which adding a circuit would improve product  * program a computer to monitor changes in environment and control product.	*Understand and use electrical systems in their products [for example, series circuits