



Gosberton Academy

Design and Technology Portfolio



Design and Technology at Gosberton Academy

Through our Design and Technology Curriculum, we aim to inspire our learners to create a range of structures, mechanisms, electrical systems, textiles and food products with a real-life purpose for our ever-changing world.

Whilst undertaking a variety of cross-curricular projects, learners are taught to investigate and evaluate existing products. Children then select and use appropriate tools safely and effectively to make a product whilst developing particular knowledge and skills. They are also encouraged to consider the effectiveness of their designs and provide constructive feedback to others when working as part of a team.

We have invested highly in developing a precise, progressive sequence of knowledge and skills which we feel our children need to be taught in DT. These are developed across our year groups, to ensure the children 'progression ready' by the end of Primary and have a wealth of knowledge and skills to aid them in their future studies.

When children leave us, they will understand how technology has impacted our lives now, in the past and into the future.



Teaching Mixed-Age Classes

Our teachers recognise that mixed aged teaching can be a challenge and they constantly adapt their approach to teaching and learning. They demonstrate a high level of flexibility and organisation to ensure that their provision caters for both age groups and includes all learners.

Mixed Aged classes generate a family of learners who support and care for each other. Older children have the opportunity to help others and be a leader, supporting younger learners to play and learn. At the same time, the older child is increasing an independence and competence.

At Gosberton Academy, we recognise learning happens individually, in small groups and as a whole class. Keeping children engaged, motivated and focused ensures they will learn regardless of the class they are in.

We have in place robust transition procedures which starts at the planning process, where teachers work collaboratively. Good communication across classes fosters curriculum continuity. Teachers share information to ensure learners start confidently in their new class.



Our Vision, Values and Aims

Gosberton Academy aims to provide a high-quality, **exceptional** education with first-hand learning experiences that are able to motivate and stimulate all learners. All learners will recognise the importance of the community in which they are educated and understand that the Academy is based at the heart of the community, bringing a **togetherness** of all stakeholders.

- All learners and families will feel supported and integrated into the school life.
- Every learner, regardless of their life experiences, can reach their full potential, growing in confidence and being **honest** to themselves.
- Throughout their time at Gosberton Academy, learners will become independent, **resilient** life-long learners that are **aspirational**, aiming to become the best they can be, including their time after Gosberton Academy.



H

Honesty – Honest to each other but also, honest to themselves.



A

Aspirational- Aspirational staff, children, parents and families



T

Togetherness- Friendships, support, stakeholders, community, parents and staff



E

Exceptional- Exceptional behaviour, effort, attitude, progress and opportunities



R

Resilient- Never giving up, always wanting to succeed.



Gosberton Goals



Long Term Plan

2021 – 2022 CYCLE A

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS + Y1	Structures		Cookery		Electrical Circuits	
Y1 + Y2	Structures		Cookery		Electrical Circuits	
Y3 + Y4	Cooking		Levers		Frame Structures	
Y4 + Y5	Cooking		Frame Structures		Pulleys	
Y6	CAMS and Frame Structures		Textiles		Digital Control	

2021 – 2022 CYCLE B

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EYFS + Y1	Textiles		Levers		Cookery	
Y1 + Y2	Textiles		Levers		Cookery	
Y3 + Y4	Axels, Wheels & Frame		Magnetism		Cookery	
Y4 + Y5	CAD		Cooking		Textiles	
Y6	CAMS and Frame Structures		Textiles		Digital Control	

THE DESIGN CYCLE



D & T Progression- Designing

Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Work within different contexts such as story- based, home, school, playground.	Work within a range of contexts e.g. bridges, boxes	Work confidently within a range of contexts.	Work confidently within a range of contexts, such as the home, school, leisure and industry.	Work confidently in a range of contexts.	Work confidently in a wide range of contexts.	Work confidently in a wide range of contexts.
Generate ideas from existing examples.	State what products they are designing and making.	State what products they are designing and making.	Describe the purpose of their products.	Describe the purpose of their products.	Describe in detail, the purpose of their products.	Describe in detail, the purpose of their products.
Begin to talk about what they want to make, the processes that may be involved and materials and resources they may need.	Say whether their products are for themselves or other users.	Say whether their products are for themselves or other users.	Indicate design features of their products.	Indicate design features of their products that will appeal to intended users.	Indicate design features of their products that will appeal to intended users.	Indicate design features of their products that will appeal to intended users.
	Describe what their products are for.	Describe what their products are for.	Gather information about the needs and wants of individuals or groups.	Gather information about the needs and wants of individuals or groups.	Gather information about the needs and wants of individuals or groups.	Gather information about the needs and wants of particular individuals and groups.
	Use existing knowledge to generate their own original designs.	Say how their products will work and how they're suitable for intended users.	Develop their own design criteria.	Develop their own design criteria and use this to inform their ideas.	Develop their own design criteria and use this to inform their ideas.	Develop their own design criteria and use this to inform their ideas.
	Begin to develop and communicate ideas by talking and drawing.	Use simple design criteria to help develop their ideas.	Share and clarify ideas through discussion.	Share and clarify ideas confidently, through discussion.	Carry out research e.g. surveys and interviews to identify users' needs, wants and preferences.	Carry out research e.g. surveys, interviews, questionnaires and web-based resources, to identify users' needs, wants and preferences.
		Generate ideas by drawing on their own experiences.	Model ideas using prototypes.	Model ideas using prototypes and pattern pieces.	Develop a simple design specification to guide their thinking.	Develop detailed design specifications to guide their thinking and planning.
		Use knowledge of existing products to help come up with ideas.	Use annotated diagrams and some computer- aided design packages, to develop and communicate ideas.	Use annotated sketches, some cross-sectional drawings and computer-aided design packages, to develop and communicate ideas.	Share and clarify ideas confidently, through discussion.	Share and clarify ideas confidently, through discussion.
		Develop and communicate ideas by talking and drawing.	Generate realistic ideas, focusing on the needs of the user.	Generate realistic ideas, focusing on the needs of the user.	Model ideas using prototypes and pattern pieces.	Model ideas using prototypes and pattern pieces.
		Model ideas by exploring materials, components, constructions kits and by making templates and mock-ups.	Begin to take account of the availability of resources.	Make design decisions that take account of the availability of resources.	Use annotated sketches, cross-sectional drawings, exploded diagrams and computer-aided design packages, to develop and communicate ideas.	Use annotated sketches, cross-sectional drawings, exploded diagrams and computer-aided design packages, to develop and communicate ideas.
		Use information and communication technology, where appropriate, to develop and communicate their ideas.			Generate realistic ideas, focusing on the needs of the user.	Generate realistic ideas, focusing on the needs of the user.
					Make design decisions that take account of the availability of resources.	Make design decisions that take account of the availability of resources.
					Generate innovative ideas from prior research.	

D & T Progression- Making

Foundation	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Shows some planning skills by suggesting what to do next. Responds to questions such as "I wonder what would happen if"	Plans by suggesting what to do next.	Plans by suggesting what to do next.	Select tools and equipment suitable to the task.	Confidently select tools and equipment suitable to the task.	Confidently select tools and equipment suitable to the task.	Confidently select tools and equipment suitable to the task.
Begins to follow safety procedures.	Selects from a range of tools, materials and components.	Selects from a range of tools, materials and components according to their characteristics.	Explain their choices.	Explain their choices, giving evidence.	Explain their choices, giving evidence.	Explain their choices, giving evidence.
Selects from a range of materials and components and adapts work where necessary.	Follows procedures for safety and hygiene.	Explains their choices.	Selects some materials and components suitable to the task.	Selects materials and components suitable to the task.	Selects materials and components suitable to the task.	Selects materials and components suitable to the task.
Manipulates materials to achieve a planned effect	Uses a range of materials, components, construction kits, textiles, food ingredients and mechanical products.	Follows procedures for safety and hygiene.	Order the main stages of making.	Order the main stages of making in logical steps.	Produce appropriate lists of tools, equipment and materials that they will need.	Produce appropriate lists of tools, equipment and materials that they will need.
Selects tools and techniques needed to shape, assemble and join materials they are using.	Measures, marks out, shapes and cuts most materials.	Uses a range of materials, components, construction kits, textiles, food ingredients and mechanical products.	Follow procedures for safety and hygiene.	Follow procedures for safety and hygiene.	Order the stages of the making process, in logical steps.	Order the stages of the making process, in logical steps.
		Measures, marks out, cuts and shapes a range of materials and components.	Use a wide range of materials and components e.g. textiles, mechanical, construction kits, electrical and food ingredients.	Use an extensive range of materials and components e.g. textiles, mechanical, construction kits, electrical and food ingredients.	Formulate step-by-step plans as guide to making.	Formulate step-by-step plans as guide to making.
		Assembles, joins and combines materials and components.	Measures, marks out, cuts and shapes materials and components with some accuracy.	Measures, marks out, cuts and shapes materials and components with accuracy.	Follow procedures for safety and hygiene.	Follow procedures for safety and hygiene.
		Begins to use finishing techniques, including those from art and design sessions.	Assembles, joins and combines many materials with some accuracy.	Accurately assembles, joins and combines most materials.	Use an extensive range of materials and components e.g. textiles, mechanical, construction kits, electrical and food ingredients.	Use an extensive range of materials and components e.g. textiles, mechanical, construction kits, electrical and food ingredients.
			Applies some finishing techniques.	Accurately apply several finishing techniques.	Measures, marks out, cuts and shapes materials and components with accuracy.	Measures, marks out, cuts and shapes materials and components with accuracy.
					Accurately assembles, joins and combines most materials.	Accurately assembles, joins and combines materials.

D & T Progression- Evaluating

Foundation	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Begin to talk about their design ideas and what they are making.	Talk about their design ideas and what they are making.	Talk about their design ideas and what they are making.	Identify the strengths and areas for development in their ideas and products.	Identify the strengths and areas for development in their ideas and products.	Identify the strengths and areas for development in their ideas and products.	Confidently identify the strengths and areas for development in their ideas and products.
Think about how to make their products better.	Talk about how to make their products better.	Make simple judgements about their products and ideas against design criteria.	Consider the views of others.	Consider the views of others, including intended users, to improve their work.	Consider the views of others, including intended users, to improve their work.	Consider the views of others, including intended users, to improve their work.
Begin to explore what products are, who they are for, how they are used, where they are from.	Explore what products are, what they are made from, who they are for, how they are used, where they are from.	Talk and write about how to make their products better.	Refer to their design criteria as they design and make.	Refer to their design criteria as they design and make.	Refer to their design criteria as they design and make.	Refer to their design criteria as they design and make.
	Talk about likes and dislikes of existing products.	Explore what products are, what they are made from, who they are for, how they are used and where they might be used.	Use their design criteria to evaluate their completed products.	Use their design criteria to evaluate and improve their completed products.	Use their design criteria to evaluate and improve their completed products.	Use their design criteria to evaluate and improve their completed products.

D & T Progression- Technical Knowledge

Foundation	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Learners recognise that a range of technology is used in places such as homes and schools.	Learners recognise a range of technology is used in places such as homes and schools.	Learners understand the working characteristics of materials and components.	Learners know how to use learning from science and mathematics to help design and make products that work.	Learners use learning from science, mathematics and other subjects to help design and make products that work.	Recognise that materials can be combined and mixed to create more useful characteristics.	Recognise that materials can be combined and mixed to create more useful characteristics.
They select and use technology for particular purposes.	They select and use technology for particular purposes.	They know about the movement of simple mechanisms such as levers, sliders, wheels and axles.	They understand that materials have functional and aesthetic qualities.	They understand that materials have functional and aesthetic qualities.	Make strong, stiff shell structures for a purpose.	Know that mechanical and electrical systems have an input, process and output.
They show an interest in toys with buttons and mechanisms.	They know how to operate simple equipment and show an interest in toys with buttons, flaps and simple mechanisms and operate them successfully.	Recognise that food ingredients should be combined according to their sensory characteristics.	Recognise that materials can be combined and mixed to create more useful characteristics.	Apply this thinking successfully to their own products.	Know how mechanical systems such as levers and linkages create movement.	Make strong, stiff shell structures for a purpose.
Begin to know about the simple working characteristics of materials and components.	Learners understand the simple working characteristics of materials and components.	Understand how freestanding structures can be made stronger, stiffer and more stable.	Know how mechanical systems such as levers and linkages create movement.	Recognise that materials can be combined and mixed to create more useful characteristics.	Know that a single fabric shape can be used to make a 3D textile product.	Recognise a wide range of fresh, pre-cooked and processed foods.
Begin to understand the movement of simple mechanisms such as levers, sliders and wheels.	Know about the movement of simple mechanisms such as levers, sliders, wheels and axles.	Recognise that 3D textiles products can be assembled from two identical fabric shapes. (e.g. Christmas Stocking)	Make strong, stiff shell structures.	Know that simple electrical circuits and components can be used to create functional products.	Recognise a range of fresh, precooked and processed foods.	Explore more complex electrical circuits and components.
Know that food ingredients should be combined according to their sensory characteristics.	Recognise that food ingredients should be combined according to their sensory characteristics.	Use the correct technical vocabulary for projects	Recognise several fresh, precooked and processed foods.	Know that mechanical systems e.g. cams, pulleys or gears create movement.	Reinforce and strengthen a 3D framework.	Program computers and devices to monitor changes in the environment and control their products. (Solar powered vehicles)
	Begin to use the correct technical vocabulary for projects.	Know that simple electrical circuits and components can be used to create functional products.		Make strong, stiff shell structures for a purpose.	Know that 3D textile products can be made from a combination of fabric shapes.	Reinforce and strengthen a 3D framework.
				Know that a single fabric shape can be used to make a 3D textile product.	Adapt recipes by adding or substituting one or more ingredients.	Recreate and adapt existing and new recipes by adding or substituting a range of ingredients.
				Recognise a range of fresh, precooked and processed foods.		

D & T Progression- Cookery

Key Stage 1			Key Stage 2			
1) use the basic principles of a healthy and varied diet to prepare dishes 2) understand where food comes from			1) understand and apply the principles of a healthy and varied diet 2) prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques 3) understand seasonality and know where and how a variety of ingredients are grown, reared, caught and processed			
Foundation	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Food is farmed, grown elsewhere or caught and is then sold in shops.	Food is farmed, grown elsewhere or caught.	Food is farmed, grown elsewhere (e.g. home), imported or caught.	Know that food is farmed, reared, grown elsewhere (e.g. home), imported or caught locally, regionally and internationally.	Know that food is farmed, reared, grown elsewhere (e.g. home, allotments), exported, imported or caught. This can be on a local, regional and international scale.	Know that food is farmed, reared, grown elsewhere (e.g. home, allotments), exported, imported or caught. This can be on a local, regional and international scale.	Know that food is farmed, reared, grown elsewhere (e.g. home, allotments), exported, imported or caught. This can be on a local, regional and international scale.
Begin to name and sort foods into the five groups in 'The Eatwell Plate.' (Healthy eating)	Name and sort foods into the five groups in 'The Eatwell Plate.' (Healthy eating)	Name and sort foods into the five groups in 'The Eatwell Plate.'	Recognise that a healthy diet is made up of a variety and balance of different foods and drinks, as depicted on 'The Eatwell Plate.'	Know that a healthy diet is made up of a variety and balance of different foods and drinks, as depicted on 'The Eatwell Plate.'	Know that a healthy diet is made up of a variety and balance of different foods and drinks, as depicted on 'The Eatwell Plate.'	Know that a healthy diet is made up of a variety and balance of different foods and drinks, as depicted on 'The Eatwell Plate.'
Understands the importance of a healthy diet. Begin to recognise that everyone should eat at least five portions of fruit and vegetables every day. (Healthy eating)	Begin to recognise that everyone should eat at least five portions of fruit and vegetables every day. (Healthy eating)	Begin to recognise that everyone should eat at least five portions of fruit and vegetables every day.	Begin to understand appropriate portion sizes for regular meals and healthy snacks. Begin to be able to read and understand food labels	Begin to understand appropriate portion sizes for regular meals and healthy snacks. Understand the value of eating sociably. Begin to be able to read and understand food labels	Know appropriate portion sizes and understand the importance of not skipping meals, including breakfast. Are able to use information on food labels to inform choice (Healthy eating)	Know appropriate portion sizes and understand the importance of not skipping meals, including breakfast. Are able to use information on food labels to inform choice
Start to prepare simple dishes. With help, use hands to shape dough in to simple shapes (e.g. salt dough) With supervision, use biscuit cutters to cut shapes With help and supervision, put together cold ingredients With help, sift and mix flour into a bowl Mix, stir and combine a small amount of cold ingredients in bowl (e.g. fruit salad)	Prepare some simple dishes. With supervision, use a small table knife for spreading soft spreads on to bread Use hands to shape dough in to small balls or shapes. Sift flour into bowl Mix, stir and combine liquid and dry ingredients (e.g. muffins)	Prepare a range of simple dishes. With help and supervision, assemble and arrange cold ingredients (e.g. sandwich, fruit kebabs, bruschetta) Use a rolling pin to flatten and roll out dough. With help, use hands to rub fat into flour (e.g. rock buns) With help, crack an egg and beat using a fork	Knead and shape dough in to aesthetically pleasing products Use a rolling pin to roll out dough to a specific thickness (e.g. scones) Use biscuit cutters accurately. Combine using a sieve, flour, raising agents and spices together in to a bowl Crack an egg and beat with balloon whisk	Assemble and arrange ingredients for simple dishes (e.g. apple crumble, scrambled egg on toast) Coat food with ingredients such as beaten egg and breadcrumbs for fish cakes Independently spread ingredients accurately onto foods. Mix, stir and combine wet and dry ingredients uniformly (e.g. to form a dough) Use hands to rub fat into flour Cream fat and sugar together using a mixing spoon	Use hands to shape mixtures in to evenly sized pieces (e.g. burgers) Use a rolling pin to roll out dough to an accurate size and thickness (e.g. pizza). Sieve wet and dry ingredients with precision Confidently crack an egg With help, begin to separate eggs Use finger tips to rub fat into flour to make fine 'bread crumbs' (e.g. cheese straws)	Assemble, arrange and layer more advanced dishes (e.g. apple sponge pudding, shepherd's pie) Spread food evenly with a coating, paste or glaze. With supervision, whisk using an electric hand mixer (e.g. eggs) With supervision, cream fat and sugar together using an electric hand mixer With supervision, use a food processor or electric hand blender to mash, blend or puree hard ingredients or hot food
Know how to use a range of techniques with support: With close supervision, and physical guidance when necessary, use the bridge hold to cut soft foods using a table knife (e.g. strawberries) With close supervision and physical guidance, crush or mash cold food in a bowl Peel fruit using their hands Tear food to divide it (e.g. lettuce leaves, fresh herbs) Begin to drain away liquids from packaged food using a sieve or colander (e.g. tuna or sweet corn) Are able to use cutlery to eat a meal Use a table knife for spreading	Know how to use a range of techniques with support: With close supervision, use the bridge hold to cut harder foods using a serrated vegetable knife (e.g. apple pieces) With close supervision, use the claw grip to cut soft foods using a serrated vegetable knife (e.g. tomato) With close supervision, mash cooked food (e.g. potatoes with a masher) With close supervision, peel soft vegetables using a peeler (e.g. cucumber) With close supervision, cut food into evenly sized largish pieces	Know how to use a wide range of techniques :With close supervision, and physical guidance if necessary, peel harder food (e.g. apple, potato) With close supervision, use a melon baller to core an apple With close supervision, grate soft food using a grater (e.g. cheese) Drain away liquids from packaged food using a sieve or colander (e.g. tuna or sweet corn) Use a lemon squeezer	Know how to use a wide range of techniques With supervision, begin to use the claw grip to cut harder foods using a serrated vegetable knife (e.g. carrot) With supervision, begin to use both the bridge hold and claw grip to cut the same food using a serrated vegetable knife (e.g. onion) With supervision, use a masher to mash hot food to a fairly smooth texture	Know how to use a wide range of techniques With supervision, begin to peel harder food (e.g. apple, potato) With supervision, cut foods into evenly sized strips or cubes (e.g. peppers, cheese) With supervision, crush garlic using a garlic press With supervision, grate harder food using a grater (e.g. apples, carrots)	Know how to use a wide range of techniques With supervision, confidently use both the bridge hold and claw grip to cut the same food using a serrated vegetable knife (e.g. onion) With supervision, confidently peel harder food using a peeler (e.g. apple, potato) With supervision, dice foods and cut them into evenly sized, fine pieces (e.g. garlic, vegetable batons, herbs)	Know how to use a wide range of techniques With supervision, finely grate hard foods (e.g. zesting, parmesan cheese) With support, use a can opener and open ring-pull tins With supervision, confidently use the claw grip to cut harder foods using a serrated vegetable knife (e.g. carrot)

D & T Progression- Cookery

Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Count the quantity of food needed using whole numbers (e.g. 6 grapes, 2 carrots) Measure using a spoon	Use measuring spoons for liquids, solids and dry ingredients.	Use measuring spoons for liquids, solids and dry ingredients. With adult support begin to use jugs measure liquids.	Begin to independently use a jug to measure liquids With adult supervision begin to use digital weighing scales	Begin to use digital weighing scales independently	Accurately use a jug to measure liquids	Accurately use a jug to measure liquids Accurately use weighing scales
Understand that food that has been dropped on the floor, touched with dirty hands or has turned mouldy should not be eaten and can make people ill Understand that some foods need to be washed before they are safe to eat (e.g. fruits and vegetables) With help and supervision get ready to cook: Tie back long hair Wash and dry hands Put on a clean apron With help and supervision, take part in simple clearing up tasks such as clearing and cleaning the tables	Can follow basic food safety rules when preparing and cooking food With supervision take part in simple clearing up tasks such as clearing and cleaning tables, collecting and disposing of rubbish, sweeping the floor With supervision get ready to cook: Tie back long hair Wash and dry hands Put on a clean apron	Can follow basic food safety rules when preparing and cooking food With supervision take part in simple clearing up tasks such as clearing and cleaning tables, collecting and disposing of rubbish, sweeping the floor With supervision get ready to cook: Tie back long hair Wash and dry hands Put on a clean apron Understand how everyday foods are stored differently to ensure they are safe to eat (e.g. fridge or freezer)	Know and can follow basic food safety rules Understand how bacteria in food can cause food poisoning or food to go mouldy Know how to get ready to cook: Tie back long hair Wash and dry hands Put on a clean apron Remove jewellery and nail varnish With guidance follow procedures for clearing up such as washing and drying utensils, clearing and cleaning tables, sweeping the floor, disposing of rubbish, putting equipment away	Know and can follow basic food safety rules Understand how bacteria in food can cause food poisoning or food to go mouldy Know how to get ready to cook: Tie back long hair Wash and dry hands Put on a clean apron Remove jewellery and nail varnish With guidance follow procedures for clearing up such as washing and drying utensils, clearing and cleaning tables, sweeping the floor, disposing of rubbish, putting equipment away Understand how a variety of foods are stored differently to ensure they are safe to eat (e.g. fridge or freezer)	Are able to independently get ready to cook: Tie back long hair Wash and dry hands Wear a clean apron Remove jewellery and nail varnish Demonstrate good food safety practices when getting ready to store, prepare and cook food (e.g. keep raw meats away from other food)	Are able to independently get ready to cook: Tie back long hair Wash and dry hands Wear a clean apron Remove jewellery and nail varnish Demonstrate good food safety practices when getting ready to store, prepare and cook food (e.g. keep raw meats away from other food) Know, and can follow, food safety rules and understand their purpose Can independently follow procedures for clearing up
Know the importance of self care- drinking enough water each day, brushing our teeth twice a day. (Healthy eating)	Understand the importance of water and drinking water regularly Understand the importance of regular meals and healthy snacks	Understand the importance of water and drinking water regularly Understand the importance of regular meals and healthy snacks Understand the types of food that can affect the health of teeth	Understand the value of eating sociably Understand the importance of keeping hydrated Begin to understand appropriate portion sizes for regular meals and healthy snacks	Understand the value of eating sociably Understand the importance of keeping hydrated Understand how to keep teeth healthy	Understand the main food groups and the different nutrients that are important for health Understand the importance of keeping hydrated	Understand the main food groups and the different nutrients that are important for health Understand the importance of keeping hydrated
Although children will not be cooking hot food, children should understand how hot food is cooked safely by observing adults using the hob, oven, toaster and / or microwave Be able to prepare food for baking with help such as greasing a baking tray, putting cake cases into a bun tray	Although children will not be cooking hot food, children should understand how hot food is cooked safely by observing adults using the hob, oven, toaster and / or microwave Be able to prepare food for baking and frying such as greasing baking tins and adding oil to frying pans / saucepans	Although children will not be cooking hot food, children should understand how hot food is cooked safely by observing adults using the hob, oven, toaster and / or microwave Be able to prepare food for baking and frying such as greasing baking tins and adding oil to frying pans / saucepans	With help and supervision, begin to use a toaster or microwave (e.g. scrambled eggs) Although learners will not be cooking food on the hob or in the oven learners should understand how to use them safely by observing adults cooking on the hob and putting in and removing food from the oven	With help and supervision, begin to use a toaster or microwave (e.g. scrambled eggs) With very close supervision, and physical guidance when necessary, handle hot food safely; once adults have removed food from the hob or oven Although learners will not be cooking food on the hob or in the oven learners should understand how to use them safely by observing adults cooking on the hob and putting in and removing food from the oven Use oven gloves and a fish slice to remove food (e.g. scones) from the baking tray	With help and supervision, begin to use the hob or electric saucepan (wok or stock pot) to cook simple dishes (e.g. burgers, soup) Although learners will not be putting in or removing food from the grill or oven they should understand how to use the grill and oven safely by observing adults	With help and supervision, begin to use the hob or electric saucepan (wok or stock pot) to cook simple dishes (e.g. burgers, soup) Although learners will not be putting in or removing food from the grill or oven they should understand how to use the grill and oven safely by observing adults With supervision, handle hot food safely using oven gloves to carefully remove cooked food with a fish slice from a baking tray on to a cooling rack

D & T Progression- Cookery

Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Begin to identify foods that they like/dislike, use words to describe the taste of food, recognise familiar food in recipes. Understand that recipes are instructions on how to make meals. <i>(Recipes and ingredients)</i>	Recognise a range of familiar ingredients (e.g. vegetables, dairy, eggs) Describe the taste of a range of ingredients Identify what they like and dislike about the food they have cooked and how to improve its taste	Recognise a range of familiar ingredients (e.g. vegetables, dairy, eggs) Describe the taste of a range of ingredients Identify what they like and dislike about the food they have cooked and how to improve its taste Follow simple recipe instructions, either in simple sentences or using pictures	Recognise and name a broad range of ingredients (e.g. cereals, meat, fish) Use simple food descriptors relating to smell, flavour, texture and appearance Know where and how a variety of ingredients are grown Read and follow a simple recipe	Recognise and name a broad range of ingredients (e.g. cereals, meat, fish) Use simple food descriptors relating to smell, flavour, texture and appearance Know where and how a variety of ingredients are grown Identify what they would do differently next time to improve what they have made Read and follow a simple recipe	Know an extensive range of ingredients and how these are grown (e.g. beans, pulses, tropical fruits, vegetables) Identify how they would change the recipe to improve the food they have made Use a range of food descriptors relating to smell, flavour, texture and appearance Confidently read and follow a recipe	Know an extensive range of ingredients and how these are grown (e.g. beans, pulses, tropical fruits, vegetables) Identify how they would change the recipe to improve the food they have made Use a range of food descriptors relating to smell, flavour, texture and appearance Compare different versions of the same dish and identify how they would change the recipe next time Confidently read and follow a recipe
Begin to recognise that food comes from plants or animals. E.g. milk from cows (Consumer awareness)	Recognise that food comes from plants or animals and can identify some foods from each group. (Consumer awareness)	Know that all food comes from plants or animals and can identify some foods from each group and understand how they are grown Aware that some food packaging has labels giving information	Understand that food is caught or farmed and changed to make it safe and palatable / tasty to eat Understand that people have different views on how food is produced and that this influences the food they buy Begin to be able to read and understand food labels	Understand that food is caught or farmed and changed to make it safe and palatable / tasty to eat Understand that people have different views on how food is produced and that this influences the food they buy Begin to be able to read and understand food labels	Understand some of the basic processes to get food from farm to plate Understand some of the ethical dilemmas associated with the food people choose to buy Are able to use information on food labels to inform choice	Understand some of the basic processes to get food from farm to plate Understand some of the ethical dilemmas associated with the food people choose to buy Are able to use information on food labels to inform choice and can explain their reasoning behind what choices they might make for example the traffic light system on food packaging of fat content how does this influence their decision and why?
Know some special foods that are eaten on special occasions	Know some of the influences on the food we eat (e.g. celebrations, preferences) and can link this to R.E topics/Geography/ all about me - different cultures eating different foods.	Know some of the influences on the food we eat (e.g. celebrations, preferences) and can link this to R.E topics/ Geography/ all about me - different cultures eating different foods.	Understand that there are a variety of influences on the food we choose to eat (e.g. who we are with, season, cost, health, occasion) Links to R.E festivals, Geography - different cultures and history - cost for example rationing	Understand that there are a variety of influences on the food we choose to eat (e.g. who we are with, season, cost, health, occasion) Links to R.E festivals, Geography - different cultures and history - cost for example rationing	Understand some of the ethical dilemmas associated with the food people choose to buy - how this may differ from country (cultural expectations).	Understand some of the ethical dilemmas associated with the food people choose to buy - how this may differ from country (cultural expectations). Understand social influences on the food we choose to eat (e.g. media, peer pressure, ethics)
Linking cookery to science to understand the Lifecycle of a bean plant/potato. To plant seeds and care for the plants understanding what recipes they can then be used for in future	Planting	Planting	Planting	Planting/growing	Begin to know that seasons and weather affect food availability. (Consumer awareness) To plan to grow a vegetable considering the impact of seasonality	Begin to know that seasons and weather affect food availability. (Consumer awareness) To plan to grow a vegetable considering the impact of seasonality

D & T SMSC Links

We promote <u>Spiritual</u> development	We promote <u>moral</u> development	We promote <u>social</u> development	We promote <u>cultural</u> development
<p>Spiritual development is very important in DT as the process of creative thinking and problem solving lies at the centre of the subject. Children's ability to think creatively and show innovation can be inspirational to others but also increase their own self confidence and belief in their own abilities</p>	<p>By we encouraging our learners to consider the moral and ethical dilemmas raised during the planning process. For example the impact on the environment through the choices of materials are made or the opportunity to consider sustainable or environmentally acceptable materials</p>	<p>By teaching the children that they have a collective responsibility to ensure they contribute to a safe working environment where the use of tools and equipment are involved. There is the opportunity to work collaboratively with a partner or take turns in a small group which requires effective social interaction and at times compromise.</p> <p>Children have the opportunity for peer evaluation and to act as a critical friend to give supportive comments to improve learners learning outcomes.</p>	<p>DT often originates from an idea or artefact and to develop a wider cultural awareness we explore our past heritage as well as investigate and use as our stimulus foods, textiles, pottery and sculptures from different cultures and periods of time. For example, Benin textiles, , Greek pottery and food from different countries and cultures.</p>

British Values: At Gosberton Academy, we use strategies within the national curriculum and beyond to secure an understanding of British Values for learning. We weave the British Values throughout all of our lessons. A high proportion of class based work sees the value of mutual respect woven throughout the lessons. From sharing ideas, celebrating good work, valuing others contributions, or discussions and debates – mutual respect is key. Teachers and staff aspire to create classroom environments where respect and tolerance are highly prioritised.



D&T at Gosberton



"It's so much fun evaluating existing products to see how they work and think about how they were made."
Year 6

"The most exciting part of our D&T week was when we got to design our own secret spy lamps using Crumble. We even got to crack each other's codes!"

Year 6

What do we love about D&T at Gosberton?

"D&T gives us skills we will need when we are older, like chopping, peeling and mashing."

Year 5



"We used CAD to build a replica of Shakespeare's globe. It was tricky but so satisfying when we finally managed to complete it!"
Year 6

"We made a magnetic maze to take on an expedition. We used what we had learnt in Science to help us design and make it."
Year 4

"We made Roman Chariots and got to use a saw. We had to be really careful but we all knew what we needed to do to be safe."
Year 3

**Exciting
Entry & Exit Points**

Teamwork: Discussing &
Negotiating

Practical equipment:
Needles, knives, saws,
hammers, scissors,
constructing clay etc.

Use of Technology- CAD
Design, See-Saw,

Engagement

**Home learning
projects & Parent
Showcase**

Practical life experiences
Cooking, using tools, knit-
ting and sewing etc.

**Theme Days &
Workshops**

Clubs

Cross curricular links: Reading, Writing,
Maths & Science



Progressive
Curriculum building on
prior knowledge

Enquiry based
lessons

Quizzes, Questioning
and Quick fire
challenges

Retrieval based
activities

Capturing Our Knowledge

Application of knowledge
through cross curricular

Learning by Questions

Knowledge Organisers

Transition preparation for
Secondary School

Use of technology to
record learning

