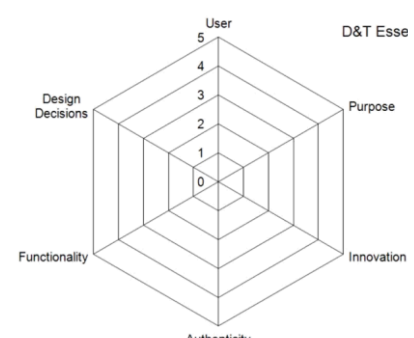


Design and Technology Curriculum Learning Sequence and Intent

Let Your Light Shine as a Designer

Intent	We want to ensure that D&T makes a high quality contribution to our broad and balanced primary curriculum. We want Design and Technology to be an inspiring, rigorous and practical subject which encourages all our children to learn to think and intervene creatively to solve problems both as individuals and as members of a team. We want children to use their creativity and imagination, to design and make functional products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. We want our Design and Technology curriculum to allow all children to become discriminating and informed consumers and potential innovators, designers and engineers for the future.
What does enrichment look like in this subject?	Enrichment goes beyond curriculum requirements for the teaching of design and technology. We want to have an impact on a pupil's learning by creating memorable experiences both in the classroom and beyond. This is achieved through cross curricula approaches, visits, clubs, speakers, projects and learning with others and are used to develop not only their design and technology understanding, but also enhance their design and technology capital and support the acquisition of SMSC values.
Curriculum design/ implementation	1. Cycle of learning – This cycle of intent is based on a 3 year programme with one unit being taught each term This is to take account of the way our year groups are organised into classes. 2. Food and nutrition - We feel that the teaching of Food and nutrition is a great importance and holds great relevance in current times. For this reason, children will study a Food and Nutrition unit every year. 3. Every DMA must include opportunities for children to: Investigate existing products. Engage in focused tasks which are largely practical in nature, set design criteria, design, make products using an iterative process and evaluate their products. 4. Learning, working and talking like a designer- The promotion of a language rich D&T curriculum is essential to the successful acquisition of knowledge and understanding. That means being introduced to the key vocabulary that a designer and engineer would use; defining the key vocabulary that a designer and engineer would use and having high expectations of pupils 'talking' like a designer. A progression of vocabulary acquisition is included with this document. 5. Published support – Teachers use a range of support materials to help deliver an exciting curriculum. Medium Term planning –teachers should use the medium-term plans from The Design and Technology Association's Projects on a Page and supplemented by Twinkl and PlanBee. ** denotes teaching aids and class packs available from Ivydale Technology Shop 6. Planning learning outcomes – Teachers decide what learning outcomes their classes produce based on their interests, current world events and strong meaningful links to other curriculum areas. 7. Progression of skills and knowledge – Alongside this intent document, runs a progression document that details the skills and knowledge pupils will experience. 8. Contexts – work confidently within a range of contexts, such as imaginary, story-based, home, school, gardens, playgrounds, local community, industry and the wider environment. 9. Cumulative curriculum – Knowledge builds on knowledge. The more you know, the easier it is to acquire more knowledge. Therefore, our curriculum is sequenced cumulatively, always building upon prior knowledge. The curriculum is a spiral in which the paths of knowledge and understanding are deepened over time in increasingly complex ways. This spaced repetition over time with constant retrieval is what we use to make learning stick. 10. Incidental work – Knowledge and understanding are woven into pupils' everyday learning through early morning work, 'What's in the news' discussions, assemblies, and cultural experience days.
Impact	Our design and technology curriculum is high quality, well thought out and is planned to demonstrate progression. If pupils are keeping up with the curriculum, they are to be making good or better progress. In addition, we measure the impact of our curriculum through the following methods: A reflection by teachers and pupils on standards achieved against the planned outcomes; Tracking of knowledge through marking and observations; Pupil discussions about their learning with their books planned learning outcome. We look for pupils being happy learners within design and technology who have experience of a wide range of learning challenges within the subject and know appropriate responses to them. Pupils talk enthusiastically about their learning in design & technology and are eager to further their learning in the next stages of their education. They understand what design and technology is and how design and innovation help shape our lives today.
Additional information Six Essentials of Good Practice	Our planning is based on the six essentials of good practice in D&T. These need to be in place in teachers' planning to ensure children's learning is genuinely design and technological in nature. User – children should have a clear idea of who they are designing and making products for, considering their needs, wants, interests or preferences. The user could be themselves, an imaginary character, another person, client, consumer or a specific target audience. Purpose – children should know what the products they design and make are for. Each product should perform a clearly defined task that can be evaluated in use. Functionality – children should design and make products that function in some way to be successful. Design Decisions – when designing and making, children need opportunities to make informed decisions such as selecting materials, components and techniques and deciding what form the products will take, how they will work, what task they will perform and who they are for. Innovation – when designing and making, children need some scope to be original with their thinking. Authenticity – children should design and make products that are believable, real and meaningful to themselves i.e. not replicas or reproductions or models which do not provide opportunities for children to make design decisions with clear users and purposes in mind. 

EYFS	1	2	3	4	5	6
Context for learning- Expressive Arts and Design	Sculpture and 3D-Creation Station	Craft and Design	Cooking and Nutrition	Textiles: Bookmarks	Structures: Boats	Structures: Junk Modelling
Learning Intent	Exploring the sculptural qualities of malleable materials and natural objects; developing the use of tools and joining techniques; designing and making clay animal sculptures.	Developing cutting, threading, joining and folding skills through fun, creative craft projects.	n this unit, children explore the differences between fruits and vegetables using their senses (taste, texture, smell etc.). They listen to the story ‘The best pumpkin soup’ and discuss the key ingredients the characters used before developing a class-based vegetable soup recipe.	Pupils develop and practise threading and weaving techniques using various materials and objects. They look at the history of the bookmark from Victorian times versus modern-day styles. The pupils apply their knowledge and skills to design and sew their own bookmarks.	In this unit, children explore what is meant by ‘waterproof’, ‘floating’ and ‘sinking’, then experiment and make predictions with various materials to carry out a series of tests. They learn about the different features of boats and ships before investigating their shape and structures to build their own.	In this unit, pupils explore and learn about various types of permanent and temporary join. They are encouraged to tinker using a combination of materials and joining techniques in the junk modelling area.
Learning Sequence ELGs	Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. Share their creations, explaining the process they have used.	. Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. Share their creations, explaining the process they have used.	Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary. • Offer explanations for why things might happen, making use of recently introduced vocabulary from stories, non-fiction, rhymes and poems when appropriate.	Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. Share their creations, explaining the process they have used. Hold a pencil effectively in preparation for fluent writing – using the tripod grip in almost all cases. • Use a range of small tools, including scissors, paintbrushes and cutlery. • Begin to show accuracy and care when drawing	Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. Share their creations, explaining the process they have used.	Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. Share their creations, explaining the process they have used.
Future learning	On the theme of the natural world, children will make sculptures, collages, 3D models of creatures and a class spider sculpture, inspired by Louise Bourgeois.	Exploring the formal elements of art: pattern, texture and tone; children create printed patterns using everyday objects; take rubbings using different media and learn how to make their drawings three dimensional.	Replicating the recognisable crockery of Clarice Cliff, exploring tone through shading, developing weaving skills, manipulating clay and experimenting with brush strokes.	Exploring how bodies and faces are portrayed in art: looking at the work of artists, using their bodies to form shapes, creating collages, drawing portraits and creating a peg figure.	Creating sculpture and pop art and learning how to draw facial features to portray different emotions, all through the topic of comic superheroes inspired by the works of Roy Lichtenstein.	Children learn about composition and work with different art materials to create texture for a project they develop over the five lessons. Based on the theme of 'The seaside' with support for adapting to the alternative theme of 'Castles'. The unit can also be easily adapted to other topics..
Drawing	Reception- Lesson 1: Mark making with wax crayons. Mark making with wax crayons, exploring textures in the classroom environment by taking wax rubbings and collecting patterns. Lesson 2: Mark making with felt tips. Investigating felt tips as a tool for mark making and developing fine motor skills as they create patterns. Lesson 3: Mark making with chalk. Mark making outdoors with chalk, practising creating patterns in a new medium and identifying similarities and differences between the drawing tools used. Lesson 4: Observational pencil drawings. Developing skills in observation, using pencils to draw and reflecting on whether their drawings show what they can see. Lesson 5: Drawing faces. Creating self-portraits by applying their observational skills, using mirrors to draw their faces carefully. Lesson 6: Drawing faces in colour. Comparing how colour is used by artists, applying what they have practised when drawing from observation and creating a colourful self-portrait.					
Painting	Reception: Lesson 1: Finger painting. Exploring paint through finger painting, children describe colours and textures and discuss their creations. Lesson 2: Outdoor painting. Collecting materials and objects from nature to make painting tools; children use these to create abstract and figurative art. Lesson 3: Painting to music. Using paint to record emotional responses to different pieces of music, creating exciting and expressive paintings. Lesson 4: Collage and transient art. Creating unique collages and transient art through independent exploration of mixed media resources. Lesson 5: Landscape collage Developing an understanding of collage, children create landscape collages inspired by the work of Megan Coyle. Lesson 6: Group art. Working collaboratively, children create a large group painting inspired by the colours and patterns of fireworks.					
Structures: Junk Modelling	Reception: Lesson 1: Exploring junk modelling. Children learn about the names and use of various craft tools and materials for junk modelling and explore ways to manipulate materials to create different effects. Lesson 2: Cutting and scissor skills. Pupils practise and develop their scissor (and fine motor) skills by investigating how easy or difficult it is to cut and shape different materials using a variety of scissor types (right, left-handed, squeeze and craft zigzag and scalloped). Lesson 3: Choosing resources. After exploring and practising with various materials and tools in the junk modelling area, pupils decide and discuss which resources they would like to use and generate ideas to develop a class-based junk model. Lesson 4: Making models. Pupils put all of the skills and decisions into practice by developing their own unique junk model plan, which includes which tools, materials and components they will need to make it possible (e.g. a cone shape for a rocket top). They begin to build their junk model. Lesson 5: Evaluation and presentation. Following their plan, pupils continue to build their junk models, sticking as closely to their decisions as possible. When complete, pupils discuss and evaluate their finished model and present it to the rest of the class. Lesson 6: Temporary joins. Building on their knowledge of joins such as glue, paper clips and sticky tape, pupils explore and tinker with a range of temporary joining methods and their use (e.g. hook and loop shoes).					
Sculpture and 3D	Reception: Lesson 1: Clay. Exploring and understanding clay through manipulation and experimentation; developing small motor skills. Lesson 2: Playdough. Exploring the properties of playdough using hands and tools to manipulate it in different ways. Lesson 3: 3D landscape art. Creating 3D landscape pictures using natural found objects; using their imagination to choose and arrange objects. Lesson 4: Designing animal sculptures. Looking at the shapes and patterns in clay animal sculptures; designing their own animal sculpture, considering how they will create it in clay. Lesson 5: Creating animal sculptures. Shaping clay into animal sculptures; refining their ideas as they follow their designs and problem solving as they work. Lesson 6: Painting animal sculptures. Developing their clay animals; choosing colours to decorate them and talking about the processes used to make their sculptures.					
Craft and design	Reception: Lesson 1: Cutting skills. Developing confidence with scissor skills; exploring the differences when cutting a range of materials. Lesson 2: Threading skills. Building small motor skills when threading a range of materials in different ways. Lesson 3: Joining materials Exploring techniques for joining paper and card; using a range of tools and equipment; making choices about which technique to use. Lesson 4: Paper snakes. Learning to fold, cut and curl paper to make colourful paper snakes. Lesson 5: Flower designs. Refining drawing and colouring skills to create a design for a tissue paper flower. Lesson 6: Tissue paper flowers. Using flower designs from the previous lesson to create colourful tissue paper flowers.					
Cooking and Nutrition	Reception: Lesson 1: Fantastic fruits and vegetables. Children explore and become familiar with different types of fruits and vegetables and their differences in texture, taste and appearance. Lesson 2: Pumpkin soup. After listening to ‘The best pumpkin soup’ story, pupils re-enact each part of the story using props. They explore the interior and exterior of a pumpkin. Using their senses, they describe the pumpkin’s appearance and texture. Lesson 3: Designing soup. Using what they have learnt from lessons one and two, children develop a vegetable soup recipe of their own. When finished, the children share their ideas with their peers to create a class soup recipe. Lesson 4: Fine motor skills. The children work in groups to practise their fine motor skills to slice and chop play dough, ready to help prepare their vegetables next lesson. Lesson 5: Making soup. After developing a class soup recipe in lesson three and practising their fine motor skills in lesson four, pupils prepare different fruits and vegetables in groups ready to make, taste and evaluate the soup. Lesson 6: Designing soup packaging. The children become packaging designers in this lesson and look at existing soup packaging before generating their own ideas and designs for the class soup.					
Textiles: bookmarks	Reception: Lesson 1: Exploring threading and weaving. Children develop their threading and weaving skills by exploring different materials and objects, such as ribbons through wire racks or wool through ten-frames. Lesson 2: Paper weaving. Building on lesson one, the children continue to explore weaving techniques, using a weaving base and paper strips. Lesson 3: Sewing with hessian. The children apply what they learnt in lesson one to develop their threading skills using wool through hessian fabric, and then with a sewing needle and thread. Lesson 4: Designing bookmarks. Children learn about the history of the bookmark back in Victorian times and compare them to modern-day styles before developing design ideas for their own. Lesson 5: Creating bookmarks. After developing their own design in lesson four, children begin to plan and sew their bookmark design using hessian fabric and thread. Lesson 6: Evaluating bookmarks. Continuing from lesson five, children complete their bookmarks and then in pairs, reflect and evaluate each other’s bookmarks - paper versus fabric designs.					
Structures: Boats	Reception: Lesson 1: Waterproof materials. Pupils investigate and learn about waterproof materials. They conduct a test in groups and observe what happens when they pour water through various samples before reporting back to the class what they discovered. Lesson 2: Floating and sinking. Pupils investigate and learn about what floating and sinking means. They make predictions about whether an object will float or sink before they test their ideas as part of an experiment to see what will happen. Lesson 3: Boats. After looking at waterproof materials and what floating and sinking mean, the children learn about the different features and structures of boats and ships. Lesson 4: Investigating boats.The children continue to look at boats and ships, but with a particular focus on their shape and how they move through the water. They explore and play with various boats and containers to determine which shapes work best. Lesson 5: Designing boats. Applying what they have learnt through lessons one to four, the children discuss what would make a successful boat. They sketch, and discuss with their peers, their design ideas for their own boats. Lesson 6: Creating and testing boats. Pupils build the boat models they designed in lesson five. They test and evaluate their boats on the water, with increasing cargo and reflect on what could have been improved about the design.					

<i>Year 1 and 2</i>	1	2	3	4	5	6
<i>Aspect</i>	Textiles	Mechanisms	Cooking and Nutrition	Textiles	Structures	Cooking and Nutrition
<i>Focus/Project Title</i>	Puppets	Wheels and axles	Fruit and Vegetables	Pouches	Baby bears Chair	A Balanced Diet
Vocabulary	names of existing products, joining and finishing techniques, tools, fabrics and components template, pattern pieces, mark out, join, decorate, finish features, suitable, quality mock-up, design brief, design criteria, make, evaluate, user, purpose, function	vehicle, wheel, axle, axle holder, chassis, body, cab assembling, cutting, joining, shaping, finishing, fixed, free, moving, mechanism names of tools, equipment and materials used design, make, evaluate, purpose, user, criteria, functional	fruit and vegetable names, names of equipment and utensils sensory vocabulary e.g. soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour, hard flesh, skin, seed, pip, core, slicing, peeling, cutting, squeezing, healthy diet, choosing, ingredients, planning, investigating tasting, arranging, popular, design, evaluate, criteria	names of existing products, joining and finishing techniques, tools, fabrics and components template, pattern pieces, mark out, join, decorate, finish features, suitable, quality mock-up, design brief, design criteria, make, evaluate, user, purpose, function	cut, fold, join, fix structure, wall, tower, framework, weak, strong, base, top, underneath, side, edge, surface, thinner, thicker, corner, point, straight, curved metal, wood, plastic circle, triangle, square, rectangle, cuboid, cube, cylinder design, make, evaluate, user, purpose, ideas, design criteria, product, function	fruit and vegetable names, names of equipment and utensils sensory vocabulary e.g. soft, juicy, crunchy, sweet, sticky, smooth, sharp, crisp, sour, hard flesh, skin, seed, pip, core, slicing, peeling, cutting, squeezing, healthy diet, choosing, ingredients, planning, investigating tasting, arranging, popular, design, evaluate, criteria
Learning Sequence Prior Learning	Explored and used different fabrics. Cut and joined fabrics with simple techniques. Thought about the user and purpose of products	Assembled vehicles with moving wheels using construction kits. Explore moving vehicles through play. Gained some experience of designing, making and evaluating products for a specified user and purpose. Developed some cutting, joining and finishing skills with card.	Experience of common fruit and vegetables, undertaking sensory activities i.e. appearance taste and smell. Experience of cutting soft fruit and vegetables using appropriate utensils.	Explored and used different fabrics. Cut and joined fabrics with simple techniques. Thought about the user and purpose of products	Experience of using construction kits to build walls, towers, and frameworks. Experience of using of basic tools e.g. scissors or hole punches with construction materials e.g. plastic, card. Experience of different methods of joining card and paper.	Experience of common fruit and vegetables, undertaking sensory activities i.e. appearance taste and smell. Experience of cutting soft fruit and vegetables using appropriate utensils.
Future learning and knowledge						

Cooking and Nutrition:	Year 1- To understand the difference between fruits and vegetables. To understand that some foods typically known as vegetables are actually fruits (e.g. cucumber). To know that a blender is a machine which mixes ingredients together into a smooth liquid. To know that a fruit has seeds and a vegetable does not. To know that fruits grow on trees or vines. To know that vegetables can grow either above or below ground. To know that vegetables can come from different parts of the plant. Year 2- To know that ‘diet’ means the food and drink that a person or animal usually eats. To understand what makes a balanced diet. To know where to find the nutritional information on packaging. To know that the five main food groups are: Carbohydrates, fruits and vegetables, protein, dairy and foods high in fat and sugar. To understand that I should eat a range of different foods from each food group, and roughly how much of each food group. To know that nutrients are substances in food that all living things need to make energy, grow and develop. To know that ‘ingredients’ means the items in a mixture or recipe. To know that I should only have a maximum of five teaspoons of sugar a day to stay healthy. To know that many food and drinks we do not expect to contain sugar do; we call these ‘hidden sugars’.
Mechanisms:	Year 1- To know that wheels need to be round to rotate and move. To understand that for a wheel to move it must be attached to a rotating axle.

	To know that an axle moves within an axle holder which is fixed to the vehicle or toy. To know that the frame of a vehicle (chassis) needs to be balanced. To know some real-life items that use wheels. Year 2 - To know that different materials have different properties and are therefore suitable for different uses. • To know the features of a ferris wheel include the wheel, frame, pods, a base an axle and an axle holder. • To know that it is important to test my design as I go along so that I can solve any problems that may occur.
Structures:	Year 1- To understand that the shape of materials can be changed to improve the strength and stiffness of structures. • To understand that cylinders are a strong type of structure (e.g. the main shape used for windmills and lighthouses). • To understand that axles are used in structures and mechanisms to make parts turn in a circle. • To begin to understand that different structures are used for different purposes. • To know that a structure is something that has been made and put together. To know that a client is the person I am designing for. • To know that design criteria is a list of points to ensure the product meets the clients needs and wants. • To know that a windmill harnesses the power of wind for a purpose like grinding grain, pumping water or generating electricity. • To know that windmill turbines use wind to turn and make the machines inside work. • To know that a windmill is a structure with sails that are moved by the wind. • To know the three main parts of a windmill are the turbine, axle and structure Year 2 - To know that shapes and structures with wide, flat bases or legs are the most stable. • To understand that the shape of a structure affects its strength. • To know that materials can be manipulated to improve strength and stiffness. • To know that a structure is something which has been formed or made from parts. • To know that a ‘stable’ structure is one which is firmly fixed and unlikely to change or move. • To know that a ‘strong’ structure is one which does not break easily. • To know that a ‘stiff’ structure or material is one which does not bend easily. • To know that natural structures are those found in nature. • To know that man-made structures are those made by people
Textiles:	Year 1- To know that ‘joining technique’ means connecting two pieces of material together. To know that there are various temporary methods of joining fabric by using staples. glue or pins. To understand that different techniques for joining materials can be used for different purposes. To understand that a template (or fabric pattern) is used to cut out the same shape multiple times. To know that drawing a design idea is useful to see how an idea will look. Year 2 -> To know that sewing is a method of joining fabric. • To know that different stitches can be used when sewing. • To understand the importance of tying a knot after sewing the final stitch. • To know that a thimble can be used to protect my fingers when sewing.

Year 3 and 4	1	2	3	4	5	6
Aspect	Textiles	Mechanical systems	Cooking and Nutrition	Textiles	Structures	Cooking and Nutrition
Focus/Project Title	Cushions	Making a Slingshot Car	Adapting a Recipe	Fastenings	Pavillions	Eating Seasonally
Vocabulary	fabric, names of fabrics, fastening, compartment, zip, button, structure, finishing technique, strength, weakness, stiffening, templates, stitch, seam, seam allowance user, purpose, design, model, evaluate, prototype, annotated sketch, functional, innovative, investigate, label, drawing, aesthetics, function, pattern pieces	slider, lever, pivot, slot, bridge/guide card, masking tape, paper fastener, join pull, push, up, down, straight, curve, forwards, backwards design, make, evaluate, user, purpose, ideas, design criteria, product, function brief, research, evaluate, ideas, constraints, investigate	name of products, names of equipment, utensils, techniques and ingredients texture, taste, sweet, sour, hot, spicy, appearance, smell, preference, greasy, moist, cook, fresh, savoury hygienic, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested healthy/varied diet planning, design criteria, purpose, user, annotated sketch, sensory evaluations	fabric, names of fabrics, fastening, compartment, zip, button, structure, finishing technique, strength, weakness, stiffening, templates, stitch, seam, seam allowance user, purpose, design, model, evaluate, prototype, annotated sketch, functional, innovative, investigate, label, drawing, aesthetics, function, pattern pieces	shell structure, three-dimensional (3-D) shape, net, cube, cuboid, prism, vertex, edge, face, length, width, breadth, capacity marking out, scoring, shaping, tabs, adhesives, joining, assemble, accuracy, material, stiff, strong, reduce, reuse, recycle, corrugating, ribbing, laminating font, lettering, text, graphics, decision, evaluating, design brief design criteria, innovative, prototype	name of products, names of equipment, utensils, techniques and ingredients texture, taste, sweet, sour, hot, spicy, appearance, smell, preference, greasy, moist, cook, fresh, savoury hygienic, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested healthy/varied diet planning, design criteria, purpose, user, annotated sketch, sensory evaluations
Learning Sequence Prior Learning	Have joined fabric in simple ways by gluing and stitching. Have used simple patterns and templates for marking out. Have evaluated a range of textile products.	Explored simple mechanisms, such as sliders and levers, and simple structures. Learnt how materials can be joined to allow movement. Joined and combined materials using simple tools and techniques.	Know some ways to prepare ingredients safely and hygienically. Have some basic knowledge and understanding about healthy eating and <i>The Eatwell plate</i>. Have used some equipment and utensils and prepared and combined ingredients to make a product.	Have joined fabric in simple ways by gluing and stitching. Have used simple patterns and templates for marking out. Have evaluated a range of textile products.	Experience of using different joining, cutting and finishing techniques with paper and card. A basic understanding of 2-D and 3-D shapes in mathematics and the physical properties and everyday uses of materials in science.	Know some ways to prepare ingredients safely and hygienically. Have some basic knowledge and understanding about healthy eating and <i>The eatwell plate</i>. Have used some equipment and utensils and prepared and combined ingredients to make a product.

Future learning and knowledge	Combining different fabric shapes	Using cams to change rotary movement into linear/reciprocating movement	Combining a range of fresh, precooked and processed foods to cook and bake foods according to their sensory characteristics	Consider a range of factors in their design criteria and use this to create a waistcoat design. Use a template to mark and cut out a design. Use a running stitch to join fabric to make a functional waistcoat. Attach a secure fastening, as well as decorative objects. Evaluate their final product.	Investigating frame structures and reinforcing and strengthening £D frameworks	Adapting a recipe by adding or substituting an ingredient
Cooking and Nutrition	Year 3- To know that not all fruits and vegetables can be grown in the UK. • To know that climate affects food growth. • To know that vegetables and fruit grow in certain seasons. • To know that cooking instructions are known as a ‘recipe’. • To know that imported food is food which has been brought into the country. • To know that exported food is food which has been sent to another country.. • To understand that imported foods travel from far away and this can negatively impact the environment. • To know that each fruit and vegetable gives us nutritional benefits because they contain vitamins, minerals and fibre. • To understand that vitamins, minerals and fibre are important for energy, growth and maintaining health. • To know safety rules for using, storing and cleaning a knife safely. • To know that similar coloured fruits and vegetables often have similar nutritional benefits. Year 4- • To know that the amount of an ingredient in a recipe is known as the ‘quantity.’ • To know that it is important to use oven gloves when removing hot food from an oven. • To know the following cooking techniques: sieving, creaming, rubbing method, cooling. •To understand the importance of budgeting while planning ingredients for biscuits.					
Mechaqnisms	Year 3- • To understand how pneumatic systems work. • To understand that pneumatic systems can be used as part of a mechanism. • To know that pneumatic systems operate by drawing in, releasing and compressing air. Year 4-• To understand that all moving things have kinetic energy. • To understand that kinetic energy is the energy that something (object/person) has by being in motion. • To know that air resistance is the level of drag on an object as it is forced through the air. • To understand that the shape of a moving object will affect how it moves due to air resistance.					
Structures	Year 3- • To understand that wide and flat based objects are more stable. • To understand the importance of strength and stiffness in structures. • To know the following features of a castle: flags, towers, battlements, turrets, curtain walls, moat, drawbridge and gatehouse - and their purpose. • To know that a façade is the front of a structure. • To understand that a castle needed to be strong and stable to withstand enemy attack. • To know that a paper net is a flat 2D shape that can become a 3D shape once assembled. • To know that a design specification is a list of success criteria for a product. Year 4-To understand what a frame structure is. • To know that a ‘free-standing’ structure is one which can stand on its own. To know that a pavilion is a a decorative building or structure for leisure activities. • To know that cladding can be applied to structures for different effects. • To know that aesthetics are how a product looks. • To know that a product’s function means its purpose. • To understand that the target audience means the person or group of people a product is designed for. • To know that architects consider light, shadow and patterns when designing.					
Textiles	Year 3- To know that applique is a way of mending or decorating a textile by applying smaller pieces of fabric to larger pieces. To know that when two edges of fabric have been joined together it is called a seam. To know that it is important to leave space on the fabric for the seam. To understand that some products are turned inside out after sewing so the stitching is hidden. Year 4-To know that a fastening is something which holds two pieces of material together for example a zipper, toggle, button, press stud and velcro. • To know that different fastening types are useful for different purposes. • To know that creating a mock up (prototype) of their design is useful for checking ideas and proportions.					

Year 5 and 6	1	2	3	4	5	6
Aspect	Structures	Mechanical systems	Cooking and Nutrition	Textiles	Electrical systems	Cooking and Nutrition
Focus/Project Title	Bridges	Automata Toys	Come Dine with Me	Stuffed Toys	Steady Hand Game	What Could be Healthier?
Vocabulary	frame structure, stiffen, strengthen, reinforce, triangulation, stability, shape, join, temporary, permanent design brief, design specification, prototype, annotated sketch, purpose, user, innovation, research, functional	cam, snail cam, off-centre cam, peg cam, pear shaped cam follower, axle, shaft, crank, handle, housing, framework rotation, rotary motion, oscillating motion, reciprocating motion annotated sketches, exploded diagrams mechanical system, input movement, process, output movement design decisions, functionality, innovation, authentic, user, purpose, design specification, design brief	name of products, names of equipment, utensils, techniques and ingredients texture, taste, sweet, sour, hot, spicy, appearance, smell, preference, greasy, moist, cook, fresh, savoury hygienic, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested healthy/varied diet planning, design criteria, purpose, user, annotated sketch, evaluations	computer aided design (CAD), computer aided manufacture (CAM) font, lettering, text, graphics, menu, scale, modify, repeat, copy, flip design brief, design criteria, design decisions, innovative, prototype seam, seam allowance, wadding, reinforce, right side, wrong side, hem, template, pattern pieces names of textiles and fastenings used, pins, needles, thread, pinking shears, fastenings, iron transfer paper annotate, functionality, innovation, authentic, user, purpose, evaluate,	pulley, drive belt, gear, rotation, spindle, driver, follower, ratio, transmit, axle, motor circuit, switch, circuit diagram annotated drawings, exploded diagrams mechanical system, electrical system, input, process, output design decisions, functionality, innovation, authentic, user, purpose, design specification, design brief	name of products, names of equipment, utensils, techniques and ingredients texture, taste, sweet, sour, hot, spicy, appearance, smell, preference, greasy, moist, cook, fresh, savoury hygienic, edible, grown, reared, caught, frozen, tinned, processed, seasonal, harvested healthy/varied diet planning, design criteria, purpose, user, annotated sketch, sensory evaluations

Learning Sequence Prior Learning	Experience of using measuring, marking out, cutting, joining, shaping and finishing techniques with construction materials. Basic understanding of what structures are and how they can be made stronger, stiffer and more stable.	Experience of axles, axle holders and wheels that are fixed or free moving. Basic understanding of different types of movement. Experience of cutting and joining techniques with a range of materials. An understanding of how to strengthen and stiffen structures	Know some ways to prepare ingredients safely and hygienically. Have some basic knowledge and understanding about healthy eating and <i>The eatwell plate</i> . Have used some equipment and utensils and prepared and combined ingredients to make a product	Experience of stitching, joining and finishing techniques in textiles. Experience of making and using textiles pattern pieces. Experience of simple computer-aided design applications.	Experience of axles, axle holders and wheels that are fixed or free moving. Basic understanding of electrical circuits, simple switches and components. Experience of cutting and joining techniques with a range of materials including card, plastic and wood. An understanding of how to strengthen and stiffen structures.	Know some ways to prepare ingredients safely and hygienically. Have some basic knowledge and understanding about healthy eating and <i>The eatwell plate</i> . Have used some equipment and utensils and prepared and combined ingredients to make a product.
Future learning and knowledge	KS3 there are various types of structures, including frame structures, shell structures, combination of frame and shell structures,	Experience of gears and pulleys to create movement use of programming to control movement	Adapt a recipe by adding or substituting ingredients	Use computers for additional applications within Design and Technology to control mechanisms	Constructed a simple series electrical circuit in science, using bulbs, switches and buzzers.	Adapt a recipe by adding or substituting ingredients
Cooking and Nutrition:	Year 5- • To understand where meat comes from - learning that beef is from cattle and how beef is reared and processed, including key welfare issues. • To know that I can adapt a recipe to make it healthier by substituting ingredients. • To know that I can use a nutritional calculator to see how healthy a food option is. • To understand that ‘cross-contamination’ means bacteria and germs have been passed onto ready-to-eat foods and it happens when these foods mix with raw meat or unclean objects. Year 6- • To know that ‘flavour’ is how a food or drink tastes. • To know that many countries have ‘national dishes’ which are recipes associated with that country. • To know that ‘processed food’ means food that has been put through multiple changes in a factory. • To understand that it is important to wash fruit and vegetables before eating to remove any dirt and insecticides. • To understand what happens to a certain food before it appears on the supermarket shelf (Farm to Fork).					
Mechanisms:	Year 5- To know that mechanisms control movement. • To understand that mechanisms can be used to change one kind of motion into another. • To understand how to use sliders, pivots and folds to create paper-based mechanisms. • To know that a design brief is a description of what I am going to design and make. • To know that designers often want to hide mechanisms to make a product more aesthetically pleasing. Year 6-To understand that the mechanism in an automata uses a system of cams, axles and followers. • To understand that different shaped cams produce different outputs. • To know that an automata is a hand powered mechanical toy. • To know that a cross-sectional diagram shows the inner workings of a product. • To understand how to use a bench hook and saw safely. • To know that a set square can be used to help mark 90° angles.					
Structures:	Year 5- To understand some different ways to reinforce structures. • To understand how triangles can be used to reinforce bridges. • To know that properties are words that describe the form and function of materials. • To understand why material selection is important based on properties. • To understand the material (functional and aesthetic) properties of wood. To understand the difference between arch, beam, truss and suspension bridges. • To understand how to carry and use a saw safely. Year 6-To know that structures can be strengthened by manipulating materials and shapes. To understand what a 'footprint plan' is. • To understand that in the real world, design , can impact users in positive and negative ways. • To know that a prototype is a cheap model to test a design idea.					
Textiles:	Year 5- • To know that blanket stitch is useful to reinforce the edges of a fabric material or join two pieces of fabric. • To understand that it is easier to finish simpler designs to a high standard. • To know that soft toys are often made by creating appendages separately and then attaching them to the main body. • To know that small, neat stitches which are pulled taut are important to ensure that the soft toy is strong and holds the stuffing securely. Year 6- -To understand that it is important to design clothing with the client/ target customer in mind. • To know that using a template (or clothing pattern) helps to accurately mark out a design on fabric. • To understand the importance of consistently sized stitches.					

Cooking and Nutrition in D&T

Year by year progressive knowledge-based planning.

As part of their work with food, pupils should be taught how to cook and apply the principles of nutrition and healthy eating. Instilling a love of cooking in pupils will also open a door to one of the great expressions of human creativity. Learning how to cook is a crucial life skill that enables pupils to feed themselves and others affordably and well, now and in later life.

Pupils should be taught to:

Key stage 1

- use the basic principles of a healthy and varied diet to prepare dishes
- understand where food comes from.

Key stage 2

- 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.

A selection of balanced diet/ healthy eating recipe suggestions is included here. Adapt them as necessary or seek alternatives but please note emphasis should be on safely preparing and cooking mostly savoury food.

Year 1 Equipment needed for skill development	Cutting and knife skills	Mixing and Moulding	Heating and Cooling
Mixing spoons • Table knives • Forks • Mixing bowls • Serrated vegetable knives • Mashers • Peelers • Melon ballers • Graters • Sieves • Colanders • Lemon squeezer	With close supervision: • Use the bridge hold to cut harder foods using a serrated vegetable knife (eg apple) • Use the claw grip to cut soft foods using a serrated vegetable knife (eg tomato) • Mash cooked food (eg potatoes with a masher) • Peel soft vegetables using a peeler (eg cucumber) • Using physical guidance if necessary, peel harder food (eg apple, potato)	With close supervision: • Sift flour into bowl • Mix, stir and combine liquid and dry ingredients (eg muffins) • With help, use hands to rub fat into flour (eg rock buns) • With help crack an egg and beat together using a fork • With physical guidance, use a small table knife for spreading soft spreads on to bread	Note: 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 With close supervision: • Be able to prepare food for baking and frying such as greasing baking tins and adding oil to frying pans / Saucepans

	• Cut food into evenly sized largish pieces (eg potatoes) • Use a melon baller to core an apple • Grate soft food, using a grater (eg cheese) Independently: • Drain away liquids from packaged food using a sieve or colander (eg tuna or sweet corn) • Use a lemon squeezer	• Use hands to shape dough into small balls or shapes • With help assemble and arrange cold ingredients (eg sandwich, fruit kebabs, bruschetta)	Recipes – taken mainly from Recipes - Food A Fact Of Life 5-7 Bruschetta Potato and Beetroot Salad Seasonal Fruit Salad Smoothie Breadsticks Milk Rolls
Year 2 Equipment needed for skill development	Cutting and knife skills	Mixing and Moulding	Heating and Cooling
Mixing spoons • Table knives • Forks • Mixing bowls • Serrated vegetable knives • Mashers • Peelers • Melon ballers • Graters • Sieves • Colanders • Lemon squeezer	With close supervision: • Use the bridge hold to cut harder foods using a serrated vegetable knife (eg apple) • Use the claw grip to cut soft foods using a serrated vegetable knife (eg tomato) • Cut food into evenly sized largish pieces (eg potatoes) With moderate supervision: • Peel soft vegetables using a peeler (eg cucumber) • Using physical guidance if necessary, peel harder food (eg apple, potato) • Grate soft food, using a grater (eg cheese) • Use a melon baller to core an apple Independently: • Mash cooked food (eg potatoes with a masher) • Drain away liquids from packaged food using a sieve or colander (eg tuna or sweet corn) • Use a lemon squeeze	With moderate supervision: • Mix, stir and combine liquid and dry ingredients (eg muffins) • Use hands to rub fat into flour (eg rock buns) • Crack an egg and beat together using a fork • Use a small table knife for spreading soft spreads on to bread • Use hands to shape dough into small balls or shapes • Assemble and arrange cold ingredients (eg sandwich, fruit kebabs, bruschetta) Independently: • Sift flour into bowl	Note: 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 With close supervision: • Be able to prepare food for baking and frying such as greasing baking tins and adding oil to frying pans / Saucepans Recipes – taken mainly from Recipes - Food A Fact Of Life Broccoli and Bean Salad Twice baked jacket potatoes Cheese Straws Sandwich Wrap Sardine Pâté Sandwich Filling Tomato and Basil Tartlets

Year 2 Equipment needed for skill development	Cutting and knife skills	Mixing and Moulding	Heating and Cooling
Mixing spoons • Table knives • Forks • Mixing bowls • Serrated vegetable knives • Mashers • Peelers • Melon ballers • Graters • Sieves • Colanders • Lemon squeezer	With close supervision: • Use the bridge hold to cut harder foods using a serrated vegetable knife (eg apple) • Use the claw grip to cut soft foods using a serrated vegetable knife (eg tomato) • Cut food into evenly sized largish pieces (eg potatoes)	With moderate supervision: • Mix, stir and combine liquid and dry ingredients (eg muffins) • Use hands to rub fat into flour (eg rock buns) • Crack an egg and beat together using a fork • Use a small table knife for spreading soft spreads on to bread	Note: 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 With close supervision:

	With moderate supervision: • Peel soft vegetables using a peeler (eg cucumber) • Using physical guidance if necessary, peel harder food (eg apple, potato) • Grate soft food, using a grater (eg cheese) • Use a melon baller to core an apple Independently: • Mash cooked food (eg potatoes with a masher) • Drain away liquids from packaged food using a sieve or colander (eg tuna or sweet corn) • Use a lemon squeeze	• Use hands to shape dough into small balls or shapes • Assemble and arrange cold ingredients (eg sandwich, fruit kebabs, bruschetta) Independently: • Sift flour into bowl	• Be able to prepare food for baking and frying such as greasing baking tins and adding oil to frying pans / Saucepans Recipes – taken mainly from Recipes - Food A Fact Of Life Broccoli and Bean Salad Twice baked jacket potatoes Cheese Straws Sandwich Wrap Sardine Pâté Sandwich Filling Tomato and Basil Tartlets
Year 3 Equipment needed for skill development	Cutting and Knife skills	Mixing and Moulding	Heating and Cooling
Balloon whisks • Garlic crushers Mixing spoons • Table knives • Forks • Serrated vegetable knives • Mashers • Peelers • Melon ballers • Graters • Sieves • Colanders • Lemon squeezers • Biscuit cutters • Oven gloves • Fish slices	With moderate supervision: • begin to use the claw grip to cut harder foods using a serrated vegetable knife (eg carrot) • begin to use both the bridge hold and claw grip to cut the same food using a serrated vegetable knife (eg onion) • Use a masher to mash hot food to a fairly smooth texture • Cut foods into evenly sized strips or cubes (eg peppers, cheese) • Crush garlic using a garlic press • Grate harder food using a grater (eg apples, carrots) Independently: • Begin to peel harder food (eg apple, potato)	With moderate supervision: • Mix, stir and combine wet and dry ingredients uniformly (eg to form a dough) • Crack an egg and beat with balloon whisk • Cream fat and sugar together using a mixing spoon • Use a rolling pin to flatten and roll out dough (eg scones) • use biscuit cutters • Coat food with egg and breadcrumbs (eg fish cakes) Independently: • Sieve flour, raising agents and spices together into a bowl • Use hands to rub fat into flour (eg scones, apple crumble) • Knead and shape dough into evenly sized shapes • Assemble and arrange ingredients for simple dishes (eg apple crumble, scrambled egg on toast)	Note: Although pupils will not be cooking food on the hob or in the oven, pupils should understand how to use them safely by: • observing adults cooking on the hob and putting in and removing food from the oven With close supervision: • begin to use a toaster or microwave (e.g beans on toast) • Using physical guidance when necessary, handle hot food safely once adults have removed food from the hob or oven (e.g. use oven gloves and a fish slice to remove scones from the baking tray) Recipes – taken mainly from Recipes - Food A Fact Of Life • Greek Salad • Spanakopita • Muesli and Yoghurt Layer • Stuffed Tomatoes • Pasta Salad • Bacon and Courgette Muffins

Year 5 and 6 Equipment needed for skill development	Cutting and Knife skills - Year 4	Mixing and Moulding Year 4	Heating and Cooling Year 4
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• Electric hand mixers • Food processors • Electric hand blenders • Garlic crushers • Mixing spoons • Table knives • Forks • Serrated vegetable knives • Peelers • Graters • Sieves • Colanders • Lemon squeezers • Biscuit cutters • Can openers • Ring pull tinned food • Oven gloves • Fish slices Recipes – taken mainly from Recipes - Food A Fact Of Life • Salmon and Dill Crispy Coat Fishcakes • Stafidopsomo - Raisin Bread • Sunset Pasta Salad • Carrot and Coriander Soup • Parsnip and Apple Soup • Green pea Pâté • Filo Parcels • Caribbean Red Pepper Salsa • Penne All’ Arrabiata • Minestrone Soup • Pizza Wheels • Spinach and Cheese Bread • Butternut Squash Cous Cous • Fish Pie • Spaghetti Bolognese	With moderate supervision: • Use the claw grip to cut harder foods using a serrated vegetable knife (eg carrot) • Use both the bridge hold and claw grip to cut the same food using a serrated vegetable knife (eg onion) • Use a masher to mash hot food to a fairly smooth texture • Cut foods into evenly sized strips or cubes (eg peppers, cheese) Independently: • Peel harder food (eg apple, potato) • Crush garlic using a garlic press • Grate harder food using a grater (eg apples, carrots)	With moderate supervision: • Mix, stir and combine wet and dry ingredients uniformly (eg to form a dough) • Cream fat and sugar together using a mixing spoon Independently: • Sieve flour, raising agents and spices together into a bowl • Use hands to rub fat into flour (eg scones, apple crumble) • Crack an egg and beat with balloon whisk • Use a rolling pin to flatten and roll out dough (eg scones) • use biscuit cutters • Coat food with egg and breadcrumbs (eg fish cakes) • Knead and shape dough into evenly sized shapes • Assemble and arrange ingredients for simple dishes (eg apple crumble, scrambled egg on toast)	Note: Although pupils will not be cooking food on the hob or in the oven, pupils should understand how to use them safely by: • observing adults cooking on the hob and putting in and removing food from the oven With close supervision: • Confidently use a toaster or microwave (e.g beans on toast) • Handle hot food safely once adults have removed food from the hob or oven (e.g. use oven gloves and a fish slice to remove scones from the baking tray)
	Cutting and Knife skills Year 5 With moderate supervision: • Finely grate hard foods (eg zesting, parmesan cheese) • With support, use a can opener and open ring-pull tin • Dice foods and cut them into evenly sized, fine pieces (eg garlic, vegetable batons, herbs) Independently: • Confidently use the claw grip to cut harder foods using a serrated vegetable knife (eg carrot) • Confidently use both the bridge hold and claw grip to cut the same food using a serrated vegetable knife (eg onion) • Confidently peel harder food using a peeler (eg apple, potato)	Mixing and Moulding Year 5 With close supervision: • use a food processor or electric hand blender to mash, blend or puree hard ingredients or hot food (eg chickpeas for hummus or vegetables for soup) With moderate supervision: • With help begin to separate eggs • whisk using an electric hand mixer (eg eggs) • cream fat and sugar together using an electric hand mixer • Use a rolling pin to roll out dough to a specific thickness (eg pizza) • Use biscuit cutters accurately to assemble, arrange and layer more advanced dishes (eg apple sponge pudding, shepherd’s pie) Independently: • Use fingertips to rub fat into flour to make fine ‘bread crumbs’ (eg apple crumble) • Sieve wet and dry ingredients with precision • Confidently crack an egg • Spread food evenly with a coating, paste or glaze • Knead and shape dough into a variety of shapes • Use hands to shape mixtures into evenly sized pieces (eg burgers)	Heating and Cooling Year 5 Note: Although pupils will not be putting in or removing food from the oven, they should understand how to use the oven safely by observing adults With close supervision: • With help, begin to use the hob or electric saucepan (wok or stock pot) to cook simple dishes (eg burgers, soup) • 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
	Cutting and Knife skills Year 6	Mixing and Moulding Year 6	Heating and Cooling Year 6

	With moderate supervision: • Begin to use a can opener and open ring-pull tin • Dice foods and cut them into evenly sized, fine pieces (e.g. garlic, vegetable batons, herbs) Independently: • Finely grate hard foods (e.g. zesting, parmesan cheese) • Confidently use the claw grip to cut harder foods using a serrated vegetable knife (e.g. carrot) • Confidently use both the bridge hold and claw grip to cut the same food using a serrated vegetable knife (eg onion) • Confidently peel harder food using a peeler (e.g. apple, potato)	With close supervision: • use a food processor or electric hand blender to mash, blend or puree hard ingredients or hot food (eg chickpeas for hummus or vegetables for soup) With moderate supervision: • separate eggs • whisk using an electric hand mixer (e.g. eggs) • cream fat and sugar together using an electric hand mixer Independently: • Use fingertips to rub fat into flour to make fine ‘bread crumbs’ (eg apple crumble) • Sieve wet and dry ingredients with precision • Confidently crack an egg • Use a rolling pin to roll out dough to a specific thickness (eg pizza) • Use biscuit cutters accurately to assemble, arrange and layer more advanced dishes (eg apple sponge pudding, shepherd’s pie) • Spread food evenly with a coating, paste or glaze • Knead and shape dough into a variety of shapes • Use hands to shape mixtures into evenly sized pieces (eg burgers)	Note: Although pupils will not be putting in or removing food from the oven, they should understand how to use the oven safely by observing adults With close supervision: • Use the hob or electric saucepan (wok or stock pot) to cook simple dishes (eg burgers, soup) • 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
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At a Glance – Progression in Technical Knowledge

Aspect	By the end of year 2	By the end of year 4	By the end of year 6
Structures	Use simple methods of making free standing structures stronger and more stable	Use strong shell structures Strengthening 2-D frameworks	Reinforcing and strengthening 3-D frameworks
Mechanisms and mechanical control	Use wheels and axles Use levers and sliders	Use levers and linkages Use syringes and tubing to produce movement	Use cams to change rotary motion to linear/reciprocating movement Use pulleys and gears
Electrical control	Not applicable	Use series circuits and simple switches	Using series or parallel circuits with more complex switches
Control and programming		how to program a computer to control their products	how to program a computer to monitor changes in the environment and control their products
Textiles	Use simple joining techniques to construct products	Using a 2-D shape to produce a 3D product	Use a combination of shapes to produce a textile product
	• Making/using simple paper pattern pieces. • Cutting fabric carefully. • Learning sewing basics – threading a needle, knotting your thread, finishing off. • Sewing using running stitch, attempting to produce neat, equal stitches • Creating a design on fabric using applique.	• Making/using a paper pattern (front and back pieces). • Cutting fabric with increasing accuracy. • Sewing basics – threading a needle, knotting your thread, finishing off. • Sewing using running stitch and overstretch. • Creating a design on fabric using applique. • Sewing on simple components – buttons/sequins/ribbon	• Making/using a paper pattern (front and back pieces). • Including a seam allowance. • Cutting fabric accurately. • Sewing basics – threading a needle, knotting your thread, finishing off. • Sewing neatly using running stitch, overstretch and back stitch. • Turning out so stitching is hidden.

	• Creating a design on fabric using pens/paint	• Using stuffing	• Creating designs on fabric using applique/pens/ paint. • Incorporating a fastening component – button/zip/press stud
Food and nutrition	Combine two or more fresh ingredients according to their sensory characteristics A focus on Cutting Peeling Grating mixing spreading combining	Combining fresh, pre-cooked and processed foods according to their sensory characteristics A focus on all previous learning and... Sieving Rubbing in Cracking eggs Using cutters Kneading and shaping Coating Rolling out whisking	Adapt a recipe by adding or substituting an ingredient A focus on all previous learning and ... Dicing Separating eggs Creaming Rolling out evenly Kneading and shaping more complex shapes and styles of bread Assembling and arranging
Drawing/designing	Drawings need to be a clear representation of the product they are evaluating or designing Labels and annotations need to be used Introduce exploded diagrams Introduce flow charts	Drawings need to show detail. They need to have colour, labels, annotations and clear components Develop use of exploded diagram Introduced cross sections Introduce layered diagrams using tracing paper Introduce use of squared paper for scale and actual size for production of pattern pieces Circuit diagrams	Drawings need to be 3-D with shading and showing all components and detailed annotations Orthographic drawings – side, front and plan views Use of dimensions Perfect use of cross sections and exploded diagrams Perfect use of layered diagrams Circuit diagrams

Where to buy resources/consumables and kits from.

Ivydale Technology Shop ISTS homepage (southwarklea.org.uk) email for Paul Newham: pnewham@ivydale.southwark.sch.uk email for Technology Shop: techshop@ivydale.southwark.sch.uk	Run by Paul Newman Consumables – excellent for wheels and dowels -always a good fit Kits Class packs You can confidently buy from this online shop knowing that components will fit together and be of a good quality, Kits are very useful for your own knowledge and understanding about mechanism or gears and pulleys – e.g fairgrounds
Technology Supplies TSL Design & Technology Tools, Products, Equipment & Materials (technologysupplies.co.uk)	Very useful site and local! You can buy hard to find axle brackets here.
CraftPacks Educational Supplies http://www.craftpacks.co.uk	Reasonably priced
TTS	Well known supplier

Design Technology Resources for Primary Schools from TTS (tts-group.co.uk)	
Rapid Education Education Suppliers, Rapid School Supplies Rapid Online	Useful for card discs to make rotary switches.