EDUCATION
SOUTH WEST

ESW DT Curriculum

Overview of Progression

Area of DT: Mechanisms							
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Project	*With **support** I can make models and pictures which incorporate movement in teacher-led knowledge.* **Simple hinges**	*With **support** I can make models and pictures which incorporate mechanisms* **Pivots and sliders**	*I can create a model with moving part **independently.** Pupils use Prior understanding of mechanisms.* **Wheels & Axles**	*With **support** I can explore the use of mechanisms to create simultaneous and consecutive movement* **Levers & Linkages**	*With **independence**, produce models that incorporate mechanical systems.* **Pneumatics**	*Develop a deeper understanding of how mechanisms create movement. Design and build complex mechanisms with connecting components to create movement **with support**.* **Pulleys or Gears**	*Develop a deeper understanding of how mechanisms create movement. Design and build complex mechanisms with connecting components to create movement **independently*** **Cams**
Substantive Knowledge (Technical Knowledge)	I know how a hinge works within something that moves. I know the properties of some materials, and which might be suitable for a certain job.	I discuss with others and start to understand the simple working characteristics of materials and components; I begin to explore and create products using slider mechanisms.	I discuss with others and to understand the simple working characteristics of materials and components; I explore and create products independently using wheel and axles mechanisms I know that for a wheel to move as part of a mechanism it must be attached to an axle.	I understand and use mechanical systems in their products (levers and linkages). I can begin to explain how levers and linkages create movement in mechanical systems. I can identify whether a mechanism is a lever or linkage and determine what movement it will make. I know that a linkage is a system of levers that are connected by pivots. I can begin to use mechanical systems in their product with support.	I understand and use mechanical systems in their products (pneumatics). I can explain how Pneumatics create movement in mechanical systems. I can discuss that pneumatic systems force air over a distance to create movement. I can use mechanical systems in their product independently.	I can understand and use mechanical systems in their products (pulleys and gears). I can explain how pulleys and gears create movement in mechanical systems and use mechanical systems in their products. I know that input is the motion used to start a mechanism. I know that output is the motion that happens because of starting the input.	I can understand and use mechanical systems in their products (cams). I can explain how cams create movement in mechanical systems and use mechanical systems in their products. I know that output is the motion that happens because of starting an input I can describe mechanisms that can be used to change one kind of motion into another.
Disciplinary Knowledge (DT Skills)	I can represent my own ideas, thoughts and feelings through design and technology. I can use a split pin to create a mechanism that opens and closes (a simple hinge). I can safely use and explore a variety of materials, tools and techniques, experimenting	Design I can begin to use existing knowledge of products to generate ideas. I can start to design products that have a purpose and are aimed at an intended user. I can explain how products will look and work.	**Design** **I can use my knowledge of existing products and my own experience to help generate my ideas.** **I design products that have a purpose and are aimed at an intended user.** **I can explain how my products will look and work**	Design I can begin to identify design features that will appeal to intended users. I can start to use knowledge of a broad ranges to generate ideas and design innovative products with support. I can begin to work in a broader range of contexts e.g., entertainment, home,	Design I can identify design features that will appeal to intended users. I can use knowledge of a broad ranges to generate ideas and design innovative products with support. I can work in a broader range of contexts e.g., entertainment, home, school,	**Design** **I can begin to use research to inform and develop detailed design criteria to inform the design of innovative, functional, and appealing products that are fit for purpose and aimed at a target market.** **I can start to use their knowledge of a broad range**	Design I can use research to inform and develop detailed design criteria to inform the design of innovative, functional, and appealing products that are fit for purpose and aimed at a target market. I can use my knowledge of a broad range of existing products to help generate ideas.

	with colour, design, texture, form and function. I can use what has been learnt about media and materials in original ways, thinking about uses and purposes. <u>Early Learning Goals</u> **Expressive Arts and Design (Exploring and Using Media and Materials)** *Children safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.* **Expressive Arts and Design (Being Imaginative)** *Children use what they have learnt about media and materials in original ways, thinking about uses and purposes. They represent their own ideas, thoughts and feelings through design and technology, art, music, dance, role play and stories* **Physical Development (Moving and Handling)** *Children handle equipment and tools effectively, including pencils for writing.*	I can follow a simple design criteria with support. I can work within a relevant context. <u>Make</u> **With support, I can follow a simple plan.** **I am beginning to select from a range of hand tools and equipment.** **I can select from a range of materials and components according to their characteristics.** **I am beginning to cut, shape and score materials with some accuracy.** **I am starting to assemble, join and combine components.** **I can demonstrate how to cut, shape and join materials to make a simple product.** **I am beginning to use simple finishing techniques to improve the appearance of their product, such as adding simple decorations.** <u>Evaluate</u> I can begin to explore and evaluate existing products mainly through discussions, comparisons, and simple written evaluations. I can explore what materials products are made from. I can create design ideas and what I am making with support. I can start to identify strengths and possible	**through talking and simple annotated drawings.** **I understand and follow simple design criteria.** <u>Make</u> I can follow a simple plan. I can select from a range of hand tools and equipment. I can select from a range of materials and components according to their characteristics. I can cut, shape and score materials with some accuracy. I can assemble, join and combine components. I can demonstrate how to cut, shape and join materials to make a simple product. I can use simple finishing techniques to improve the appearance of my product, such as adding simple decorations. <u>Evaluate</u> I can explore and evaluate existing products mainly through discussions, comparisons, and simple written evaluations. I can explore what materials products are made from. I can create design ideas and discuss what I am making. I can identify strengths and possible changes I might make to refine my existing design.	school, leisure and the wider environment. I can explain how parts of a product work. I can begin to use annotated sketches to develop ideas and a simple design criteria. I can explore different initial ideas before identifying a final design. I can start to test ideas through prototypes. <u>Make</u> I can select from a range of tools and equipment and explain my choices. I can begin to select from a range of components and materials according to their functional properties and aesthetic qualities. I can begin to place the main stages of making in a systematic order. <u>Evaluate</u> **I am beginning to explore and evaluate existing products, explaining the purpose of the product and whether it is designed well to meet the intended purpose.** **I explore what materials products are made from and suggest reasons for this.** **I consider my design criteria as I make my product and I am willing to alter my plans, sometimes considering the views of others if this helps me to improve their product.**	leisure and the wider environment. I can explain how different components of a product work. I can use annotated sketches to develop ideas and a simple design criteria. I can explore different initial ideas before identifying a final design. I can test ideas through prototypes. <u>Make</u> **I can carefully select from a range of tools and equipment, explaining their choices.** **I select from a range of materials and components according to their functional properties and aesthetic qualities.** **I order the main stages of making in a systematic order.** **I can use a range of tools and equipment safely, appropriately.** **I can use a wider range of materials and components, including construction materials, kits and mechanical components.** **With growing independence, I can measure and mark out to the nearest cm and millimetre.** **I can cut, shape and score materials with some degree of accuracy.**	**of existing products to help generate their ideas.** **I can design products that have a clear purpose and indicate the design features of their products that will appeal to the intended user.** **I can explain how particular parts of their products work.** **With growing confidence, I can use annotated sketches, cross-sectional drawings and exploded diagrams (possibly including computer-aided design) to develop and communicate ideas.** **I can, within a group, generate a range of design ideas and clearly communicate final designs.** **I can consider the availability and costings of resources when planning out designs.** <u>Make</u> I can more independently, plan by suggesting what to do next. I can confidently select from a range of materials and components according to their functional properties and aesthetic qualities. I can discuss and create step-by-step plans as a guide to making. I can start to independently take exact measurements and mark out, to within 1 millimetre. I can use a full range of materials and components, including construction	I can design products that have a clear purpose and indicate the design features of products that will appeal to the intended user. I can explain how particular components of my products work. I can use annotated sketches, cross-sectional drawings and exploded diagrams (possibly including computer-aided design) to develop and communicate ideas. I can independently, generate a range of design ideas and clearly communicate final designs. I can consider the availability and costings of resources when planning out designs. <u>Make</u> I can confidently select from a range of materials and components according to their functional properties and aesthetic qualities and explain why I have chosen them. I can independently discuss and create step-by-step plans as a guide to making. I can independently take exact measurements and mark out, to within 1 millimetre. I can use a full range of materials and components, including construction materials and kits, textiles, and mechanical components.

		changes I might make to refine my existing design. I can evaluate my product and ideas against simple design criteria. I can start to understand that the iterative process sometimes involves repeating different stages of the process.	I can evaluate my products and ideas against simple design criteria. I can start to understand that the iterative process sometimes involves repeating different stages of the process.	**With support, I evaluate my product against my original design criteria.** **I can evaluate how and why products have changed over the years.**	**I can assemble, join and combine material and components with some degree of accuracy.** Evaluate I can continue to explore and evaluate existing products, explaining the purpose of the product and whether it is designed well to meet the intended purpose. I can explore what materials products are made from and suggest reasons for this. I can consider design criteria as I make progress and willingly alter plans, sometimes considering the views of others if this helps to improve my product. I can evaluate my product against an original design criteria. I can evaluate key events, including technological developments, and designs of individuals in design and technology that have helped shape the world.	materials and kits, textiles, and mechanical components. I can more consistently cut a range of materials with precision and accuracy. I can shape and score materials with precision and accuracy. Evaluate I can, with support, complete a detailed competitor analysis of other products on the market. I can begin to critically evaluate the quality of design, manufacture and fitness for purpose of products as they design and make. I can start to evaluate their ideas and products against the original design criteria, making changes as needed.	I can cut a range of materials with precision and accuracy. I can shape and score materials with precision and accuracy. **Evaluate** **I can complete detailed competitor analysis of other products on the market.** **I can critically evaluate the quality of design, manufacture and fitness for purpose of products through designing and making.** **I can evaluate ideas and products against the original design criteria, making changes as needed.**
New Vocabulary		**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	**Axle, Axle holder, chassis, friction, dowel** vehicle, wheel, 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	mechanism, lever, linkage, pivot, slot, bridge, guide system, input, process, output linear, rotary, oscillating, reciprocating user, purpose, function prototype, design criteria, innovative, appealing, design brief	components, fixing, attaching, tubing, syringe, plunger, split pin, paper fastener pneumatic system, input movement, process, output movement, control, compression, pressure, inflate, deflate, pump, seal, air-tight linear, rotary, oscillating, reciprocating user, purpose, function, prototype, design criteria, innovative, appealing, design brief, research, evaluate, ideas, constraints, investigate	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	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

Area of DT: Structures							
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
					design		
Project/Unit Title		I can design play structures - **Playground**	I can evaluate structures - **Chair**	I can make a structure – **Castle**	I can design a framed structured – **Bird hide**	I can evaluate structures which are strong and stable - **Bridges**	I can make play structures – **Playground and landscapes**
Design Brief		Make a range of play structures for Lego characters	Make a chair for baby bear! To evaluate the strength of different structures/ chairs.	Create a castle for…	Design and make prototypes of a range of free-standing shell structures of different shapes and sizes. Then make, in groups a bird hide.	Make a bridge which is strong and capable of supporting weight due to its design.	Make a range of playground structure prototypes and consider the wider landscape that they are used in.
Substantive Knowledge (Technical Knowledge) **How things work**	Explore junk modelling – Learn about the names and use of various craft tools and materials. Cutting and scissor skills. Practise and develop scissor (and fine motor) skills by investigating how easy or difficult it	• 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.	• 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	• To understand why wide and flat based objects are more stable. • To understand the importance of strength and stiffness in structures.	• To understand what a frame structure is. • To know that a 'free-standing' structure is one which can stand on its own. • To understand the importance of triangles when creating strong and stable frames	•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	• To know that structures can be strengthened by manipulating materials and Shapes.

	is to cut and shape different materials. Choosing resources – Practising with various materials and tools in the junk modelling area. Making models – Develop their own unique junk model plan, which including tools, materials and components they will need to make it possible. Evaluation and presentation – Evaluate finished models and present their model to the rest of the class.	• 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.	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.			important based on properties. • To understand the material (functional and aesthetic) properties of wood.	

	Temporary joins – Develop knowledge of joins such as glue, paper clips and sticky tape.						
Disciplinary Knowledge (DT Skills) **Making things work**		Design • Learning the importance of a clear design criteria. • Including individual preferences and requirements in a design. *(Children's ownership of design).* Make • Making stable structures from card, paper, paper straws, tape and glue, wood (lolly sticks). • Following instructions to cut and assemble – cylinders, triangulation	Design • Generating and communicating ideas using sketching and modelling. • Learning about different types of structures, found in the natural world and in everyday objects. Make • Making a structure according to design criteria. • Creating joints and structures from paper/card, straws, recyclable materials and pipe cleaners and tape.	Design • Designing a structure with key features to appeal to a specific person/purpose. • Drawing and labelling a castle design using 2D shapes, labelling: - the 3D shapes that will create the features - materials needed and colours. Make • Constructing a range of 3D geometric shapes using nets. • Creating special features for individual designs.	Design • Designing a stable structure that is aesthetically pleasing (camouflage) and selecting materials to create a desired effect. • Building frame structures designed to support weight of camouflage material. • *Using CAD software. – available software??* *To design different protypes.*	Design • Designing a stable structure that is able to support weight. • Creating a frame structure with a focus on triangulation. Make • Making a range of different shaped beam bridges. • Using triangles to create truss bridges that span a given distance and support a load. • Building a wooden bridge structure. • Independently measuring and marking wood accurately.	Design • Designing a variety of different structures, giving careful consideration to how the structures will be used, considering effective and ineffective designs. Make • Building a range of play apparatus structures drawing upon new and prior knowledge of structures. • Measuring, marking and cutting wood to

		(paper straws / lolly sticks). Evaluate • Evaluating play structures according to the design criteria, testing whether the structure is strong and stable and altering it if it isn't. • Suggest points for improvements.	• Building a strong and stiff structure by folding paper, using materials available. **Evaluate** **• Exploring the features of structures.** **• Comparing the stability of different shapes.** **• Testing the strength of own structures.** **• Identifying the weakest part of a structure.** **• Evaluating the strength, stiffness and stability of own structure.** **To focus on the iterative process of design (small**	• Making facades from a range of recycled materials. Evaluate • Evaluating own work and the work of others based on the aesthetic of the finished product and in comparison, to the original design. • Suggesting points for modification of the individual designs.	Make • Creating a range of different shaped frame structures- prototypes. • Making a variety of free standing frame structures of different shapes and sizes - prototype. • Selecting appropriate materials to build a strong structure and cladding. • Reinforcing corners to strengthen a structure using triangles. • Creating a design in accordance with a plan. • Learning to create different textural effects with materials. Evaluate	• Selecting appropriate tools and equipment for particular tasks. • Using the correct techniques to saws safely. • Identifying where a structure needs reinforcement and using card corners for support. • Explaining why selecting appropriating materials is an important part of the design process. • Understanding basic wood functional properties. Evaluate • Adapting and improving own bridge structure by identifying points of weakness and reinforcing them as necessary.	create a range of structures. • Using a range of materials to reinforce and add decoration to structures. Evaluate • Improving a design plan based on peer evaluation. • Testing and adapting a design to improve it as it is developed. • Identifying what makes a successful structure.

			steps of make-evaluate feedback)		• Evaluating structures made by the class. • Describing what characteristics of a design and construction made it the most effective. • Considering effective and ineffective designs.	• Suggesting points for improvements for own bridges and those designed by others.	
New Vocabulary Additional knowledge		• To know that a **client** is the person I am designing for. • **Design brief** • To know that **design criteria** (specific points) is a list of points to ensure the product meets the clients needs and wants.	• To know that natural structures are those found in nature. • To know that man-made structures are those made by people.	• 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	• 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 the difference between arch, beam, truss and suspension bridges. • To understand how to carry and use a saw safely. <u>Vocabulary</u> beam bridge arch bridge truss bridge strength technique corrugation lamination stiffness rigid factors	• 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. <u>Vocabulary</u> apparatus

				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.	• 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. <u>Vocabulary</u> Cladding, innovative, reinforce, structure	stability visual appeal aesthetics joints mark out hardwood softwood wood file/rasp sandpaper/glasspaper bench hook/vice tenon saw/coping saw assemble material properties reinforce wood sourcing evaluate quality of finish accuracy	design criteria equipment playground landscape features cladding

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Project Unit / Title	**Teddy Bears Picnic blanket – make a square for a collaborative blanket.**	EVALUATE focus **Fabric Faces**	MAKE focus **Hand Puppets - Felt**	DESIGN focus **Pencil case**	EVALUATE focus **Bag**	MAKE focus **Stuffed Toy**	DESIGN focus **Cushion – dye fabric, sew and embellish**
Substantive Knowledge (Technical Knowledge)	I know how to use scissors safely. I can talk about different fabrics and describe them. I understand what tape, glue and staples are used for,	I can cut simple shapes using scissors. I can name different fabrics. I know what a template is and how it is used. I know different ways of attaching and joining.	I know how to use scissors accurately and safely. I know how to use needles safely. I can describe how a puppet is made. I know what running stitch is and why it is used	I know how to use scissors and needles safely and accurately. I understand the use of over stitch for a product and why it is used.	I know what fabrics are suitable for a bag and explain why. I understand the use of blanket stitch for a product and why it is used.	I know how soft toys are made. I understand what a pattern is and how it is used. I understand why and how we tack pieces of fabric together.	I know how to tie dye fabric. I understand the use of back stitch for a product and when it needs to be used. I understand why we need to leave a seam allowance.
Disciplinary Knowledge (DT Skills)	I can represent own ideas, thoughts and feelings through design and technology I can begin to use scissors, glue, tape and staples to join and cut fabric. I can decorate fabrics with buttons, beads, sequins, ribbons Use appropriate decoration techniques.	**Design** I understand what the research product is and its user. I understand how a product works and how it is used. I can explain the product I will be designing and making, I can represent my ideas through drawing and talking. **Make** I can use scissors with increasing	**Design** I can Identify where you might find this research product I can Identify the materials used to make the product. I can explain why this product is suitable for the intended user I can represent ideas through talking, drawing and computing – (where appropriate) I can choose materials to use	**Design** I can identify who made the research product, when it was made and what its purpose is I can evaluate the research product on design and use. I can describe what my product will be used for and how it will work. I can Identify design features that will appeal to its intended users **Make**	**Design** I can explain how parts of the research products work. I can develop my own design criteria and use for planning ideas Generate realistic ideas that meet needs of user and consider availability of resources I can order the main stages of making I can Represent ideas in diagrams, annotated sketches and computer-based	**Design** I can Identify what the research product has been made from and how environmentally friendly the materials are I can evaluate the research product on design, appearance and use. I can develop my own design criteria and use for planning ideas I can generate innovative ideas that meet needs of user and consider	**Design** I can evaluate the research product on design, appearance and use. I can identify the cost to make the product and whether it has any other purposes I can create a design description for my product I can highlight the impact of time, resources and cost within my design ideas. **Make**

		accuracy to cut a range of fabrics. With support, I can draw around a template, I can assemble, join and combine fabrics and components together using glue, staples and stich. I can select appropriate items to decorate fabrics. Eg buttons, beads, sequins, ribbons **Evaluate** I can talk about my design ideas and what I have made I can make simple judgements about how the product I have made met my design ideas I can begin to explore and evaluate existing products mainly through discussions, comparisons, and simple written evaluations.	based on suitability of their properties **Make** I can use scissors accurately and safely. I can use needles safely and with support. I can adapt a template and cut with some accuracy. I can assemble and join fabrics to make a product. I can cut, shape and join fabric to make a simple puppet. I can use basic running stitch. **Evaluate** I can identify strengths and possible changes I might make to refine my existing design I can evaluate my products and ideas against simple design criteria. I can start to understand that the iterative process sometimes involves	I can use scissors, pins, needles safely and accurately. I can measure, mark out, and cut fabric for case and front. I can choose and use appropriate stitch for joining pieces together – running stich and over sewing I can sew on buttons for fastenings. Use appropriate decoration techniques – applique / sewn on. **Evaluate** I consider my design criteria as I make my product and I am willing to alter my plans, sometimes considering the views of others if this helps me to improve their product. With support, I evaluate my product against my original design criteria. I can evaluate how and why products have changed over the years.	programmes (where appropriate) I can create pattern pieces and prototypes. **Make** I can select and use appropriate materials and tools. I can measure, mark out, cut and shape a range of fabrics with increasing accuracy. I can join and combine fabrics and components with increasing accuracy. I can join fabrics using running stitch, blanket stitch and over sewing. Use appropriate decoration techniques. I can colour fabric using fabric paint **Evaluate** I can evaluate my product against my original design criteria. I can evaluate key events, including technological developments, and	availability of resources. I can record a step-by-step plan for making I can produce lists for the tools, equipment and materials I will be using **Make** I can measure and mark out accurately. I can begin to use patterns to create 3d products. I can cut and join with accuracy to ensure a good-quality finish to the product I can pin and tack fabric pieces together. Join fabrics using running stitch, blanket stitch, over sewing with increasing accuracy. I can use appropriate decoration techniques (often before joining components) **Evaluate**	I can measure and mark out accurately, making modifications as they go along I can pin, sew and stitch fabrics together to create a product. I can create 3d products using pattern pieces and seam allowance. I can pin and tack fabric pieces together. I can join fabrics using running stitch, blanket stitch, over sewing and back stitch. I can use appropriate decoration techniques (often before joining components) I can colour fabrics using tie dye techniques, **Evaluate** I can use design criteria to evaluate product – looking at the quality of my final product and whether

			repeating different stages of the process.		designs of individuals in design and technology that have helped shape the world.	I use design criteria to evaluate my product, identifying both strengths and areas for development. I consider the views of others, including the intended user, whilst evaluating my product.	it is fit for its intended purpose.
New Vocabulary	Fabric, join, cut, decorate, texture, Scissors Make Ideas	Template Assemble stitch evaluate, user, purpose, design criteria, product, function	Running stitch Needle Adapt names of tools, equipment and materials functional	Over stitch Applique Measure Pin prototype, design criteria, innovative, appealing, design brief	Blanket stitch Fabric paint research, evaluate, ideas, constraints, investigate	Pattern Tack Stuffing design decisions, functionality, innovation, authentic,	Tie dye Modification Seam allowance

Area of DT: Cooking and Nutrition							
	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Project/Unit Title		To make a healthy breakfast dish.	To make a dish to share at a party.	To adapt a recipe and make bread.	To make a variety of sandwiches and wraps.	To make a salad with a cooked element.	To cook a savoury all-in-one product.
Substantive Knowledge (Technical Knowledge) **Healthy eating**		I know that people need food and drink to stay alive. I know that food and drink help me to grow, be active and stay healthy. I know we need more of some foods than others. I know that everyone should eat at least 5 portions of fruit and vegetables every day. I can talk about foods I like and dislike and explain why. I know that we eat different foods depending on the time of day, occasion and our lifestyle.	I recognise the Eatwell Guide as a model which shows me how to eat healthily. I can sort a selection of foods into the five Eatwell Guide food groups. I can put together a simple, balanced meal (and include a drink) by choosing foods from the Eatwell Guide. I know that different people eat or avoid certain foods for different reasons and I can give some of these reasons, e.g. allergy, intolerance, religious belief.	around the world eat depends on reasons such as availability, preference, resources, time, culture and religion. I know that what is eaten in different countries around the world can look different but it usually includes combinations of foods from the same the Eatwell Guide groups. I know that the word 'diet' means the amount and range of food eaten. I know that a variety and balance of food and drink is needed to make a healthy diet. I know that I need to have 6-8 drinks a day and more if it is hot or I am active.	I understand that the different proportions of the Eatwell Guide reflect the proportions of foods which should be eaten from each group. I can identify and classify ingredients in composite dishes according to the Eatwell Guide food groups. I can use the Eatwell Guide model and messages to help me make healthy choices and plan healthy meals and menus for myself and others. I know that different factors can affect our food choices and I can give some examples of these. E.g. availability, cost, advertising, pressure.	I know that different types of food provide different amounts of energy. I know that different amounts of food (portions) provide different amounts of energy. I know that it is important to be aware of portion size when choosing food and drinks. I know that different amounts of energy are needed by the body for different activities. I know that different people need different amounts of energy. I know that to be healthy, energy balance should be achieved (over a period of time).	-I understand that I need the nutrients - carbohydrate, protein, fat, vitamins and minerals - as well as fibre and water to be healthy. I know that energy is provided by the nutrients carbohydrate, protein and fat. -I know that most foods and drinks contain a main nutrient but they will also contain other nutrients in smaller amounts. I know that some foods provide fibre which is not digested but helps to keep the digestive system healthy. -I know that the body needs water to stay alive and that this can be found in drinks and in foods. -I know that the amount of energy and nutrients provided by food or drink depends on the amount (portion) eaten. -I know the basic function of each nutrient (carbohydrate, protein, fat, vitamins and minerals). -I can identify and interpret the nutrition panel on food packaging and use it to help me make food choices.
Ingredients	I know a range of familiar foods.	I know a basic range of ingredients. Cheese Flour Bread Spread Eggs Milk		I know an increasing range of ingredients. E.g. Onions Peppers Herbs - basil Tomato puree Pulses – kidney beans, chickpeas		I know that there are a vast range of ingredients used around the world and I can name some of these. E.g. Lemon grass Papaya Bean sprouts Plantain	

		Yogurt Fruit - bananas, strawberries, peaches, blueberries Salad - cucumber, sweetcorn, peppers	Apricots Courgettes Baking powder Yeast	Lentils Gram flour Coconut
Sourcing		I know some ingredients that come from shops, markets and can be grown at home. I know how some foods are produced E.g. • Eggs • Milk	I know where to find different ingredients in a shop. E.g. • Cheese, milk, yogurt – in a refrigerator or chilled area • Canned peaches, bread, dried pasta – shelves • Frozen peas or fish – freezers	I know that some ingredients need to be bought from speciality shops/ aisles: E.g. • World foods- plantain, gram flour, galangal
Storing	I can give some examples of foods which should be kept in the fridge, cupboard or freezer.		I know that there are storage instructions on most food packaging, and I can identify and use these.	I know that there are date marks ('use by' and 'best before') on foods and I can identify and use these.
			know that different food should be stored in different places in the fridge to keep it at its best and prevent cross contamination E.g. • Lettuce, cucumber - salad draw to keep it crisp • Raw meat and fish – bottom shelf • Cheese, yogurt, ready cooked food – top shelves to keep them away from the juices of raw foods.	
Preparation	I can give examples of how ingredients need to be prepared before they are eaten. E.g. • Apple - washed • Banana, Satsuma- peeled • Potato – peeled and cooked		I know that ingredients are prepared differently depending on culture, county, custom and religion. E.g. • Sushi - fish prepared and eaten raw • Jewish dietary law – not to prepare or eat dairy products or meat in together • Chinese stir fries - cooked in a hot wok	
Equipment	I know a range of basic cooking equipment. -Mixing bowl -Knife -Spoon -Fork -Cutters -Saucepan	I know a <u>basic range</u> of cooking equipment and explain what it does. E.g. Chopping board Vegetable knife Saucepan Cake tin Muffin tray Measuring cups	I know an <u>increasing range</u> of cooking equipment and explain what it does. E.g. Baking tray Garlic press Whisk Measuring spoons Blender Colander Sieve Grater Weighing scales Peeler	I know an <u>extended range</u> of cooking equipment which I may not have used before and explain its function and how it is designed for its purpose. E.g. Palette knife Fish slice Wok Pastry brush Icing pipe/bag Bread maker I can select the most appropriate equipment for what I am making.
Disciplinary Knowledge (DT Skills) Cooking skills	-Sift (flour into a bowl) -Spoon (into containers) -Crush (soft fruit with a potato masher)	I can name and use a range of basic cooking skills with support. E.g. • Mix (with increasing thoroughness) • Spread (soft ingredients) • Measure (with measuring cups)	I can name and use a range of cooking skills with increasing competence. E.g. • Peel (with a peeler) • Mix (thoroughly) • Spread (evenly over food) • Measure (with measuring jug, scales)	I can name and use a range of cooking skills with confidence and accuracy to prepare increasingly challenging ingredients. E.g. • Peel (to create ribbons, e.g. carrots, courgettes) • Mix (fold ingredients together e.g. flour into a mixture) • Measure accurately (using digital scales, analogue scales, measuring jug)

		• Snip with kitchen scissors • Cut out with cutters (with greater control to minimise waste) • Spoon ingredients • Arrange • Thread (soft foods onto a cocktail stick, e.g. strawberries, satsuma segments) • Cut (soft foods* with a table knife progressing to firmer foods with a vegetable knife) using: -Fork secure -Claw grip -Bridge hold *tinned peaches, strawberries, bananas		• Snip with kitchen scissors (with greater control) • Grate (firmer foods like carrots) • Shape dough • Knead dough • Press (garlic press) • Spoon ingredients (using two spoons) • Arrange (in an attractive way) Thread (medium resistance foods onto a kebab stick, e.g. mushrooms, courgettes) • Crack an egg • Juice (juicer) • Cut (soft foods with table knife progressing to firmer foods** with a vegetable knife) using: • -Fork secure -Claw grip -Bridge hold **tomatoes, celery, apple		• Grate (with greater control and skill, e.g. zest from a lemon, nutmeg) • Thread (firmer foods onto kebab sticks, e.g. onions) • Cut (firm*** and other foods with a vegetable knife) using: -Fork secure -Claw grip -Bridge hold *** potatoes, carrots	
Hygiene and safety	I can get ready to cook with some help. • Tie back long hair • Roll up long sleeves • Remove any jewellery, including watches • Put on an apron • Wash my hands			I can get myself ready to cook and remember what I need to do. • Tie back long hair • Roll up long sleeves • Remove any jewellery, including watches • Put on an apron • Wash my hands		I can get myself ready to cook and talk about and demonstrate what I should do during and after I cook. E.g. • Keep my work space tidy • Avoid touching my face and hair • Wash up the equipment • Clean the surfaces	
New Vocabulary		Cultural beliefs Dietary needs Food allergies Vegetarian	Staple food Vegan Food origins World foods	Cuisine			

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6

Area of learning								
	Project/Unit Title							
	Substantive Knowledge		.					
	Disciplinary Knowledge		.					
	New Vocabulary							