Design Technology
Curriculum Documents

Intent

At Draycott & Rodney Stoke First School, our Design and Technology (D&T) curriculum is all about inspiring curiosity, creativity, and problem-solving in our young learners. Rooted in our inclusive school vision, we aim to provide meaningful and practical experiences that help every child flourish—whatever their background, interests, or abilities. Our D&T curriculum is designed to:

- **Spark Creative Thinking:** Encourage children to explore their ideas imaginatively and come up with innovative solutions to real-life problems.
- **Develop Practical Skills:** Give pupils hands-on opportunities to plan, make, and evaluate their own creations using a wide range of materials and tools in a safe, supported environment.
- **Build Technical Understanding:** Introduce age-appropriate concepts such as mechanisms, structures, and basic food and nutrition, laying the foundation for confident, informed decision-making.
- **Promote Sustainability:** Help children think about how design choices affect the world around them, encouraging thoughtful use of resources and an early awareness of environmental responsibility.
- **Nurture Resilience and Confidence:** Create a classroom culture where pupils feel comfortable trying new things, learning from mistakes, and celebrating their progress—growing in confidence along the way.

Implementation

Our Design and Technology curriculum is brought to life through creative, engaging units that link to children's interests and wider learning across the curriculum. Key features of our approach include:

- **Integrated Learning:** D&T projects are often linked to class topics in subjects like Science, History, Geography, and Art—for example, designing and building a home for a woodland creature in a nature-themed unit.
- **Step-by-Step Skill Progression:** Each year group builds on what's come before, from simple joining techniques and basic food prep in EYFS and KS1 to more structured planning and evaluation in lower KS2.
- **Group Work and Collaboration:** Children are encouraged to work together on shared tasks, learning how to listen to one another's ideas, solve problems as a team, and celebrate shared achievements.
- **Practical, Purposeful Making:** Our pupils get plenty of opportunities to work with real tools and materials—whether constructing moving models, baking healthy snacks, or experimenting with junk modelling.
- **Responsive Assessment:** Teachers assess learning through observation, questioning, and reviewing completed projects. Feedback is positive and focused on helping children improve while celebrating their creativity and effort.

Impact

The impact of our D&T curriculum is reflected in our pupils' enthusiasm, growing independence, and confidence in bringing ideas to life. We see success in the following ways:

- **Engagement and Enjoyment:** Children are eager to take part in D&T lessons, showing pride in their work and excitement when solving design challenges.
- **Growing Skills:** Pupils develop a strong foundation in using tools, understanding materials, and following design processes, which support learning across the curriculum.
- **Creative Problem-Solving:** Even at a young age, pupils learn to adapt their ideas, try out solutions, and think critically about how to improve their work.
- **Awareness of Sustainability:** Children begin to understand the value of recycling, reusing, and thoughtful material choices, often reflected in their project decisions.
- **Readiness for the Future:** By the time they leave us, our pupils are confident, capable, and creative thinkers, ready to continue developing their D&T skills in the next stage of their education.

In summary, Design and Technology at Draycott & Rodney Stoke First School gives children the tools—and the mindset—to explore, create, and thrive. Through thoughtful teaching and joyful, hands-on experiences, we help every child see themselves as a maker, a thinker, and a problem-solver.

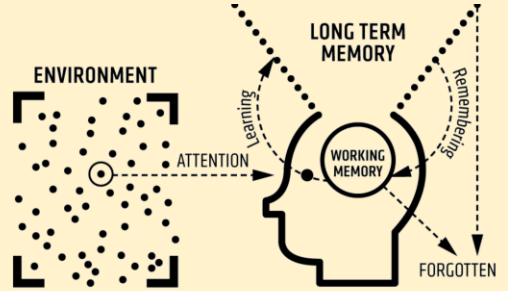
Wessex Learning Trust Principles

Strategic Aims

The Principles codify the shared language that contribute to high-quality, adaptive teaching and inclusion for all.
Used routinely to bring the curriculum to life, the pedagogical principles support learning and progress over time.
The Wessex Principles are not a linear planning tool, an expectation for every lesson or mandate a formulaic approach to lessons

The principles aim to:

- Reduce cognitive load
- Encourage self regulation
- Provide regular opportunities to identify misconceptions or gaps in learning
- Ensure teaching is adapted to need
- Make learning explicit and transferable across the curriculum, beyond school into the wider community and wider world



Ready To Learn Routines → **Linking Prior + New Learning** → **Focused Instruction *'I Do'*** → **Practise Learning *'We Do'*** → **Learning Check *'You Do'*** → **Consolidating Learning**

★ Subject pedagogies are key ingredients to adaptive teaching, alongside effective formative and summative feedback to monitor progress.

★ Disciplinary and substantive learning is integral to any planned sequence of learning.

Ready To Learn Routines		*Ref SLC* - *Emotional learning environment* - *physical learning environment*	Learning environments are safe, inclusive and welcoming. Relationships are positive and love of learning is promoted. Everyone feels safe to take risks and explore learning without judgement. Praise and rewarding effort is used to motivate and engage. A sense of pace and challenge is established from the start of the lesson.
Linking Prior + New Learning		*Ref SLC* - *Pace of talk, clarity of instruction*	Prior learning is checked and revisited to strengthen connections and longer-term memory. Know more, remember more. Planning ensures new learning builds on prior learning. Vocabulary is explicitly taught using the schools agreed pedagogies so that words are understood, contextualized and barriers to learning are reduced. Problem solving and number skills are revisited, retaught and applied in unfamiliar contexts to support deeper learning. Gaps in learning and misconceptions are revisited, including feedback and improvement tasks. Planning is adapted lesson on lesson so that core skills and knowledge are retaught where necessary. Precision learning is explained so that skills and knowledge are well understood, and misconceptions are minimised.
Focused Instruction *'I Do'*		*Ref SLC* - *Explicit teaching of vocabulary* - *Explicit teaching of listening*	The steps to new learning are broken down into manageable amounts and reduce cognitive load. High-quality explanations are used to model thinking, decision making, and application of knowledge. Self-regulation is taught through decision making modelled, visible and explicit. Approaches to getting unstuck are taught and accepted as part of learning. Practical skills and strategies are modelled so that there is a clear understanding of how to solve problems solve and minimize misconceptions. Deeper learning is sequenced so that all learners can understand each developing stage. Learners know what excellent learning looks like and have success criteria to support their independent work.
Practise Learning *'We Do'*		*Ref SLC* - *Explicit teaching paired, small group talk*	Guided practice and worked examples are used to link new learning and decision making with prior learning. Formative assessment, including rich questioning, is used skilfully to check understanding and the impact of planned learning. Peer explanation + modelling scaffolds and prepares for independent practice. Learners use expert thinking and talking to explore deeper learning. Scaffolding and support (including TAs) is in place to develop and build independence.
Learning Check *'You Do'*			Skills and knowledge are explored using a variety of contexts. Independent practice and application of learning (including homework) builds confidence, self esteem and motivation. Metacognition and self-regulation are developed over time. Learning is consolidated. Scaffolding and support is reduced and removed over time. Feedback is used to deepen learning and address misconceptions.
Consolidating Learning			Learner's plan, review and evaluate their progress reflecting on what excellent learning looks like and success criteria. Next steps are identified and used to inform teacher planning and develop mastery approaches over time. Learning skills continue. *Next lessons, rest of day, community, wider world.*

Knowledge in Design Technology

National Curriculum and EYFS Framework

Substantive Knowledge
Learning about…

- Theoretical knowledge of the strands of DT - 'mechanical systems', 'electrical systems', 'structures', 'textiles' and 'cooking and nutrition'

Disciplinary Knowledge
learning how to…

- Practical knowledge of skills and techniques within the DT strands of 'mechanical systems', 'electrical systems', 'structures', 'textiles' and 'cooking and nutrition'
- DT technical vocabulary

Procedural Knowledge
Learning through…

Investigate
Investigate and analyse existing products. Key events and individuals from the world of DT.

Design
Design innovative, functional, appealing products

Make
Construct using tools, equipment, materials and components

Evaluate

Evaluate and improve designs

National Curriculum Programmes of Study and EYFS Framework						
EYFS	**Year 1**	**Year2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Development Matters 4-5 Years: *ELG Expressive arts and design: Creating with materials '…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.' 'Make use of props and materials when role playing characters in narratives and stories.'*	***Design*** *• design purposeful, functional, appealing products for themselves and other users based on design criteria* *• generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology* ***Make*** *• select from and use a range of tools and equipment to perform practical tasks* *• select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics* ***Evaluate*** *• explore and evaluate a range of existing products* *• evaluate their ideas and products against design criteria* ***Technical Knowledge*** *• build structures, exploring how they can be made stronger, stiffer and more stable* *• explore and use mechanisms, in their products* ***Cooking & Nutrition*** *• use the basic principles of a healthy and varied diet to prepare dishes* *• understand where food comes from*		***Design*** *• use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups* *• generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design* ***Make*** *• select from and use a wider range of tools and equipment to perform practical tasks accurately* *• select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities* ***Evaluate*** *• investigate and analyse a range of existing products* *• evaluate their ideas and products against their own design criteria and consider the views of others to improve their work* *• understand how key events and individuals in design and technology have helped shape the world* ***Technological Knowledge*** *• apply their understanding of how to strengthen, stiffen and reinforce more complex structures • understand and use mechanical systems in their products* *• understand and use electrical systems in their products* *• apply their understanding of computing to programme, monitor and control their products.* ***Cooking & Nutrition*** *• understand and apply the principles of a healthy and varied diet* *• cook a repertoire of predominantly savoury dishes so that they are able to feed themselves and others a healthy and varied* *• become competent in a range of cooking techniques [for example, selecting and preparing ingredients; using utensils and electrical equipment; applying heat in different ways; using awareness of taste, texture and smell to decide how to season dishes and combine ingredients; adapting and using their own recipes]* *• understand the source, seasonality and characteristics of a broad range of ingredients*		

Substantive Knowledge
Learning about…(Knowledge)

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Textiles		• A running stitch can be used to join two pieces of fabric together. • A template (or fabric pattern) is used to cut out the same shape multiple time.		• A cross-stitch is stronger than a running stitch because it works in different directions. • Applique is a way of mending or decorating a textile by applying smaller pieces of fabric to larger pieces. • When two edges of fabric have been joined together it is called a seam. It is important to leave space on the fabric for the seam. • Some products are turned inside out after sewing so the stitching is hidden.		• The blanket stitch is useful to reinforce the edges of a fabric material or join two pieces of fabric. • The back stitch is a strong stitch and also be used for decoration. • Small, neat stitches which are pulled taut are important, including when creating seams. • Using a template (or clothing pattern) helps to accurately mark out a design on fabric.	
Cooking and Nutrition	• All food comes from plants or animals. • The names of key, basic foodstuffs; some foods are healthy and some are unhealthy. • Everyone should eat at least five portions of fruit and vegetables every day.	• All food comes from plants or animals, and that food has to be farmed, grown elsewhere (e.g. home) or caught. • The names and groups of some foods, according to the Eatwell Plate. • Everyone should eat at least five portions of fruit and vegetables every day. • There are 'hidden sugars'. • There is nutritional information on a drinks containers.		• Food is grown (such as tomatoes, wheat and potatoes), reared (such as pigs, chickens and cattle) and caught (such as fish) in the UK, Europe and the wider world. • A healthy diet is made up from a variety and balance of different food and drink, as depicted in The Eatwell Plate. • To be active and healthy, food and drink are needed to provide energy for the body		• Different food and drink contain different substances – nutrients, water and fibre – that are needed for health, and make comparisons between different foodstuffs. • About nutritional labelling on food packets and make comparisons. • Recipes can be adapted to change the appearance, taste, texture and aroma.	
Mechanical Systems/Electrical Systems		• A mechanism is the parts of an object that move together. • A slider mechanism moves an object in a straight line. • A rotary mechanism moves an object in a curved way. Wheels need to be round to rotate and move. • For a wheel to move it must be attached to a rotating axle. • An axle moves within an axle holder which is fixed to the vehicle or toy.		• Air can be used to create mechanisms and these are called pneumatic systems. • A pneumatic system can force air across a distance to make a mechanism work. • A cam turns a turning motion into a linear motion. • Different shape cams create different movements. • Inputs are motions that start mechanisms and outputs are the resultant motions.		• Inputs are motions that start mechanisms and outputs are the resultant motions. • Different mechanisms control movement in different ways. • Rotary motion is a circular path in one direction Reciprocating motion is back and forwards in a straight line. • Oscillating motion is in a circular path, first one way then the other. • Electric circuits can be incorporated into products.	
Structures	• Structures need to be strong.	• Structures need to be strong and stable. • Roofs need to be waterproof. Windows need to be transparent. • Structures with a wide base are stable. • Cylinders and corrugated shapes make strong structures. • Hinges allow parts of a structure to open and close.		• Sheets within structures can be strengthened by folding and shaping, corrugating, ribbing and laminating. • Structures with a square or rectangular base are strong and stable. • Structures with diagonal struts are strong and stable. • Pavilions are a type of temporary or permanent enclosure.		• There are beam, arch and truss bridges. • Arches increase the strength of bridges. • Truss bridges use triangles to strengthen beams.	

Disciplinary Knowledge
Learning how to...(Skills)

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Practical skills and techniques	• Use a small range of materials such as textiles and food ingredients.	• Use a small range of materials and components, such as construction kits, textiles, food ingredients and mechanical components.		• Begin to use a wider range of materials and components than KS1, such as construction materials and kits, textiles, wood, food ingredients, mechanical and electric components.		• Use a wide range of materials and components, such as construction materials and kits, textiles, wood, food ingredients, mechanical and electric components.	
Textiles	• With support, decorate fabrics with attached items - e.g. buttons, beads, sequins, braids, ribbons.	• Measure, mark out, cut and shape materials/components, including cutting fabric from a template. Assemble, join and combine materials and component using a range of methods – e.g. masking tape, glue, staples, running stitch. With support, decorate fabrics with attached items - e.g. buttons, beads, sequins, braids, ribbons.		• Measure, mark out, cut, shape and score materials/components with some accuracy. Assemble, join and combine materials and components with some accuracy, using a range of methods - e.g. masking tape, glue, staples, running stitch, cross-stitch, applique. Sew on buttons and make loops.		• Measure, mark out, cut, shape and score materials and components to the nearest 1mm. Accurately assemble, join and combine materials and components, using a range of methods - e.g. masking tape, glue, staples, running stitch, back stitch, blanket stitch, applique glue gun and modelling wire. Decorate textiles appropriately (often before joining components).	
Cooking and Nutrition	• Begin to understand how to prepare simple dishes, without a heat source. Begin to develop food vocabulary using taste, smell, texture and feel. **Mix/Stir** • Loosely combine ingredients. Mash ingredients together using a fork. **Spoon** • Spoon ingredients between containers. **Measure** • Begin to measure and weigh food items, using non-standard measures e.g. spoons, cups. Count ingredients. **Tearing and Snipping** • Tear fresh herbs **Cutting** • Cut soft foods with butter knife, e.g. banana, canned peach slices. **Following** • Follow simple instructions given by an adult.	• With support, know how to prepare simple dishes safely and hygienically, without using a heat source. Taste test food combinations. Develop food vocabulary using taste, smell, texture and feel. **Mix/Stir** • Combine ingredients with increasing thoroughness. • Spoon • Spoon ingredients into different containers with increasing accuracy and minimal spillage. **Measure** • Measure and weigh food items, using non-standard measures e.g. spoons, cups, and standard measures, in accordance with the KS1 NC for Maths. • **Grating** • Grate soft foods - e.g. cheese, cucumber **Tearing and Snipping** • Snip fresh herbs or spring onion. **Threading** • Thread soft foods onto kebab sticks or cocktail sticks - e.g. soft fruits **Cutting** • Cut low resistance foods with a table knife into equal size pieces/slices - e.g. canned pineapple slices, sticks of pepper, mushrooms. Use a fork to secure foods. **Following** • Follow a simple recipe supported by an adult.		• Begin to know how to prepare and cook safely and hygienically including, where appropriate, the use of a heat source. Develop sensory vocabulary/knowledge using, smell, taste, texture and feel. **Mix/Stir** • Combine any ingredients thoroughly. Whisk foods using a hand whisk. **Spoon** • Use two spoons to transfer ingredients into different size/shape containers with minimal spillage - e.g. liquid foods into baking cases. **Measure** • Weigh and measure using scales and standard measures, in accordance with the Year 3/4 NC for Maths – e.g. measuring jugs and digital scales. **Grating** • Grate firmer foods - e.g. carrots, apples. **Tearing and Snipping** • Tear and shred with greater dexterity – e.g. shredding lettuce. **Threading** • Thread medium-resistance foods onto kebab sticks -e.g. courgettes. **Cutting** • Cut medium resistance foods with a vegetable knife - e.g. cucumber. Use a fork or the claw grip to secure foods. Cut medium resistance or partly prepared foods using a bridge hold - e.g. cut half a tomato into a quarter, halve canned potatoes, halve large grapes. **Following** • Follow a simple recipe with guidance from an adult and adapt it as needed		• Know how to prepare and cook and hygienically including, where appropriate, the use of a heat source. Develop sensory vocabulary/knowledge using, smell, taste, texture and feel **Mix/Stir** • Fold ingredients together carefully. Whisk foods using a hand whisk. **Spoon** • Gauge the quantities spooned to ensure an equal amount of ingredient in each container. **Measure** • Weigh and measure using scales with increasing accuracy, in accordance with the Year 5/6 NC for Maths – e.g. – e.g. measuring jugs and digital/analogue scales. **Grating** • Grate independently, and use the other parts of a grater (e.g. zesting) as needed. **Tearing and Snipping** • Tear and shred with greater dexterity – e.g. shredding lettuce. **Threading** • Thread high-resistance foods onto kebab sticks – e.g. onions, peppers. **Cutting** • Cut higher resistance foods with a vegetable knife, using the claw grip - e.g. celery, carrots. Cut higher resistant foods from whole using the bridge hold - e.g. halve an apple, raw potato. **Following** • Follow and modify a simple recipe independently	
Mechanical Systems/Electrical Systems	• Cut and shape materials With support, assemble, join and combine materials using a range of methods – e.g. masking tape, glue, staples	• Assemble, join and combine materials to make simple mechanisms using masking tape, glue and split pins. Assemble, join and combine materials/ to make simple wheels and axles and pulleys.		• Assemble, join and combine materials and components to make simple pneumatic systems. Assemble, join and combine materials and components to make simple cam mechanisms.		• Assemble, join and combine materials and components to make a range of different mechanisms. Use layers and spacers to hide mechanisms. Incorporate a circuit into a product base.	
Structures	• Explore how to make structures stronger.	• Assemble, join and combine materials to make strong and stable structures. Assemble, join and combine materials to make simple hinges .		• Assemble, join & combine paper to strengthen structures – e.g. folding and shaping, corrugating, ribbing, laminating. Join structural beams to create strong and stable structures. Add diagonal struts to increase stability. Create a free-standing structure. Create different textured cladding effects.		• Assemble, join & combine paper to strengthen bridges – e.g. folding and shaping, corrugating, ribbing, laminating, arching. Strengthen bridges with triangular trusses. Measure, mark out and cut wood safely using a tenon saw.	

Procedural Knowledge
Learning through...(Understanding/Application)

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Understanding contexts and users and purposes	• Work within a small range of familiar contexts, such as imaginary, story-based, home, school, gardens, playgrounds and the local community. Begin to state what products they're designing & making, who they are for, how they work,.	• Work within a small range of familiar contexts, such as imaginary, story-based, home, school, gardens, playgrounds and the local community. State what products they are designing and making, who they are for, how they work, and how they will make them suitable. Develop design criteria with support.		• Work within a range of contexts, such as the home, school, leisure, culture, enterprise, industry and the wider environment. Begin to describe the purpose of their products and their design features, explaining how particular parts of their products work. Begin to gather information about the needs/ wants of individuals and groups, and develop their own design criteria.		• Work confidently and independently within a broad range of contexts, such as the home, school, leisure, culture, enterprise, industry and the wider environment. Describe the purpose of their products and their design features, explaining in detail how particular parts of their products work. Gather information about the needs and wants of particular individuals and groups, develop their own design criteria and use these to inform their ideas.	
Investigating	• Explore: •what products are •who/what products are for •how products work •where products are used •what materials are used •what they like and dislike about products	• Explore: •what products are •who products are for •what products are for •how products work •where products are used •what materials products are made from •what they like and dislike about products		• Begin to investigate and analyse: •how well products have been designed and made •why materials have been chosen •how well products work and achieve their purposes •how well products meet user needs and wants •who designed and made the products •whether products can be recycled or reused •inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products		• Investigate and analyse: •how well products have been designed and made •why materials have been chosen •how well products work and achieve their purposes •how well products meet user needs and wants •who designed and made the products •how much products cost to make •how innovative products are •how sustainable the materials in products are •what impact products have beyond intended purpose •inventors, designers, engineers, chefs and manufacturers who have developed ground-breaking products	
Designing: Generating, developing, modelling and communicating ideas	• Explore simple ideas. Develop and communicate ideas by talking and drawing. Begin to model ideas by exploring materials.	• Generate ideas by drawing on their own experiences and knowledge of existing products. Develop and communicate ideas by talking and drawing, including labelling parts. Model ideas by exploring materials, components & construction kits. With support, use ICT to develop and communicate ideas.		• Generate realistic ideas, focusing on the needs of the user. Begin to share and clarify ideas through discussion, and use annotated sketches and labelled drawings from different viewpoints to develop and communicate their ideas. Begin to model their ideas using prototypes. Use information and communication technology, where appropriate, to develop and communicate their ideas.		• Generate realistic ideas, focusing on the needs of the user and drawing on research. Share and clarify ideas through discussion. Use annotated sketches, cross- sectional and perspective drawings and exploded diagrams to develop and communicate their ideas. Model their ideas using prototypes. Use CAD to develop and communicate their ideas.	
Designing: Planning	• Select from a range of tools, equipment and materials.	• Select from a range of tools and equipment. Select from a range of materials and components according to their characteristics.		• Select tools and equipment suitable for the task. Select materials and components suitable for the task. Plan and order the stages of making.		• Select tools and equipment suitable for the task, explaining their choice in relation to the skills/techniques used. Select suitable materials/components. explaining choices according to functional and aesthetic qualities. Produce appropriate lists of tools, equipment and materials that they need and formulate step-by-step plans.	
Making	• Make a simple product with support.	• Follow procedures for safety and hygiene. Follow a simple plan to make a product, following design criteria with support.		• Follow procedures for safety and hygiene. Follow design criteria to create a product.		• Follow procedures for safety and hygiene. Follow design criteria to create a product.	
Evaluating: Own products		• Evaluate a finished product against design criteria, explaining likes and dislikes.		• Evaluate an end product against own design criteria, consider the views of others, and think of ways to improve the design. Evaluate their ideas and products against their original design specification, and begin to think about the needs of the user.		• Reflect on their work continually throughout the design, make and evaluate. Evaluate their ideas and products against their original design specification, thinking about the needs of the user.	
Tier 2 Vocabulary		• Design, Make, measure, weigh, test, plan, join, cut, shape,			• Evaluate, sequence, justify, explain, accuracy		
Tier 3 Vocabulary		• Sew, scissors, cardboard, materials, paper, fabric, wood, metal, plastic, ingredients, hygiene, safety, peel, grate, structure, design criteria, product, decoration			• Fit for purpose, target market, customer stitch, saw, sand, template, pattern, electronics, mechanisms, circuits, stiff, mouldable, joints, utensils, cook, bake, recipe, names of wood, fabric, ingredients, metal, plastic etc.		

Long Term Plan							
	EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Theme 1 ***Ourselves and Humankind***	**Making Models** To know that materials can be joined and spaces can be enclosed.	**Shade and Shelter** This project teaches children about the purpose of shelters and their materials. They name and describe shelters and design and make shelter prototypes. Children then design and build a play den as a group and evaluate their completed product.		**Cook Well, Eatwell** This project teaches children about food groups and the Eatwell guide. They learn about methods of cooking and explore these by cooking potatoes and ratatouille. The children choose and make a taco filling according to specific design criteria.			
Theme 2 ***Culture and Diversity***	**Cooking at Christmas** To explain what happens when you combine different ingredients and then cool/heat them.						
Theme 3 ***Community and Citizenship***	**Project Props!** To know that a plan can be created and this plan can be used to make a prop.	**Taxi!** This project teaches children about wheels, axles and chassis and how they work together to make a vehicle move.		**Making it Move** This project teaches children about cam mechanisms. They experiment with different shaped cams before designing, making and evaluating a child's automaton toy.			
Theme 4 ***Exploration and Discovery***	**Making Movement** Joining materials together using different techniques to create movement.						

Long Term Plan							
	EYFS	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**	**Year 6**
Theme 5 ***Expression and Creativity***	**Structures and Shelters** Using natural materials to make structures, for example a den.	**Chop, Slice, Mash** This project teaches children about sources of food and the preparatory skills of peeling, tearing, slicing, chopping, mashing and grating. They use this knowledge and techniques to design and make a supermarket sandwich according to specific design criteria.		**Greenhouse** This project teaches children about the purpose, structure and design features of greenhouses, and compares the work of two significant greenhouse designers. They learn techniques to strengthen structures and use tools safely. They use their learning to design and construct a mini greenhouse.			
Theme 6 ***Ourselves and Humankind***	**Depth and Dimension** To know that media and materials can be combined and changed to create a 3D object. For example, a paper mâché globe.						