Design Technology Vision

OUR VISION
From tiny seeds, we grow and learn together. Our school vision is inspired by the parable of the mustard seed. When planted and nurtured by a loving community, every seed can grow and flourish. Our school is like the mustard tree; a place where all are valued and belong. Our children are like tiny seeds; in good soil they can grow as individuals, ready to branch out and be good news in an ever- changing world. Our loving community of gardeners enable each unique child to flourish, removing barriers, and supporting growth. **Little people can do big things through love, courage and joy.**

OUR VALUES		
LOVE	**COURAGE**	**JOY**

OUR BEHAVIOUR PRINCIPLES		
KIND WORDS	**KIND HANDS**	**KIND FEET**

CURRICULUM INTENT

We define ‘curriculum’ as everything our children experience as they journey through our school, so that they become children who:

Learn and play with joy	Approach life and learning with courage, resilience and independence	Are kind and loving	Are numerate and literate	Can express their thoughts and ideas

Design Technology Vision

Have high self-esteem and are proud of their own strengths and successes	Has a strong sense of belonging	Can collaborate with others	Are good news for their school and wider community	Recognise how they have grown as a unique individual

DESIGN TECHNOLOGY INTENT It is our intention that all children will experience a high-quality science curriculum which inspires a growing knowledge, curiosity and fascination, so that they become children who:		
Generate and communicate their ideas throughout the process.	Acquire technical knowledge, understanding and skills. Through their understanding of different designs and mechanisms.	Are competent in using and interpreting a range of design technology resources, including simple cooking equipment and tools for creating their designs.
Use and apply their design technology skills to design and create.	Develop their knowledge of a range of tools and techniques.	Have an understanding of the basic principles of a healthy, varied diet and where food comes from.

DESIGN TECHNOLOGY CURRICULUM IMPLEMENTATION We design our curriculum so that it reflects our core values, individual school context and the needs of our children, as well as delivering the statutory requirements of the Early Years Foundation Stage Framework (EYFS) and the National Curriculum. We have made deliberate curriculum choices driven by our curriculum intent.						
Learning will be planned and delivered through:	Quality First Teaching (QFT) with appropriate challenge and support	Active and hands-on learning through concrete, pictorial & abstract experiences, inside and outside	Consistent pedagogical approaches based upon Rosenshine's principles of effective instruction (Crookham Toolkit)	Rich oracy opportunities for formal and informal talk	Engaging hooks, carefully planned learning journeys, enrichment and	Ordinarily Available Provision (OAP) which meets individual needs

Design Technology Vision

					purposeful outcomes	
Learning Animals (BLP 4 Rs)	**Reflective Owl** Reflectiveness		**Resourceful Squirrel** Resourcefulness		**Tough Tortoise** Resilience	**Team Ant** Reciprocity
Learning will be organised through	**Early Years Foundation Stage (EYFS)**					
	Expressive Art and Design					
	National Curriculum (KS1)					
	Design Technology Subject Content					
	Cooking and Nutrition	Mechanisms	Structures	Joining, such as sewing		
	Design Technology Disciplinary Knowledge The disciplinary knowledge and skills needed to work as a Designer:					
	Technical Knowledge	Design	Make	Evaluate		
	Understanding how to make structures stronger, stiffer, and more stable. Explore and use mechanisms.	Generating initial ideas and communicating ideas through drawings or models. Design purposeful, functioning products that are appealing to themselves and others, based on design criteria.	Selecting and using tools safely (e.g., cutting, joining). Selecting and using a range of materials to create products, such as moving mechanisms (wheels/axles, sliders) or food products.	Exploring existing products and evaluating their own ideas and final products against design criteria, including identifying improvements.		
	Design Technology Subject Threads These are key threads that run through our DT curriculum, they are:					

Design Technology Vision

	Technical Knowledge	Design	Mechanisms: Sliders and levers/ wheels and axels	Structures: strength and stability	Joining, including sewing	Cooking and Nutrition
Our School specific components	**Crookham Toolkit** ('How we teach here')		**School Library Service**		**Oracy** Approaches	
			Visitors, Trips and Curriculum			

CURRICULUM IMPACT

MEASURING IMPACT

We draw together evidence from a variety of sources in order to evaluate how well children have learned, remembered and applied the intended knowledge, skills and attributes. These include:

Reception Baseline Assessment and EYFS outcomes		Summative Assessment			External validation and inspection reports
Observations of children in various aspect of school life	Governing monitoring evidence	Stakeholder Questionnaires	Learning Walks & Lesson Observations	Book Looks	Pupil conferencing

Design Technology Vision

Long Term Planning LTP *See Medium Term Planning MTP for more detail.*						
	Autumn		**Spring**		**Summer**	
Year R	Why are we amazing?	How far can we travel?	Where in the world?	Once upon a time…	How does it grow?	How many legs?
Year 1		Celebrations *Winter Fruit Slushy - cooking*		Raws, paws and claws Easter Card – Sliders and levers		I do like to be beside the sea… *Seasonal Changes* *Kites*
Year 2		Fire and flame *Stockings – Joining materials*			Space adventures Mars Rovers - axels	Space adventures *Cooking*

Progression in Design Technology at Crookham Infant School					
Working as a Designer	**Technical Knowledge**	**Design**	**Make**	**Evaluate**	**Cooking and Nutrition**
Year R	Talk about what different structures look like this may include, rockets, boats, building.	Using what they know about their product, the children discuss what their finished design idea will look like.	Exploring ways to join materials together and practicing how to use different tools, such as scissors. ELG: Safely use and explore a variety of materials, tools and techniques,	Evaluating through verbal discussions about their designs and materials they have used. ELG: Share their creations, explaining the process they have used.	ELG: Manage their own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices.

Design Technology Vision

			experimenting with colour, design, texture, form and function. ELG: Make use of props and materials when role playing character		
Year 1	Understand the mechanical workings of sliders and leavers.	Starting to design functional products including the use of Sliders and leavers, and different joining techniques. Developing their ideas during their projects through exploring and testing their designs.	Explain and give reasoning for my choice of resources, design and materials. Select from a range of tools suitable for an activity, using their experience, including scissors, string and split pins. Develop their cutting, shaping, joining and finishing skills to complete their projects.	Explore and use basic mechanisms used in existing products, including using slider and leaver mechanisms. Asking simple questions about existing products and those that they have made. Evaluating the positives and area for improvement for their own products.	Identify and name a variety of common wild and garden plants, including deciduous and evergreen trees. Identify and describe the basic structure of a variety of common flowering plants, including trees.
Year 2	Explore actual mechanisms and use them in their products.	Create designs through drawings and practical resources. Design purposeful, functional, appealing products based upon a design criterion. Generate, develop, model and communicate their ideas through discussion, drawing, templates, mock-ups and, where appropriate, using technology.	Select appropriate tools to create a final product. Explore how structures can be made stronger and more stable, considering previous learning. Using knowledge and understanding of materials to select materials with consideration for their use.	Exploring and evaluating existing products and those that they have made using a design criterion. Making considered evaluations including techniques and materials used.	Designing and preparation of a healthy snack drawing on your science knowledge. Understand the need for a variety of food in a diet. Understand that all food has to be farmed, grown or caught. Use a wider range of cookery techniques to prepare food safely.

Design Technology Vision

Prior Knowledge and What happens next					
	Technical Knowledge	**Design**	**Make**	**Evaluate**	**Cooking and Nutrition**
What happens before:					
Nursery (pre-learning)	Explore different materials freely, to develop their ideas about how to use them and what to make.	Develop their own ideas and then decide which materials to use to express them.	Join different materials and explore different textures.	Evaluate through exploring their own ideas and developing them during making.	Experience cooking
What happens after:					
Year 3 (Next steps)	Apply their understanding of how to strengthen, stiffen and reinforce more complex structures Understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages] Understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors] Apply their understanding of computing to program, monitor and control their products.	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.	Select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately. Select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.	Investigate and analyse a range of existing products Evaluate 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.	Understand and apply the principles of a healthy and varied diet Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed.

Design Technology Vision