![Two Rivers CofE Primary School logo]

Design Technology curriculum and skills Progression

Intent:
Our DT Curriculum aims to equip students with the knowledge, skills and attitudes they need to become successful, innovative young designers and makers.
By building on prior experience, students progressively develop technical skills and practical expertise. They are encouraged to think creatively, imaginatively and be ambitious in their design ideas. They are given opportunities to solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values. They learn to recognise the importance of design and technology in the real world and its relevance in everyday life. They are given opportunities to learn about and be inspired by designs and designers past and present who have impacted on life across the world.
Through the design, make, evaluate process, students are guided to develop skills of team work, communication, resilience and reflectiveness through problem solving. They learn to use knowledge and understanding from other curriculum areas including mathematical, scientific, computing and art skills, applying them in relevant and practical contexts. In this way, we aspire for our students to become articulate, dynamic thinkers able to approaching new challenges with confidence and enthusiasm.

Disciplinary knowledge

		EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Designing	**Technical knowledge**	Children use what they have learnt about media and materials in original ways, thinking about uses and purposes.	Pupils can be given an idea and know what to do. Describe my design using pictures. Follow a design criteria.	Children can think of their own ideas and explain what they want to do. Describe their design using pictures, model mock-ups and words. Make their own simple design criteria, using a simple design brief.				
	Understanding contexts, users and purposes		Work confidently within a range of contexts, such as imaginary, story-based, home, school and gardens. Describe what their products are for. Be able to say how their products will work.	Be able to say whether their products are for themselves or other users. Be able to say how they will make their products suitable for their intended users.				

	Generating, developing, modelling and communicating ideas			Develop and communicate ideas verbally and start to use drawings.	Develop and communicate ideas verbally and through labelled drawings.			
Making	**Technical knowledge**	They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.		Select appropriate tools and materials to use. Use tools safely with support.	Select appropriate tools and materials to use and why. Use tools safely.			
	Planning			Plan by suggesting what to do next.	Plan by recording their suggestions on what to do next and how to progress as their ideas develop.			
	Practical Skills and techniques			Follow procedures for safety and hygiene. Make an object with simple moving parts.	Choose materials and techniques to suit purpose and be able to explain reasons for their choices.			
				Choose appropriately from simple finishing techniques, including those from art and design in order to enhance their products.				
Analysing and Evaluating	**Technical knowledge**	They select and use technology for particular purposes.		Talk about their own work identifying likes and dislikes of the design. Identify ways to improve my design.	Talk about their own work identifying likes and dislikes of the design. Identify ways to improve their design by reflecting on the design brief.			
	Own ideas and products			Be able to talk about their ideas, saying what they like and dislike.	Identify what they could have done differently to improve their work in the future.			
	Existing products			Pupils use their investigative skills to describe and analyse	Pupils use their investigative skills to describe and analyse			

	existing products explaining what they like and dislike.	existing products relating their findings to their own ideas for products.		

Design Technology curriculum and skills Progression-Substantive knowledge

		EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Designing	**Technical knowledge**	Explore the sensory qualities of materials. Begin to use the language of designing and making, e.g. join, build and shape.	Learn about what healthy foods are and where some come from. Think of interesting ways to decorate food that I have made.	Learn about what healthy foods are and where they come from. Think of interesting ways to decorate food that I have made thinking of what would be best for the person eating it.				
	Understanding contexts, users and purposes		State what products they are designing and making. Talk about ideas by handling materials and components – handling and investigating. Learn to use and respond to simple design criteria to help develop their ideas.	Begin to understand the needs of users other than themselves. Generate and talk about ideas by handling materials and components – handling, investigating and disassembling.				
	Generating, developing, modelling and communicating ideas		Generate ideas by drawing on their own experiences Use knowledge of existing products to help come up with ideas	Model ideas by exploring materials, components and construction kits and by making templates and mock-ups. Use information and communication technology, where appropriate, to develop and communicate their ideas.				
Making	**Technical knowledge**	To learn to construct with a purpose in mind.	Demonstrate a range of cutting and shaping techniques;	Use and explore different levers and slides in my work.				

		To learn how to use a range of tools, e.g. scissors, hole punch, stapler, woodworking tools, rolling pins, pastry cutters. Children have basic hygiene awareness.	tearing/cutting/folding and curling.					
			Understand the importance of food safety and hygiene; washing hands.					
	Planning		Learn simple characteristics and properties of materials and begin to use this in order to make informed choices.	Learn simple characteristics and properties of materials they will use in order to make informed choices.				
	Practical Skills and techniques		Learn how to keep themselves and other safe when using tools and materials such as holding scissors away from self and clothes, etc. Use a range of materials and components, including construction materials and kits and mechanical components. Learn simple finishing techniques, including those from art and design.	Measure, mark out, cut and shape soft materials. Shape paper and card by cutting with scissors. Assemble, join and combine materials and components with adhesives and tapes. Saw wood with a gents saw/backsaw. Use wood glue. Use a and drill or hole punch.				
	Mechanisms and control		Use wheels and axles (pushed through) Identify how toys can be made to move (push, pull)	Make moving joints using paper fasteners, wood, etc Use programmable toys (e.g. Roamer) Create pop-ups and sliders.				
	Structures		Make joints which allow movement, e.g. axles Use construction kits	Build structures, exploring how they can be made stronger, stiffer and more stable. Make box models, card and wood constructions				
Analysin g	**Technical knowledge**	Learning about planning and adapting initial	Make more than one prototype and learn which works best.	Think of interesting ways to decorate food that I have made thinking of what				

		ideas to make them better.		would be best for the person eating it.				
	Own ideas and products	Begin to talk about changes made during the making process, e.g. making a decision to use a different joining method. Children recognise that a range of technology is used in places such as homes and schools.	Use of design criteria to guide production process	Develop a technical vocabulary related to the products they are making.				
	Existing products		Pupils should learn to explore and ask questions of products such as: What products are. Who products are for. What products are for. How products work. How products are used. Where products might be used. What materials products are made from. What they like and dislike about products.					