Design and Technology

Our TRUST Curriculum Principles

A Kaleidoscope Schools curriculum has been designed to enable children to develop wide knowledge/ skills and become well rounded and confident individuals who are curious and want to learn. Schools design and develop their own curriculums but encapsulate the following which are linked to the Kaleidoscope 5C's.

Intent

Becket and Hutton's curriculum for Design and Technology aims to inspire and equip pupils with the skills, knowledge, and creativity to engage with the designed and made world. Our curriculum is designed to:

1. **Develop Creative Thinking**: Encourage pupils to think creatively and critically, enabling them to design and make products that solve real-world problems and perform everyday tasks.
2. **Enhance Practical Skills**: Provide hands-on experiences that help pupils develop practical skills in designing, making, and evaluating products.
3. **Promote Technological Understanding**: Foster an understanding of how technology works and its impact on society, preparing pupils for a future in an increasingly technological world.
4. **Encourage Collaboration**: Promote teamwork and collaboration, allowing pupils to work together to design and create innovative solutions.
5. **Ensure Safe Practices**: Teach pupils to use tools and materials safely and responsibly, understanding the importance of safety in the design and technology process.

By the end of each key stage, pupils will be confident, competent, and creative designers and makers, ready to tackle the challenges of the designed and made world, including the principles of nutrition.

Implementation

The implementation of the primary Design and Technology curriculum involves a structured approach to ensure that pupils gain practical experience and theoretical knowledge. Teachers will deliver lessons that integrate hands-on activities with critical thinking exercises, allowing students to design, create, and evaluate their projects. The curriculum emphasizes the use of safe practices and encourages collaboration among pupils to foster teamwork and communication skills. By incorporating real-world problems and technological understanding, the curriculum aims to prepare students for future challenges in an increasingly technological society

Impact

Assessment sheets

Design and Technology National Curriculum Milestones (Trust Milestones)

Key Theme	Reception	KS1 (Y1–Y2)	KS2 (Y3–Y4)	KS2 (Y5-Y6)
Creative Thinking	Begin to explore ideas and use imagination to create simple designs.	Generate ideas and plan designs with increasing detail.	Develop innovative ideas and create detailed design plans.	Refine ideas and create complex design solutions.
Practical Skills	Develop basic skills in cutting, joining, and assembling materials.	Improve skills in measuring, cutting, and joining materials accurately.	Enhance skills in using a variety of tools and techniques for making products.	Master advanced techniques in making and finishing products.
Technological Understanding	Understand the basic functions of everyday objects.	Explore how different materials and components work together. Evaluate a range of products	Investigate how technology can be used to solve problems.	Analyse the impact of technology on society and the environment.
Collaboration	Work together in small groups to complete simple projects.	Collaborate effectively with peers to design and create products.	Work in teams to design, make, and evaluate products.	Lead and manage group projects, ensuring effective teamwork.
Safe Practices	Learn to use tools and materials safely under supervision.	Understand and follow safety rules when using tools and materials.	Demonstrate safe practices independently when using tools and materials.	Apply safety knowledge confidently and teach others about safe practices.
Cooking and Nutrition		Understand where food comes from. Use basic principles of a healthy and varied diet to prepare dishes. Begin to develop simple food preparation skills.	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 focusing on food safety.	Understand seasonality and know where and how a variety of ingredients are grown, reared, caught, and processed.

Overview

	Autumn	Spring	Summer
Reception			
Year 1 and 2 2025/2026	Levers and sliders: moving cards	Wheels and axles: vehicles	Frame structures: bridges (Link to Clifton suspension bridge)
Year 1	Frame structures: bridges (Link to Clifton suspension bridge)	Rotary mechanisms: windmills	Templates in textiles: puppets
Year 2	Levers and sliders: moving cards	Wheels and axles: vehicles	Freestanding structures: playgrounds
Year 3	Shell structures: packaging	2D shapes to 3D products: stationery storage	2D shapes to 3D products: stationery storage
Year 4	Levers and linkages: interactive books	Simple programming and control: data loggers	CAD textiles: pattern design
Year 5	Combining fabrics: accessible textiles	Pulleys and Gears: Electric Vehicles	CAD structures: architecture

Year 6	Cams: automata	Systems and control: sensor alarms	Products and people: inspirational design

(Put in Cooking throughout each year)