DESIGN & TECHNOLOGY

SUBJECT OVERVIEW

Innovative thinkers. Practical makers. Reflective evaluators.

Curriculum Intent & Implementation

OUR INTENT

- Innovative and creative thinkers with an appreciation for the design cycle
- Confidence to take risks through drafting, modelling and testing ideas
- Reflective learners who evaluate their own work and the work of others
- An understanding of how design and technology shapes the world around us
- Resourceful, enterprising citizens ready to contribute to future design
- Every child a designer and a maker

IMPLEMENTATION

Curriculum structure & sequencing

Three units a year, sometimes taught in day blocks where appropriate, following the three-stage design, make and evaluate process across five strands.

Content & concepts

Every unit follows a consistent structure: research, design, make and evaluate. Cross-curricular links are made where they enrich learning without diluting the subject.

Enrichment & personal development

The whole-school Christmas Lights Extravaganza, a biennial large-scale project such as Bexton Carnival or Caine's Arcade, and a Year 6 food technology taster day at Knutsford Academy.

Assessment & next steps

Evaluation sheets completed at the end of each unit, alongside ongoing observation and questioning. Judgements are recorded in Whole Class Feedback Books and Insight.

Design & Technology and The Pathway

Every DT project incorporates elements of the five Pathway Trails, connecting subject learning to the wider Bexton experience.

PERFORMANCE

Presenting and showcasing finished products with pride.

SOCIAL

Working alongside others, sharing ideas and materials.

COMMUNITY

Designing for real users and real-world purposes.

TEAM

Collaborating on shared design and making challenges.

COMMUNICATION

Annotating designs and explaining making decisions.

DT in the Early Years Foundation Stage

In Reception, DT is woven through play-based learning. Children explore making and construction using a range of media and materials, including Diwali lanterns, shadow puppets, Supertato junk traps, mini-beast models and sea creature puppets, developing early design thinking and manual skills across the year.

BY THE END OF RECEPTION, CHILDREN CAN...

- Use a range of tools competently, safely and confidently
- Return to and build on previous learning, refining their ideas
- Create collaboratively, sharing ideas, resources and skills
- Design a model for a purpose, choosing their own materials and joining techniques

EXPRESSIVE ARTS AND DESIGN

Early Learning Goal: 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

Development Matters guides the frequency, repetition and depth of these experiences. DT is not taught discretely in Nursery. In Swans, children make junk-model vehicles, work with clay and take part in simple food preparation.

Inclusion within DT

Every child at Bexton is a designer and a maker. The curriculum intent stays the same for every pupil. What changes is how staff scaffold the journey there for children with additional needs.

SAME AMBITION.
ADAPTED APPROACH.

Adapted tools

Adapted tools and equipment to support fine motor development and physical access

Structured guidance

Complex design challenges broken into manageable steps, with visual prompts and personalised support

Additional support

Extra adult support and pre-prepared materials or templates to reduce barriers while keeping the challenge

Greater depth

Greater independence and precision, more complex materials and mechanisms, and justifying design decisions

Curriculum Journey: Year 1 & Year 2

Year 1

AUTUMN 1
Food: Making Smoothies

Naming fruit and vegetables, and where they grow.

SPRING 1
Mechanisms: Moving Story Book

Using a mechanism to make storybook characters move.

SUMMER 1
Textiles: Puppets

Using a template and choosing the best way to join fabric.

Year 2

AUTUMN 2
Food: Healthy Wraps

Food groups, taste and texture, and designing a healthy wrap.

SPRING 1
Structures: Baby Bear's Chair

Designing a chair, and understanding strong, stiff and stable.

SUMMER 1
Mechanisms: Moving Monster

Levers, pivots and linkages in a moving mechanism.

Autumn Spring Summer

Curriculum Journey: Year 3 & Year 4

Year 3

AUTUMN 2
Textiles: Making a Cushion

Joining fabric using running stitch, cross stitch and appliqué.

SPRING 1
Constructing a Roman Fort

Designing a fort, using paper nets and manmade features.

SUMMER 1
Food: Eating British Seasonal Foods

Diet, nutrients, and how climate affects the food we grow.

Year 4

AUTUMN 1
Mechanical Systems: Slingshot Car

Exploded diagrams, air resistance, and testing a moving vehicle.

SPRING 2
Food: Adapting a Viking Recipe

Adapting a recipe for Viking Day, cooking safely and to a budget.

SUMMER 1
Electrical Systems: Making an Electric Torch

Circuits, switches, conductors and insulators in a working torch.

Autumn Spring Summer

Curriculum Journey: Year 5 & Year 6

Year 5

AUTUMN 1
Food: Mexican Themed Cooking

Planning a healthy Mexican meal, nutritional qualities, and cooking as a team.

SPRING 1
Electrical Systems: Doodlers

Circuit components, series circuits, and how a motor works.

SUMMER 1
Structures: Bridges

Truss, beam and arch bridges, and how weight is distributed.

Year 6

AUTUMN 2
Cooking & Nutrition: Come Dine with Me

Writing and adapting a recipe, cooking safely to a timescale.

SPRING 1
Electrical Systems: Steady Hand Game

Series circuits, buzzers, LEDs and form over function.

SUMMER 1
Textiles: Waistcoat Design

Design criteria, templates, stitching and secure fastenings.

Autumn Spring Summer

Progression of Skills: Year 1 – Year 3

STRAND	YEAR 1	YEAR 2	YEAR 3
Cooking & Nutrition	Naming fruit and vegetables, and which plant parts we eat	*Food groups, taste and texture, and making a healthy wrap*	Diet, nutrients and how climate affects the food we grow
Mechanisms	Using a mechanism to make storybook characters move	Levers, pivots, linkages and design criteria in a moving mechanism	*No discrete unit this year*
Structures	*No discrete unit this year*	What makes a structure stable; designing a chair that passes testing	Designing a fort, using paper nets and manmade features
Textiles	Using a template and choosing the best way to join fabric	*No discrete unit this year*	Joining fabric using running stitch, cross stitch and appliqué
Electrical Systems	*No discrete unit this year*	*No discrete unit this year*	*No discrete unit this year*

For full progression and skills detail by year group, see the DT Progression Document.

Progression of Skills: Year 4 – Year 6

STRAND	YEAR 4	YEAR 5	YEAR 6
Cooking & Nutrition	Adapting a recipe for Viking Day, cooking safely and to a budget	Planning a healthy Mexican meal and the nutritional qualities of its foods	Writing and adapting a recipe, cooking safely to a timescale
Mechanisms	Exploded diagrams, air resistance and testing a moving vehicle	*No discrete unit this year*	*No discrete unit this year*
Structures	*No discrete unit this year*	Truss, beam and arch bridges, and how weight is distributed	*No discrete unit this year*
Textiles	*No discrete unit this year*	*No discrete unit this year*	Design criteria, templates, stitching and secure fastenings
Electrical Systems	Circuits, switches, conductors and insulators in a working torch	Circuit components, series circuits and how a motor works	Series circuits, buzzers, LEDs and form over function

For full progression and skills detail by year group, see the DT Progression Document.

Assessment within DT

DAY TO DAY

- Observation of practical work, design development and questioning throughout
- Design reviews, group discussions and review of sketches and planning
- Verbal feedback and live demonstrations during the making process
- Evaluation of pupils' use of technical vocabulary

ONGOING

- Completed evaluation sheets assessing the whole design journey
- Judged against year-group end points in the DT Progression Document
- Recorded in Whole Class Feedback Books and Insight (annually)
- Teacher judgement based on research, design, making and evaluation together

Every child at Bexton leaves able to think like a designer: researching, creating and evaluating with the confidence to solve real problems.