Design and Technology at Wren's Nest Primary School

As the National Curriculum for Design and Technology states,

'Design and Technology is an inspiring, rigorous and practical subject, using creativity and imagination'

At Wren's Nest, we use 'Projects on a Page', a programme of study planned by the Design and Technology Association. The carefully planned projects help develop children's skills through collaborative work and problem-solving. They allow children to acquire and apply knowledge and understanding of materials and components. The projects develop children's practical abilities and creates opportunities to design, construct and evaluate using a range of materials, drawing on a variety of skills.

Big Ideas

- ✓ Design
  - Research
  - Develop
  - Communicate
- ✓ Make
  - Tools
  - Equipment
  - Materials
- ✓ Evaluate
  - Investigate
  - Analyse
  - Understand
- ✓ Technical knowledge
  - Apply

Content and Sequencing

- ✓ **EYFS** – Children are taught to safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function. This is done through a wide range of both structured and child-initiated provision. The provision is carefully planned for to create such opportunities through enhanced provision planning and resourcing. The children are encouraged to share their creations with their peers and adults, explaining the processes they have used. Children's achievements and abilities within this process are celebrated within the setting using "Our Creations" display.
- ✓ **Years 1 – 2** Children discover how leavers and sliders work. They use these skills to create a moving book with 'pop up' sections. When working with wheels and axles, they investigate different types of wheels and consider how these work in relation to the type of axles they select to use on their moving toys. When working with textiles, children experiment with a range of joining techniques, using appropriate examples to create a hand puppet. When designing free standing structures, children are encouraged to make general observations about their surrounding and the design of the structures they use daily.
- ✓ **Year 3 – 4** Children build on the skills acquired during EYFS and KS1. In textiles the children use 2D drawings to make a three-dimensional product. While working in the design phase, they experiment with CAD to improve the accuracy and aesthetics of the product they are creating. When evaluating, children are encouraged to refer to their design criteria and consider the user for whom their design was intended.
- ✓ **Years 5 - 6** In Upper KS2, while working with textiles, children experiment with a range of fasteners, buttons, toggles, and zips. They are encouraged to record their own 'HOW TO' videos and share these with their peers. While working with Electrical Systems, children build on previous work, creating circuits that 'control' and 'monitor'.
- ✓ **All Children** – Within the programme of study, all year groups have the opportunity to investigate where food comes from, how to prepare food and know why it is important to eat healthily.

Cross curricular links

- ✓ Direct links with:
  - History
  - Geography
  - British Values
  - PSHE
  - Enrichment activities.
- ✓ Wren's Nest Schema Webs of Food, Fashion and Technology.

Retrieval

- ✓ Quizzes
- ✓ Tasks and activities
- ✓ Big Questions
- ✓ Schemas
- ✓ Debates
- ✓ Wow Days
- ✓ Enrichment Days

Progress

- ✓ Low-stake quizzes
- ✓ Formative assessments
- ✓ Children's Work
- ✓ Through disciplinary skills across year groups
- ✓ Working Wall

Support

- ✓ Inclusion for all children.
- ✓ Children in provision sets to access strength lessons in year groups
- ✓ Differentiated activities based on skills and knowledge of Design and Technology
- ✓ Adult support in the class
- ✓ High quality resources