



## Design and Technology

### Curriculum Intent

At Bentley High Street Primary School, it is our intention to deliver a DT curriculum that builds on children's prior learning, providing them with the tools to design, make and evaluate their own products effectively, understanding a need for an audience and purpose in order to create products fit for use. We teach the concepts food and nutrition, structures, mechanisms including electrical systems and textiles from EYFS up to Y6. Repeating these means children remember more substantive knowledge when concepts are revisited. We meet the outlined aims of the national curriculum through this approach. Following the TASC wheel, we support children to think like an engineer and developing their disciplinary knowledge.

We expect all our pupils to gain the knowledge to:

- Develop the creative, technical and practical expertise to perform everyday tasks confidently and to participate successfully in an increasingly technological world.
- To learn about inventors from the past and modern day.
- To build and apply a repertoire of knowledge, understanding and skills, in order to design and make high quality prototypes and products for wide range of users.
- Critique, evaluate and test their ideas and products and the work of others.
- Understand and apply the principals of nutrition and learn how to cook.

Children will develop a progression of knowledge from our Early Years where they explore the understanding of the world (asking open ended questions such as how can we? And What would happen if?), Exploring and using media and materials (supportive ways in which children mix or add media, children talk about their observations and experiences and encourage children to find out what happens when they put different materials together) and being imaginative (Introducing descriptive language of products and enable children to develop confidence in their own way of representing ideas).

### Curriculum Implementation

#### Subject Content and Organisation Across School

We teach DT as sequences across the year

Each Year group will learn:

- Cooking and nutrition
- Structures
- Textiles
- Mechanisms including electrical circuits

Across each sequence of learning, children will learn how to design, make and evaluate their products. They will also learn technical knowledge. Therefore, children 'will know and know how to'.

Teachers will use the TASC wheel across each sequence. This supports children to build an understanding of "thinking like a designer". The expectations of this build in demand from the early years



At the end of each unit each child will have made a quality, product which they can then evaluate and communicate their learning from.

Teacher's will assess children's knowledge through a range of observation notes, written or oral communication and practical skills applied to a finished product. Children record their learning through evidence of research of product, designing including sketches, evidence of practicing practical skills which may be photographed and a finished product. All year groups communicate the process through a range of ways both written and oral after the unit.

Memory is developed through retrieval and practice of skills and referring back to design brief and sequence of TASC wheel at the beginning of each unit.

DT is revisited throughout the year through blocks of retrieval and practice. These revisit intended vocabulary we wish for the children to use from both their current year and the previous year. Terms like 'Design Criteria' which thread through our curriculum from Y1 all the way to Y6 are revisited. Practical knowledge is practiced in these sessions for example cutting skills and theoretical knowledge is resisted through quizzes and other activities. The key strands of DT are revisited with focussed days on; Food and Nutrition including opportunities to link healthy lifestyle and eating, Structures, Mechanisms and Textiles. Time is also dedicated to revisiting DT principles and associated vocabulary.