## Design & Technology INTENT



### What we aim to achieve in Design and Technology

At St Michael's, we aim to inspire our children through the Design and Technology curriculum – making links to the wider world of engineers, designers, chefs and architects. We create an environment to enable children to develop their creativity and practical expertise needed to perform everyday tasks confidently and successfully. Links are made in a cross curricular way, giving children motivation and meaning for their learning while creating a range of structures, mechanisms, textiles, electrical systems and food products with a purpose. Children will also have the opportunity to understand where food comes from and apply the principles of nutrition as they learn to cook.

Our Design and Technology (D&T) curriculum at St. Michael's is rooted firmly within the National Curriculum Programs of Study. Through a variety of creative and practical activities, we teach the knowledge, understanding and skills needed to engage in an iterative process of designing, making and evaluating. The design process will be rooted in real life, relevant contexts to give meaning to learning. While making, children will be given choice and a range of tools to choose freely from. To evaluate, children will be able to evaluate their own products against design criteria. Each of these steps are to be rooted in technical knowledge and vocabulary. D&T will be taught to a high standard, where each of the stages will be given equal weight.

# BIG IDEAS

- DESIGN I am a Design Technologist because I use my creativity and experimentation to design new products.
  - MAKE I am a Design Technologist because I learn and apply practical and technical skills.
- EVALUATE I am a Design Technologist because I use my problem-solving skills to evaluate existing products and to adapt and improve my own products against design criteria.



### How we deliver Design & Technology

#### In KS1:

#### Design

- Design will be rooted in real life, relevant contexts to give meaning to the learning.
- Planned through appropriate formats: drawing, templates, talking and mock-ups.
  Make
- Children will be given a range of tools to choose from for their projects.
- Children will use a wide range of materials and components linked to textiles, construction equipment and ingredients.

Evaluate

- Evaluate existing products.
- Evaluate their own products against design criteria.

#### In KS2:

#### Design

- Rooted in real life, relevant contexts to give meaning to the learning.
- Researched designs based on functional, appealing products with purpose.
- Planned by appropriate methods through annotated sketches, cross-sectional diagrams, prototypes, pattern pieces and computer aided design.
   Make
- Children will be able to select from a wider range of tools than KS1.
- Children will be able to use from and select a wider range of materials and components linked to textiles, construction equipment and ingredients.
   Evaluate
- Evaluations will be made in comparison to existing products.
- Children will evaluate against design criteria.
- Children will have an understanding of how key events and individuals have helped shape design and technology globally.

Key skills and key knowledge for Design and Technology have been mapped across the school to ensure progression between year groups. The context for the children's work in D&T is also well considered and children learn about real life structures and the purpose of specific examples, as well as developing their skills throughout the programme of study.

Design and technology lessons are also taught as a block so that children's learning is focused throughout each unit of work.

Evidence of the three stages of designing, making and evaluating will be documented in D&T books, on Seesaw and through displays in both the classroom and throughout school. The aim is that D&T books will be able to show clear progression across the key stages as they are passed up through each year group.