DESIGN & TECHNOLOGY AT MARWOOD PRIMARY SCHOOL

INTENT

It is important to all staff at Marwood School that children will approach Design and Technology challenges with a sense of purpose. We intend for all children to understand the role of Design and Technology in the world in which they live and that they will aspire to be able to develop and create in a meaningful way. We will work to guide children in problem-solving and investigating throughout each Design and Technology unit. We will work alongside children in practising, refining and evaluating skills, enabling successful outcomes to be achieved and encouraging children to be excited about having another go, making changes, improving even more. The practical nature of Design and Technology activities at Marwood School will be valued, not only for the purposes of this area of learning but also for their contribution to the wider curriculum. The benefits of Design and Technology activities will be recognised in the development of fine motor skills, opportunities to inspire writing, improving engagement, developing a sense of achievement and self-worth, promoting enjoyment of a rich and varied school experience. At Marwood School staff will work together with subject lead to identify and address any areas of the Design and Technology curriculum that require improvement. As we begin to move beyond the restrictions related to the COVID-19 pandemic we recognise that the Nutrition and Cooking aspects of the curriculum are target areas. This will be an area for development identified in the subject leader Action Plan.

We will deliver a curriculum that:

- Allows children to develop functional, appealing products that are aimed at particular individuals or groups and are fit for purpose.
- Promotes analytical thinking, in identifying the features, problems and solutions in products.
- Will challenge children to research information and think for themselves, give reasoned solutions, work independently and cooperatively and be enterprising.
- Builds on prior learning and promotes the progression of the language of technology, the knowledge of appropriate tools and techniques and the skills to use them.
- Creates a fun, enjoyable and engaging environment and memorable learning experiences.
- Allows children to consider the views of others, evaluate their ideas and products against their own design criteria to improve their work.
- Improves children's understanding of the basic concepts of design, make and evaluate alongside specific skill, knowledge and understanding in food technology, textiles, structures and electrical and mechanical systems.
- Can be adapted to link with other subject areas being taught

IMPLEMENTATION

The Subject Leader will lead and oversee the subject, to promote continuous improvement by leading a regular programme of monitoring, evaluation review and sharing of good practice, as well as undertaking self-improvement and development activities. The curriculum will incorporate the statutory requirements of the Design and Technology programmes of study and other experiences and opportunities which best meet the learning and developmental needs of the children in our school.

The National Curriculum will be mapped out across a two-year curriculum map for KS1 and KS2 classes, identifying progression of skills and units within which the skills will be taught and developed. Commercial resources will be used to support the mapping of provision but we will not be wedded to them. Staff will have access to commercial resources providing ideas and units that support coverage of the National Curriculum should they need it.

Design and Technology will be taught as a whole class or in smaller groups. Children will be taught to:

- **Design**
  Using research and developing design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups; by generating, developing, modelling and communicating their ideas through discussion, annotated sketches, cross-sectional diagrams, prototypes, pattern pieces and computer-aided design.
- **Make**
  Selecting from and using a wider range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing) accurately; selecting from and using a wider range of materials and components,

including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities

- **Evaluate**
  By investigating and analysing a range of existing products; evaluating their ideas and products against their own design criteria and consider the views of others to improve their work; understanding how key events and individuals in design and technology have helped shape the world
- **Technical knowledge**
  Applying their understanding of how to strengthen, stiffen and reinforce more complex structures; understanding and using mechanical systems in their products; understanding and using electrical systems in their products; applying their understanding of computing to program, monitor and control their products

IMPACT

The Design and Technology curriculum will:

- Provide opportunities for all children to collaborate, learn from, understand and react to each other's perspectives and strengths.
- Create an enjoyable, engaging academic outlet for children who may find traditional subjects challenging.
- Develop children's subject vocabulary and skill in choosing and using appropriate tools and techniques.
- Give children an insight into how physical products can be created and an understanding of basic concepts used in everyday items.
- Set a firm foundation of subject skills to create a smooth transition to KS3.
- Children will move through, and leave the school, with the confidence that they can design, make and change products and items and belief that qualifications and careers incorporating D&T are within their capability.
- Have a positive impact of children's self-efficacy.

DESIGN TECHNOLOGY IN EYFS

Design and Technology sits within the areas of **Physical Development** and **Expressive arts and design**. Children will develop their fine motor skills so that they can use a range of tools competently, safely and confidently (**Physical Development)** and explore, use and refine a variety of artistic effects to express their ideas and feelings; return to and build on their previous learning, refining ideas and developing their ability to represent them; create collaboratively, sharing ideas, resources and skills (**Expressive arts and design**).

Children will achieve the following Early Learning Goals:
Physical Development – Fine Motor Skills

- Use a range of small tools, including scissors, paintbrushes and cutlery.

Expressive Arts and Design – 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.

The design and technology lead is: Stella Griffin
Statement reviewed: July 2021