



Design Technology



INTENT

At Frogmore Infant School, specific design technology (DT) taught skills are planned and linked to earlier learning and children are actively encouraged to draw and build upon this previous knowledge. Links with other subject areas are openly acknowledged to make learning purposeful and relevant. If necessary, additional DT skills are also taught in isolation. The curriculum has been designed to provide all children with the opportunities to design, make and evaluate products using a range of materials. Vital life skills are also developed through food technology with children learning how to bake and cook using safe techniques. We ensure our curriculum is rich in practical activities, stimulates children's imagination and ingenuity, and fosters a deep sense of creativity and critical thinking.

IMPLEMENTATION

Lesson design

Our DT curriculum is planned so that children learn knowledge through looking and doing. Children follow a 4 part structure of investigate, design, make and evaluate for each unit of work.

Teachers make pedagogical decisions that emphasise important content and concepts in a meaningful way and in revisiting these regularly so that children develop secure knowledge. This includes building on what pupils already know, using well-selected models and examples to make abstract ideas meaningful and using explanations to help pupils to connect information.

Progression

Learning is carefully sequenced so that knowledge, skills and understanding build on previous learning. Our progression of skills and knowledge details the substantive knowledge and disciplinary knowledge to be covered. Prior learning is referenced at the start of new units and key knowledge is woven over time so that learning can be revisited and links made to prior learning. Children have the opportunity to practice skills over time to develop confidence and proficiency.

Key vocabulary for each unit is carefully considered and planned for.

Key concepts

The two strands of study are designing & making and cooking & nutrition

The key concepts of designing & making are taught through:

- Structures
- Mechanisms

The key concepts of cooking & nutrition are:

- preparing fruit & vegetables
- healthy & varied diet

EYFS

All children are encouraged to explore and experiment with a range of tools and materials. Such tools and materials, where possible, are readily available and vary in level of expertise needed. Planning allows for a variety of particular themes/topics/skills to be explored and for staff to purposely introduce new vocabulary and concepts; in doing so staff very carefully balance engagement with the direct teaching of the vocabulary and skills needed for pupils to progress; whilst also ensuring ample opportunities for child-initiated play and self-led enquiry in the provision. Opportunities to investigate, design, make and evaluate are available both within the classroom and within the large outdoor provision.

SEND

4 part structure for DT

Investigate- based on the design brief, what products are already available that are relevant to our unit. Practise skills that will be required during the making of our own product.

Design- design purposeful, functional, appealing products based on design criteria.

Make- select and use a range of tools and equipment to perform practical tasks based on previous designs.

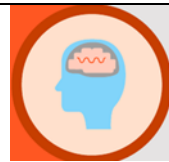
Evaluate- evaluate their ideas and products based on the design criteria.

EEF 5-a-day approach in DT



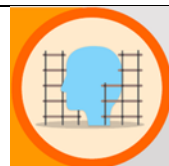
Explicit instruction

Clear and succinct explanations
Dual coding of key vocabulary
Active learning through practical work, drama and visitors



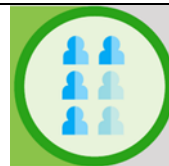
Cognitive and metacognitive strategies

Tasks are chunked
Retrieval tasks and practice of key skills and vocabulary
Use of class learning journey to visually track learning



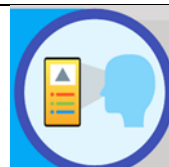
Scaffolding

Use of structured verbal sentence stems
Use of visual and tactile scaffolds
Skills in clear steps for each sequence of learning
Use of verbal scaffolds/teacher modelling to reteach and remind



Flexible grouping

Groupings where children can discuss, share ideas and reflect together



Using technology

Use of digital devices to record

IMPACT

The impact of our DT curriculum is that children at Frogmore Infants School are equipped with the necessary attitudes, skills and knowledge that will enable them to be ready for the learning required at KS2 and beyond. Children show their ongoing interest of learning in DT through applying their learning to play activities and through items they choose to make at home linked to learning in school.

We shape our DT curriculum to be fully inclusive to every child and ensure that children's ability to show what they have learnt and understood is not limited by their writing skills.

Happy learners, great achievers