Tilery Primary School

Design Technology

What we will offer

Tilery's Design and Technology (DT) curriculum allows children to exercise their creativity through the concepts of Structures, Mechanisms, Textiles, Electrical Systems and Food and Nutrition. Children have opportunities to design and evaluate their ideas, working with a range of materials, whilst learning new skills. Skills will be taught progressively to ensure that all children are able to develop, practise and refine them as they move through the school. Our curriculum is also designed to provide our children with the subject specific language they need to describe and evaluate their work, or work of their peers, with pupils encouraged to use skills and knowledge gained in English and Maths lessons to enhance their learning in DT.

Based on the National Curriculum and the individual needs of our children, we have created a DT progression map, which sets out the objectives taught in each year group. The key knowledge and skills that children acquire and develop throughout each block have been mapped to ensure progression between year groups throughout the school. We support all pupils; regardless of ability, gender or ethnicity, to have equal access to our DT curriculum.

Our DT curriculum enables children to create a range of structures, mechanisms, textiles, electrical systems and food products with a real life purpose. We aim to support children in the next stage of their education and **inspire** them to be engineers, designers, chefs and architects in their future life.

How we will deliver it

- Design Technology at Tilery follows a carefully planned curriculum, which builds upon knowledge, skills and concepts as children move through the school. The long-term plan sets out the DT units which are to be taught throughout the year and ensures that the requirements of the National Curriculum are fully met.

- Each element of Design Technology is embedded into the topic plans in a way that is relevant and exciting. We use progression grids to ensure there is clear progress in the knowledge, skills, concepts and vocabulary taught. The concepts are built upon sequentially through the teaching of structures, mechanisms, textiles, electrical systems and food products.

- We aim for our lessons to have relevance and an applicable purpose, for example food and nutrition is also incorporated into each year group, linked to topic where possible – making Viking bread links to the topic of Invaders and Settlers. This provides the opportunity for discussing and encouraging healthy eating.

- Children are provided with appropriate and sufficient Design Technology materials and tools so that they are able to design and explore variations of making and building crafts.

- Our skilled staff and specialist visitors who come into school, develop children's learning within lessons. We plan for pupils to have frequent opportunities to enquire and explore, developing their understanding within our concepts.

During lessons :

  - our DT concepts are discussed at the beginning of each unit and teachers explain when they were last taught to enable children to understand their learning journey
  - carefully chosen vocabulary is displayed alongside the concepts and is referred to throughout the topic

- lessons begin by reviewing previous learning allowing the children to demonstrate their skills and to revisit the knowledge required to fully access new learning
- shared learning objectives ensure pupils understand what is expected of them and the focus of the learning enabling children to self-evaluate their understanding
- teachers use effective questioning, and provide opportunities for discussion and investigation to support the development of vocabulary, which is explicitly taught and modelled by teachers in every lesson
- teachers are encouraged to promote practical activities for pupils. This is of particular importance within food technology where an emphasis is placed upon how to prepare and cook healthy and nutritious meals. This links into our monthly 'out of school £2 meal bags' which aim to provide a cheap and nutritious meal for families on a budget, hence supporting the development of life skills for our pupils
- quality first teaching ensures children build on prior learning and knowledge
- pupils are encouraged to make connections both within and across subjects
- teaching staff are skilled when assessing children's learning and knowledge throughout the topic
- pupils are supported to make rapid and sustained progress
- clear end points and assessment materials ensure that accurate judgements are made on pupils' achievement.

- We enrich our children's learning with practical resources, visitors, workshops and where possible visits to excite and intrigue our children.

- Pupils and staff evidence what has been learned in lessons within their Art and Design workbooks and classroom displays. Further photographic and video evidence is collected within a DT Evidence folder, saved on the staff shared area.

- We know that the quality of lessons offered to the children are good through evidence collected during learning walks, lesson observations, work scrutinies and pupil voice activities. The DT subject leader is able to ascertain what children have remembered, what they have learned, what they are able to talk about and the knowledge, skills and concepts they have acquired during each DT topic.

The difference it will make

We enable our pupils to gain a meaningful understanding of what Design and Technology is and the impact it can have on their own lives. Our curriculum allows children to talk about the knowledge and skills they have acquired. Our evaluation focus of 'design, make, evaluate' enables children to celebrate what worked well and reflect upon what could have been better. We encourage children to be more resilient in trying different strategies in Design Technology, other subjects, and wider school life.

Our school assessment materials identify clear and progressive end points. Our tracking system, which teachers complete at the end of each topic, enables us to assess progress. Data from the assessments is then collated to enable subject leaders to monitor progress and attainment across the school. Should issues be identified, subject leaders can address this directly with class teachers.

We know that our children enjoy our DT lessons, as they are highly engage and motivated and **inspired** to find out more. We know this through conducting learning walks, lesson observations, work scrutinies and pupil voice activities. Subject Leaders are therefore able to ascertain what children have remembered, what they have learned, what they are able to talk about and the knowledge, skills and concepts they have acquired during each DT topic. Children learn lessons from DT that can influence the decisions they make in their future lives, for example skills to feed themselves healthy food on a budget.

The success of our DT curriculum is that it allows our children to acquire the appropriate knowledge and skills, **inspiring** them to succeed in the next stage of their education and **aspire** to potential careers, e.g. as engineers, designers, chefs and architects in their future life.