Curriculum Guide

Design and Technology

National Curriculum Aims

The 2014 National Curriculum for Design and Technology aims to ensure that all pupils:

- develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world
- build and apply a repertoire of knowledge, understanding and skills in order to design and make high-quality prototypes and products for a wide range of users
- critique, evaluate and test their ideas and products and the work of others
- understand and apply the principles of nutrition and learn how to cook

Intent

At HPS, Design and Technology aims to inspire children through a broad range of practical experiences to create innovative designs which solve real and relevant problems within a variety of different contexts. Learning in DT encourages children to identify real and relevant problems, critically evaluate existing products and then take risks and innovate when designing and creating solutions to the problems. Opportunities are provided for children to evaluate key events and individuals who have helped shape the world, showing the real impact of Design and Technology on the wider environment and helping to inspire children to become the next generation of innovators. Children will also develop their knowledge of relevant famous designers and engineers linked to faith, history and culture.

Our Design and Technology vision encourages children to see themselves as makers, thinkers, and problem-solvers, developing resilience, teamwork, and critical thinking. Through studying Islamic and cultural designers alongside global innovators, children learn how people past and present have shaped the world through creativity and invention. We aim to instill confidence so pupils recognise that with curiosity, skills, and imagination, they can design solutions that reflect both practicality and cultural identity.

Implementation

Design and Technology skills and understanding are built into lessons, following an iterative process. Through revisiting and consolidating skills, we help children build on prior knowledge alongside introducing new skills, knowledge, and challenge. Key vocabulary is built into each lesson and this vocabulary is then included in display materials and additional resources to ensure that children are allowed opportunities to repeat and revise this knowledge.

Through these lessons, we intend to inspire pupils and practitioners to develop a love of Design and Technology and see how it has helped shaped the ever-evolving technological world they live in. Children also understand how design reflect our faith, and shape our history, and contribute to the culture, creativity and wealth of our nation.

Our curriculum follows the Early Years Framework and the National Curriculum, supported by the Kapow scheme, ensuring that skills and knowledge progress systematically without limiting our bespoke approach. From Early Years onward, children explore tools, materials, and mechanisms through hands-on and project-based learning. They investigate how things work, how they are made, and how they can be improved. As children progress, DT becomes increasingly project-based, involving designing, making, and evaluating purposeful products. Pupils study a diverse range of designers—including Islamic and cultural designers whose work connects to our community—drawing inspiration from multiple perspectives while applying their learning to the world around them. Displays, exhibitions, and curriculum evenings allow children to celebrate their achievements and see the value of their creations.

Impact

Design and Technology displays will be seen across the school. The learning environments across the school will be more consistent with DT technical vocabulary displayed, spoken and used by all learners. Whole-school and parental engagement will be improved through the use of Design and Technology-specific home learning tasks and opportunities for wider learning.

We will ensure that Design and Technology is loved by teachers and pupils across school, therefore encouraging pupils to want to continue building on this wealth of skills and understanding, now and in the future.

Through our enriched DT curriculum, children develop practical confidence, innovation, and independence as creators. They learn to critique, refine, and evaluate their work, celebrating both successes and improvements. Children recognise how DT shapes the world—past, present, and future—and begin to see themselves as capable designers who can impact their community and wider society.

Knowledge and Skills

In Early Years, Children safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function (Expressive Arts and Design); and handling equipment and tools effectively, including pencils for writing (Physical Development). **In Key Stage 1**, children learn to design, make, evaluate, as well as apply technical knowledge and understand about cooking and nutrition. **In Key Stage 2**, children learn to design, make, evaluate a range of difference products; apply technical knowledge on more complex structures; understand more about cooking and nutrition and seasonality, and know where and how a variety of ingredients are grown, reared, caught, and processed. Across all stages, children encounter designers from a wide range of backgrounds, including those from Islamic and cultural traditions, strengthening representation, identity, and cultural understanding.

Creativity

At HPS, the curriculum for Design and Technology, is taking into consideration different structures, artefacts and food and then linking current events or themes within the school calendar and community. Links are also made, where appropriate, with other curriculum areas to ensure that learning is meaningful and relevant. As the Design and Technology curriculum is focused towards a creative and evaluative process, work is mainly showcased, photographed and then returned to pupils. Children also have the opportunity to create 'finished' pieces of work individually and collaboratively. This is often displayed around the school. Creativity is fostered through exploration, risk-taking, problem-solving, and collaboration, enabling pupils to turn ideas into meaningful products rooted in cultural awareness and practical purpose.

Assessment

At HPS, verbal feedback is given during lessons to support learning. Children are questioned carefully to enable them to evaluate their learning and make informed choices. Individuality and creativity are celebrated. At the end of each unit, the key knowledge, understanding and skills are assessed by the class teacher. At the end of each unit, the key knowledge, understanding and skills are assessed by the class teacher. Teachers also use the Kapow scheme's videos which demonstrate explicit design technology skills to support teaching and learning. Assessments are through observation of pupils and discussion as well as, the assessment of pupils' designed work and completed models. Evaluation is embedded throughout each project, encouraging children to reflect on what works well, what could be improved, and how effectively their product meets its purpose.

Our Curriculum follows our school values: service, gratitude, excellence, compassion, integrity, respect