



Intent- We aim to...



Deliver a purposeful and engaging curriculum which allows children to feel they can contribute ideas to an ever-evolving world of invention.

Encourage children to become independent, creative problem-solvers, identifying needs and developing ideas for products that are fit for purpose and user.

Provide children with key knowledge and explicitly teach practical skills and vocabulary so children can create and discuss their work confidently and apply their skills at home and in the wider world.

Expose children to a range of inventors, designers and inventions so they can reflect on and evaluate past and present technology, its uses and impacts.

Develop in children an understanding of how environmental issues and societal factors (e.g. cost-effectiveness) impact design.

Link D&T to other subject areas such as Science, Maths and Computing to strengthen and transfer skills.

Implementation- How do we achieve our aims?

Our Curriculum

At Keep Hatch Primary School our DT curriculum has been created in accordance with the National Curriculum, is strongly influenced by practical life skills and with an understanding of the EYFS framework. The curriculum is mapped out so that each year group will study an aspect of textiles, food and nutrition and construction and strengthening structures each year. These build on each other from year to year. In addition, Years 1, 3 and 5 learn about mechanical systems and Years 2, 4 and 6 learn about electrical systems.

The projects they undertake will be inspired by aspects of the wider curriculum such as science, a history topic or reading. For example, the Year 5s create a mechanical animal based on their novel Cogheart and the Year 2s used sewing skills to create poppies for Remembrance. Though the project outcomes may change year on year, the core skills and knowledge remain consistent.

Cross-curricular links with maths are created when measuring or exploring shape in particular. In KS2, there is an increased focus on the use of computer programs and more complex mechanisms within D&T. Use of computer technology reinforces our belief that D&T enables children to enhance their skills in other subject areas (in this case Computing). This cross-curricular approach to the teaching of D&T ensures that knowledge from other subjects (particularly Science) is further enhanced and skills are transferred.

Content

Textiles and Sewing

Food and Nutrition

Mechanical Systems

Construction and Strengthening Structures

Electrical Systems and Computer Design

Golden Threads

Progression of Knowledge and our 'Golden Threads'

At Keep Hatch, children will encounter 'Golden Threads'. These are substantive concepts that are revised and developed throughout each Design and Technology unit and across the key stages. It ensures that the learning is linked together in a more meaningful way.

For example, the element of researching and planning to create a purposeful product is a thread that runs through each unit covered in DT in each year group. During the planning stage children in Year 1 would draw a simple picture of their design and label it with single words, their plan would follow a set of design criteria given to them. In Year 3 children would create design criteria for their product together and then use it to create a detailed plan labelled with material types, functions etc. In year 6 the children would write their own design criteria independently, use it to inform their design, create a detailed plan from multiple perspectives and included pros and cons of different aspects of the design.

Design Brief



PRODUCT



USER



PURPOSE

Research existing products

Design Criteria and Planning

Constructing and Building Products

Testing and Evaluating Products

Implementation (continued)

In KS1 & KS2, the curriculum is taught through 4 key areas of D&T.



Textiles

Years 1 - 6

Learning types of stitches
Combining fabrics
Embellishing



Electrical Systems & Computer Design

Simple and complex switches
Coding



Years 2, 4 and 6

Years 2, 4 and 6



Food & Nutrition

Years 1 - 6

Healthy diet and food seasonality and sustainability
Cooking techniques and food hygiene
Meal planning



Structures and Mechanical Systems

Strengthening freestanding structures
Joining and assembling
Wheels, axels, sliders, levers, gears, pulleys, cams



Years 1, 3 & 5



Reading in D&T

Reading is at the heart of our curriculum and we look to provide opportunities for children to read in DT lessons. Texts can be chosen to support DT lessons in the following ways:

Texts to...



Introduce a Topic



Inspire



Research

Strong foundations

Design Technology is an essential part of learning in the Foundation Stage as it is **incorporated in everyday learning**. The D&T aspects of the children's work relate to the objectives set out in the Early Learning Goals (ELGs). We ensure that the key foundational knowledge required for our KS1 D&T curriculum feeds into our Early Years environment and learning activities.

Using equipment safely

Across the school, the teachers discuss safety with children and model how to use tools and equipment safely. These technical skills are then practiced by children prior to making their final products.

Allocated time

The D&T curriculum is taught once a half term throughout KS1 and KS2, where time is blocked during a week to make D&T a key focus of the timetable.

Assessment

Every DT unit will begin with a cold task to assess the children's skills, for example which stitches they can do confidently or the function of different mechanical systems. This enables the teachers to correctly challenge and support all children in the class. Opportunities for assessment are built into each lesson so that children's knowledge and skills are stretched and supported as necessary. Children are also given the opportunity to self assess and both teachers and children will evaluate the success of their products against their design criteria.

Strong vocabulary development

Technical language is explored with children across the school. Repetition of key language ensures that knowledge is retained and words are used by children in discussions. We believe that exposing children to technical language is an entitlement and that it will enhance their vocabulary.

Impact- How will we know we achieved our aims?

After receiving our high quality D&T curriculum, children will be ready to make an essential contribution to the creativity, culture, wealth and well-being of the nation.

Children produce high-quality work that offers a solution to a problem or a contribution to the world of design, and these products are fit for purposes and users.

Children know more and remember more about D&T and this is demonstrated through the work they produce and in discussion.

Children critically evaluate the work of other designers and inventors and have a developed understanding of how their work contributed to the wider world.

Children consider sustainability (e.g. environmentally friendly or cost-effective products) and understand the importance of this.

Children demonstrate their knowledge of Science (and Maths when appropriate) during D&T lessons.