Design Technology at Haworth

At Haworth, we want all our children to have a passion for, and be enthused by, Design Technology. We aim to achieve this through a carefully designed curriculum, covering the national curriculum in its entirety. We believe that Design Technology comprises core skills which will enable children to become self-sufficient adults. The subject is the root of important skills needed for everyday adult life, like cooking and DIY, as well as being valuable in future work places. Our Design Technology also has links to Science and Computing.

Haworth's history as an industrial village with many mills demonstrates how design, production and innovation has been key to the livelihood and survival of many local people for generations. There is now only one working textiles mill in Haworth, Wyedean. Many of our families work beyond the village. However, in the nearest town of Keighley, there is still are large number of manufacturing companies offering the opportunity for STEM careers to our families and young people. Also, we have a large number of people from our community and families who are carpenters, engineers, electricians and many other careers which begin with the skills taught early in Design Technology. We predict that the rapidly evolving work environment, for which our children are preparing to join, will rely on such skills and knowledge. With technology evolving constantly, the future is very exciting but also unpredictable. One thing that is certain, the creativity, resourcefulness, resilience, problems solving, determination and ingenuity that are the corner stones of DT, and deeply rooted in our local history, will drive us into the future well prepared for change.
We are also aware of research demonstrating that Bradford children are more likely to be overweight or obese. Therefore, we have designed our Design Technology curriculum to reflect the importance of teaching an understanding of a balanced diet and the practical skills to prepare healthy food for themselves and we have included a Food, Cooking and Nutrition unit for every year group from Years 1-6.
In addition to our Design Technology curriculum, we also celebrate the subject with our Sewing Club open to Year 6 leavers at the end of their finally year where they are able to create a memory doll in Haworth Primary School Uniform as a keepsake of their time with us. We also bring elements of the subject into other areas of our curriculum to give purpose to our learning like making torches during LKS2's electricity unit.

In Haworth, we are inspired by the wonderful scenery and outside space that we are blessed with. This informs and inspires some of our Design Technology units such as our playground designs (structures) unit in Year 1 and our making movement (mechanisms) unit in Year 3.

EYFS

At Haworth, Design Technology begins in our Early Years Foundation Stage. Within Expressive Art and Design and Physical Development (Fine Motor), children explore and use one handed tools and equipment (scissors), explore different materials to develop their ideas about how to use them and what to make, make joins in different ways including glue, tape, paperclips and fasteners. They also work both independently to develop their own ideas and collaboratively to share ideas and resources.

SEN

At Haworth, we want all children to develop a love of Design Technology and become Designers and makers. Throughout school, Design Technology lessons/teaching are expertly adapted to ensure that learning is accessible to all children at Haworth Primary. This includes using technology, images and additional scaffolds as required. Our staff have very strong, positive relationships with our children, knowing them on an individual basis, and are therefore able to design and implement bespoke adaptations when required.

	Autumn	Spring	Summer
Nursery	In Nursery children are learning to: - Explore different materials freely, to develop their ideas about how to use them and what to make. - gain confidence when using one handed tools - e.g scissors and paintbrushes - Develop their own ideas and then decide which materials to use to express them - Join different materials (glue, tape, string, staples) and explore different textures		
Reception	In Reception children are learning to: - Return to and build on their previous learning, refining ideas and developing their ability to represent them - Create collaboratively, sharing ideas, resources and skills and explaining the process they have used - Use one handed tools confidently - scissors and paintbrushes - Safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function - Make use of props and materials when role playing characters in narratives and stories.		
Year 1/2 A	- Mechanisms- Moving Pictures - To explore and use sliders and levers - The design, make, evaluate process	- Food, Cooking and Nutrition- fruit Salad - To Know the principals of a healthy diet - To understand where food comes from - The design, make, evaluate process - To cut and chop safely	- Structures – Design a playground - To explore stability, strengthening and stiffening - The design, make, evaluate process
Year 1/2 B	- Textiles- A Cloak for Super Ted	- Mechanisms- Wheels and Axils - To explore and use wheels and axils	- Food, Cooking and Nutrition- Savoury Salad

	- To understand the needs of a user when considering purpose, function and appeal - To communicate ideas through drawing and mock ups - To select suitable materials	- The design, make, evaluate process	- To Know the principals of a healthy diet - To understand where food comes from - The design, make, evaluate process - To cut and chop safely
Year 3/4 A	- Textiles- Christmas ornaments - To explore the impact of Hans Greiner - To join material with sewing using the equipment safely - To use shell structures - To design functional, appealing products that are fit for purpose and aimed at a particular person - To use pattern pieces - The design, make, evaluate process	- Mechanisms- Making Movement - To explore the impact of Ben Franklin's design - To understand the mechanical systems linkages, levers and pulleys. - The design, make, evaluate process	- Food, Cooking and Nutrition- A Healthy Breakfast - To know food can be fresh, pre-cooked or prepared. - To plan a meal based on the principals of a balanced diet - To use a heat source- microwave or toaster - To know that food can be grown, reared or caught
Year 3/4 B	- Mechanisms- Movement - To understand how pneumatic systems produce movement - To make a functional and appealing product - The design, make, evaluate process	- Structures – chairs - To recognise the impact of Marcel Breuer - To strengthen, stiffen and reinforce materials - To use a wide range of tools and equipment - The design, make, evaluate process	- Food, Cooking and Nutrition- pizza bagels - To know where and how ingredients have been reared, caught or processed. - To understand seasonality - To investigate a range of existing products - To use heat sources safely- toaster or microwave - To spread, grate, slice, cut and chop
Year 5/6 A	- Food, Cooking and Nutrition- Making bread - To adapt a recipe - To plan a recipe based on appeal - To create a protective shell structure	- Mechanical Systems- Moving Toys - To explore how previous designs have shaped the world - To create a shell structure using woodwork equipment safely	- Structures and Electrical Systems – Lighthouses - To know how a key design has shaped the world- the first Light House in Ancient Egypt, Ptolemy I and II

	- To use the oven safely	- To understand the mechanical system cams. - To design a product for a target audience. - The design, make, evaluate process	- To understand and use electrical systems in a product - To strengthen, stiffen and reinforce more complex structures. - To select and safely use equipment - The design, make, evaluate process
Year 5/6 B	- Textiles- a bag - To know how key events and individuals have shaped the world. - To develop use of a range of stitches - To design, make and evaluate a functional and appealing product for a specific audience.	- Food, Cooking and Nutrition- A Pasta Dish - To understand seasonality and where food comes from. - To apply the principals of a healthy, balanced and varied diet. - To adapt a recipe - To use a heat source- hob and oven - To use appropriate tool safely to cut, chop, de-seed, grate, fry boil, simmer, cook and blend.	- Applying Computing- A Step Counter - To explore existing products - To develop ideas through sketch, diagrams, expanded diagrams and prototypes. - To apply making skills to a product incorporating computing. - The design, make, evaluate project