

# Design and Technology

## Intent Statement DT

Design and Technology is essentially a practical activity concerned with developing the children's ability to investigate, analyse, design, make and evaluate as part of a whole process. At Hyde Park Infants we recognise that children are living in an ever changing technological world. Design and Technology provides the children with the opportunity to develop and use a range of skills that will prepare them for a future with new and evolving technologies.

Design and Technology activities will enable the children to use their creativity, imagination and social interaction skills to design and make their own products, understanding the processes from planning to making, evaluating and refinement. During the teaching of design and technology, a wide range of new skills will be acquired and the knowledge of other subjects, such as Mathematics, Science, Engineering, Computing, PSHE and Art, will be drawn upon and applied. Children will also develop the life skills and knowledge associated with healthy living, food nutrition and cookery.

## Implementation

Through a variety of creative and practical activities, we teach the knowledge, understanding and skills needed to engage in an iterative process of designing and making. The children work in a range of relevant contexts (for example home, school, leisure, and culture).

When designing and making, the children are taught to:

### Design

- To use research and develop design criteria that inform the design of innovative, functional, appealing products that are fit for purpose and aimed at particular a particular use or group.

- To generate, develop, model and communicate their ideas through discussion, annotated sketches, and prototypes. To use computing to support this where appropriate.

## Make

- To select from and use, a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing) with increasing accuracy.
- To select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities.

## Evaluate

- To investigate and analyse a range of existing products.
- To evaluate their ideas and products against their original design criteria and consider the views of others to improve their work.
- To contribute to discussion to help others improve their designs.

## Technical knowledge

- To apply their understanding of how to strengthen, stiffen and stabilise structures.
- To understand and use mechanical systems in their products such as levers, sliders, wheels, and axles.

## Impact

We ensure the children develop the creative, technical and practical expertise needed to perform everyday tasks confidently and to participate successfully in an increasingly technological world. Our children develop 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 and learn the importance of evaluating and testing their ideas and products. They begin to

learn the principles of nutrition and how to cook. Children will design and make a range of products. A good quality finish will be expected in all design and activities made appropriate to the age and ability of the child.

### Vocabulary

Topic	EYFS	Year 1	Year2
Design	<b>picture, drawing, use</b>	<b>purpose, function, product, develop, model, template, mock up, information</b>	<b>purpose, function, product, develop, model, template, mock up, information</b>
Make	<b>experiment, change, tools, materials, use.</b>	<b>function, design, equipment, material, fabric, thread, shape, glue, cut, fold, sew, staple.</b>	<b>function, design, equipment, material, fabric, thread, shape, glue, cut, fold, sew, staple.</b>
Evaluate	<b>materials, use, idea, improve.</b>	<b>product, evaluate, improve, design, criteria.</b>	<b>product, evaluate, improve, design, criteria.</b>
Technical Knowledge	<b>technology, tape, record, video, photograph, computer.</b>	<b>roll, pleat, corrugate, stiffen, strengthen, reinforce, structure, pulleys, hinge, levers, pivot, linkages..</b>	<b>roll, pleat, corrugate, stiffen, strengthen, reinforce, structure, pulleys, hinge, levers, pivot, linkages.</b>
Cooking and nutrition	<b>food, meal, snack, healthy, diet</b>	<b>chop, cut, peel, cook, healthy, farm, factory.</b>	<b>chop, cut, peel, cook, healthy, farm, factory.</b>

