

Hollinhey Primary School



Design and Technology Policy

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HOLLINHEY PRIMARY SCHOOL

Design and Technology Policy

Design and Technology is an inspiring, rigorous and practical subject. Using creativity and imagination, pupils design and make products that solve real and relevant problems within a variety of contexts, considering their own and others' needs, wants and values.

Aims

The 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 Hollinhey, it is our intention to teach Design & Technology in alignment with our core values:

Honesty – We give each pupil a chance to believe in themselves as Designers and engineers. We aspire to encourage resilience, perseverance and an acceptance that mistakes are an important part of learning. We give children the opportunity to evaluate their own and their peers' work.

Effort – We promote the importance of hard work to build success and the development of a growth mindset. We encourage the children to improve their designs and existing products to achieve their best possible work.

Achievement – We provide children with a secure grasp of the skills needed to design and create successful products which can be used by their target user and to take home a product that they are proud of.

Respect – We encourage the children to evaluate their own and their peers' products in a respectful way.

Tolerance – We provide effective support to pupils where they find it difficult to overcome challenges when creating products. We encourage teamwork and peer-peer support.

Implementation:

To ensure high standards of teaching and learning in Design and Technology, we implement a curriculum that is progressive throughout the whole school. Design and Technology is taught as part of a cross-curricular half-termly topic, focusing on the knowledge and skills stated in the National Curriculum. At Hollinhey, we currently use the 'Projects on a Page' Scheme from the Design and Technology Association to inform our own school planning. This scheme compliments the National Curriculum and provides clear skills and objectives, along with suggested projects and resources in order for staff to provide fun and challenging learning with noticeable progression.

- Each year group Y1 – Y6 has 3 projects to complete (Year 6 – 2 projects) which allow the children to gain a wide range of skills. These include: mechanisms, structures, electrical products, textiles and food preparation. Each project follows a clear process: research and investigate, design, make and evaluate. All learning and the final product are evidenced in the children's Design & Technology books.

Foundation Stage

Design and Technology in the Foundation Stage is an integral part of the topic work covered during the year. Please see the EYFS policy and the progression document.

Impact:

Within Design and Technology, we aim to encourage children to become problem-solvers, both as individuals and as part of a team. We aspire that pupils will have gained knowledge and understanding of different skills and techniques required to solve problems by designing and creating a variety of products using a safe approach. Our carefully-planned curriculum allows the children to reflect on and evaluate present and past design and technology, its uses and its impact. Children learn to be passionate and excited by the designing and making of products including working with, preparing and tasting food. Children will be equipped with skills and knowledge that will enable them to be ready for the curriculum at Key Stage 3 and for life as a capable citizen in the wider world.

Adaptation and SEN

We teach DT to all children, whatever their ability. We do this by setting suitable learning challenges and responding to each child's different needs. In order to ensure that children with special educational needs achieve to the best of their ability, it may be necessary to

adapt the delivery of the DT curriculum for some pupils. This may be through providing extra support or adapting learning resources and equipment as necessary.

Extra Opportunities

We provide an after-school Cookery Club, which is offered to both KS1 and KS2, where the children prepare both sweet and savoury dishes. Lego club is also offered in KS1, providing opportunities for designing and building structures.

Equal Opportunities (see also Equal Opportunities Policy)

Hollinhey Primary School will ensure that all children are provided with the same learning opportunities regardless of social class, gender, culture, race, disability or learning difficulties. As a result, we hope to enable all children to develop positive attitudes towards others. All pupils have equal access to DT and all staff members follow the equal opportunities policy. Resources for SEN children and More Able pupils will be made available to support and challenge appropriately.

Roles and Responsibilities

Design and Technology is led by one member of staff and a governor. The subject leader is expected to:

- Ensure that the subject is regularly discussed, reviewed and monitored within the school
- Keep resources up-to-date and relevant, particularly in preparation for each unit of work.
- Promote Design and Technology good practice through the school.
- Set a good example of Design and Technology practice.
- Support long term planning for the whole school.
- Monitor and evaluate Design and Technology through the school.
- Provide INSET.
- Liaise with other primary and secondary schools.
- Promote Design and Technology's high profile in the school.

When the policy will be reviewed

September 2025

Progression of Skills							
Food Textiles Structures Mechanisms Electrical	EYFS	Year 1 Fruit Salad Fire Engines Houses	Year 2 Salad Sandwiches Hand Puppets Moving pictures	Year 3 Mini Quiches and coleslaw Moving Christmas Cards Treasure Chests	Year 4 Tomato Pasta Bake Bags/purses Torches	Year 5 Viking Stew Cams Toys Shelters	Year 6 Calzone Buggies
Developing, planning and communicating ideas.	<ul style="list-style-type: none"> Express their ideas about their product and say what they will do to create it. 	<ul style="list-style-type: none"> Draw on their own experience to help generate ideas Identify the purpose for what they intend to design and make Suggest ideas and explain what they are going to do Develop their design ideas through discussion and labelled drawings 	<ul style="list-style-type: none"> Generate ideas, drawing on their own and other people's experiences Identify a user and purpose for what they intend to design and make Identify simple criteria Suggest ideas and explain what they are going to do when given a selection of equipment and materials Develop their design ideas through discussion, observation, labelled drawing and simple modelling 	<ul style="list-style-type: none"> Generate ideas for an item, considering its purpose and the target user/s establish criteria for a successful product. Think about the order of their work before starting, choosing from a variety of tools and materials Develop their design ideas through discussion, observation, labelled drawing and simple modelling 	<ul style="list-style-type: none"> Generate ideas, for an item, considering its purpose and target user group With support, draw up a simple specification for their design Explore and develop their design ideas through discussion, observation, labelled drawings, exploded diagrams and modelling Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making, if the first attempts fail 	<ul style="list-style-type: none"> Generate ideas through brainstorming and research, using ICT where appropriate Identify a purpose and audience for their product Draw up a specification for their design Communicate their ideas through discussion and detailed labelled drawings using ICT programmes where appropriate, including cross-sectional drawings and exploded diagrams Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making if the first attempts fail 	<ul style="list-style-type: none"> Generate ideas through brainstorming and research, using ICT where appropriate identify a purpose and audience for their product. Develop a design specification Communicate their ideas through discussion and detailed labelled drawings using ICT programmes where appropriate, including cross-sectional drawings and exploded diagrams Develop a clear idea of what has to be done, planning how to use materials, equipment and processes, and suggesting alternative methods of making if the first attempts fail

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Working with tools, equipment, materials and components to make quality products (e.g. food)	<ul style="list-style-type: none"> Safely use and explore a variety of materials, tools and techniques, experimenting with design and function. 	<ul style="list-style-type: none"> Make their design using suggested appropriate tools and techniques With support, measure, mark out, cut and shape a range of materials With support, use everyday tools e.g. ruler, scissors and a hole punch safely Assemble, join and combine materials and components together using a variety of temporary methods e.g. glues or masking tape Understand and use simple axles and wheels Select and use appropriate ingredients, processes and tools Use basic food handling, hygienic practices and personal hygiene Use simple finishing techniques to improve the appearance of their product 	<ul style="list-style-type: none"> Begin to select tools and materials; use vocab' to name and describe them With support, Measure, mark out, cut and score a range of materials with some accuracy Use a range of hand tools safely and appropriately, e.g. ruler, scissors, hole punch, stapler, sewing needle, saw Assemble, join and combine materials using a variety of methods Use simple sliders, axles, levers to create movement in products Cut, shape and join fabric using basic sewing techniques Select and use appropriate ingredients, processes and tools Use basic food handling, hygienic practices and personal hygiene 	<ul style="list-style-type: none"> Select tools and techniques for making their product Measure, mark out, cut, score and assemble a range of materials with more accuracy Develop and use 2D nets to create 3D structures. Use a range of hand tools safely and appropriately, e.g. ruler, scissors, hole punch, stapler, Use levers and linkages in products Think about their ideas as they make progress and be willing change things if this helps them improve their work Select and use appropriate ingredients, processes and tools Demonstrate hygienic food preparation and storage Use finishing techniques strengthen and improve the appearance of their product using a range of equipment 	<ul style="list-style-type: none"> Suggest and select tools and techniques for making their product Measure, mark out, cut and shape a range of materials, using appropriate tools, equipment and techniques Join and combine materials and components accurately Use 2a range of hand tools safely and appropriately, e.g. scissors, stapler, sewing needle Measure, tape or pin, cut and join fabric with some accuracy. Add embellishment using sewing techniques. Think about their ideas as they make progress and be willing change things if this helps them improve their work Use simple electrical circuits in products Use finishing techniques strengthen and improve the appearance of 	<ul style="list-style-type: none"> Suggest and select appropriate materials, tools and techniques for making their product Measure and mark out, cut and shape a range of materials with accuracy use different tools and equipment safely and accurately to join and combine materials and components. Construct products using permanent joining techniques Use a range of hand tools safely and appropriately, e.g. scissors, hole punch, stapler, saw, glue gun, craft knife, soldering iron Make necessary modifications as they go along Use electrical systems in products e.g. moving vehicle Use finishing techniques strengthen and improve the appearance of their product using a range of equipment including ICT to create a high quality product select and use appropriate ingredients, processes and tools, including the hob and oven Apply the rules for basic food hygiene and other safe practices 	<ul style="list-style-type: none"> Select appropriate tools, materials, components and techniques for making their product Measure and mark out, cut and shape a range of materials with accuracy use different tools and equipment safely and accurately to join and combine materials and components. Construct products using permanent joining techniques Use a range of hand tools safely and appropriately, e.g. scissors, hole punch, stapler, saw, glue gun, craft knife, soldering iron Make necessary modifications as they go along Use electrical systems in products e.g. moving vehicle Use finishing techniques strengthen and improve the appearance of their product using a range of equipment including ICT to create a high quality product select and use appropriate ingredients, processes and tools, including the hob and oven Apply the rules for basic food hygiene and other safe practices

			<ul style="list-style-type: none"> Choose and use appropriate finishing techniques 	including ICT	their product using a range of equipment including ICT <ul style="list-style-type: none"> select and use appropriate ingredients, processes and tools, including the hob and oven Demonstrate hygienic food preparation and storage 	hob and oven <ul style="list-style-type: none"> Apply the rules for basic food hygiene and other safe practices e.g. hazards relating to the use of ovens Use finishing techniques strengthen and improve the appearance of their product using a range of equipment including ICT to create a high quality product Understand how mechanical systems such as cams or pulleys or gears create movement. 	e.g. hazards relating to the use of ovens
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	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Evaluating processes and products	<ul style="list-style-type: none"> Share their creations, explaining the process they have used Express their ideas and feelings about their product and the experience of making it 	<ul style="list-style-type: none"> Talk about their product, saying what they like and dislike about it and discussing how well it works in relation to the purpose and original design. Talk about the making process and what went well and difficulties they overcame 	<ul style="list-style-type: none"> Talk about their product, saying what they like and dislike about it and discussing how well it works in relation to the purpose and original design. Evaluate against given criteria Talk about the making process and what went well and difficulties they overcame Identify strengths and possible changes they might make 	<ul style="list-style-type: none"> Disassemble and evaluate familiar products in order to create own design Talk about the making process and what went well and difficulties they overcame Identify strengths and possible changes they might make Evaluate their product against original design criteria e.g. how well it meets its intended purpose, 	<ul style="list-style-type: none"> Disassemble and evaluate familiar products in order to create own design Evaluate their work during and at the end of the assignment and identify strengths and difficulties Evaluate their product against original design criteria e.g. how well it meets its intended purpose, Evaluate their products carrying out appropriate test, using set criteria 	<ul style="list-style-type: none"> Disassemble and evaluate existing products in order to create own design Evaluate their products, against the design specification, identifying strengths and areas for development, and carrying out appropriate tests Evaluate their own work and seek evaluation from others 	<ul style="list-style-type: none"> Disassemble and evaluate existing products in order to create own design Evaluate their products, against the design specification, identifying strengths and areas for development, and carrying out appropriate tests Evaluate their own work and seek evaluation from others
Suggested events and individuals who have helped shape the world	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> 			https://www.qualitylogoproducts.com/promo-university/history-of-flashlights.htm	http://re.trotoys.com/article/mechanical-toys-history/	