



Design Technology Skills Progression Map



Design technology

Intention

At Dunstable Icknield Lower School, design and technology is a practical subject where children use their creativity and imagination to make products. The curriculum is split into three areas: design, make and evaluate as to ensure that children are making a range of products for relevant contexts (for example, the home, school or leisure) and considering how they would work in these environments.

By the end of year four all pupils will be able to use research to develop design criteria for a functional, appealing product.

- Children will create diagrams of their design during planning
- Children will use knowledge of existing products to help them design a functional and appealing product
- Children will understand what makes a healthy balanced diet and consider that when designing recipes

By the end of year four all pupils will be able to select from and use a wide range of tools and equipment to perform practical tasks.

- Children will know how to use techniques he/she has learnt to strengthen structures
- Children will cut, shape, join and finish his/her work with accuracy
- Children will read and follow their own or existing recipes to make something they and others can eat

By the end of year four all pupils will be able to evaluate existing products and their own using technical vocabulary.

- Children will consider how existing products and their own might be improved
- Children will consider how existing products and their own meet the need of the intended user
- Children will evaluate the look and taste of food, giving their opinions as to what they could do better next time, taking into account principles of a healthy and varied diet, and where ingredients come from.

Objective	Reception	Year 1	Year 2	Year 3	Year 4
Design	<ul style="list-style-type: none"> • Represent their own ideas thoughts and feelings through design and technology. 	<ul style="list-style-type: none"> • I can think of some ideas of my own. • I can use pictures and words to plan. • I can design a product for myself following design criteria. 	<ul style="list-style-type: none"> • Explain what I want to do. • I can describe my design by using pictures, model mock-ups and words. • I can choose the best tools and materials. 	<ul style="list-style-type: none"> • I can show that my design meets a range of requirements. • I can put together a plan which shows the order and also what equipment and tools I need. • I can describe my design using an 	<ul style="list-style-type: none"> • I can come up with at least one idea about how to create my product. • I can put together a step-by-step plan which shows the order and also what equipment and tools I need. • I can produce a plan and explain it to others.

			<ul style="list-style-type: none"> • I can give a reason why these are best tools or materials. • I can describe my design by using pictures, diagrams, model mock-ups, words and ICT. • I can design a product for others following design criteria. 	<p>accurately labelled sketch and words.</p> <ul style="list-style-type: none"> • I can say how realistic my plan is. • I can take account of the ideas of others when designing. 	<ul style="list-style-type: none"> • I can suggest some improvements and say what was good and not so good about my original design.
Make	<ul style="list-style-type: none"> • Construct with a purpose in mind, using a variety of resources. • Use simple tools and techniques competently and appropriately. • Selects appropriate resources and adapts where necessary. • Selects tools and techniques needed to shape, assemble and join materials they are using. • Use and explore a variety of materials tools and techniques. • . 	<ul style="list-style-type: none"> • Explain what I am making and why. • Select tools and equipment to cut shape join and finish and use with increasing accuracy and care. • Use a range of materials and explain their choice according to their characteristics. 	<ul style="list-style-type: none"> • Select from a range of tools and equipment to perform practical tasks (eg cutting, shaping, joining and finishing), and use them accurately and safely. • Select from a range of materials and components including construction materials, and textiles according to their characteristics. • Use a range of materials according to the characteristic against the design criteria. 	<ul style="list-style-type: none"> • Choose what tools/ materials/ techniques to use and use them with some accuracy. • Cut, shape and put things together when making. • Make my product work well(function) 	<ul style="list-style-type: none"> • Choose and use a range of tools equipment and techniques. • Use a variety of materials/components with some accuracy • Make my product work well(function) • Select from and use a widening range of materials and components including construction materials and textiles according to their functional properties and aesthetic qualities.

Evaluate		<ul style="list-style-type: none"> • I can talk about my own work. • I can talk about existing products and say what is good and not so good about them. • I can talk about my own work linked to what I was asked to do. 	<ul style="list-style-type: none"> • I can describe what went well with my work. • I can evaluate what I would do differently if I did it again and why. • I can judge my work against the design criteria. 	<ul style="list-style-type: none"> • I can say what I would change which made my design even better. • I can practise my evaluation skills by evaluating existing products. 	<ul style="list-style-type: none"> • I can begin to explain how I can improve my original design. • I can evaluate my product, thinking of both appearance and the way it works. • I can practise my evaluation skills by evaluating existing products against set criteria.
Technical Language		<ul style="list-style-type: none"> • I can say how to make products stronger. • I can use levers or slides in my work. • I can measure materials to use in a model or structure. • I can join material in different ways. • I can use joining, folding or rolling to make it stronger. • I can use levers or slides in my work. 	<p>Mechanisms:</p> <ul style="list-style-type: none"> • I can use materials together as part of a moving product. • I can add a specific design to my product. • I can use axels and wheels in my work. <p>Textiles:</p> <ul style="list-style-type: none"> • I can measure textiles. • I can join textiles together to make something. • I can cut textiles. • I can explain why I chose a certain textile. 	<p>Textiles:</p> <ul style="list-style-type: none"> • I can join textiles of different types in different ways. • I can choose textiles both for their appearance and also qualities. • I can think about how to make my product strong • I can devise a template. <p>Stiff and flexible sheet materials:</p> <ul style="list-style-type: none"> • I can use the most appropriate materials. • I can work accurately to make cuts and holes. 	<p>Textiles:</p> <ul style="list-style-type: none"> • I can think what the user would want when choosing textiles • I can think about how to make my product strong • I can devise a template • I can explain how to join things in a different way. <p>Stiff and flexible sheet materials:</p> <ul style="list-style-type: none"> • I can measure carefully so as to make sure I have not made mistakes <p>I can attempt to make my product strong.</p> <p>Electrical & mechanical components</p> <ul style="list-style-type: none"> • I can select the most appropriate tools and techniques to use for a given task. • I can make a product which uses both electrical and mechanical components. • I can use a simple circuit.

				<ul style="list-style-type: none"> I can join materials. 	<ul style="list-style-type: none"> I can use a number of components I can add things to my circuits I can tell you how I have altered my product after checking it. I can be confident about trying out new and different ideas.
Cooking and Nutrition	<ul style="list-style-type: none"> Talk about what they are making. Select and use appropriate tools with support and increasing accuracy and care. Begin to be aware of the different characteristics of ingredients with support. 	<ul style="list-style-type: none"> Explain what they are making and why. Select appropriate tools with support and use with increasing accuracy and care. Use ingredients/ components according to their characteristics 	<ul style="list-style-type: none"> Select from a range of tools and equipment to perform practical tasks (eg cutting, shaping, mixing, and cooking), and use them accurately and safely. Select from a range of materials and components including ingredients according to their characteristics with reference to the design criteria. 	<ul style="list-style-type: none"> Be conscious of the need to produce something that will appeal to others. Demonstrate a care when using a range of tools and equipment 	<ul style="list-style-type: none"> Select from and use a wider range of ingredients/ components according to their functional and aesthetic qualities. Demonstrate a good level of expertise when using a range of tools and equipment.

Learn, Believe, Achieve