## Design and Technology

## Inspiring creativity and imagination to design and make to achieve success!

Within the Oaks Federation, high-quality design and technology education is taught in discrete blocks linked to our project work providing a clear progression of skills. The design tasks children undertake have a clear purpose that links specifically to the outcome of the project. A series of lessons will always include evaluating current products, focused practical tasks, teaching discrete skills, such as different ways to make an axle, a design brief, construction and evaluation against design brief.

With real purpose for their designs our children are encouraged and motivated to develop the creative, technical and practical expertise needed to complete the challenge. In developing their designs children will learn to critique, evaluate and test their ideas and products as well as the work of others. This is done by using the children's interests, stimulating their natural curiosity, and challenging them to take risks in their designs. It is made explicit that Design and Technology involves thinking about what products are used for and the requirements of those who use them.



Key Objectives <b>EYFS</b> In Foundation design and technology is taught through the curriculum area 'Expressive arts and design'. The Early Learning Goal for this area is:	Key Objectives <b>Year One</b> Children will learn:	Key Objectives <b>Year Two</b>
Children sing songs, make music and dance, and experiment with ways of changing them. They safely use and explore a variety of materials, tools and techniques, experimenting with colour, design, texture, form and function.	<ul> <li>Design purposeful, functional, appealing products for themselves and other users based on design criteria</li> <li>Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and , where appropriate, information and communication technology</li> </ul>	<ul> <li>Design purposeful, functional, appealing products for themselves and other users based on design criteria</li> <li>Generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and , where appropriate, information and communication technology</li> </ul>

<u>Make</u>	<u>Make</u>
<ul> <li>select from and use a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing)</li> </ul>	<ul> <li>select from and use a range of tools and equipment to perform practical tasks (for example, cutting, shaping, joining and finishing)</li> </ul>
<ul> <li>select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</li> </ul>	<ul> <li>select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics</li> </ul>
<u>Evaluate</u>	<u>Evaluate</u>
<ul> <li>explore and evaluate a range of existing products</li> </ul>	• explore and evaluate a range of existing products
<ul> <li>evaluate their ideas and products against criteria</li> </ul>	• evaluate their ideas and products against criteria
Technical knowledge	Technical knowledge
<ul> <li>build structures, exploring how they can be made stronger, stiffer and more stable</li> </ul>	<ul> <li>build structures, exploring how they can be made stronger, stiffer and more stable</li> </ul>
<ul> <li>explore and use mechanisms (for example wheels and axels) in their products</li> </ul>	<ul> <li>explore and use mechanisms (for example levers and sliders) in their products</li> </ul>
Cooking and Nutrition	Cooking and Nutrition
<ul> <li>use the basic principles of a healthy and varied diet to prepare dishes</li> </ul>	<ul> <li>use the basic principles of a healthy and varied diet to prepare dishes</li> </ul>
<ul> <li>understand where food comes from</li> </ul>	<ul> <li>understand where food comes from</li> </ul>