



## Design Technology Vision Statement

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.

At Lambley Primary School children are taught to select and use appropriate tools safely and effectively to make a product. In all areas of Design and Technology the children are encouraged to consider the effectiveness of their designs and requirements of the product. Every child will have the opportunity to learn and extend their understanding, experience and application in the use of technology, including I.C.T, in as wide a variety of situations as possible.

### Aims and Objectives

- to deliver programmes of study for Key Stages 1 and 2 of the National Curriculum in Design and Technology;
- to develop imaginative thinking in children and to enable them to talk about what they like and dislike when designing and making;
- to enable children to talk about how things work, and to draw and model their ideas;
- to encourage children to select appropriate tools and techniques for making a product, whilst following safe procedures;
- to explore attitudes towards the made world and how we live and work within it;
- to develop an understanding of technological processes, products, and their manufacture, and their contribution to our society;
- to foster enjoyment, satisfaction and purpose in designing and making.

### The Curriculum

The Design and Technology curriculum contains two strands of subject content:

- 1) Design and making– Each Design and Technology project should include elements of:
  - Designing
  - Making
  - Evaluating
  - Technical knowledge

- 2) Cooking and nutrition- When designing products, pupils should consider:
- User - pupils should consider who their products are for
  - Purpose - pupils should decide which tasks their products will perform
  - Functionality - pupils should think about how their products will work
  - Design Decisions - pupils should have opportunities to make informed choices
  - Innovation - pupils should have scope to be original with their thinking
  - Authenticity - pupils should design and make products that are real, believable and can be evaluated through use

### Curriculum Coverage

Each class should undertake at least three Design and Technology units per year. One of these must be a Food project and the other can be selected from:

- Textiles
- Structures
- Mechanisms (KS1)
- Electrical or Mechanical Systems (KS2)

To help guide teachers with planning please see the example long-term plan below, created by D & T Primary.

Example long-term plan:

### Key Stage 1

Year 1	<p><b>Mechanisms</b> Sliders and levers</p>	<p><b>Structures</b> Freestanding structures</p>	<p><b>Food</b> Preparing fruit and vegetables (including cooking and nutrition requirements for KS1)</p>
Year 2	<p><b>Mechanisms</b> Wheels and axles</p>	<p><b>Food</b> Preparing fruit and vegetables (including cooking and nutrition requirements for KS1)</p>	<p><b>Textiles</b> Templates of joining techniques</p>

## Lower Key Stage 2

Year 3	<b>Structures</b> Shell structures (including computer-aided design)	<b>Food</b> Healthy and varied diet (including cooking and nutrition requirements for KS2)	<b>Textiles</b> 2-D shape to 3-D product
Year 4	<b>Mechanical Systems</b> Levers and linkages	<b>Electrical Systems</b> Simple circuits and switches (including programming and control)	<b>Food</b> Healthy and varied diet (including cooking and nutrition requirements for KS2)

## Upper Key Stage 2

Year 5	<b>Structures</b> Frame Structures	<b>Food</b> Celebrating culture and seasonality (including cooking and nutrition requirements for KS2)	<b>Electrical Systems</b> More complex switches and circuits (including programming, monitoring and control)
Year 6	<b>Textiles</b> Combining different fabric shapes (including computer aided-design)	<b>Mechanical Systems</b> Pulleys or gears	<b>Food</b> Celebrating culture and seasonality (including cooking and nutrition requirements for KS2)

### Progression of Skills

To see how Design and Technology skills progress throughout Key Stage 1 and 2 a Skills Progression Framework can be located on T:Staffroom\DT.

### Health and Safety

The general teaching requirement for health and safety applies in this subject.