

DT	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
UMPS Intent	At Upton Meadows we teach three units of DT per year, either in 6 week blocks or in two day blocks where the unit is best taught as an immersive experience which follows the process of 'Design, Make, Evaluate' in depth. We aim for the context of each project to be meaningful to the children, while teaching the knowledge and skills in a rigorous and structured way that builds on prior learning. To support the quality and expertise of our DT curriculum we use the DATA schemes as well as planned links to other curriculum areas. Cooking and Nutrition is taught alongside Topic work and through our RSHE curriculum ensuring children understand what a healthy diet looks like, learn the skills of cooking and know where food comes from. See UMPS Long Term Maps for details.					
KS1 Order of topics may vary depending on year group.		Y1 Structures – Homes Y2 Mechanisms – Sliders and levers/Vehicles		Y1 Textiles - Y2 Textiles – Bendy bags		Y1 Food – Fruit Salad Y2 Food Tech – Caribbean fruit cocktails
LKS2 Order of topics may vary depending on year group.		Y3 Mechanisms - Moving history book Y4 Food - Soup Y4 Textiles - Apron		Y3 Food - Sandwiches Y3 Textiles -Bird Hides and Dragons Den Y4 Mechanisms - Alarming vehicles		Y3 Structures - Working with plastic Y4 Structures - Desk Tidy
UKS2 Order of topics may vary depending on year group.		Y5 Food – Celebrating culture and seasonality – Ginger Biscuits for Christmas/Winter Y6 Mechanisms - Mechanisms with a Message		Y5 Mechanisms/ Electrical Systems – Monitoring and Control/Handmade switches Y6 Textiles - Designing with Textiles		Y5 Structures – bird hide (frames) Y6 Mechanisms & Structures (Cams, pulleys, gears/Electric Circuits) - 'Fairgrounds'
Enrichment						
KS1 National Curriculum	When designing and making, pupi Design - design purposeful, functional, app - generate, develop, model and co where appropriate, information an  Make - select from and use a range of too joining and finishing]	Is in KS1 should be taught to:  be aling products for themselves and other uses municate their ideas through talking, draw id communication technology  bls and equipment to perform practical tasks of materials and components, including con	sers based on design criteria ring, templates, mock-ups and, s [for example, cutting, shaping,	Evaluate - explore and evaluate a range of existing products - evaluate their ideas and products against design criteria  Technical knowledge - build structures, exploring how they can be made stronger, stiffer and more stable - explore and use mechanisms [for example, levers, sliders, wheels and axles] in their products  Cooking and nutrition . Use the basic principles of a healthy and varied diet to prepare dishes		



# KS2 National Curriculum

. Understand where food comes from

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making. When designing and making, pupils in KS2 should be taught to:

#### Design

- use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups

- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

#### Make

- select from and use a wider range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing], accurately
- select from and use a wider range of materials and components, including construction materials, textiles and ingredients, according to their functional properties and aesthetic qualities

### Evaluate

- investigate and analyse a range of existing products
- evaluate their ideas and products against their own design criteria and consider the views of others to improve their work
- understand how key events and individuals in design and technology have helped shape the world

## Technical knowledge

- apply their understanding of how to strengthen, stiffen and reinforce more complex structures
- understand and use mechanical systems in their products [for example, gears, pulleys, cams, levers and linkages]
- understand and use electrical systems in their products [for example, series circuits incorporating switches, bulbs, buzzers and motors]
- apply their understanding of computing to program, monitor and control their products

#### Cooking and nutrition

- . understand and apply the principles of a healthy and varied diet
- . Prepare and cook a variety of predominantly savoury dishes using a range of cooking techniques
- . Understand seasonality, and know where and how a variety of ingredients are grown, reared, caught and processed