Design and Technology Long term planning grid

Cycle A	Class 1	Class 2	Class 3	Class 4	Class 5
Autumn	**Yr 1/2: Food- Preparing fruit and vegetables** Fruit Cocktail	**Yr 1/2: Food – Preparing fruit and vegetables** Fruit Smoothies Story – Oliver's fruit	**Yr 3/4: Structures: Pneumatics** Castles – bridges and draw bridges	**Yr 3/4: Shell Structures using CAD** Christmas box/3D Christmas tree decoration - nets	**Yr 5/6: Textiles: Combining different fabric shapes** Viking purses Include the CAD from projects on a page.
Spring	**Yr 1/2: Structures – Free standing structures** Make a strong house for The Three Little Pigs	**Yr 1/2: Structures - Free standing structures** Making chairs Goldilocks and the Three Bears.	**Yr 3/4: Food – Healthy and varied diet** Making a sandwich	**Yr 3/4: Electrical Systems - Simple Programming and Control** (link to Computing – Crumble)	**Yr 5/6: Frame structures –** Bird boxes
Summer	**Yr 1/2: Textiles – Templates and joining** Design and make a jacket to keep Super Ted dry.	**Yr 1/2: Mechanisms - Wheels and axles** Moving Vehicle	**Yr 3/4: Textiles – 2D shape to 3D product** Making an ocean creature	**Yr 3/4: Food – Healthy and varied diet** Design and make own healthy picnic for river visit – savoury biscuits/scones	**Yr 5/6: Food: Celebrating culture and seasonality** Homemade pasta and homemade Sauces
Cycle B	**Class 1**	**Class 2**	**Class 3**	**Class 4**	**Class 5**
Autumn	**Yr 1/2: Food – Preparing fruit and vegetables** Vegetable soup Vegetables for dips for a picnic.	**Food - Preparing fruit and vegetables** Vegetable soup Vegetables for dips Oliver's vegetables	**Yr 3/4: Mechanisms – pneumatics or shell structures** Moving skeletons	**Yr 5/6: Electrical Systems: Simple circuits and switches** Design and make an alarm (light or buzzer) to protect your home	**Yr 5/6: Food – celebrating culture and seasonality** Greek food – flat breads, tzatziki, Greek salad
Spring	**Yr 1/2: Mechanisms – sliders and levers** Animal Puppets	**Yr 1/2: Textiles – Templates and joining** Making bags Little Red Riding Hood	**Yr 3/4: Levers and Linkages** Make an Easter cards	**Yr 5/6: Food: Celebrating culture and seasonality/ Healthy and varied diet** Healthy Eating – toaster wrap pockets.	**Yr 5/6: Mechanisms CAMs –** Victorian toys.
Summer	**Yr 1/2: Structures - Free standing structures** Design and make a beach hut.	**Yr 1/2: Mechanisms – sliders and levers** Moving parts on a plant	**Yr 3/4: Food - Healthy and varied diet** Salad snack: Cous cous – focus on healthy eating plate	**Yr 3/4: Textiles- 2D shape to 3D product** Sock Teddies – using a pattern	**Yr 5/6: Pulleys and gears – moving toy Mechanisms, computer control –** Fairgrounds

EYFS	**Proposed ELG - Creating with Materials** - **Children at the expected level of development will:** - Draw and paint using a range of materials, tools and techniques, experimenting with colour, design, texture, form and function; - Share their creations, explaining the process they have used; - Make use of props and materials when role playing characters in narratives and stories. **Proposed ELG – Managing self**- **Children at the expected level of development will;** ……..develop an understanding the importance of healthy food choices.	
	National Curriculum KS1	**National Curriculum KS2**
	Design • design purposeful, functional, appealing products for themselves and other users based on design criteria • generate, develop, model and communicate their ideas through talking, drawing, templates, mock-ups and, where appropriate, information and communication technology **Make** • select from and use a range of tools and equipment to perform practical tasks [for example, cutting, shaping, joining and finishing] • select from and use a wide range of materials and components, including construction materials, textiles and ingredients, according to their characteristics **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 • understand where food comes from.	**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.